



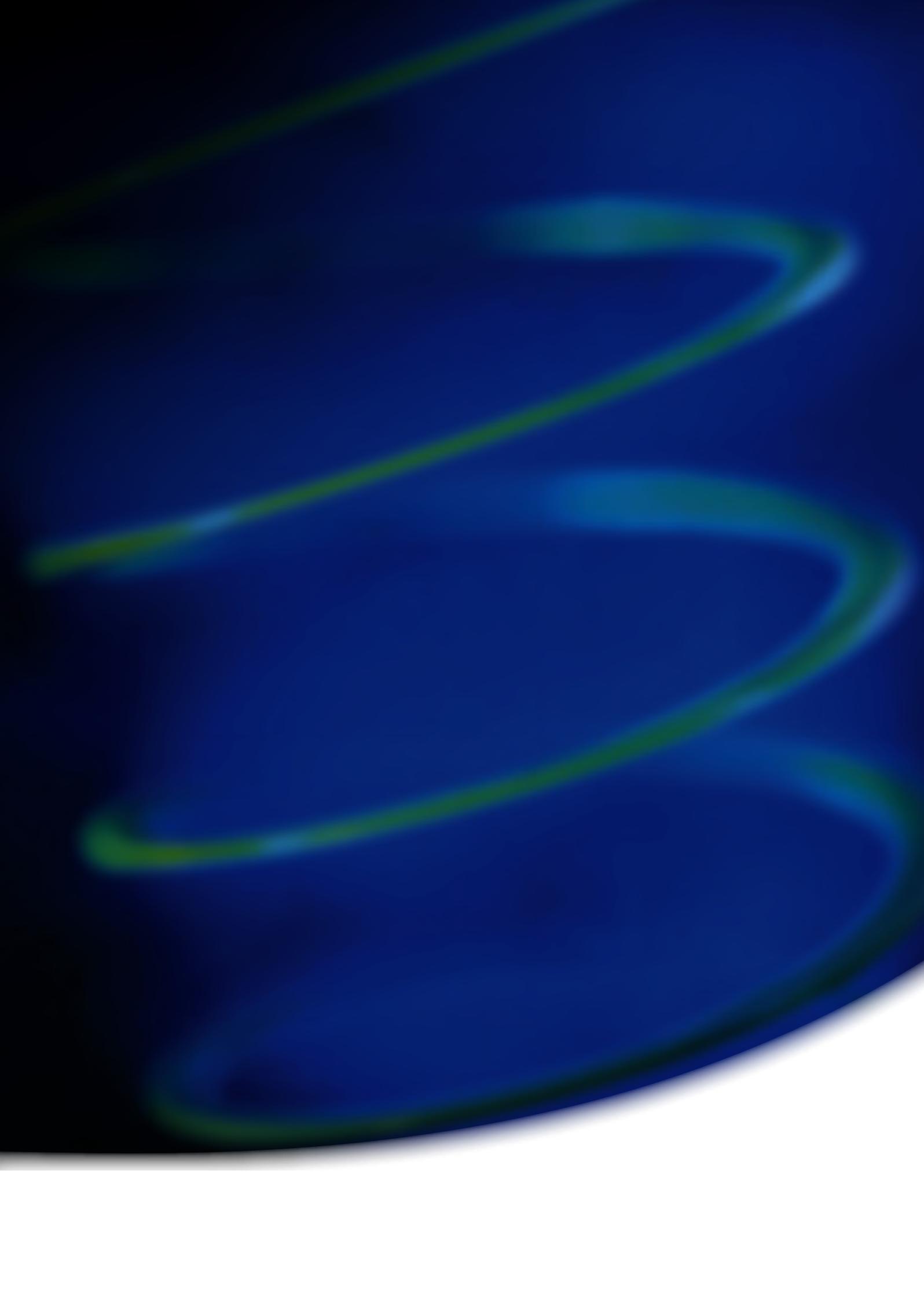
**ECONOMIC  
TRANSFORMATION  
PROGRAMME**

ANNUAL REPORT

2011



**JABATAN PERDANA MENTERI**



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## A Note from the Prime Minister

It has been just over a year since I launched the Economic Transformation Programme, and I am extremely pleased to note the excellent progress made to transform Malaysia into a high-income, fully-developed nation by 2020



The ETP has adopted a two pronged approach – to be focussed and competitive – and I believe that the Roadmap published in October 2010 has been very clear in detailing out key prioritisation areas for the nation. I believe that this has had a positive effect, both domestically and internationally. This brings us a step closer towards transforming Malaysia into a globally competitive investment destination.

As a nation, we have focussed on 12 National Key Economic Areas, sectors where Malaysia can compete globally. To date, 131 Entry Point Projects (EPP) have been identified to kickstart growth as well as to catalyse investment and participation from the private sector.

It is gratifying to note that private sector investment has grown to RM94 billion in 2011, increasing some 19.4 per cent from 2010.

I have hosted eight ETP Progress Updates over the course of 2011. 110 projects were launched, 55 per cent of the EPPs have taken off, and over RM179.2 billion in investment has been committed, an unprecedented amount over a 12-month period. These projects are projected to contribute some RM129.5 billion in gross national income in 2020, and create over 313,741 new jobs by 2020.

In July, we launched the Strategic Reform Initiatives, these will complement our focus, creating an environment to allow Malaysians to be competitive on the global stage. I am confident that the Government in partnership with the private sector, can and will proceed full speed ahead, especially in implementing the structural reforms to enable us to achieve the targets on investment.

With this in mind, I have announced the liberalisation of foreign ownership of banks. Foreign banks will be allowed to own bigger stakes in local institutions, grant more licences and ease short-selling rules. By end 2012, a further 17 service sub-sectors will be liberalised, allowing up to 100 per cent foreign equity participation. Earlier, 24 sub-sectors have been opened up.

Let me reiterate that we remain committed to reducing government's role in business to enable the private sector to take the lead; simplifying and reducing the cost of doing business; and developing a larger pool of qualified and skilled workers.

As a testament to the Government's commitment, all ministers and ministries' KPIs, with deliverables and timelines, were set out in early 2011. To ensure smooth implementation of the projects under the ETP, we have put in place a problem escalating governance structure from PEMANDU to ministers, and to the Economic Council which I chair every week.

I am pleased to announce that all of the NKEAs have either exceeded or met their 2011 targets. While it is natural that some KPIs will outperform others due to the dynamism of the economy, we are taking steps to address the issues to ensure we achieve the set targets.

In 2011, Malaysia's GDP grew by 5.1 per cent. Foreign direct investment (FDI) rose to RM32.9 billion in 2011. This is an increase of 12.3 per cent over the RM29.3 billion in 2010. It is gratifying to note that private sector investment has grown to RM94 billion in 2011, up 19.4 per cent from 2010.

Internationally, our efforts have been recognised. According to the AT Kearney 2011 FDI Confidence Index, inflows rose 537 per cent to US\$9 billion in 2010 from the previous year. They reported that this number will be surpassed in 2011 and, based on the sentiments reflected in the index, it is likely to continue in this positive direction in 2012.

In the World Bank Report on *Doing Business 2012*, we improved five positions to 18th from 23rd in 2011 amongst 183 economies. The report puts us ahead of countries such as Germany, Japan, Taiwan and Switzerland.

Malaysia also moved up five places to the 21st position of 142 countries globally in the World Economic Forum *Global Competitiveness Report*. We were ranked sixth amongst Asia Pacific countries and second in ASEAN.

It is important that we give ourselves credit for doing a remarkable job this year. It is, and continues to remain challenging, to galvanise the entire civil service to push ahead with the reforms. However, we remain on course as we will be impacted by the on-going global economic uncertainty and higher productivity is critical to our future success as a nation.

I would like to take this opportunity to thank all the ministers and civil servants for their contributions. We have indeed done and achieved much this year. I would also like to express our appreciation to all in PEMANDU especially Senator Dato' Sri Idris Jala and his team of directors who have been driving the ETP.

There are challenging and rewarding times ahead. Let us continue to keep our eye on the ball as there is another nine years of hard work ahead of us. I am confident that together, we can transform our country into a globally competitive investment destination, and high income fully developed nation, by 2020. Thus, ensuring every citizen benefits. I urge you to join us to scale these new heights.



**Yang Amat Berhormat**  
**Dato' Sri Mohd Najib bin Tun Abdul Razak**  
Prime Minister of Malaysia

## A Note from the Deputy Prime Minister

I am delighted that we have made good progress in delivering social development and economic growth in 2011 under the complementary Government Transformation Programme and Economic Transformation Programme



When we launched these two transformation programmes in 2010, we were clear that we needed both to achieve our Vision 2020 goal of becoming a high income nation with inclusiveness and sustainability.

Our efforts are bearing fruits. I see them in the reduction of crime rates, the improvement in literacy and education, and in the urban transport work that we are doing. I see people's lives being changed. For instance, under the rural basic infrastructure project, we built 1,780.1 kilometres of roads and we gave 108,679 houses clean and treated water—impacting the lives of some three million Malaysians, a million more than we had in 2010.

We are touching people's lives in areas that matter most to them. And we continue to be responsive to the rakyat's needs. In July 2011, in response to the public's feedback, we launched a new focus area – Cost of Living – to ensure that we meet the needs of those who are most vulnerable economically.

With this in mind, we have committed more resources to development. In the 2012 Budget, Prime Minister Dato' Sri Najib Tun Razak announced an allocation of RM232.8 billion on plans focussing on the well-being of the rakyat.

The results in improving public service delivery and liveability also complement the ETP in attracting foreign investments. According to the AT Kearney 2011 FDI Confidence Index, inflows rose 537 per cent to US\$9 billion in 2010 from the previous year. They reported that this number will be surpassed in 2011 and, based on the sentiments reflected in the index, it is likely to continue in this positive direction in 2012.

This is good news. Our task now is to ensure that Malaysia continues to attract FDI. To achieve this, we will, amongst other initiatives, speed up the pace of reforms. The Prime Minister has already reiterated the government's commitment to follow through with structural policy reforms.

One other key concern amongst investors is corruption. The government is committed to weed out corruption. This is especially critical as private sector investments are expected to contribute 92 per cent of our country's total investment needs in our aim to become a high-income nation in just nine years' time.

We have put building blocks in place such as introducing the Whistleblowers' Protection Act, Corruption Integrity Pledge for the business sector in 2010 and anti-corruption hotline. This is a good start and we will continue with the work. Eradicating corruption will take time. To put this into perspective: Hong Kong took 10 years to bring corruption down to a level where it could say it is there.

At the same time, for this to succeed, all of us must play our part. The job of removing corruption does not just rest with the government. It is a fight that everyone living in Malaysia must play a role in. Bribery in any form or any size is totally unacceptable anywhere or anytime.

Concurrently, we will continue to tackle crime. While statistics clearly show there is a reduction in the crime rate, the general perception is that crime rate remains high. I acknowledged that crime is still there; it is not zero. However public perception should not lag the reality on the ground. The reality is that the real crime index is down and the government continues to make progress in fighting crime.

As we move forward in 2012, we remain focussed on building an eco-system that is both conducive to the rakyat and investors – continuous improvement in public service delivery, enhancing liveability, growing the economy, and ensuring that everyone enjoys the benefits of economic progress. We encourage your active participation every step of the way – from tracking the progress of the plans to providing feedback and coming forward with pragmatic suggestions – so that we can deliver the results that matter to you, and achieve our 2020 aspirations.



**Yang Berhormat**  
**Tan Sri Dato' Hj. Muhyiddin Bin Hj. Mohd Yassin**  
Deputy Prime Minister of Malaysia

# 2011 Review of the ETP

By Yang Berhormat Tan Sri Nor Mohamed Bin Yakcop, Minister in the Prime Minister's Department, Economic Planning Unit and Yang Berhormat Senator Dato' Sri Idris Jala, Minister in the Prime Minister's Department and CEO, Performance Management and Delivery Unit (PEMANDU)

It gives us great pleasure to present the review of the Economic Transformation Programme, which was officially launched by YAB Dato' Sri Mohd Najib Tun Razak, Prime Minister of Malaysia, on 25 October 2010



**Yang Berhormat  
Tan Sri Nor Mohamed Bin Yakcop**  
Minister in the Prime Minister's Department

Briefly, while the global economy gives cause for concern on several fronts, we expect the Malaysian economy to be resilient and still show significant growth. In the meantime, the steps we have taken towards economic transformation and moving towards high income experienced vertical take-off with most targets being achieved or exceeded.

We remain confident of the future and rely on the participation of every Malaysian to make the transformation a success and lead to a better life for all of us.

## Global economy in a state of flux but green shoots are emerging

By any measure, 2011 has been a difficult year for the global economy. The continuing Eurozone sovereign debt crisis, coupled with several 'black swan' events – Japan's tsunami and nuclear disasters, the US credit rating downgrade and Thailand's massive flood – have brought the developed economies to their knees. Emerging economies were not spared from the spill-over effects. Some of these weaknesses are likely to extend into 2012.

Growth continued to be sluggish in Europe, slowing to 0.9 per cent year-on-year in Q4 2011 from 1.4 per cent in Q3. Both business and consumer confidence have dipped sharply, biting into investment and consumption.

Japan went through a V-shaped recovery and expanded 1.7 per cent quarter-on-quarter in Q3 2011. However, the economy reversed by 0.2 per cent in Q4 2011, despite ramped up capital expenditure spurred by reconstruction in the earthquake-hit areas. A high yen and weak demand point to deflation and an anaemic growth in 2012, at best.

Fortunately, there is good news coming out of the US and China. The US has added 227,000 new jobs in February 2012 while unemployment has fallen to 8.3 per cent, its lowest in three years. New home starts increased 9.9 per cent year-on-year to a 699,000 annual rate in January 2012.



**Yang Berhormat Senator Dato' Sri Idris Jala**  
Minister in the Prime Minister's Department

These are encouraging green shoots of economic recovery in 2012. On the other hand, China has managed to rein in inflation and is in a good position to stimulate growth in the event of a sharper than expected drop in external demand, despite a downward revision of its 2012 Gross Domestic Product (GDP) forecast to 7.5 per cent.

### Malaysia's economy is resilient and evolving

In the face of supply chain disruptions caused by the Japanese and Thai disasters as well as soft export demand from the Eurozone, Malaysia's economy continued to grow on the back of resilient domestic demand and stronger exports. The nation's GDP grew at 5.1 per cent in 2011. Our GDP grew by seven per cent in 2010. With the ETP beginning to have an impact in 2012 and beyond, we are pursuing our annual six per cent average growth target.

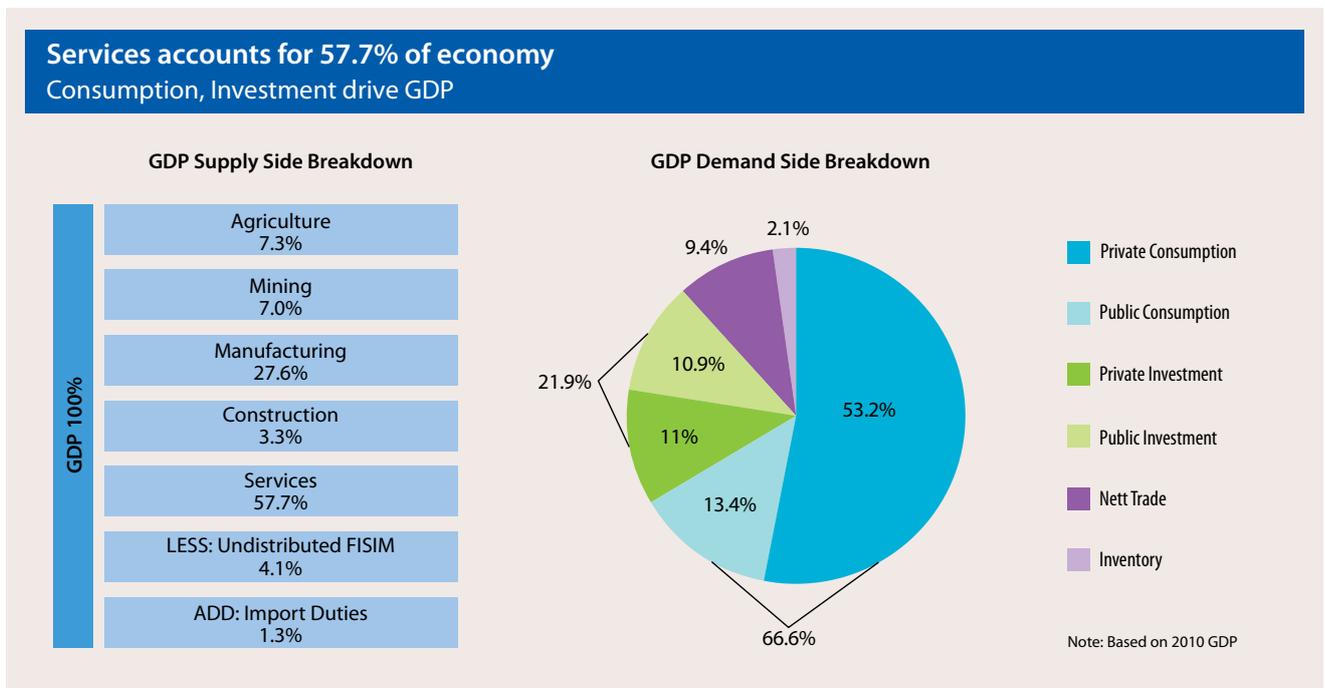
From an exports perspective, Malaysia's dependency on the US and Eurozone has declined to 12.2 per cent and 11 per cent respectively on average between 2007 and 2010, while intra-regional trade has risen to above 50 per cent. Nonetheless, some of these exports are still linked to demand in the developed economies as part of the regional production supply chain to the US and Eurozone. Sluggish performances in these regions will impact Malaysia's trade performance.

Investment has been a bright spark for Malaysia and encouragingly has been driven by the private sector. In 2011, total investment grew to RM171.5 billion, up 10.2 per cent from RM155.6 billion in 2010. This is led by a 19.4 per cent growth in the private sector including a 12.3 per cent growth in FDI. There has been a visible shift in the ratio of private to public investment from approximately 50:50 in 2010 to 55:45 in 2011. Private investment in 2011 amounted to RM94 billion, some 113 per cent above our target.

In addition, the 19.4 per cent private sector investment growth was well above a 6.7 per cent average growth between 2000 and 2010 and ahead of the 12.8 per cent average growth targeted under the 10th Malaysia Plan. This development validated our push to make the private sector the engine of economic growth.

As Malaysia continues to progress up the value chain, we are moving from a resource-based economy to one that is more services-oriented in line with the structure of most high-income nations. Based on the 2010 GDP, services made up 57.7 per cent of the supply side supported by manufacturing at 27.6 per cent. This translates into a consumption and investment-driven demand side at 66.6 per cent and 21.9 per cent respectively.

Exhibit A



## The ETP is all about focus and competitiveness

In transforming the economy, the ETP acts as the catalyst of growth in two ways: focusing our resources on 12 National Key Economic Areas (NKEAs) and improving on our competitiveness through six Strategic Reform Initiatives.

Exhibit B



Most successful economies are highly focussed on key sectors as nations must choose to be very competitive in high-impact areas where they also have an advantage and provide less attention to areas of relative weakness. By analogy, a sprinter cannot excel in a marathon and vice versa.

Working in tandem, cross-cutting structural changes to the economy must go hand-in-hand with vertical sector focus. With a small domestic economy, we have no choice but to tap into global opportunities. This necessitates that we allocate financial and human capital in the most effective way.

We must promote competition across sectors; adopt and develop international standards; further liberalise our services sector; develop our human capital; create fiscal space to allow for robust responses to economic challenges; improve our public service delivery; restrict government’s role in business to strategic areas and raise Bumiputera Small and Medium Enterprises (SMEs) capabilities in a market-competitive and transparent manner.

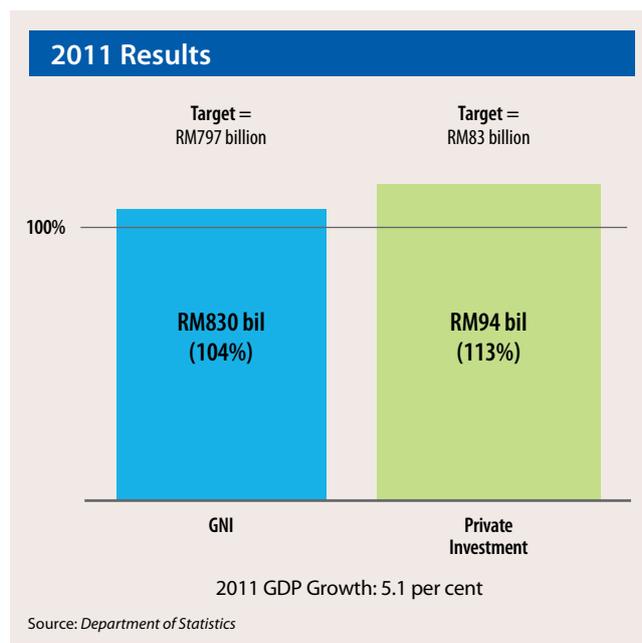
## The ETP has achieved a vertical take-off

Our 10-year targets have been clearly defined: RM1.4 trillion in investment to generate a Gross National Income (GNI) of RM1.7 trillion and create 3.3 million incremental jobs, in the end-point year of 2020. This will translate into a GNI per capita of US\$15,000 and catapult us into high-income nation status.

In just over a year of implementation, 72 of the 131 Entry Point Projects (EPPs) have taken off. We have announced 110 projects and over 83 per cent of them are either operational or have commenced work. Considering the initial inertia in any new initiative, these results are akin to a vertical take-off.

More importantly, the confidence created has had immediate knock-on effects on the economy. In 2011, private investment reached RM94 billion, surpassing the target of RM83 billion. The GNI contribution of 11 NKEAs (excluding Greater Kuala Lumpur/Klang Valley to avoid double-counting) has reached RM589 billion, surpassing the full-year target of RM494 billion. In addition to this the 110 announced projects are projected to create 313,741 new jobs (95 per cent of full year target). The RM589 billion in GNI contribution from the 11 NKEAs accounts for 70 per cent of national GNI (RM830.7 billion) clearly indicating the weight of the NKEAs on the economy.

Exhibit C



\*The Department of Statistics only tracks employment numbers, not new job creation.

Key to our ethos is transparency. For the 2011 Annual Report, we engaged PricewaterhouseCoopers (PwC), an independent audit firm, to conduct a series of Agreed-Upon-Procedures (AUPs) to ensure the accuracy of our reporting. During the course of the AUP, we recalibrated the committed investments, projected GNI contribution in 2020 and projected jobs created.

The revision of the investment and job creation numbers is primarily due to changes in business plans over the next five years, in tandem with changing business dynamics. In addition, there is a significant revision in the GNI forecast. Being a relatively new concept, most corporations struggled with it.

Simply put, GNI is defined as income of Malaysians. It is the Gross Domestic Product (GDP) net of corporate and personal repatriations, which is a better measure of actual income for Malaysians. Some errors include:

- Using revenue as GNI: cost must be stripped out to ensure that we do not double count across sectors
- Using cumulative GNI figures: we look at the impact in the year 2020 as an end-point to determine the achievement of high-income nation status
- Inaccurate projections: corporate planning cycles tend to be five years long and some projections assumed an unrealistic growth rate
- Assuming GDP equates to GNI: some corporations e.g. subsidiaries of Multinational Companies (MNCs) or companies in joint ventures with foreign companies, repatriate a substantial amount of their profits

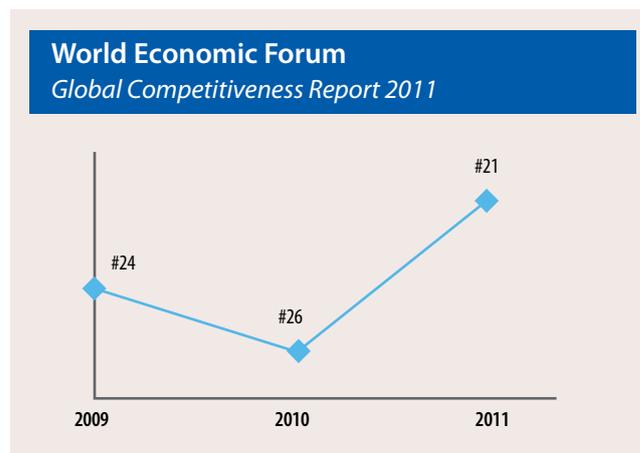
The recalibration has resulted in a revised committed investment of **RM179.2 billion**, GNI of **RM129.5 billion** and **313,741 new jobs**. This rigorous exercise is extremely useful to help us establish clear accounting and best practices that will ensure greater accuracy as we move forward.

### Moving up the competitive rankings

Malaysia has also made significant strides in several key global rankings. In the World Economic Forum's Global Competitiveness Report 2011, Malaysia rose five places from 26th to 21st among 142 countries globally while coming in sixth and second in the Asia-Pacific and ASEAN respectively. Scoring 5.08 points out of a maximum of seven, compared to 4.88 in the 2010 report, we moved ahead of countries such as the UAE, New Zealand, South Korea, Luxembourg and Israel.

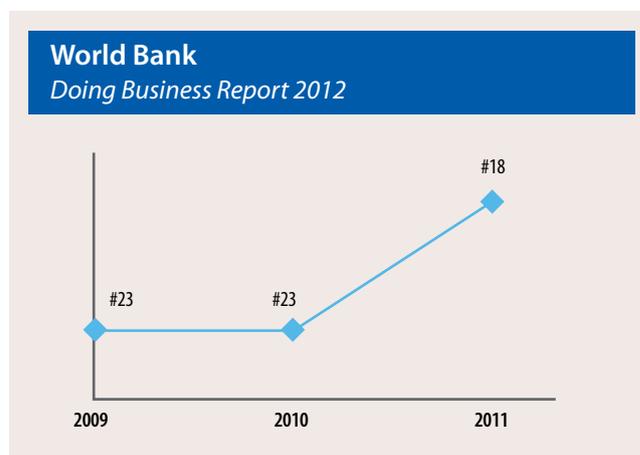
While we perform creditably in institutions, macroeconomic environment, higher education and training, labour market efficiency and financial market development, there is room for improvements in health and primary education, technology readiness and innovation.

Exhibit D



In the World Bank's Doing Business Report 2012, we moved from 23rd to 18th place, leaping over advanced economies such as Germany, Japan, Taiwan, Switzerland, Belgium and France. Malaysia scored top marks in getting credit (first) and protecting investors (fourth) and improved significantly in ease of starting a business (50th from 113th), enforcing contracts (31st from 59th) and resolving insolvency (47th from 55th). However, the difficulty in dealing with construction permits continues to be an issue, deteriorating from 108th to 113th.

Exhibit E



The AT Kearney 2012 FDI Confidence Index is a great boost from an investment perspective. Malaysia moved into the top 10, signalling a change in investors' perception of the Malaysian economy due to the progressive implementation of the NKEAs and National Key Result Areas (NKRAs) under the Government Transformation Programme (GTP). This is further complemented by the liberalisation policies and the concerted efforts of the government and private sector as a whole. Be that as it may, we need to sustain all efforts to remain competitive with our neighbours Singapore (seventh) and Indonesia (ninth).

Exhibit F



### Focus: 12 NKEAs to drive economic growth

During the year under review, all 12 NKEAs made good progress. Detailed reporting of the Key Performance Indicators (KPIs), targets and achievements are available under the respective NKEAs.

### Greater Kuala Lumpur/Klang Valley

Our aspiration for Greater KL/KV is summarised as 20-20, to achieve top 20 global ranking in city economic growth and liveability by 2020. Nine EPPs along four dimensions have been identified to deliver RM193 billion in GNI and create 300,000 jobs. These are: Greater KL/KV as a choice location for companies and professionals, connecting Greater KL/KV externally and internally, making Greater KL/KV a vibrant and attractive place to live in, and enhancing services.

To attract global multinationals and talent to Malaysia, two agencies; Talent Corp and InvestKL have been established. To date, Schlumberger, PayPal, IBM and Toshiba have set up their operations and/or committed investments. IBM will invest RM1 billion in its Global Technology Services Delivery Centre in Cyberjaya over the next five years while Toshiba with an investment worth RM268 million has global and regional roles for its new hub in Malaysia.

Talent Corp has launched various programmes which have received positive response. As of December 2011, 680 Malaysians have returned home under the Returning Expert Programme while 482 applicants have received the Resident Pass which is focused on attracting and retaining foreign talent in Malaysia.

The Klang Valley MyRapid Transit (KVMRT) project to reduce congestion and make the city more liveable is progressing. Construction for the first line (Sungai Buloh-Kajang) commenced in July 2011 and it is expected to be fully operational in 2017. Given the size and complexity of the project, MRT Corporation Sdn Bhd was established, taking over from Syarikat Prasarana Negara Berhad as the project developer and asset owner. Planning will start on the other two MRT lines using the Rail Transport Master Plan for GKL.

Various other initiatives to enhance the city's liveability are also on-going. These include cleaning up Kuala Lumpur's main river, beautifying and developing its surroundings; planting more trees; and providing comfortable pedestrian walkways.

## Oil, Gas and Energy

We are targeting a five per cent annual growth for the sector from 2010 to 2020. This is an ambitious goal, particularly against a backdrop of the natural two per cent decline in oil and gas production.

To achieve this, we are focused on four key thrusts: sustaining oil and gas production, enhancing downstream growth, making Malaysia the number one Asian hub for oil field services, and building a sustainable energy platform for growth.

There are 12 EPPs which will deliver a GNI of RM131.4 billion and create an additional 52,300 jobs by 2020. Major industry players such as PETRONAS, Dialog Group, Shell ExxonMobil and Vitol Group have made huge investments in this sector.

Milestones for the year include the approval of the Petroleum Income Tax Act Amendment Bill, which aims to incentivize exploration of marginal oil and gas fields; and the launch of the Global Incentives for Trading Programme which is focused on transforming Malaysia into Asia Pacific's hub for petroleum storage and trading business.

Central to achieve the latter goal is Malaysian Petroleum Resources Corporation (MPRC), a new dedicated body set up to streamline cooperation between the government and private sectors, attract foreign investments, and help local players become regional champions.

## Financial Services

The 2020 aim is to transform the sector to serve the needs of businesses and consumers in a high-income economy, and to increase its depth as well as regional and global market shares in select niches.

To realise this vision, four thrusts have been identified: strengthen the core, serve the needs of the high-income population, develop new growth sectors, and go on the offensive. Through 10 EPPs with 49 initiatives, this sector is expected to contribute RM121.5 billion in GNI and create 45,000 jobs.

The major milestone of the year was the Prime Minister launching the Financial Sector Blueprint, which charts the direction of the financial system over the next decade. The 69 recommendations in the blueprint have taken into account the expected changes in the international and domestic environment and its consequent demands on the financial system over the next 10 years.

We continue to place strong emphasis on the four core sectors in Islamic finance; Islamic banking, takaful, the Islamic capital market and the Islamic money market. Malaysia's Islamic banking assets have reached US\$72.5 billion with an average growth rate of 20 per cent annually. We will also continue to develop regional banking champions. With CIMB's recent expansion into the Philippines and Maybank's acquisition of Kim Eng Holdings, Malaysian banks now have a presence in 14 markets around the world.

## Wholesale and Retail

The retail sector is the fourth biggest GNI contributor after Oil, Gas and Energy, Palm Oil and Rubber and Financial Services. With 13 EPPs grouped along three themes: modernise, globalize and revolutionise, we aim to more than double the sector's GNI contribution to RM165 billion per annum in 2020 from RM57.2 billion in 2009.

A key achievement in 2011 is seeing lives transformed in the Small Retailer Transformation (TUKAR) programme which modernises traditional sundry shops. To date, 519 sundry shops across Malaysia have been modernised, with excited retailers reporting an average 30 per cent increase in sales. In addition, 55 workshops were transformed under the modernization of automotive workshop (ATOM) programme and we will continue to further expand this initiative in 2012.

Within the 1Malaysia Mall initiative, we are making inroads overseas as we seek to export our skills and products. We are currently in discussions with the Chinese and Vietnamese governments to develop malls in these two countries. We are also exploring similar opportunities in high growth potential countries such as India, Indonesia and Sri Lanka, with an increasing burgeoning middle class. We are pleased to say that the feasibility study is completed and the report to the Government will be ready in March 2012.

### Palm Oil and Rubber

To capture the growing global demand for palm oil, we are focused on two strategic thrusts: improving upstream productivity and downstream expansion. There are eight EPPs to deliver RM178 billion in GNI and create 123,400 new jobs by 2020. The increased productivity is also expected to reduce Malaysia's dependence on foreign labour.

In the upstream sector, yield is up 19.73 tonnes per hectare compared to 18.03 in 2010. Oil extraction rate has also increased from 19.7 per cent in January to an average of 20.35 per cent in 2011.

In oleo chemicals, four companies have committed some RM1.3 billion. These include Kuala Lumpur Kepong Berhad, Emery Oleochemicals Group, ICM Speciality Chemical Sdn Berhad and IOI Oleochemical Industries Berhad. To develop health-based products, Malaysia is investing some RM20 million in six clinical trials in the US, Singapore and Malaysia seeking medical breakthroughs by using tocotrienols in palm oil.

In the rubber industry, a dedicated lab was run at the end of 2010; four EPPs have been identified to increase productivity, ensuring sustainability, winning more market share for latex gloves and introducing new rubber products. Collectively, these four EPPs are to deliver RM28.4 billion in incremental GNI.

### Tourism

By 2020, the Tourism NKEA will contribute to RM66.7 billion in incremental GNI. To achieve this ambitious target, we have identified 12 EPPs across five themes: affordable luxury; nature adventure; family fun; events, entertainment, spa and sports; and business tourism.

The highlights include the opening of Malaysia's first premium outlet; the RM150 million Johor Premium Outlet which is a Joint Venture between Genting Group and Simon Property Group, and MyCEB's (Malaysia Convention and Exhibition Bureau) success in securing 49 events with a projected economic impact of RM780 million.

In addition, efforts to encourage investments in four-star and five-star hotels are progressing well with more than RM1.4 billion investments in three new hotels. KL will see two: St. Regis Kuala Lumpur which will open its doors in 2014, and the Majestic Kuala Lumpur which will be fully operational in December 2012. Also operational in 2012 is the Gaya Island Resort on Pulau Gaya.

### Electrical and Electronics

Our strategy is to focus on four target sub-sectors chosen based on attractiveness in terms of growth and size (semiconductors, light emitting diodes (LEDs), solar and industrial electronics, and home appliances) and four geographical clusters (Northern Corridor, Greater KL/KV, Johor, and Sabah and Sarawak). A total of 15 EPPs, business opportunities (including multiplier effect) and baseline growth will contribute RM90.1 billion to GNI by 2020.

The focus for the year was in strengthening the enablers to expedite the multiplier effects. One of the sector's major accomplishments is in establishing capacity building enablers. These include wafer fab equipment refurbishment services in Kulim, LED test and certification services in Bayan Lepas, and industrial utilities infrastructure in Samalaju, Sarawak. Industry players are able to leverage on these enablers to expand their businesses.

We also focussed on structural reforms. With the intention to ease the entry of Malaysian entrepreneurs and their innovations further into the global marketplace, the Malaysian Investment Development Authority (MIDA) was corporatised and the Malaysian Productivity Centre restructured. In addition, Agensi Inovasi Malaysia was established to drive innovation in Malaysia, inspiring a new generation of innovative entrepreneurs.

In addition to this, the five corridor authorities – the Iskandar Regional Development Authority, North Corridor Implementation Authority, East Coast Economic Region Development Council, Sabah Economic Development and Investment Authority and the Sarawak Corridor of Renewable Energy – will be further empowered to promote the government’s transformation initiatives by spearheading industrial infrastructure development.



## Business Services

With Malaysia’s business sector only contributing 2.9 per cent to GNI, there are ample opportunities for growth. Through five EPPs across five sectors, we aim to quadruple Malaysia’s business services’ GNI contribution from RM19.5 billion in 2009 to RM78.7 billion by 2020.

The sectors are: Aviation Maintenance Repair and Overhaul (MRO), Outsourcing, Data Centre Hub, Green Technology and Pure Play Engineering.

MAS Aerospace Engineering has successfully established a joint venture entity with the GMR Hyderabad International Airport Limited (GHIAL) to establish a satellite centre that focuses on MRO services such as airframe and line maintenance work. Located in Hyderabad, India, the satellite centre began operations on 2 November 2011. This will enable higher value-added MRO work such as component and engine repair to be channelled to MAS Aerospace Engineering’s MRO facility in Subang, Malaysia.

Building on our strength as one of the world’s best locations for Outsourcing and Data Centre sectors, we have secured 17 new MNCs in 2011 which are either business outsourcing vendors or off-shoring entities.

We are also on track to capture more data centre market share in the region. We started out with an existing data centre space of 500,000 square feet. The first full year target was set at 100,000 square feet. We are happy to report that for 2011, with the development of three new data centre facilities, we have increased the sellable data centre space by another 380,000 square feet, over three times our first year target.



## Communications Content and Infrastructure

The aspiration is to raise the CCI sector’s GNI contribution threefold to RM57.7 billion in 2020 from RM22 billion in 2009. To realise this target, we have identified 10 EPPs across three themes: serving tomorrow, pushing boundaries and enhancing foundation.

Highlights include increasing broadband household penetration from 60 per cent in 2011 to 65 percent in 2012 reaching a total of 4.5 million households subscription, and bridging the digital divide by getting more rural communities online. In the first week of 2011, broadband household penetration was 56.2 per cent and by Dec 2011 it grew to 62.3 per cent.

In addition, more than 1,300 villages across the country were connected with wireless internet services, and close to 350,000 netbooks were distributed to low income household families.

Concurrently, the new industry-led public-private collaboration to grow the export segment of the creative industry saw a 29.6 per cent increase in export revenue to RM337 million in Q32011 compared to RM260 million in 2010. This EPP is expected to register further growth in 2012 as 22,000 hours of digital content will be made available during the year.



## Education

The Government has provided key guidance and direction to private players on initiatives that have direct impact on national policy. For example, EPPs such as EPP1: Scaling Up of Early Childcare and Education Centres and EPP2: Improving Early Childcare and Education Training, are part of a bigger national education policy to ensure universal preschool enrolment by 2020 and access to quality and affordable childcare and pre-school education. These initiatives require major participation of the private sector players to succeed and the government provides the necessary support in terms of policy formulation and incentives eg. soft loans, training grants etc.

The Government has focused on the importance of technical education and vocational training (TEVT), in line with the requirements of a skilled workforce for a high-income nation. Apart from funding and grant support, the Government introduced a policy of vocational and technical pathway as early as in secondary school which will raise the profile and importance of skills training on par with the academic pathway.

The positioning of Malaysia as a regional hub in the global education network has also gained tremendous traction with the success of Educify@Iskandar and the creation of the Kuala Lumpur Education Cluster (KLEC). Educify@Iskandar has attracted eight world-class universities and colleges with committed investments totaling RM 581.8 million while Epsom College Malaysia branch campus will be made available at KLEC.



## Agriculture

The Agriculture NKEA looks into transforming the rural economy. This sector focuses on four key themes to transform the agriculture industry to agribusiness: ensuring food security, tapping premium markets, capitalizing on Malaysia's competitive edge and expanding participation in the regional value chain. A total of 16 EPPs have been identified to deliver RM28.9 billion in incremental GNI and create 74,600 jobs.

In 2011, the breakthrough achievement is in the introduction of reimbursable incentives to the anchor companies based on KPI of work completed and production. This NKEA is recognized as an enabler which facilitates company growth and socio-economic development.

To date, the NKEA incentives procedure saw the approval of 39 companies, with committed private investments of RM3.2 billion to generate RM10.22 billion in GNI at 2020 and a cumulative of 31,504 jobs (42 per cent of overall target by year 2020) by the end of each project's completion date. Private investment for EPPs surpassed the original target of 66 per cent to achieve 91 per cent by the end of 2011. This significantly reduced public investment to nine per cent from the initial estimate of 34 per cent.

These incentives provided by the government to the anchor companies are given with a caveat that the surrounding community of any given project within this NKEA must be involved and thus benefit economically.



## Healthcare

In 2011, Business Opportunity 1 – Medical Devices Industry was transformed into seven new EPPs, bringing the total number of EPPs under the Healthcare NKEA to 13. With these changes, the Healthcare NKEA will contribute to incremental GNI growth of RM35.5 billion and 181,000 jobs by 2020.

We have made major policy changes to enable us to transform Malaysia into a generics export country. The most significant is the shortening of the compulsory services for pharmacists from three years to one. They are also allowed to do their practical training in recognised private pharmaceutical industry facilities. In addition, the Pharmaceutical Off-Take Agreement-Government Procurement for New Local Manufactured Pharmaceuticals has been agreed upon with implementation in 2012.

We continue to make inroads in healthcare travel. The Malaysia Healthcare Travel Council, the main care taker has been corporatized while various tax incentives, automatic issuance of working permit for spouses of medical professionals and shorter processing time for healthcare tourists have been made available. This EPP has generated RM436 million in revenue.

## Competitiveness: Six structural reforms to ensure changes

In July 2011, we launched six Strategic Reform Initiatives (SRIs). The SRIs represent policy recommendations made in the New Economic Model and the cross-cutting reforms to enable Malaysians to be competitive in the global arena.



## Competition, Standards and Liberalisation

This SRI has made good progress. The Competition Law, to safeguard against anti-competitive practices and abuse of market power, came into force in January 2012. In addition, the Prime Minister has announced the liberalisation of foreign ownership of banks as well as 17 services sub-sectors. These sub-sectors to be liberalised in stages by end 2012 include private hospital services; medical and dental specialist services; architectural, engineering, accounting and taxation, legal services; courier services; education and training services; as well as telecommunication services.



## Human Capital Development

The minimum wage is expected to be announced in the first half of 2012 while the upskilling and upgrading of the workforce continues. Focus has been given to five sectors; Oil, Gas and Energy, Tourism, Electrical and Electronics, Communications Content and Infrastructure, and Business Services. In addition, the MyProCert programme which aims to upskill Malaysians to international certification standards targets to produce 5,000 new certified professionals by 2014.



## Government's Role in Business

33 companies under six Government Linked Investment Companies (GLICs) have been identified as ready for divestment either through a listing, pare-down or outright sale. Under the plan to rationalise the portfolio of GLCs, five have been identified for stake pare-downs, seven for public-listing and 21 for outright sale. For the year of 2011–2012, 24 companies have been identified for the Government's divestment exercise. For the year of 2011–2012, 24 companies have been identified for divestment, and the divestment process will begin as the shares hit an agreed-upon strike price.

To date, four companies comprising the four subsidiaries in MSM Holdings Berhad's IPO have been divested. The listing of Felda Global Ventures Holdings Sdn Bhd is slated to happen in May 2012.



### Public Finance Reform

The Public Finance SRI aims to reduce the Government's expenditure whilst increasing revenue. This will create a fiscal space and budget surplus that will allow us to manage contingencies, pay off debt and invest in the future.

20 initiatives were set out in the lab sessions. These are clustered into six key thrusts: improving tax administration, rationalising corporate tax incentives, transparent procurement, controlling expenditure, accrual accounting and introducing a broad-based tax.

The primarily focuses on increasing Federal Government revenue are via improving tax administration and compliance of both direct and indirect taxes. We estimate that some RM1.94 billion will be collected in 2012 on top of the conventional revenue projection made.

Let us reiterate: we are committed to introduce GST (Goods and Services Tax) and continue rationalisation of subsidies. Much of our national income now comes from PETRONAS and is not sustainable. We need a broad-based consumption tax, a tax levied on the value-added activities by every operation along the delivery chain.

The GST will not impact the lower income group as most of the basic products and services will be exempted or zero-rated such as rice, raw meat, fresh fish, vegetables, domestic public transportation and healthcare services.

SMEs will be offered incentives to reduce cost of implementing the GST. The estimated additional revenue is RM6 to RM10 billion dependent on the GST tax rate of four to five per cent.

In addition, we cannot continue with the current extent of subsidies. We have previously said that the rationalisation will be staggered over five to seven years. With the cost of living issue coming out to the fore today, we have to take that into consideration in the implementation. A balancing act is key – reforming the public finance while ensuring that we take care of the lower income group.



### Public Service Delivery

This SRI is on track. Business Licensing Electronic Support System (BLESS) which aims to make investing in Malaysia easy will see 405 licenses abolished, and 271 simplified, before being made available online. The current myGovernment Portal will be enhanced to become the Single Online Portal.

In addition, BLESS will be incorporated into a single online portal for greater accessibility to the business community.

To improve governance and promotion of efficiency, the pilot for Real Time Performance Monitoring System for five government agencies is expected to be implemented in the second quarter of 2012. The pilot on the counter service rating system was introduced at 82 police stations in Selangor in 2011.



### Narrowing Disparity

Unit Peneraju Agenda Bumiputera (TERAJU) is the champion of the Bumiputera Economic Transformation Plan, which aims to enhance wealth creation for the bumiputeras.

One of the key drivers is the High Performing Bumiputera SME Programme (TERAS), focussed on developing the next generation of world-class entrepreneurs. To date, 30 SMEs have been selected to undergo the programme. Concurrently, to encourage the implementation of Bumiputera private sector projects, the Government has allocated a RM2 billion Facilitation Fund to be managed by the Public-Private Partnership Unit (UKAS) and TERAJU.

The Yayasan Peneraju Pendidikan Bumiputera, a private education trust fund for specialised skills and training has also kicked off with more than RM100 million in pledges. A total of 12,000 scholarships will be made available.



**The ETP is people focussed. Our single-minded pursuit of investment and competitiveness is to enable everyone to enjoy the wealth of the nation.**



### **Our priority is the *rakyat***

The ETP is people focussed. Our single-minded pursuit of investment and competitiveness is to enable everyone to enjoy the wealth of the nation. While it will take time before the benefits are felt across the country as the ETP is a 10-year programme, we are delighted that many individuals and their families are already seeing significant differences in their lives.

We have transformed 519 mom-and-pop shops under the TUKAR programme or modernising small retail sundry shops (Wholesale and Retail NKEA). TUKAR gives shop owners a fresh start. For entrepreneurs such as Shaari Abu Hassan (Penang) Rahmat Sulaiman (Sibu), Michael Lim (Sabah) and Mohd Shawal Omar (Johor), their sales have risen sharply since the makeover. Between the four of them, sales have increased between 30 per cent and 75 per cent.

In the Agriculture NKEA, farmers are enjoying better income with the introduction of fragrant rice cultivation in non-irrigated areas. For Encik Saidin Hashim in Sik, Gurun, one of the contract farmers, his reason for switching was simple, the premium that fragrant rice can command, some RM1,400 per tonne of paddy versus RM950 per tonne, proved quite an inducement. To date, 37 farmers in various locations across the peninsula are participating in this initiative.

In the Education NKEA, we are up-skilling existing pre-school teachers and providing pre-service training for new teachers. Our aim is to raise the quality and level of professionalism in early childhood education (ECCE) as Malaysia moves towards a minimum diploma level qualification for all ECCE teachers. To date, close to 6,000 teachers have been trained. Haryani Kamarudin was one of the preschool teachers who participated in the three-week ECCE teacher-training programme in November 2010. She has been awarded a scholarship by SEGi to pursue a Diploma in Early Childhood Education.

### **2012: Renewing the discipline of action**

On all counts, the ETP has got off the block quickly and gained traction. However, this is a marathon, not a sprint. We have nine more years to go and stakeholders from both the public and private sector must remain fully focused to realise the goals.

Transformation is not about marginal improvements or for the faint-hearted, more so when it is about remodelling the national economy. It requires conviction and courage to accept ambitious targets and work relentlessly towards them.

The gauntlet has been thrown down. Our true north is towards becoming a high-income nation. We believe that a combination of the 12 NKEAs and six SRIs will allow us to achieve RM1.4 trillion in investments, RM1.7 trillion in GNI and to create 3.3 million new jobs. Detailed KPIs have also been set for each NKEA and each EPP. The governance structure that enables the Government to facilitate private sector participation is in place.

Having a precise and detailed ETP roadmap is crucial. It has concrete projects, targets, action items, project owners and timelines clearly laid out. What it requires is the discipline of action to make it happen. No amount of planning is any good if no action is taken and repeated action is needed to tip things over for targets to be achieved.

2012 will not be a year for us to introduce new programmes. It will be one where we must follow through on our existing programme and execute, execute, execute. Only then can we become a high-income nation in an inclusive and sustainable manner by 2020. Only then can we be rich, all of us, for a long, long time.

# ETP Scorecard: Key Performance Indicator Measurement Methodology

The ETP Scorecard assesses the extent to which the planned Key Performance Indicator (KPIs) for each Entry Point Project achieved the desired outcome for the past year. The actual year-to-date results are presented in three scoring methodologies

All three methods have been formulated to provide a pragmatic representation of the actual KPI numbers in percentages.

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

The traffic light approach is outlined below:

**Green** – exceeded targets

**Yellow** – achieved 50 per cent or more

**Red** – underperformed

Where decimal points are concerned, the scorecard employs a rounding mechanism. In cases where the KPI results have a decimal point of 0.1 to 0.4 per cent, the final percentage value is rounded downwards. Where the results have a decimal point of 0.5 to 0.9 per cent, the final percentage value is rounded upwards.

Methods 1 and 2	
Achievement	Traffic Lights
90 per cent and above	
51 per cent to 89 per cent	
50 per cent and less	

Method 3		
Achievement	Scoring	Traffic Lights
100 per cent and above	1	
51 per cent to 99 per cent	0.5	
50 per cent and less	0	

# ETP Milestones

2010

25 Oct



**Economic Transformation Programme Roadmap**  
 Launched by the Prime Minister, with announcement of nine projects



**Progress Update**  
 Prime Minister announced 23 projects

8 Mar

**InvestKL** announced by the Prime Minister



1 Apr



**Strategic Reforms Initiatives Labs** completed

**Progress Update**  
 Prime Minister unveiled 12 projects

**Corporate Integrity Pledge**  
 Business owners signed and expressed commitment for transparency, accountability & good governance



19 Apr

**Malaysia Petroleum Resources Corp** established



19 Apr

13 Jun



**Progress Update**  
 15 projects within seven NKEAs announced

5 Jul

**ETP Update**  
 Introduction of the six Strategic Reform Initiatives



8 Sep



**Progress Update**  
 84% projects announced are being implemented. Prime Minister announced 10 more projects



8 Sep

**International Performance Review** on ETP and GTP Annual Report 2011



7-9 Feb

**Cities and Corridors Open Day** Kuantan

18 Feb

## ECONOMIC TRANSFORMATION PROGRAMME



# 2011

30 Nov

**Progress Update**  
Strong start continues with announcement of nine more projects



Dec



**New Economic Model**  
The National Economic Advisory Council released the concluding part of the book

1 Jan

**TalentCorp**  
A government agency tasked to attract local and foreign talents to work in Malaysia takes off on January 2011

11 Jan



**Progress Update**  
ETP in overdrive with 19 projects announced

MRT Open Day



21 Feb

**Strategic Reform Initiatives Labs**  
500 lab members participated in six SRI labs for six weeks



13 Feb

**Cities & Corridors Labs** commenced with ECER, Iskandar Malaysia, NCER, SDC, SCORE



12 Sep



25 Oct



**ETP Turns One** celebration

1 Nov

**Progress Update**  
Prime Minister announced 10 more projects

**Cities & Corridors Labs** ended



# 2012

14 Feb

**Cities and Corridors Open Day**  
Kota Kinabalu

10 Nov

4 Nov



Oil, Gas  
and Energy



Greater  
Kuala Lumpur/  
Klang Valley

# National Key Economic Areas

## Focussed Approach to Economic Growth

Malaysia will leverage its competitive advantages by prioritising investment and policy support behind a limited number of key growth engines. Hence, the Economic Transformation Programme focusses on 12 National Key Economic Areas (NKEAs) as announced in the Tenth Malaysia Plan. These NKEAs will receive prioritised government support including funding, top talent and Prime Ministerial attention.

The Government is committed to the ongoing support of growth in the non-NKEA sectors. However, the Government will focus its efforts on the NKEAs because of the significance of the GNI contribution that these parts of the economy can drive.



**Financial  
Services**



**Business  
Services**



**Wholesale  
and Retail**



**Electrical  
and Electronics**



**Tourism**



**Palm Oil  
and Rubber**



**Healthcare**



**Communications Content  
and Infrastructure**



**Agriculture**



**Education**



# Greater Kuala Lumpur/ Klang Valley



**Senator Datuk  
Raja Nong Chik  
Raja Zainal Abidin**

Minister of Federal  
Territories and Urban  
Well-being



**Greater Kuala Lumpur/Klang Valley is home to six million people, about 20 percent of Malaysia's total population. As we move towards 2020, ten million people will be living in this city. Our aim is to transform Greater Kuala Lumpur/Klang Valley into a connected city where residents can enjoy its many facilities and services, where its diversity will be celebrated through its iconic developments, places and people.**

The Greater Kuala Lumpur/Klang Valley NKEA 2020 targets are to be both in the top 20 most livable cities list and the top 20 in economic growth.

Our journey towards 2020 and realizing our goals has just begun through the implementation of nine Entry Point Projects and the two Business Opportunities under this NKEA.

Transforming Greater Kuala Lumpur/Klang Valley into an urban metropolis will require endurance and willingness of its citizens to embrace and participate in change. A city that has vibrancy and attractiveness will be a magnet for talent, innovation and creativity – where a dynamic environment provides its residents a sense of purpose, connectedness and belonging.

# Greater Kuala Lumpur/Klang Valley

The four Greater Kuala Lumpur/Klang Valley (Greater KL/KV) themes of Magnet, Connect, New Places and Enhanced Services have set an exacting agenda in the National Key Economic Area (NKEA)'s first year of implementation

The implementation of key Entry Point Projects (EPPs) envisage a comprehensive makeover of the Greater KL/KV geography by improving its attractiveness to foreign multinational companies (MNCs) and foreign talent, putting in place the backbone of an efficient public transport system and looking into the feasibility of high speed travel between Kuala Lumpur and Singapore.

In addition, various initiatives to enhance the ambience of the city by improving its physical environment are also on-going. These include intensive efforts to upgrade the water quality of Kuala Lumpur's main rivers and beautifying and developing its surroundings via the River of Life EPP, going green through the planting of more trees in the city, developing iconic places within the city and providing comfortable walkways for pedestrians.

Not to be forgotten is the planning for enhanced solid waste management and improved sewerage services for the metropolis. Efforts to improve housing opportunities as well as to vitalize the Government administrative capital of Putrajaya have also taken off.

Together these initiatives will not only enhance livability but also the economic vitality of Greater KL/KV through activities, contributing RM190 billion in Gross National Income (GNI) over the course of the next 10 years and creating over 300,000 jobs.

## 2011 Key Performance Indicators

Exhibit 1.1

NKEA Greater Kuala Lumpur/Klang Valley		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Conclude letter of intent with MNCs for location of HQs or regional HQs in Greater KL/KV	6	6	100%	●	100%	●	1.0	●
	Employment generated	400	471	118%	●	100%	●	1.0	●
EPP #2	Returning Expert Programme, Resident Pass Programme and Employment Permit Programme	100%	94%	94%	●	94%	●	0.5	●
	TalentCorp website and portal improvements	100%	98%	98%	●	98%	●	0.5	●
EPP #3	Provision of a business case to Cabinet for a HSR project between Kuala Lumpur and Singapore	Dec-11	100%	100%	●	100%	●	1.0	●

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NKEA Greater Kuala Lumpur/Klang Valley		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #4	Gazetting 90 per cent of land acquisitions for the Sungai Buloh – Kajang Line by December 2011	90%	100%	111%	●	100%	●	1.0	●
	Commencement (Ground Breaking for the MRT Project) by July 2011	100%	100%	100%	●	100%	●	1.0	●
EPP #5	Percentage of completion of River Cleaning	15%	19%	127%	●	100%	●	1.0	●
	Number of firms participating in master planning competition	5	5	100%	●	100%	●	1.0	●
	International news articles on River of Life	70	98	140%	●	100%	●	1.0	●
EPP #6	Number of trees planted	30,000	31,447	105%	●	100%	●	1.0	●
	Shaded areas ('000 square feet)	668	700.2	105%	●	100%	●	1.0	●
	Number of events in parks	10	10	100%	●	100%	●	1.0	●
	Number of trees funded by the private sector	5,000	5,098	102%	●	100%	●	1.0	●
EPP #7	Percentage of average completion of Iconic Places	5%	57%	1,140%	●	100%	●	1.0	●
	Number of master plans for Iconic Places	5	5	100%	●	100%	●	1.0	●
EPP #8	Total pedestrian walkways improved (km)	12	10	83%	●	83%	●	0.5	●
EPP #9	Roll-out of separation at source (household wastes) – distribution of bins to Kuala Lumpur households	15%	15%	101%	●	100%	●	1.0	●
	Completion of Food Waste Plan (including approach to food wastes disposal, inventory of eateries, economic feasibility of PFI/PPP approach)	100%	100%	100%	●	100%	●	1.0	●
	Biogas plant for food waste: finalisation of pre-tender process (site, business model and tender documents)	10%	0%	0%	●	0%	●	0.0	●
				<b>151%</b>		<b>94%</b>		<b>88%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

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# Entry Point Projects

## EPP 1

### Attracting 100 of the World's Most Dynamic Firms within Priority Sectors

This EPP aims to attract 100 MNCs to Greater KL/KV that could eventually contribute RM40 billion to the annual GNI by 2020.

#### Achievements

A special purpose vehicle, InvestKL, was set up in June 2011 to ensure the effective implementation of the MNC headquarters attraction programme, with its vision to transform Greater KL/KV into one of the world's top investment destinations.

For this year, InvestKL has been successful in bringing in the following global corporations to set up bases in Greater KL/KV:

1. Schlumberger - Global Budgeting and Taxation Service
2. Vale – Global Business Process Outsourcing Support Centre
3. IBM – Global Technology Service Delivery Center
4. Toshiba – Global Supply Chain, Turnkey Hub and Research and Development (R&D) Centre



5. Worley Parsons – Global Treasury Service Centre
6. AECOM – Regional Knowledge Centre

We are seeing positive outlook in terms of foreign investment under the ETP. In 2011, MNCs such as IBM and Toshiba have committed to investing in capital and operating expenditures (CAPEX and OPEX) totaling RM1.268 billion, while creating 3,668 jobs by 2017.

#### Moving Forward

InvestKL has an overall target to bring 100 MNCs into Greater KL/KV by 2020. They are working closely with the Malaysian Investment Development Authority (MIDA), Multimedia Development Corporation (MDeC) and the five Regional Economic Corridors to bring in companies that are regionally and globally focused, in the process creating world class businesses and generating career opportunities. InvestKL will leverage on the manufacturing and services sectors and provide a comprehensive and integrated investment environment for global companies operating from Greater KL/KV.

## EPP 2

### Attracting the Right Mix of Internal and External Talent

The Greater KL/KV population is expected to grow significantly to reach the level of urbanisation and income of a developed country. It will need to attain a critical mass in population to remain competitive.

An anticipated additional 2.5 million immigrants are expected to relocate to Greater KL/KV by 2020. 20 per cent of this number is expected to come from overseas – both expatriates as well as returning Malaysians. This EPP aims to generate 1.7 million incremental employment demands in Greater KL/KV by 2020.

#### Achievements

Talent Corporation (TalentCorp) was set up in December 2010 and its existence is critical to support the initiatives under InvestKL. Detailed talent attraction programmes were identified to enable and facilitate foreign immigration and domestic migration and the return of members of the Malaysian diaspora. In addition, TalentCorp is reaching out to the Public Service Commission (JPA) scholars from abroad and from local institutions for the Talent Acceleration in Public Service (TAPS) and Scholarship Talent Attraction and Retention (STAR) Programmes.

The Returning Expert Programme (REP) was launched in April 2011. As at December 2011, the programme has recorded more than 680 Malaysians returning from abroad. The Resident Pass (RP), which is an enhancement of the Employment Pass (EP) and already implemented, has had over 482 applicants approved between April 2011 and December 2011.



TalentCorp career fair

(more on next page)

**EPP 2** (continued from previous page)

The Bond Transfer Programme is a programme which involves JPA scholars graduating from abroad and also those from top tier local universities. These students will be given the opportunity to serve their bond either in the public

service or with multi-national and government-linked companies through Talent Acceleration in Public Service (TAPS), a collaborative effort between JPA, TalentCorp and Razak School of Government, which commenced in late

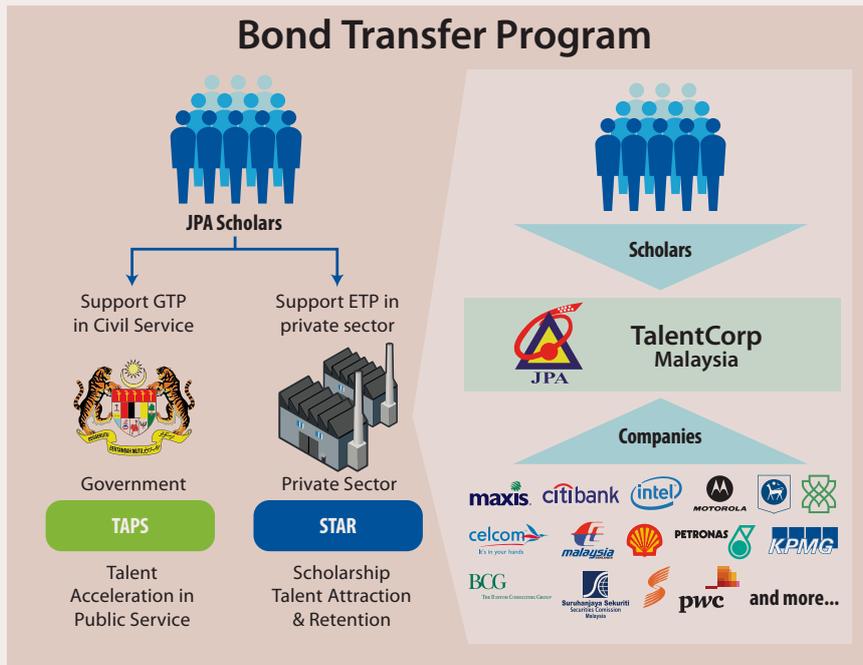
October 2011. The programme will be rolled out to graduating JPA Scholars in Australia – approximately 330 scholars in March 2012.

**Moving Forward**

TalentCorp will intensify efforts to target a higher number of Returning Experts, Residence Pass and Employment Pass (Category II) recipients through business process improvement projects. These include automation of manual processes, new business models and systems development for the Returning Experts programme, and an improved immigration setup for both Residence Pass and Employment Pass issuance which will include system support and maintenance.

The database and portal enhancement project will be developed further to enable better online interaction and will include STAR and MyWorkLife portals, Diaspora Database and virtual engagement platforms. TalentCorp is also targeting to recruit a higher number of JPA scholars including those from local institutions of higher learning in addition to overseas scholars for the bond transfer programme.

Exhibit 1.2



**EPP 3** Connecting to Singapore via a High Speed Rail System

The High Speed Rail (HSR) system to connect Kuala Lumpur to Singapore, as well as to serve key intermediate cities was another recommendation from the Greater KL/KV NKEA lab. The system is expected to link Southeast Asia’s two largest economic agglomerations and will unlock development potential in Malaysia’s intermediate cities.

The Kuala Lumpur – Singapore route is within the sweet spot distance where high speed rail services perform well (i.e. within 300 to 500 kilometres and with travel time of less than three hours). The successful implementation of such a service is expected to reduce overall door to door journey time to Singapore with only 90 minutes travel time in comparison with two and a half hours by air.

**Achievements**

A pre-feasibility study undertaken by AT Kearney was concluded in August 2011. The aim of the pre-feasibility study was to determine the viability of a HSR service between Kuala Lumpur and Singapore, and the next steps will be based on the study

outcome. The study started on 1 June 2011, and was completed on 19 August 2011. Key assessment areas included the vision for HSR, political, social and economic impact, technology characterization, demand assessment, strategic initiatives, funding model and the implementation plan. Market research was also undertaken to understand the public perception toward HSR both in Kuala Lumpur and Singapore, and to estimate the demand for HSR services.

**Moving Forward**

The Government has given the go-ahead for a detailed feasibility study that will take approximately six to nine months. The study will provide detailed information on the HSR project that will include daily ridership, rail alignment, station stops, catchment area, and direct and indirect economic impact on surrounding areas. The study will decide on the overall viability of the HSR project and will outline the timeline for the project delivery as well as the estimated overall project cost.

## EPP 4

## Building an Integrated Urban Mass Rapid Transit System

Significant investment in the Greater KL/KV public transportation is required to reduce congestion, increase productivity and provide for environmentally sustainable means of transport. The Greater KL/KV aspiration to achieve a 50 per cent public transport modal share by the year 2020 will therefore require a significant increase in rail capacity in addition to buses, KTM Komuter, LRT and monorail systems serving within Greater KL/KV.

The Klang Valley Mass Rapid Transit (KVMRT) project will be a vital part of the public transport system that aims to support the achievement of a vibrant Greater KL/KV metropolis. The KVMRT project is expected to benefit the residents of Greater KL/KV as it will be a key enabler to catalyse the nation's economy with immense spill-over effects on other sectors of the economy such as the construction and construction-related industries. Expenditure from the construction and operations of the KVMRT lines are expected to flow back into the economy. The project will generate employment opportunities up to 130,000 jobs at its peak in 2015.

### Achievements

The Government has approved the construction of the first KVMRT line (Sungai Buloh-Kajang or SB-K), with the Final Railway Scheme signed into effect on 29 June 2011. This was undertaken after a three-month public display period from 14 February to 14 May 2011. The Railway Scheme took into account the views of the public during this public display before it was finalised.

The SB-K line is the first of three lines planned for the Greater KL/KV region. The line starts from Sungai Buloh and goes through Kota Damansara, the Curve, Bandar Utama, Taman Tun Dr Ismail, Jalan Semantan, Cheras, Bandar Tun Hussein Onn and Balakong before ending in Kajang.

On 8 July 2011, Dato' Sri Najib Tun Razak, the Prime Minister of Malaysia officially launched the SB-K line.

Given the size and complexity of the project, the MRT Corporation Sdn Bhd (MRT Corp) was established on 1 September 2011, taking over from Syarikat Prasarana Negara Berhad as the project developer and asset owner. This is expected to free up the latter to focus on its priorities to improve the service of buses, LRT and monorail in Greater KL/KV and Penang. MRT Corp will also be responsible for concluding the agreement appointing MMC-



Artist impression of an MRT station



PM Dato' Sri Najib Razak at the launch of the KVMRT project

Gamuda Joint Venture Sdn Bhd as the Project Delivery Partner (PDP). In addition, MRT Corp is also expected to conclude an agreement to appoint the Independent Checking Engineer (ICE). The Suruhanjaya Pengangkutan Awam Darat (SPAD) will remain as the supervising agency for the KVMRT project.

Preliminary work on the KVMRT SB-K line has begun with land clearing work at three sites; Sungai Buloh, Semantan and Cochrane. In addition land acquisitions are on-going with MRT Corp taking the lead in ensuring that any issues and concerns are settled to the mutual satisfaction of all parties, within the ambit of the current land acquisition laws.

### Moving Forward

The construction of the SB-K line will be undertaken over the next five years, with an expected completion in 2017. In the interim, planning on the other two KVMRT lines has commenced. The Rail Transport Master Plan for Greater KL/KV has identified future KVMRT corridors in Greater KL/KV and MRT Corp will use the information for the detailed feasibility studies in 2012 to determine the actual alignments for the other two KVMRT lines.



Groundworks for the MRT have begun at the Jalan Cochrane site

**EPP 5**

# Revitalising the Klang River into a Heritage and Commercial Centre for Greater KL/KV

The River of Life (RoL) is an EPP that aims to transform the Klang River into a vibrant and liveable waterfront with high economic value. This transformation is divided into three components: river cleaning, river beautification and land development.

## River Cleaning

River cleaning will be conducted along a 110 kilometre stretch along the Klang River basin, covering the municipal areas of Majlis Perbandaran Selayang (MPS), Majlis Perbandaran Ampang Jaya (MPAJ) and Dewan Bandaraya Kuala Lumpur (DBKL). The goal is to bring the river from its current Class III – Class V water quality (not suitable for body-contact) to Class IIb (suitable for recreation) by year 2020.

## River Masterplanning and Beautification

To increase economic viability of the area, masterplanning and beautification works will be carried out on a 10.7 kilometre stretch along the Klang and Gombak river corridor. Significant landmarks in the area include Dataran Merdeka, Bangunan Sultan Abdul Samad and Masjid Jamek.

## Land Development

The masterplanning and beautification works will spur economic investments into the areas immediately surrounding the river corridor. To catalyse development along the corridor, potential government

land will be identified and tendered out to private developers through competitive bidding.

## Achievements

### River Cleaning

To date, 46 work packages for river cleaning works have been planned. Of these packages, 18 are already under construction mainly for the initiatives to utilise retention ponds and remove pollutants from sewage, to implement the Drainage and Stormwater Management Master Plan to upgrade drainage systems, to install additional gross pollutant traps, and to construct new communal grease traps, amongst others. The river cleaning works has exceeded its Key Performance Index (KPI) of 15 per cent completion with 19 per cent completion in 2011.

### River Beautification

On 12 April 2011, the River Beautification Taskforce organized a three-month International Masterplanning Competition to identify the best vision and masterplan for the beautification works along the 10.7 kilometre stretch of Klang and Gombak. Five internationally acclaimed masterplanners were shortlisted to participate in the competition, which ended on 15 June 2011. The competition was judged by a panel of local professionals and international experts from the United States, the United

Kingdom and Australia. Members of the public were also encouraged to participate in the decision-making process by voting for their favorite masterplan through an online e-voting platform and public exhibition. Public votes accounted for 20 per cent of the decision.



The precincts covered by the RoL project

## Moving Forward

In 2012, the river cleaning works will shift into high gear with 17 sewerage projects to begin construction while the initiatives to remove pollutants using retention ponds and the implementation of the Drainage and Stormwater Management Masterplan is targeted to reach approximately 70 per cent completion. In addition to the sewerage and drainage works, wastewater treatment plants will be installed in wet markets by local councils while a public outreach and awareness programme will be launched to engage public participation in ensuring the water quality of the Klang and Gombak Rivers are well sustained after cleaning and beautification.

On top of this, the first phase along Precinct 7 is undergoing design phase and the river beautification works will begin construction in the second half of 2012.



Scope of River Cleaning

## EPP 6

## Greening Greater KL/KV to Ensure Every Resident Enjoys Sufficient Green Space

To become a world top-20 liveable city, Kuala Lumpur needs to significantly increase its green space. Today, the amount of green space per person in the city centre is only 11 square metres, which falls behind other leading liveable cities. Vancouver, for example, has 22 square metres of green space per person.

The target of 100,000 trees by 2020 emphasizes on large coverage trees to create the look and feel of green corridors. Greening the city will improve liveability by creating a more comfortable living environment and providing spaces for healthy recreational activities. Most importantly, it creates a sustainable environment by reducing inner city temperature and greenhouse gases.

### Achievements

The Kuala Lumpur City Hall (DBKL) has planted 31,447 trees, exceeding the 2011 target. The trees planted to date have the potential to cover up to 668,000 square feet of shaded areas throughout Kuala Lumpur. The Greener KL initiative also invites private participation in its efforts to green the city and has also exceeded the target of 5,000 trees funded by private sector in 2011.

Efforts are also made to integrate parks and promote outdoor events. This does not only give rise to the impression of a green city but also directly contribute to GNI through commercial activities. Efforts were also made to hold both public events (e.g. concerts, performances, sports competitions) and private events (e.g. weddings, birthday celebrations, corporate parties) in KL's many parks. Currently, the Greener KL EPP has successfully achieved its KPI of holding at least 10 events per month in the 14 parks within the city throughout the year.

### Moving Forward

In 2012, Greener KL will continue in its efforts to plant another 30,000 trees within Kuala Lumpur and continue to draw park-based events. In addition, Greener KL will increase its efforts to draw private participation in its efforts through increased sponsorship of trees, participation in park maintenance and events as well as encouraging developments that supports the EPP's objective.

## EPP 7

## Creating Iconic Places and Attractions

Greater KL/KV needs to establish world class attractions to increase tourism revenue and enhance overall appeal of the city. World class iconic developments can be established from either existing iconic places or major development townships which can position Greater KL/KV as a global city and heritage centre.

15 potential opportunities were identified based on ease of implementation and GNI impact. It is estimated that the incremental GNI impact for the Heritage Trail and Central Market is RM470 million, at a cost of RM250 million, which is expected to be shared between the public and private sector.

### Achievements

Despite the initial setback in identifying suitable projects for the year, the following initiatives have been successfully carried out:-

1. **Primary Icon** (Petronas Twin Towers) – KLCC Visit Experience Project, now known as "Malaysia's Iconic Experience in Kuala Lumpur" it is mainly targeted at improving the visit experience to KLCC. This involves establishing a one-stop information centre (complete with pamphlets, website, events calendar), improve directional signage within KLCC, improve customer services via training programmes and interact with the tour operators to develop saleable offerings and packages to boost the tourism industry. This is a private sector initiative headed by KLCC Holdings Sdn Bhd.
2. **Green Icon** refers to Taman Warisan Tun Abdul Razak (from Masjid Negara to Tugu Negara comprising Masjid Negara, Islamic Arts Museum, Museum PDRM, Planetarium Negara, Memorial Tun Abdul Razak, Pangung Anniversary, Perdana Botanical Garden, Orchid Garden, Deer Park, Bird Park, Butterfly Park, and Tugu Negara). Support improvements are provided and visitors have the option of taking trams for a ride around the park for a fee. Branding and promotions are also carried out to market the attractions under one brand to get visitors to spend a day to cover all attractions.
3. **The Heritage Trail** initiative involves enhancing current conditions from the National Museum to Dataran Merdeka, right through to Medan Pasar/Clock Tower and Central Market. Trail facilities, like static maps on location and surrounding attractions, historical write-ups, public toilets, tourism information centres, free guided walks, and photo spots will be provided. The historical buildings within this trail shall be preserved and managed as tourism-related areas that combine attractions and services.
4. **Reviving Medan Pasar** – This initiative involves restoring the surrounding historical buildings and turning this square into a pedestrian only area with side-walk cafes, souvenir shops, and a theatre. There will also be an effort to improve on façade lighting for each building. This area with its old buildings is a high profile tourist attraction and heritage centre which links to Central Market, Petaling Street, Leboh Ampang, Masjid Jamek and Dataran Merdeka.

*(more on next page)*

**EPP 7** (continued from previous page)

- 5. **Malaysia Truly Asia Centre** – An integrated cultural tourism park, it sits on a 65.66 acre site bordered by the Tugu Peringatan, Padang Merbok, Bank Negara’s Lanai Kijang residential complex and Istana Selangor. Relocation of occupants within the site is almost complete and land amalgamation has been approved. This project is carried out by the private sector and is expected to be formally announced later this year.

With the exception of the Malaysia Truly Asia Centre, the rest of the projects had a late start but are now progressing well within the project deadlines.

**Moving Forward**

Based on the blueprint for Heritage Trails, another three routes have been identified for development in 2012 and they are:

1. Heritage Trail Route 2 – Jalan Tun Perak to Bukit Nanas
2. Heritage Trail Route 3 – Jalan Tun Perak to Petaling Street via Central Market
3. Heritage Trail Route 4 – Petaling Street mall

Another project earmarked next year is the upgrading of Masjid Jamek, one of the oldest mosques in Kuala Lumpur. Specialised repair works will be carried out on this heritage building to restore it to its former glory.

**EPP 8**

**Creating a Comprehensive Pedestrian Network**

Greater KL/KV is not a pedestrian-friendly city. Locals and visitors often find that there are no linkages between buildings, poor continuity, and lack of access for the physically challenged and the elderly. The goal of the pedestrian network EPP is to upgrade and complete a 42-kilometres long barrier free, handicapped-friendly pedestrian network that also embraces the safe city concept within Kuala Lumpur by 2020.

**Achievements**

In 2011, efforts were focused on improving and upgrading existing pedestrian walkways to connect with the covered and elevated pedestrian linkages in the city centre.

To date, four kilometres along Jalan Raja Laut and Jalan P. Ramlee have been upgraded to meet the barrier free and safe city standards while six kilometres along

Jalan Sultan Ismail and Jalan Tunku Abdul Rahman have been made barrier free to improve the comfort level of pedestrians and the handicapped. Jalan Sultan Ismail and Jalan Tunku Abdul Rahman will be further upgraded to meet the safe city standards once works for covered and elevated pedestrian linkages along these stretches are completed.

**Moving Forward**

In 2012, this EPP has identified an additional 12 kilometres of pedestrian networks for upgrades.



Jalan Raja Laut walkway, before pedestrian network improvement works



The pedestrian walkway along Jalan Raja Laut is now seamless and barrier-free, with greeneries separating pedestrians from the traffic

## EPP 9

## Developing an Efficient Solid Waste Management Ecosystem

In order to enhance city liveability, efficient solid waste management has been defined as a necessary and key issue. In managing solid waste in the Greater KL/KV conurbation, the Government will focus on initiatives aimed at increasing the recycling rates, managing the costs of solid waste disposal, and deploying the use of technologies to treat generated solid waste.

There are four major initiatives under this EPP:

1. Increase Reduce, Reuse, Recycle (3R) implementation by
  - Creating a recycling ecosystem which includes composting to stimulate waste disposal reduction and target a recycling rate of 40 per cent by 2020 from the current 11 per cent;
  - Introducing composting and anaerobic digestion to tackle high levels of organic waste; and
  - Stimulating Construction and Demolition (C&D) waste recycling with a proper system and a recycling facility.
2. Increase waste treatment capacity to reduce the amount of solid waste disposed in the landfill.
3. Improve governance of solid waste management and public cleansing services.
4. Assess future potential for leveraging new developments in technology like automatic waste collection systems and deep bins to improve waste collection standards.

### Achievements

The implementation of the 3R initiative is being addressed through a three-prong strategy. This includes addressing main categories of waste to date ie. household wastes, food wastes and construction and demolition wastes:

1. Household Waste – the implementation of the Solid Waste Management Act (2007) was approved on 1 September 2011. With its implementation, solid waste management will be addressed in a comprehensive manner, from waste generation to collection, treatment and disposal, with emphasis on the 3Rs. An awareness campaign was also carried out in 2011 to create public awareness of the new Act and the 3R campaign.

2. Food Waste – A Food Waste Study was undertaken by the Department of Solid Waste Management which was concluded in November 2011. The objective of the study is to map the commercial sources of food waste (eateries, factories, restaurants), identify the amount of waste generated and the system of waste disposal. With this data, the study will recommend the appropriate approach for food waste treatment such as a biogas facility. Such an approach is required to manage food wastes which account for 45 per cent of waste in landfills. Prior to this, a Food Waste workshop was held on 25 January 2011 to also consider the appropriate technology for food waste treatment.
3. Construction and Demolition Waste – Discussions were held with various bodies, including the Solid Waste Contractors (SOWACO), the Waste Management Association of Malaysia (WMAM) and the construction industry stakeholders on the appropriate approach to the treatment of construction and demolition wastes.

Initiatives are also being put in place to address the issue of proper disposal in sanitary landfills and addressing the reduction of emissions intensity.

### Moving Forward

The implementation of Act 672 in Kuala Lumpur will be fully realized by end 2012. The intention is to step up efforts to achieve higher recycling rates by households and through other approaches for commercial and office establishments. Beginning 1 September 2012, households in Kuala Lumpur and Putrajaya will be provided a bin each to keep the residual rubbish which will be collected twice a week while recyclables will be collected on a separate day. In the other areas, the local authorities will ensure that effective waste collection and 3R will also be undertaken. The outcome of the Food Waste Study suggested that an Anaerobic Digestion plant is feasible to be developed in Greater KL/KV. The study showed food waste generation of 1,634 tons per day and the plant will be able to consume 1,171 tons per day. A suitable site for the development of the plant will be located and detailed site assessment will be done beforehand. By year end, the tender for setting up a Construction and Demolition Waste processing plant for Greater KL/KV will be completed.

# Business Opportunities

## Business Opportunity 1

### Vitalising Putrajaya

Greater KL/KV's rapid growth has inevitably created many opportunities to reinvigorate Putrajaya. Putrajaya is already a liveable city but the city lacks vitality and does not attract activity beyond its role as the administrative capital of the nation.

Putrajaya has strong potential to achieve greater vibrancy through these initiatives:-

1. **Reshape the main boulevard** – Both sides of the 4.2 km boulevard will be enhanced with vibrant activities by having retail shops, upscale street vendors, and food and beverage premises which can generate foot traffic and bring life to the city centre.
2. **Leverage waterfront potential** – The natural lake waterfront will be developed to host waterfront retail and large-scale leisure developments (e.g. water theme park).
3. **Increase connectivity** – Provide effective bus and rail connections to Putrajaya from Cyberjaya and surrounding areas.
4. **Stimulate economic activity** – Putrajaya needs to be more than just a government administrative centre to attract other economic activities. There are plans to develop a world-class university, to create a special economic zone with neighbouring areas (e.g. IOI, Cyberjaya) to attract commercial entities, and to establish partnerships with private developers to develop land within Putrajaya.
5. **Increase tourism and optimise the Putrajaya International Convention Centre** – This initiative looks at increasing the number of events per year and also increasing the number of visitors to events.

Much of 2011 was spent identifying relevant initiatives with the desired impact and returns with minimal or no funding. Key initiatives identified for next year are the development of a city trail along the Promenade from Alamanda to Dataran Putra, the acquiring of water taxis and additional cruise boats with dine-in facilities, and the carrying out of a detailed feasibility study on opportunities to increase connectivity to Putrajaya.



Putrajaya needs to be more than just a government administrative centre

## Business Opportunity 2

### Housing

The Housing Business Opportunity was recommended by the 2010 Greater KL/KV NKEA Lab as an opportunity to capitalize on the expected increase in population. The responsibility for provision of housing is shared by the government and private sector. Currently several government agencies are already involved in the housing industry namely Kementerian Perumahan dan Kerajaan Tempatan (KPKT) for Projek Perumahan Rakyat, Local Authorities (PBT), State Economic Development Corporations (SEDC) and other Government linked companies. The private sector has a more established foothold in the housing industry. The planning and implementation of housing projects have been continuously tracked by the various responsible groups such as Jabatan Perumahan Negara and the Association of House Builders.

## Business Opportunity 3

### Basic Water and Sewerage Services

Growing urban economies naturally create more demand for services. Greater KL/KV needs to improve its existing water and sewerage systems by moving away from the existing system of fragmented and small sewerage treatment plants (STPs) in order to ensure adequate provision of services and amenities.

The current target of this Business Opportunity is to have 91 percent of all STPs upgraded to Category 1 status by 2020. To do this, a sewerage rehabilitation programme will be carried out to upgrade over 300 kilometres of sewerage network. As of end 2011, four projects have been identified as quick-wins (Old Klang Road, Kajang 2, Kelang, Shah Alam, Subang Jaya dan Petaling Jaya, Selangor).

In addition, the Government has identified another eight locations (Old Klang Road, Petaling Jaya, Seputeh, Kajang, Cheras Jaya, Cheras Batu 11, Puchong, Selayang, Kelang, Kuala Lumpur, Sepang, Petaling Jaya, Subang Shah Alam, Putrajaya and Ampang) where the new STPs will be constructed and old ones upgraded to Category 1. This will be completed in phases over the next eight years.

## Summary of Greater Kuala Lumpur/Klang Valley NKEA

	2020 Target										
Incremental GNI Impact	RM190 billion										
Additional jobs	300,000										
<b>Critical Targets for 2012</b>											
<ul style="list-style-type: none"> <li>• <b>MNC Attraction</b> <ul style="list-style-type: none"> <li>– Conclude Letter of Intent for 10 MNCs operational headquarters (OHQ) relocation in Greater KL/KV for setting up of MNC HQs in Greater KL/KV</li> <li>– 600 employment generation under Greater KL/KV</li> <li>– 10 Branding InvestKL Activities</li> </ul> </li> <li>• <b>Talent Attraction</b> <ul style="list-style-type: none"> <li>– The Returning Expat Programme aims to see 1,200 expats return to Malaysia</li> <li>– The Residence Pass Programme targets for 800 approved passes</li> <li>– The Employment Pass (Category II) intends to approve 300 passes</li> <li>– Development of a Diaspora Database</li> <li>– The STAR Program aspires to have 800 JPA scholars and 100 corporate partners</li> </ul> </li> <li>• <b>High Speed Rail (HSR)</b> <p>Completion of HSR Phase 1B, which is a detailed feasibility study, including recommendations for alignment and stations.</p> </li> <li>• <b>My Rapid Transit</b> <ul style="list-style-type: none"> <li>– 100 per cent completion of land required for SB-K Line</li> <li>– All elevated civil underground and depot packages are awarded</li> <li>– Completion of feasibility studies and undertake required freeing of the MRT alignment corridors</li> </ul> </li> <li>• <b>River of Life</b> <p>Target pollution level from 5 Wet Markets:</p> <table border="0" style="margin-left: 20px;"> <tr><td>BOD</td><td>50 (mg/l)</td></tr> <tr><td>COD</td><td>100 (mg/l)</td></tr> <tr><td>SS</td><td>100 (mg/l)</td></tr> <tr><td>Ph</td><td>5.59</td></tr> <tr><td>O&amp;G</td><td>10 mg/l</td></tr> </table> <ul style="list-style-type: none"> <li>– Tonnage of Floatables in the River per day (tons/day), measured at downstream confluence will be 2.5 tons/day</li> <li>– Oil and grease pollution from each hawker center after Communal Grease Traps installed will be 10 mg/l</li> <li>– 15 per cent Completion of River Beautification Construction for Phase 1</li> </ul> </li> <li>• <b>Greener KL</b> <ul style="list-style-type: none"> <li>– 30,000 trees will be planted</li> <li>– 5,000 trees will be sponsored from the private sectors</li> </ul> </li> <li>• <b>Iconic Places</b> <ul style="list-style-type: none"> <li>– 100 per cent average completion of Heritage Trail Route 1 (National Museum to Medan Pasar)</li> <li>– 100 per cent average completion of Reviving Medan Pasar</li> <li>– 100 per cent average completion of Heritage Trail Route 2-4</li> <li>– 100 per cent upgrading of Masjid Jamek</li> <li>– 100 per cent completion of land matters, planning approvals and detail design for Malaysia Truly Asia Centre (MTAC)</li> </ul> </li> <li>• <b>Pedestrian Network</b> <ul style="list-style-type: none"> <li>– 12 km upgrade of non-covered pedestrian network system</li> </ul> </li> <li>• <b>Solid Waste Management</b> <ul style="list-style-type: none"> <li>– 100 per cent roll-out of Separation at Source Scheme (Household Wastes) in Kuala Lumpur through distribution of bins to landed property</li> <li>– Issuance of Letter of Approval to successful contractor via Private Public Partnership (PPP) for setting up of Food Waste Treatment Plant (Composting or Anaerobic Digestion) for food waste</li> <li>– Request for Proposal (RFP) process completed and submissions received for setting up of Construction and Demolition Waste facility for construction waste</li> </ul> </li> <li>• <b>Sewerage Non-River</b> <ul style="list-style-type: none"> <li>– 45 per cent construction progress for rationalization projects of Old Klang Road. Contract period is 18 months</li> <li>– 20 per cent sewer rehabilitation projects in Kuala Lumpur, Shah Alam, Subang Jaya and Petaling Jaya. Contract period is 30 months</li> <li>– 18 per cent regionalization of sewerage treatment Lot 130, Klang. Contract period is 36 months</li> </ul> </li> </ul>		BOD	50 (mg/l)	COD	100 (mg/l)	SS	100 (mg/l)	Ph	5.59	O&G	10 mg/l
BOD	50 (mg/l)										
COD	100 (mg/l)										
SS	100 (mg/l)										
Ph	5.59										
O&G	10 mg/l										

# Transforming Malaysia, Transforming Lives

**T**urning tired sundry shops into organised, modern mini markets through financial and supply management support. Modernising paddy farming to increase profits and improve the lives of the rakyat in rural Sarawak. Providing internet access in villages so everyone can gain access to information on the World Wide Web.

Commercialising local herbs has put Malaysia on the map for its success in the nutraceutical industry. Implementing radio-frequency identification technology to facilitate the movement of goods and reduce lines at custom checkpoints, allowing large companies and Small Medium Enterprises (SMEs) to run more efficient businesses.

The Economic Transformation Programme (ETP) is changing the economic face of Malaysia and transforming the lives of many Malaysians. It will continue to do so until we reach our aspiration of becoming a high-income nation by 2020.

Designed to inject a new lease of life into existing efforts to grow the economy, the ETP ensures that each

initiative will contribute to the goal of making Malaysia a high-income nation. What this translates into is that Malaysia must achieve a GNI per capita of RM48,000, investments totalling RM1.4 trillion and generate 3.3 million jobs within the country.

12 key growth areas, known as the National Key Economic Areas (NKEAs), have been selected to grow our economy coupled with private investments and policy support. To get the ball rolling, Entry Point Projects (EPPs) have been clearly defined with potential investors established in the roadmap.

A vital element to the success of the ETP is the ability to attract both domestic and foreign investments. The Government's role in this is to provide assistance in the form of policy and change in regulatory framework. Where relevant, additional funding and investments are put forward to pave the way for projects.

Critical to the ETP is also growing Malaysia's human capital. As such, concerted efforts will be put in place to develop capabilities of existing talents in Malaysia, and to continue

to attract foreign and Malaysian talents abroad to fulfil the high number of vacancies that will result from macro economic growth.

While the NKEAs offer focus for the ETP, the Strategic Reform Initiatives (SRIs) aim to improve the business environment and encourage free competition from within and outside the country. This will be achieved through the review of regulations and the liberalisation of the services sector, putting in effect a clear divestment strategy and the implementation of standards and the Competition Law.

It will take a great deal of hard work and unrelenting focus for the ETP to achieve its goal in 2020. The injection of private investments, persistence of the various ministries and their dedicated teams as well as the continued support of the rakyat, will ensure we achieve our high-income nation vision.

“  
**Designed to inject a new lease of life into existing efforts to grow the economy, the ETP ensures that each initiative will contribute to the goal of making Malaysia a high-income nation**

”



Photo courtesy of Star Publications (Malaysia) Bhd



# Oil, Gas and Energy



**Dato' Sri  
Peter Chin Fah Kui**

Minister of Energy,  
Green Technology  
and Water



Energy is an important factor to Malaysia's economic growth, constituting about 20 per cent of the nation's Gross Domestic Product (GDP). The Government plans to increase diversification of the energy industry, step up exploration for new oil and gas resources, enhance production from known reserves, and encourage the use of alternative energy sources such as solar, hydro-electric and even nuclear. The energy sector's contributions to our GNI are expected to rise from RM110 billion in 2009 to RM241 billion in 2020. Hence, the energy sector needs to be more efficient and resilient to be able to deliver adequate and reliable energy supply to support our country's rapid growth against a backdrop of depleting energy resources as well as escalating and volatile energy prices.

Malaysia has made rapid progress moving from an agrarian economy into an industrial economy and now, moving towards a green economy. One of the main reasons for our success is the Government's focus on providing excellent infrastructure to support and promote economic growth. We have to ensure that the infrastructure is present and well-maintained.

Malaysia's direction towards a green economy is an essential part of the ETP, along with the assurance of sustainable and sufficient energy supply to all at reasonable and affordable prices. The Renewable Energy Act, as the foundation catalyst for the nation's renewable energy generation, is aligned with the Malaysian Government's aim of achieving 5.5 per cent renewable energy in Malaysia's total energy mix by 2015. Malaysia is now ready to join the league of economies that have eco-friendly and survivable business through the Government's direct participation in promoting consumption of green, efficient and environmental-friendly products.

Moving forward, the national vision on energy is set to leverage on green technology to achieve sustainable development and contribute to a high income economy. The proposed vision captures the potential impact of green technology in ensuring a higher quality of life for Malaysians while ensuring that economic growth is sustainable without the over-depletion of its natural resources. Such a state of affairs would also ensure recognition of Malaysia as a responsible global player in the green technology sphere and low carbon economy.

# Oil, Gas and Energy

The Oil, Gas and Energy (OGE) National Key Economic Area (NKEA) is targeting five per cent annual growth for the sector from 2010 to 2020. This is ambitious, particularly against a backdrop of the natural two percent decline of oil and gas production

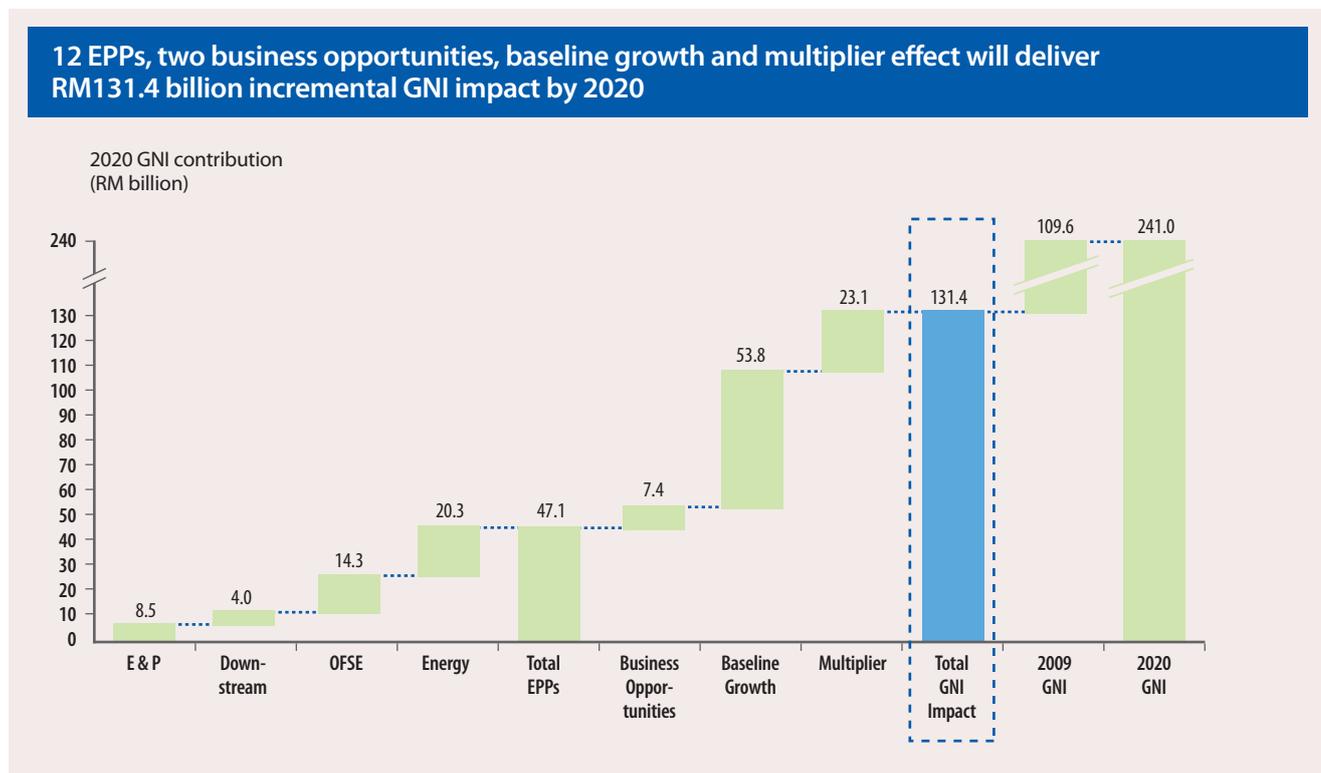
To meet this target, the OGE NKEA will focus on four key thrusts: sustaining oil and gas production, enhancing downstream growth, making Malaysia the number one Asian hub for oil field services and building a sustainable energy platform for growth.

The OGE NKEA Lab in 2010 identified 12 Entry Point Projects (EPPs) as well as two business opportunity thrusts. Combined, they are projected to deliver RM131.4 billion in Gross National Income (GNI) and create an additional 52,300 jobs in the OGE sectors. A significant proportion of these jobs will be highly-skilled, with an estimated 21,000 (40 per cent) for qualified professionals such as engineers and geologists.

Beyond sustaining the production of oil and gas, the OGE NKEA will also focus on growing the downstream area of the sector, providing insulation against price shocks in the global commodity market. It will also be responsible for building a sustainable energy platform for the rakyat and business.

Over the course of 2011, significant strides have been made in the sector, notably the approval of the Petroleum Income Tax Act (PITA) Amendment Bill, which aims to incentivize exploration of marginal oil and gas fields. Significant investments have been made by major industry players such as Shell, ExxonMobil, Petronas, Dialog Group and Royal Vopak in line with the four strategic thrusts of the NKEA. Dedicated bodies such as the Malaysia Petroleum Resources Corporation (MPRC) have been set up to streamline cooperation between the government and private sectors.

Exhibit 2.1



## 2011 Key Performance Indicators

Exhibit 2.2

NKEA Oil, Gas and Energy		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Addition resources – million stock tank barrel (mmstb)	* Information kept confidential at request of involved parties		196%		100%		1.0	
EPP #2	Production from marginal fields – thousand barrel of oil equivalent per day (kboed)			99%		99%		0.5	
	Production from marginal fields (oil) – thousand barrel per day (kbd)			99%		99%		0.5	
EPP #3	Number of explored wells			103%		100%		1.0	
EPP #4	Committed amount of land-based oil storage capacity – million cubic metre	7,000,000	7,300,000	104%		100%		1.0	
	Number of oil trading companies based in Malaysia	2	5	250%		100%		1.0	
EPP #5	Number of additional confirmed gas requirement (mmscfd)	140	139	99%		99%		0.5	
EPP #6 and #8	Amount of investments made by OFSE MNCs – RM million	320	454	142%		100%		1.0	
	Number of MNC or JVs between local OFSE companies with global MNCs	2	2	100%		100%		1.0	
EPP #7	Number of successful merger of fabricators	1	1	100%		100%		1.0	
EPP #9	Percentage reduction in electricity bill for top 120 government entities against electricity bill for the year	3%	3%	100%		100%		1.0	
	Market share of 5-star appliances	13%	13%	101%		100%		1.0	
	1. Refrigerator	8%	9%	107%		100%		1.0	
	2. Air-conditioner	35%	11%	32%		31%		0.0	
	3. Chiller								
EPP #10	Amount of grid-connected solar power generation capacity installed (MW)	24	2.55	11%		11%		0.0	
EPP #12	Generated electricity capacity (MW)	300	300	100%		100%		1.0	
				<b>109%</b>		<b>90%</b>		<b>78%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

EPP 1

## Rejuvenating Existing Fields Through Enhanced Oil Recovery



EOR techniques can improve oil recovery rates a range of 20 to 35 per cent to 30 to 50 per cent

Enhanced oil recovery (EOR) uses methods such as gas or chemical injection or thermal flooding to increase the amount of oil recovered from the underground reservoirs from a range of 20 to 35 per cent (industry norms) to 30 to 50 per cent.

PETRONAS has a three-pronged strategy to ensure that EOR techniques are deployed in Malaysia to extract more oil from the nation's oil fields. Firstly, PETRONAS, where necessary, will review the production sharing contract (PSC) terms and introduce new petroleum arrangements to incentivise the implementation of EOR techniques.

Secondly, PETRONAS will ensure that companies with specialised EOR expertise are aware of the opportunities in Malaysia and are attracted to operate here. Thirdly, PETRONAS will use its role as the industry regulator to ensure that the most innovative methods and technologies are being disseminated and deployed to reduce capital and operating costs.

### Achievements

There has been significant development in this EPP in 2011. In January, ExxonMobil committed to invest over RM10 billion in EOR techniques. The investments will be made to rejuvenate mature facilities and undertake enhanced oil recovery activities in the Tapis field. The Telok project, offshore Peninsular Malaysia, is being developed under a Gas Production Sharing Contract to provide additional supplies for Malaysia's power and industrial needs and will promote organic growth of the natural gas sector.

On 16 January 2012, Shell Malaysia and PETRONAS signed two new PSCs for enhanced oil recovery (EOR) projects offshore Sarawak and Sabah. These contracts will see investments of over US\$12 billion to extend the life and increase the recovery factor of the Baram Delta and North Sabah fields, located offshore Sarawak and Sabah, respectively. The average recovery factor in these fields is expected to increase from 36 per cent to 50 per cent.

Shell Malaysia has committed investment of RM5.1 billion into projects to upgrade, expand and build their facilities in upstream, midstream and downstream across Malaysia. These projects include the expansion of the Shell MDS wax plant in Bintulu, a new diesel processing unit at the Shell Refinery in Port Dickson, and the Gumusut deepwater development offshore Sabah.

### Moving Forward

Significant investment in 2011 on EOR techniques ensured that the Key Performance Indices (KPIs) for this EPP were met, and significantly surpassed. To ensure that targets in 2012 are met, additional focus is needed to ensure that the investment committed in the best EOR techniques for the remainder of the oil and gas fields in Malaysia is realised.

In addition to this, the expansion of Shell MDS wax was completed at the end of 2011, while the new diesel processing unit at Shell Refinery in Port Dickson has already been commissioned. The Gumusut deepwater development is still in progress and is expected to be ready by 2013.

## EPP 2

## Developing Small Fields Through Innovative Solutions

A significant proportion of Malaysia's remaining resources lay in fields with less than 30 million barrels of recoverable oil. Developing these fields in an economically attractive manner is often challenging, as they need the same expensive infrastructure as large fields, while the expected revenue streams are smaller due to the smaller reserve sizes.

Over 2011, PETRONAS and relevant stakeholders have reviewed the PSC terms and introduced new petroleum agreements to ensure that operators of these small fields receive enough economic incentives to make their investment attractive. Significant work has also been done to attract exploration and production (E&P) operators that specialise in small fields as well as facilitating collaboration between players to allow sharing of facilities and other synergistic measures to improve the economics of small field development.

### Achievements

In June 2011, the Petroleum Income Tax Act Bill Amendment was read and approved in Dewan Rakyat and later in July 2011, it was approved by Dewan Negara. The amendments will introduce new tax incentives for the oil and gas sector to unlock and monetise stranded oil and gas resources.



PETRONAS awarding a risk service contract to the Berantai marginal field consortium

The five new incentives introduced under PITA are:

- An investment tax allowance of up to 60 to 100 per cent of capital expenditure to be deducted against statutory income to encourage the development of capital intensive projects in the area of enhanced oil recovery, high carbon dioxide gas fields, high pressure high temperature, deepwater and infrastructure projects for petroleum operations
- The tax rate of 38 per cent currently for marginal oil field development would be reduced to 25 per cent to improve commercial viability of the development
- Accelerated capital allowance of up to five years from 10 years, where full utilisation of capital cost deducted could improve project viability
- Qualifying exploration expenditure transfer between non-contiguous petroleum agreements with the same partnerships or sole proprietor to enhance contractors' risk-taking attitude, which could encourage higher levels of exploration activity
- Waiver of export duty on oil produced and exported from marginal field development to improve project viability

In addition to this, in January PETRONAS awarded a risk service contract for its Berantai marginal field to a consortium consisting of, Kencana Energy Sdn Bhd, Sapura Energy Ventures Sdn Bhd (now Sapura Kencana Petroleum Bhd) and Petrofac Energy Developments Sdn Bhd. Petrofac Energy, with a 50 per cent equity stake will lead the project, while Kencana and Sapura each take a 25 per cent stake. The partners are expected to invest around RM2.56 billion in the development and are scheduled to complete the first phase of oil wells in 2012.

In August, PETRONAS awarded the Balai Cluster marginal oil field offshore Sarawak to a venture involving Dialog Group, Australia's ROC Oil Co and PETRONAS Carigali. Production from all the fields in the cluster was planned to be online within 24 months from commencement of the development programme.

### Moving Forward

To bolster production of crude oil and gas and maintain production at 650,000 barrels per day, additional licences to develop marginal fields will be awarded by PETRONAS in 2012. Having been passed, the Petroleum Income Tax Act will be utilised to incentivise new players to enter the marginal field development segment.

## EPP 3

## Intensifying Exploration Activities

It has been determined that there are remaining resources that have not yet been discovered. However, these fields are likely to be high risk, as the 'low hanging fruits' in shallow waters are already in production.

To ensure that the necessary exploration investments are made, PETRONAS, where necessary, will review the PSC terms and/or introduce new petroleum arrangements, and review specific processes to expedite future exploration work.

### Achievements

In March 2010, successful drilling of the NC3 wildcat well and a subsequent appraisal well brought significant discovery for PETRONAS in Block SK316 with early estimation of 2.6 trillion standard cubic feet (tscf) of net gas in place. Production flow test results of the wells demonstrate that the field is technically producible.

The Spaoh-1 well of 3,000m drilling depth, located in Block SK306, shows similar promise. It was drilled in December 2010 and found both oil and gas. The preliminary evaluation indicates around 100 million barrels (mmstb) of oil and 0.2 tscf of gas in place, respectively. Currently, the well is being prepared for production testing.

### Moving Forward

In the next three years, over 50 exploration wells are expected to be drilled offshore Malaysia by PETRONAS and its production sharing contractors.

## EPP 4

## Building Regional Oil Storage and Trading Hub

In Southeast Asia, Singapore has traditionally had a significant presence in the oil storage industry, with a total of 10 million barrels of independent storage capacity. In addition, by 2007 it had built a significant trading business worth more than RM1 trillion in physical oil trade and RM2 trillion in derivative trade.

With port locations on major shipping routes for crude oil and refined products, close proximity to Singapore, significant land availability and deepwater marine accessibility, Malaysia is well placed to complement Singapore in this industry.

### Achievements

Dialog Group Berhad is leading a consortium comprising of the State Government of Johor and Royal Vopak to develop an Independent Deepwater Petroleum Terminal Project at Pengerang, Johor with a total petroleum storage capacity of about five million cubic metres.



Dialog Group Berhad is leading a consortium to develop an Independent Deepwater Petroleum Terminal Project at Pengerang, Johor

The terminal will have an initial storage capacity of approximately 1.3 million cubic metres and is expected to be commissioned in 2014. Department of Environment has approved the project's detailed environmental impact assessment and currently earthworks reclamation are in progress.

In addition to this, Zhuhai Winbase has teamed up through a joint venture with RG Gas and Chemical (M) Sdn Bhd to develop Labuan oil storage terminal in Pulau Daat. This hub will provide land-based logistics and support services such as tank farms, oil terminals, container yards, fabrication yards as well as complementing marine support logistics in Labuan.

The first phase of the project, would involve the building of a storage tank terminal, with a capacity of 300,000 cubic metres. The remaining three phases would include building a 1.5 million cubic metres storage tank terminal, engineering fabrication yards like jacket platforms and other facilities, including water storage facilities.

Earthworks are currently in progress and expected to be completed by end of December 2011. Construction of storage tanks will begin in the second quarter of 2012.

In addition to this, Tanjong Agas Supply Base and Marine Services Sdn Bhd (TASBMS) is the concessionaire and project company to develop the Tanjong Agas Oil & Gas and Logistics Industrial Park on 4,260 acres of land in Tanjong Agas, Pekan, Pahang Darul Makmur.

*(more on next page)*

**EPP 4** (continued from previous page)

The Tanjung Agas Industrial Park will accommodate the operations and activities within the oil and gas and maritime industries such as shipyards, fabrication yards, supply/logistics bases, a crude oil and petroleum storage terminal and a LNG/gas receiving and storage terminal. It will introduce support services and facilities such as port and marine services, a centralized integrated utility waste management plant, an oil and gas college, a five-star mariners' centre and business park. This park is projected to have a storage capacity of two million cubic metres.

Vitol has signed an agreement with MISC Berhad to extend their current storage facility in Tanjung Bin, Johor. This project is expected to be commissioned in April 2012 with a base capacity of 841,000 cubic metres. Tanjung Pelepas Port has also committed to invest in expanding its existing storage facility, which has a capacity of 3.25 million cubic metres. In Tanjung Langsat, a consortium comprising of Dialog Group, MISC Berhad and Trafigura will expand their existing storage facility to targeted capacity of 1.027 million cubic metres by 2014.

**Moving Forward**

Over 2011, several large corporations and consortiums have committed to construct and expand on petroleum storage terminals. The focus in 2012 will be ensuring that these projects are implemented, with several slated to be commissioned over the course of the year. In addition to this, we will work to ensure that plans for future phases of these facilities are realized.

**EPP 5****Unlocking Latent Gas Demand**

The lack of gas supply, driven by declining domestic gas production, is cited to have resulted in limited additional investment from new industries, e.g. glass and plastics manufacturers and semiconductor wafer manufacturers, as well as preventing current industrial diesel and liquefied petroleum gas (LPG) users from switching to more competitively priced natural gas. It is estimated that there would be more than 500 million standard cubic feet per day (mmscfd) of additional latent gas demand by 2020.

Domestic gas supply, including imports from Indonesia and the Joint Development Area with Thailand, is expected to decline at 12 per cent per year in the coming decade. Furthermore, there is insufficient gas supply in the region to support additional piped gas imports into Malaysia. To meet this growing latent gas demand, a liquefied natural gas (LNG) regasification terminal will be built to treat imported LNG. To make gas imports economically feasible, the gas will be sold at a liberalised and unsubsidised price.

Malaysia-based Muhibbah Engineering Bhd in concert with Perunding Ranhill Worley has been awarded a contract for the Engineering, Procurement, Construction, Installation and Commissioning alliance for an LNG regasification unit, island berth and subsea pipeline of the LNG Regasification Project from PETRONAS Gas Berhad.

The contract is valued at approximately RM1.07 billion, under which the consortium will undertake the construction of the LNG regasification unit, island berth and subsea pipeline. These facilities will be constructed near the Sungai Udang Port, Melaka with a capacity to send out 3.8 million tonnes of gas per annum.

**Achievements**

PETRONAS is embarking on the country's first regasification terminal in Melaka. The facility is designed to receive, store and vaporize LNG with a maximum capacity of 3.8 million tonnes per annum (mtpa) (up to 530 mmscfd). Its Jetty Regasification Unit will regasify the LNG (into its gaseous form) and the natural gas will be transported to demand centres through the existing Peninsular Gas Utilisation network. The project is estimated to be ready for commissioning by third quarter 2012, ahead of schedule which projected the first phase to be operational in 2013.

In December 2011, PETRONAS Gas Bhd set up a code of conduct which defines standards of behaviour and disclosure in respect of the provision of third-party access to the gas transportation system operated by the company in Peninsular Malaysia.

Designed to provide a framework and a clear third-party access regime through wide, transparent and uniform principles to allow entities to gain access to the gas transportation system, the code will also ensure transparency, and fair and equitable practices in all transactions within the gas transportation system.

**Moving Forward**

The focus in 2012 will be to ensure that the regasification terminal is commissioned in Q3 2012. This, coupled with PETRONAS's set up of a code of conduct marks the beginning of the liberalisation of the natural gas market in Malaysia. Efforts to bring the sale of natural gas by PETRONAS up to market prices will also continue.

## EPP 6

## Attracting Multinational Companies to Bring a Sizeable Share of their Global Operations to Malaysia

Malaysia aims to attract 10 to 20 major international companies in the Oil Field Services and Equipment (OFSE) industry to bring approximately 10 per cent of their business operations to Malaysia. This translates to around 40 per cent of their regional activities and would mean positioning Malaysia as a cost-competitive base for engineering, procurement and construction as well as a strategic base for installation activities in the Asia-Pacific region.

In April 2011 the Malaysia Petroleum Resources Corporation (MPRC) was established under the Prime Minister's Department. Its main objective is to make Malaysia an oil and gas hub by 2017. The organisation will facilitate cross-border investments and assist Malaysian oil and gas companies through the identification of suitable markets and opportunities abroad.

MPRC's Board of Directors consists of representatives from PEMANDU, Malaysia Industrial Development Corporation (MIDA) and PETRONAS amongst others.

### Achievements

MPRC and Labuan Financial Services Authority (LFSA) have recently announced the Global Incentives For Trading (GIFT) programme. The GIFT programme is established to encourage global petroleum trading companies to use Malaysia as a platform to enter the Asia Pacific market.

To date, five companies namely PETRONAS, Dialog Group Bhd, YTL Power International Bhd, UK-based BB Energy and Rotterdam group, Vitol Trading, have signed up for this programme and were awarded a trading license each.

The key incentives offered are:

- Flat corporate tax rate of three per cent of chargeable income
- 100 per cent exemption on director fees paid to non-Malaysian director



Malaysia can be positioned as a cost-competitive and strategic base for installation activities in the AP region

- 50 per cent exemption on gross employment income for non-Malaysian professional traders and others in managerial capacity of the Labuan International Trading Companies.

In July 2011, Schlumberger inaugurated the WesternGeco Penang Product Centre (WPPC) dedicated to the manufacturing and support of State-of-the-Art marine and land seismic equipment. By the end of 2012, the WPPC will employ approximately 300 people, combining local talent with international experience and expertise to integrate manufacturing capabilities with engineering resources and supply chain support through leveraging opportunities in Malaysia and across the region.

### Moving Forward

MPRC targets to have at least four more companies signed up by the end of 2012 for its GIFT programme. MPRC will conduct international road shows in Houston,

Geneva and London to promote the GIFT programme and attract international oil traders to locate their operations in Malaysia. It also targets to win the bid as the host of the annual Offshore Technology Conference, the world's foremost event for the development of offshore resources in the fields of drilling, exploration, production, and environmental protection. It aims to host the conference by 2014.

The downstream industry of oil and gas will be kept driven by two key factors namely high oil prices, which have improved industry margins hence improving the economics for oil field services & equipment business, as well as the shift towards more exploration and production activities in geologically-complex fields which increases demand for OFSE. Both of these factors are expected to continue to drive growth in the Malaysian OFSE industry over the coming years.

## EPP 7

## Consolidating Domestic Fabricators

There are five major offshore structure fabricators in Malaysia, none of which has the required scale or track record to efficiently compete with major regional players. Industry players say that there is a need for consolidation within the industry to match the scale and efficiency of major regional players.

Consolidating the many companies operating within the industry would require PETRONAS to award licenses to only a limited number of domestic fabricators, who are open to such intervention.

### Achievements

In September, Malaysia Marine and Heavy Engineering Holdings Bhd (MMHE) made an offer to acquire Sime Darby's Pasir Gudang fabrication yard. The acquisition, worth some RM393.5 million,

is expected to be completed by Q1 2012, which will make MMHE the largest fabricator in the country with its yard size increasing to 488 acres. Its capacity will also increase to 69,700 metric tonnes per year.

### Moving Forward

Discussions between OFSE players in Malaysia are underway, and in 2012 we target two additional mergers or acquisitions of domestic fabricators.

## EPP 8

## Developing Capabilities and Capacity Through Strategic Partnerships and Joint Ventures

At present there are considerable gaps in the domestic OFSE industry, with Malaysian companies lacking capabilities and experience particularly in engineering and installation, limiting their ability to gain a strong share in the regional market. This EPP aims to incentivise domestic companies to form joint ventures with world class companies to build their capabilities and track records.



Strategic partnerships offer opportunities for domestic companies to form joint ventures with world class companies to build capabilities

### Achievements

Bureau Veritas, a global leader in conformity assessment and certification services recently acquired Scientige Sdn Bhd, a Malaysian based company specialising in asset integrity management services.

Through this strategic acquisition, Bureau Veritas will strengthen its local presence by enhancing technology and knowledge transfers as well as expediting the level of in-house competency. The new organisation will serve as the heart of the technical operations in the South East Asia region, providing services to Singapore, Thailand, Vietnam, Brunei and Indonesia.

In 2011, Sapuracrest Petroleum Berhad and Kencana Petroleum Berhad laid out plans to merge. The merger, worth RM11.85 billion, will create Malaysia's largest integrated oil and gas service provider by assets. The merger is expected to be completed by Q1 2012, and SapuraCrest Kencana Petroleum Bhd will become the fourth largest provider in the world by assets.

In addition to this, there were a number of strategic partnerships between local companies and international players. For example, Dialog Group and the Johor State Government formed a consortium with Royal Vopak (from the Netherlands) to develop an oil terminal in Pengerang, Johor. Partnerships between Petrofac (UK), Kencana Petroleum and Sapuracrest Petroleum (both Malaysian) as well as between ROC Oil (Australia), Dialog Group and Petronas Carigali (both Malaysian) were formed to develop marginal oil fields.

### Moving Forward

The target for 2012 will be for two additional joint ventures.

## EPP 9

## Improving Energy Efficiency

On average, Malaysia is 34 per cent more energy-intensive than its peer countries. We will focus on five relevant levers to improve energy efficiency in Malaysia:

1. The Government will lead by example on energy-efficiency practices and philosophy
2. Stimulate sales of energy-efficient appliances
3. The Government will work with Tenaga Nasional Berhad (TNB) to make co-generation economically viable
4. Regulate better insulated buildings
5. Stimulate the sale of energy-efficient vehicles

### Achievements

SAVE, or Sustainability Achieved via Energy Efficiency, is a programme spearheaded by the Ministry of Energy, Green Technology and Water (KeTTHA), to improve energy efficiency in Malaysia through five initiatives. It was launched in July 2011.

This one-off initiative is to stimulate sales of energy-efficient appliances by providing rebates for refrigerators, air-conditioners and chillers to qualified consumers. The programme is implemented through collaboration between KeTTHA and utility companies (TNB, Sarawak Electricity Bhd, Sabah Electricity Sdn Bhd) with participating appliance and equipment manufacturers as well as retailers throughout Malaysia to reach the targeted groups.

100,000 rebate vouchers for five-star rated refrigerators worth RM200 each, and 65,000 vouchers for five-star rated air conditioners worth RM100 each have been allocated to states across Malaysia.



SAVE, or Sustainability Achieved via Energy Efficiency, is spearheaded by the Ministry of Energy, Green Technology and Water (KeTTHA)

To date, about 12.4 per cent and 7.1 per cent of market share of five-star rated energy efficient refrigerators and air-conditioners respectively have been recorded through the initiatives being implemented, with total energy saving accumulation of 66.3 GWh.

In March, it was announced that Faber Group Berhad will spearhead the pilot project for the Energy Performance Management System (EPMS) for government entities. Faber has commenced and completed energy audits at five hospitals in the northern states of Peninsular Malaysia. Implementation of zero and low cost measures are expected to be completed by December 2011.

To stimulate the use of fuel efficient cars, the import duty on all hybrid cars has been exempted, bringing the cost of hybrid models such as the Toyota Prius

and Honda Insight to more competitive levels. Sales of hybrid cars are expected to achieve record highs in 2011. This exemption was extended to the end of 2013 in the recent Budget 2012 announcement.

### Moving Forward

Promotion of awareness in efficiency of energy utilisation will be increased in 2012 onwards. This is targeted at creating the right public attitude in terms of using energy more wisely and efficiently.

In the meantime the efficient management of energy programmes (Energy Performance Contracting) in 120 top-energy-using government buildings will be further explored for implementation in all government buildings and private properties.

## EPP 10

## Building Up Renewable Energy and Solar Power Capacity

By 2020, solar power is expected to contribute to a minimum of 220 megawatts, as per the target under the National Renewable Energy Policy. Therefore, between 2015 and 2020, Peninsular Malaysia will need to build approximately four gigawatts of additional power capacity to meet rising demand while maintaining a healthy power reserve margin.

A regulatory framework needs to be developed, both for the feed-in tariff (FiT) mechanism as well as for any solar power plants that may come on stream once the cost of centralised solar power generation has reached parity with that of gas. Secondly, adequate business models need to be developed, including financing, public-private partnerships and the role of the Government, the incumbent generator, TNB, and private operators. Finally, skills and learning need to be built in the form of small amounts of solar generation by leveraging the FiT mechanism which was launched on 1 December 2011.

### Achievements

The Malaysia FiT programme will be managed by Sustainable Energy Development Authority (SEDA), a statutory body under the Ministry of Energy, Green Technology and Water (KeTTHA). SEDA is a dedicated and focussed agency that serves as a one-stop Renewable Energy (RE) centre.

As of 28 April 2011, both the RE Bill and the SEDA Bill were passed by the Dewan Negara.

SEDA started its operations on 1 September 2011 and its official portal was also launched.



PM Dato' Sri Najib Razak on a site visit



Wind and solar hybrid plant at Pulau Perhentian Kecil. Photo courtesy of Tenaga Nasional Berhad

Applications for the FiT opened on 1 December 2011, with quota for solar photovoltaic cells of 150MW, biomass (including solid waste) of 240MW, biogas (including landfill) of 90MW and small hydro of 150MW offered to any interested party through an open online application system. The quota allocation for solar photovoltaic up until 2014 was almost fully applied for within 24 hours of its launch, whilst applications for quota allocation for biomass, biogas and small hydro have been similarly encouraging.

Cypark Resources Berhad (CRB) will spearhead an initiative to build an RE park on 26 hectares of remediated landfill in Pajam, Nilai, Negeri Sembilan. The proposed RE park involves the integration of three potential resources available at the landfills i.e. solar, landfill gas (biogas), and waste (biocell) into a scalable renewable energy project capable of generating up to 10 megawatts of power in Pajam landfill alone.

This project will be carried out through the private investment initiative of CRB. In December 2011, CRB was designated as one of the FiT approved holders, and will be allowed to sell solar energy back to TNB.

### Moving Forward

In 2012 the target is to encourage individuals and households to install solar cells in their properties through the FiT campaign. This will incentivise local solar cell manufacturers to further exploit the growth in the local solar market, in the meantime, other sources of renewable energy such as biomass, biogas & small hydroelectricity will be continuously promoted. The possibility of ramping up the FiT system has been considered, but will be subject to significant consultation with the public. SEDA is in discussions with banks in Malaysia to streamline applications and draw up a framework to finance solar and renewable energy investment projects.

## EPP 11

## Deploying Nuclear Energy for Power Generation

A projected increase in demand for energy, coupled with the Prime Minister's conditional commitment to reduce Malaysia's carbon intensity by up to 40 per cent in 2020 as compared to 2005 levels has forced the government to reconsider the energy generation mix in Malaysia.

Malaysia's energy consumption level, relative to the size of the population and economy, is significantly higher than its peers. To meet growing demand, an additional 6,000 Megawatts of electricity generating capacity is expected between 2015 and 2020, with additional capacity required beyond 2020.

Given the longer lead time for nuclear power projects than conventional non-nuclear power projects, the earliest a nuclear power plant can realistically be expected to be operational is in 2021.

### Achievements

To spearhead this initiative, the Malaysia Nuclear Power Corporation (MNPC) has been formed to lead the planning based on the current development timeline of 11 to 12 years, from pre-project to commissioning. Dr Mohd Zamzam bin Jaafar has been appointed the Chief Executive Officer of this newly established entity.

### Moving Forward

MNPC has since started its feasibility study and is expected to submit a detailed report to the Government in early 2013.

## EPP 12

## Tapping Malaysia's Hydroelectricity Potential



EPP 12 explores Malaysia's hydroelectricity potential. Photo of Kenyir Dam courtesy of Tenaga Nasional Berhad

Sarawak's hydroelectricity potential is virtually untapped: only 0.6 per cent of the estimated 20 gigawatts of potential power capacity is currently being developed (based on the study carried out by the SAMA Consultancy in the 1980s for the State Government of Sarawak).

There are approximately 25 terawatt hours of latent power demand from industries operating in Sarawak, Sabah and the neighbouring countries of Brunei Darussalam and West Kalimantan, Indonesia.

### Achievements

The Bakun Hydroelectric power purchase agreement, signed between Sarawak Hidro Sdn Bhd – owned by the Federal Treasury

– and state-owned Sarawak Energy Berhad, sets the base tariff at 6.25 sen per kilowatt-hour (kWh) with an annual tariff hike of 1.5 per cent.

### Moving Forward

Discussions are underway to ensure that energy generated in Bakun is fully utilised. Further efforts in the hydroelectricity segment will focus on developing small hydro power producers and getting them feed-in approved holder status in order to sell their electricity back to the utility companies – via the FiT.

# Business Opportunities

In 2011, two additional business opportunities were included under the OGE NKEA, the Refinery And Petrochemical Integrated Development (RAPID) Project as well as the Sabah Ammonia Urea (SAMUR) Project. Both these projects are spearheaded by PETRONAS, and will be monitored in the OGE Steering Committee.

## Business Opportunity 1

### Process Improvements

Global benchmarks of refining and petrochemical facilities demonstrate that significant process improvements can be expected with these types of facilities over time. These improvements typically translate into efficiency gains of 0.5 per cent per year representing an additional GNI contribution of RM 3.4 billion. Improvement of overall processes and structure in the electricity generation sector is expected to add RM 1.5 billion of GNI contribution.

## Business Opportunity 2

### Economic Growth

Malaysia has targeted a GNI growth of 5.9 per cent per annum. Achieving this is expected to raise consumption by 3 per cent and will have a knock-on effect on the oil, gas and energy sector. The increased consumption will require an additional two gigawatts of installed capacity to be built at a cost of RM9.6 billion, creating an estimated 2,500 jobs and adding RM11.2 billion to GNI. The additional transmission and distribution of this energy will create a further RM5.6 billion GNI and require an investment of RM12.4 billion.

## Business Opportunity 3

### Project RAPID (Refinery and Petrochemical Integrated Development)

PETRONAS is spearheading the development of Project RAPID (Refinery And Petrochemical Integrated Development) in Pengerang, Johor. Still at the detailed feasibility study stage, RAPID will comprise a crude oil refinery with a refining capacity of 300,000 barrels-per-day, a naphtha cracker with a combined annual production capacity of approximately three million tonnes of ethylene, propylene, C4 and C5 olefins and a further development of about 22 mini petrochemical complexes.

RAPID will be the largest green-field investment within the Asia Pacific region. RAPID is set to leverage on opportunities opened up by global mega trends in technological advancements, increasing consumer awareness and affluence. Through this project, PETRONAS is set to further expand and diversify its petrochemical business through volume growth, a more diversified product base and more importantly, a greater focus on premium specialty chemicals industry in the vibrant Asia Pacific market.

RAPID's project feasibility is expected to be completed by December 2011 and if approved, earthworks will start by Q2 2012.

## Business Opportunity 4

### Project SAMUR (Sabah Ammonia Urea)

Sabah Ammonia Urea (SAMUR) Project is a project by Petronas Chemicals Group Berhad (PCG) to build an Ammonia Urea Complex in Sipitang Oil and Gas Industrial Park (SOGIP), Sabah. This project is one of the strategic developments in supporting the oil and gas industry for Sabah and will consist of an ammonia plant, a urea plant and a granulation plant, as well as integrated utility units and jetty facilities. The ammonia plant will produce 2,100 metric tonnes per day (mtpd) of liquid ammonia while the urea plant will produce 3,500 mtpd of granulated urea.

Construction is expected to start in Q2 2012 with completion targeted in 2015.

## Summary of Oil, Gas and Energy NKEA

	2020 Target
Incremental GNI Impact	RM131.4 billion
Additional Jobs	52,300
<b>Critical targets for 2012</b> <ul style="list-style-type: none"> <li>• To ensure enhanced oil recovery (EOR) techniques are implemented in existing oil fields</li> <li>• Malaysia to win the bid as the host of Offshore Technology Conference</li> <li>• Energy Performance Contract (EPC) implementation in all top 120 government buildings</li> <li>• GIFT international promotion to attract at least four trading companies to be based in Malaysia</li> <li>• To ensure commissioning of regassification terminal by Q3</li> <li>• To enhance discovery of new wells by PETRONAS</li> <li>• To increase production from marginal oil fields</li> <li>• To increase investment from Multinational Companies into OFSE industries</li> <li>• Increasing the penetration rate of SAVE awareness</li> <li>• Ensure two mergers or acquisitions between offshore structure fabricators</li> <li>• To ensure two additional partnerships or joint ventures in the OFSE industry</li> <li>• To ensure the Feed In Tariff (FIT) allocation for biomass, biogas and small hydroelectricity are fully utilised</li> </ul>	

## Early Child Care and Education in Malaysia

In November 2010, Haryani Kamaruddin, a preschool teacher, decided she needed additional training to become a better educator. She wanted to be part of Malaysia's vision to raise the levels of pre-school education and increase the number of children receiving such an education.

Haryani was one of the many early childcare educators and minders in Malaysia that did not have the related qualification needed for their current roles.

She signed up for an Early Child Care and Education (ECCE) Training held over three weeks. This three-week training is managed by the Early Child Care and Education (ECCE) Training Centre Cluster. This cluster was set up to support the Government's objectives to raise the number of students enrolled in pre-schools and childcare centres.

The aim of the ECCE Cluster is to train 218,500 ECCE educators by 2020, heighten the teacher-workforce

knowledge, as well as create better career pathways for these teachers. The project, spearheaded by SEGi, is open to Malaysian teachers in service at registered private pre-schools.

"This training programme was interesting and interactive. There were many workshops, group projects and module presentations, and were excellent opportunities to practice the skills acquired during the training sessions," said Haryani.

She pointed out, "Good training and skills transfer can only take you so far. One needs to have the passion and interest and I strongly believe we must love what we do to perform our best."

The other consortium members of the ECCE Cluster include the Institute of Early Years Development, Kolej Dika, TAJ International College, Institute CECE, Alfa International College (REAL Education Group), The Children's House, and Kirkby International College.



“

**Good training and skills transfer can only take you so far. One needs to have the passion and the interest and I strongly believe we must love what we do to perform at our best**

”





# Financial Services



**Dato' Seri Haji  
Ahmad Husni  
Bin Mohamad  
Hanadzlah**

Minister of Finance (II)



**In its first year of implementation, the Financial Services NKEA has done exceptionally well. I am proud to announce that all of our EPPs have made significant progress that will create a better investment and financial landscape domestically for the years to come.**

Under the Financial Services NKEA, there are 10 EPPs with 53 initiatives, of which 31 initiatives (58 per cent) are scheduled to be completed in 2011, 20 initiatives (38 per cent) in 2012, one initiative (two per cent) in 2013, and one initiative (two per cent) in 2015. Previously, many major announcements and development plans did not have proper follow-through, monitoring and feedback in addition to lacking immediate visible and real impact. This time however, we are encouraged by the progress made by ETP implementation thus far. My sincere and utmost appreciation to all the Financial Services NKEA teams such as Federal Treasury, PEMANDU, Bank Negara Malaysia, Securities Commission, Bursa Malaysia and the government linked investment companies (GLICs) for their strong commitments and dedication in achieving their targets.

Endnote – our aim is to make the Malaysian financial services sector serve the needs of businesses and consumers alike in a high-income economy, not only to increase its depth but also to expand its regional and global market shares. And, we will.

## Financial Services

The importance of the financial services sector to Malaysia's economy has been growing over the past decade, with its Gross Domestic Product (GDP) share increasing from an average of 9.9 per cent between 2000 and 2005 to 10.9 per cent over the period 2006 to 2009

Today, Malaysia's financial services sector contributes to 11.6 per cent of the country's real GDP. The proposed development of this sector takes on a holistic approach that encompasses both financial institutions and financial markets, and it targets to raise Malaysia's total Gross National Income (GNI) by RM121.5 billion to RM180.2 billion and create 275,400 new jobs by 2020.

Of this goal, RM28.8 billion is expected to be derived from 10 EPPs, RM72.0 billion from baseline growth and RM20.7 billion from the multiplier effect created by EPPs from other sectors. In addition, through the EPPs, 45,000 jobs will be created, with 56 per cent of them offering an average income of above RM4,000 per month.

The Financial Services National Key Economic Area (NKEA) has four key thrusts: strengthen the core; serve needs of a high income population; develop new sectors; and go on the offensive, from which a portfolio of EPPs has been identified to grow the sector's GNI contribution.

Moving forward, although the world economy and financial markets quickly rebounded in 2010 from the global financial crisis and economic recession in 2008-2009, with signs of steady momentum in early 2011, we are fully aware that the global economic outlooks for 2012 are still subjected to several caveats and risks such as the sustainability of US economic recovery, Eurozone's solvency risk, Japan's series of unfortunate events, rising commodity prices, and many others.



Malaysia's financial services sector contributes to 11.6 per cent of the country's real GDP. Photo courtesy of Star Publications (Malaysia) Bhd

## 2011 Key Performance Indicators

Exhibit 3.1

NKEA Financial Services		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Average Daily Value (ADV) Traded (RM bn)	1.6	1.74	109%		100%		1.0	
	Value of REITs including national REITs (pooling properties of GLCs) (RM bn)	RM5 bn	RM5.6 bn	113%		100%		1.0	
	Increased number of foreign listings	5	3	60%		60%		0.5	
	Mandate GLICs to hedge using derivatives – Educational & Awareness programmes	Q4 2011	Completed in November 2011	100%		100%		1.0	
	Licensing: Opening up of retail access to foreign brokers	Q4 2011	Completed in Q2 2011	100%		100%		1.0	
	Licensing: Allow all brokers to open branches	Q4 2011	Completed in Q2 2011	100%		100%		1.0	
	Licensing: Liberalise licensing of Proprietary Day Traders (PDTs) – Approval	Q1 2011	Completed in Q1 2011	100%		100%		1.0	
	Licensing: Dual licensing of equity and futures dealers	650	684	105%		100%		1.0	
EPP #2	Widen the credit spectrum of bond market: Benchmark domestic credit rating agencies against international standards and best practices	Q1 2011	Completed in March 2011	100%		100%		1.0	
	Increase participation of foreign issuers and investors: Internationally-rated local companies to be allowed to use international ratings for RM bonds	Q3 2011	Completed in July 2011	100%		100%		1.0	
	Increase participation of foreign issuers and investors: Enhanced disclosure standards (Launching)	Q3 2011	Completed in July 2011	100%		100%		1.0	
	Increase participation of foreign issuers and investors: Foreign holdings in PDS (RM bn)	RM16 bn (by 3Q11)	RM15.3 bn (September 2011)	96%		96%		0.5	
EPP #3	Revisit DFI mandates and rationalise: Complete review of DFI mandates	Q4 2011	Completed in March 2011	100%		100%		1.0	
	Sustainable DFIs that do not require additional capital injection in the form of bailouts from the government	Q4 2012	Completed in March 2011	100%		100%		1.0	
	Shift emphasis of DFIs towards Islamic Finance: Islamic financing portfolio of DFIs increase to 70 per cent of total financing portfolio	Q4 2011	YTD: 66% increased	94%		94%		0.5	

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NKEA Financial Services		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #4	Expand merchant acceptance: Increase in the number of POS terminals by 15 per cent (as at 31 Dec 2010: 196,210 terminals)	Increase in the number of POS terminals by 15 per cent by 4Q11	As at end September 2011 = increased by 9.4 per cent	63%		63%		0.5	
	Expand merchant acceptance: Government to waive the import duty for POS terminals	Q4 2011	Completed in September 2011	100%		100%		1.0	
	Expand strategic partnership with regional ATM switches: Expand ATM link to Korea	Q1 2011	Completed in December 2010	100%		100%		1.0	
	Deploying 1Malaysia Payment (from CCI NKEA): Roll-out of the pilot interoperable mobile banking and payment platform	Q4 2011	70%	70%		70%		0.5	
	Deploying 1Malaysia Payment (from CCI NKEA): Increase volume of mobile banking transactions by 15 per cent in 2011 (as at end Dec 2010: 717,038 transactions)	Increase volume of mobile banking transactions by 15 per cent in 2011	As at end November 2011 = 1,532,582 (increased by 214 per cent)	214%		100%		1.0	
EPP #5	Launched micro-insurance scheme: Roll-out of 1Malaysia Micro-Protection Plan (1MMPP)	Q1 2011	Rolled out in April 2011	100%		100%		1.0	
EPP #9	Expand within ASEAN in meaningful manner and beyond ASEAN: Identify priority/strategic countries for expansion	Q1 2011	Completed in Q1 2011	100%		100%		1.0	
	Expand within ASEAN in meaningful manner and beyond ASEAN: Domestic banks with capacity to expand regionally	Q4 2011	6 banking groups have presence in 19 countries worldwide.	100%		100%		1.0	
	Expand within ASEAN in meaningful manner and beyond ASEAN: G2G or regulator-regulator engagement to remove market access impediments	Q4 2011	MOUs signed with 4 regulatory authorities.	100%		100%		1.0	
	Successful signing of FTAs to the net benefit of Malaysia in regards of Financial Services chapter	Q4 2011	100%	100%		100%		1.0	
EPP #10	Expand Islamic banking to priority markets: Identify key priority countries to expand Islamic banking where Malaysian banks have significant presence	Q4 2011	100%	100%		100%		1.0	

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NKEA Financial Services		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
	Actively participate in the enhancement of global Islamic liquidity management: Expand scope and global acceptance of Bursa Suq Al-Sila' by extending the opening hours and having greater number of participants (Bursa to provide details)	Q4 2011	Bursa Suq Al-Sila' is operating at a 6 days market since 1 November 2010. Year 2011: 40 members (29 local, 11 foreign participants)	100%	●	100%	●	1.0	●
	Actively participate in the enhancement of global Islamic liquidity management: Encourage fund raising for 10MP via FX Islamic instrument (First-right-of-refusal for Islamic instruments)	Q2 2011	The Govt of Msia issued US\$2 bn Wakala Global Sukuk (June 2011), attracting subscription worth more than US\$9 bn	100%	●	100%	●	1.0	●
	Actively participate in the enhancement of global Islamic liquidity management: Operationalise International Islamic Liquidity Management Corporation (IILM)	Q2 2011	Operationalised in Jan 2011	100%	●	100%	●	1.0	●
	Develop Islamic fund management: Attract leading international fund managers to establish in Malaysia	Q4 2011	There are 16 Islamic fund management companies of which 9 are fully foreign owned and 3 are joint venture	100%	●	100%	●	1.0	●
	Expand takaful products overseas: Increase takaful penetration in the domestic market and foreign currency share of retakaful business	Q4 2011	Takaful penetration rate increased from 11.1 per cent (Dec 2010) to 11.7 per cent (Mar 2011). Data available only annually but expected to increase in 2011	100%	●	100%	●	1.0	●
				<b>101%</b>		<b>96%</b>		<b>92%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

## Revitalising Malaysia's Equity Markets

The capital market is a vital link in the financial services infrastructure. Various issues confront Malaysia's equity markets today including low turnover velocity and trading volumes in relation to its peers, as well as shrinking liquidity.

EPP 1 seeks to resolve this by targeting the expansion of Bursa's market capitalisation at a compounded annual growth rate (CAGR) of 15 per cent to RM3.9 trillion by 2020 from RM1 trillion in 2010. Liquidity, measured by trading velocity, is also targeted to improve from 31 per cent of total market capitalisation to 60 per cent, in line with regional averages. This EPP is expected to create incremental GNI of RM3.3 billion and 9,000 additional jobs by 2020.

Khazanah Nasional Bhd is the lead agency to manage the equity holdings of Government-linked investment corporations (GLICs) in listed companies with a view of paring down non-core holdings to improve the stock market's liquidity. Another key initiative will be the listing of key privately-held Government-linked companies (GLCs) to further boost stockmarket liquidity and the number of large cap stocks.



Khazanah Nasional is the lead agency to manage the equity holdings of GLICs in listed companies

### Achievements

In April 2011, Khazanah Nasional Bhd sold 32.21 per cent of its strategic stake in Pos Malaysia Bhd to DRB-Hicom Bhd at RM3.60 per share or RM622.79 million. This was followed by the listing of two large PETRONAS subsidiaries: Malaysia Marine and Heavy Engineering Holdings Berhad (MMHE) and PETRONAS Chemicals Group in 2010 and was followed by the listing of MSM Malaysia Holdings Bhd, FELDA's sugar refining arm in 2011.

A total of 33 companies under six GLICs have been identified as ready for divestment either through a listing, pare-down or outright sale. Five have been identified for stake pare-downs, seven for public-listing and 21 for outright sale. For 2011 – 2012, 24 companies have been identified for the Government's divestment exercise; the divestment exercise will begin once their share prices hit pre-determined prices.

In 2011, there were three foreign listings on Bursa Malaysia. They are Maxwell International Holdings Bhd (local incorporated, China based, listing date: 6 Jan 2011, market capitalisation: RM216 million); Mclean Technologies Bhd (local incorporated, Singapore

based, listing date: 10 May 2011, market capitalisation: RM61 million); Ideal Jacobs (M) Corporation Bhd (local incorporated, China based, listing date: 18 May 2011, market capitalisation: RM32 million).

Bursa was upgraded within the FTSE's Global Equity Index series from secondary emerging to Advanced Emerging in June 2011. Malaysia's latest weightage in the MSCI Emerging Markets Index has increased from 2.9 per cent to 3.2 per cent after staying at the 2.9 per cent weightage for the past 2 years. In addition to this, Malaysia's weightage in MSCI AC Asia excluding Japan has also risen to 4.4 per cent from 4.1 per cent.

Bursa Malaysia has partnered with Chicago Mercantile Exchange (CME), the biggest derivative exchange in the world. This will allow global traders to access the Bursa Malaysia derivative products electronically, especially the Crude Palm Oil Futures (FCPO) market facilitating a robust derivative exchange.

As at third quarter of 2011, the Securities Commission (SC) approved 12 applications for Initial Public Offering (IPO) in the Main Market which are expected to have a total combined market capitalisation of RM18.33 billion and expected to raise more than RM5.5 billion. In addition, Bursa approved seven applications for IPOs for the ACE Market which are expected to have a total combined market capitalisation of RM0.5 billion and expected to raise more than RM0.1 billion.



As at Q3 2011, SC approved 12 applications for IPO in the Main Market. Photo courtesy of Star Publications (Malaysia) Bhd

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**EPP 1** (continued from previous page)

Exhibit 3.2

Number of Corporate Proposals Approved by the SC (YTD Q3 2011)	
Type of proposals	Approved
Initial public offering – Main market	12
Reverse take-overs and restructurings	2
Transfer to main market	1
Private debt securities	58
Others	8
<b>Total</b>	<b>81</b>

As at end September 2011, Bursa Malaysia has achieved 26 new company listings on Bursa Malaysia i.e. 10 ACE Market listings and 16 Main Market listings. In terms of listed products, there was a total of 5 exchange traded funds (ETFs) listed on Bursa Malaysia as at end September 2011, with a market capitalisation of RM1.08 billion and 14 Real Estate Investment Trust (REITs) with a market capitalisation of RM11.25 billion.

The Prime Minister has announced in the National Budget 2012 that the concessionary tax rate of 10 per cent on dividends in REITs will be maintained for a further five years.

With the completion of the stockbroking consolidation policy, branching was allowed for standalone brokers. Applications have also been received for new stockbroking licenses and they are currently being vetted to assess the value proposition of their proposals to increase retail participation in the stock market.

To promote more active trading, 674 dealer representatives were approved to be dual licensed as equity and futures dealers as at end of October 2011. On 25 March 2011, the SC approved an increase in the number of Proprietary Day Traders (PDTs) from 36 to 100. As at 31 October 2011, the total number of PDTs rose to 57.

### Moving Forward

Initiatives will be implemented to improve liquidity and scale in the market with greater focus on retail and institutional investor segments. To capture these segments, Bursa Malaysia will continue to diversify its Islamic and conventional product offering and also address structural issues that would help to spur investor participation in the market.

## EPP 2

## Deepening and Broadening Bond Markets

Our aspiration is for Malaysia to have a deep, broad and liquid bond market. Total outstanding is expected to grow from about RM270 billion in 2010 to about RM880 billion by 2020 with average yearly trading value increasing from RM64 billion in 2010 to RM618 billion by 2020 or a CAGR of 23 per cent.

This EPP aims to widen the credit spectrum of the bond market, increase participation of foreign issuers and investors and strengthen retail participation, collectively increasing incremental GNI by RM183.2 million and creating 1,400 jobs in bond markets. It will also improve accessibility of funding to medium-sized companies, provide a broader range of instruments and enhance the industry's risk assessment capabilities.

### Achievements

Guidelines on Registration of Credit Rating Agencies (CRA) were issued on 30 March 2011 to require CRAs to comply with international standards and best practices. Subsequently on 12 July 2011, the revised Private Debt Securities (PDS), *sukuk* and trust deed guidelines were issued to enhance documentation and disclosure standards for PDS and *sukuk*.

During the first three quarters of 2011, the SC approved a total of 50 ringgit-denominated PDS and *sukuk* applications worth RM63.8 billion as compared to 29 applications worth RM35.9 billion

during the corresponding period last year. Ringgit-denominated *sukuk* continued to attract interest as half of the total applications approved comprised *sukuk*, amounting to RM37.2 billion. Comparatively, over the same period last year, there were only 12 ringgit-denominated *sukuk* applications approved totaling RM17.8 billion. For non-ringgit-denominated PDS and *sukuk*, the SC approved eight applications amounting to approximately US\$5.9 billion during the first three quarters of 2011. In contrast, there were only five such applications approved by the SC over the same period last year, which amounted to US\$5.3 billion.

### Moving Forward

To facilitate retail participation in *sukuk* and conventional bonds, the SC and Bursa Malaysia are working together to facilitate the offering of corporate bonds to retail investors by early 2012. A series of consultations have been held with various stakeholders to establish a suitable framework for retail trading while ensuring sufficiently robust standards of investor protection. The framework will include an effective distribution network and a cost-efficient trading mechanism to facilitate retail investors' access to the bond market. Investor education initiatives will also be undertaken to ensure that investors are familiar with the investment characteristics and risks associated with investing in bonds.

## EPP 3

## Transforming or Rationalising Development Financial Institutions (DFIs)

This EPP focusses on reviewing DFI mandates and activities with the goal of having clear and non-overlapping mandates and operations. DFIs will also be re-shaped to improve productivity and sustainability, benchmarked against a non-performing loan level of lower than six per cent and cost to income ratio of 40 per cent by 2020.

The transformation of DFIs is expected to create incremental GNI of RM1.8 billion by 2020 and in addition spur growth and job creation for other key industries through improved developmental activities.

### Achievements

In March 2011, a review on DFI mandates was completed to enhance the capacity and capability of DFIs to ensure they remain focused on their mandates and to enhance their capacity and capability to ensure they perform their roles efficiently and effectively. DFIs have been asked to strengthen and enhance their business models to diversify their sources of funds to ensure financial sustainability.

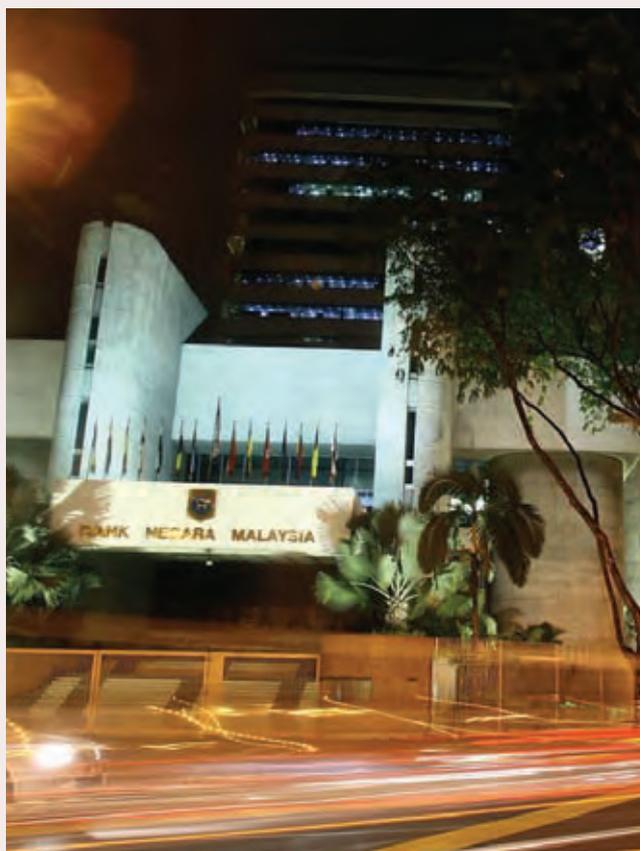
Export-Import Bank of Malaysia Bhd (EXIM Bank) is seeking to build strong alliances with other Asian exim (export-import) banks to drive forward initiatives for more cross-country businesses as there were many deals that were too big for one exim bank to handle. The bank has approved RM400 million worth of deals thus far in 2011 and is also evaluating loan applications close to RM500 million for green technology projects, in sync with the government's call for financial institutions to support environmentally sustainable initiatives.

Additionally, EXIM Bank and the Venezuelan Bank of Foreign Trade have signed a memorandum of understanding (MoU) to establish an inter-institutional alliance allowing a further strengthening of trade relations between the two countries. This MoU reinforces a previous agreement signed in 1991 on sustaining technical and economic cooperation and enhancing trade.

Agrobank, which has been corporatised since 2008, has embarked on a restructuring exercise. With its focus remaining on the agriculture sector, Agrobank has set up eight regions, combining several states under one region. Each region will also have a business centre that will help expedite loans and other services.

### Moving Forward

Continuous efforts will focus on improving the sustainability of the DFIs in targeting higher financing for targeted sectors, improving impaired financing ratios and DFIs' operational efficiency. Bank Negara (in collaboration with the Ministry of Finance) is also currently developing the risk sharing framework for DFIs to achieve socio-economic objectives by the end of 2012. In addition to this, focus will be in increasing resource capacity and capability in advisory and R&D.



Bank Negara is developing the risk sharing framework for DFIs. Photo courtesy of Star Publications (Malaysia) Bhd

## EPP 4

## Creating an Integrated Payment Ecosystem

To become a cheque-less economy and reduce cash transaction dependence to 63 per cent of transaction frequency by 2020, this EPP concentrates on initiatives to expand merchant acceptance of cash-less payment methods, drive consumer adoption of electronic payment systems and reduce the usage of cheques.

This EPP is expected to create incremental GNI of RM2.6 billion and an additional 8,000 jobs in the financial services sector. Impact to the greater economy beyond the financial sector will be much larger and estimated at one to 1.5 per cent of total GDP, with e-payment transactions increasing ten-fold from 1.2 billion to 12 billion transactions per year.

### Achievements

Bank Negara has worked with private merchant acquirers to increase the number of Point of Sale (POS) terminals by 9.4 per cent (as at end September 2011 214,675 terminals vs. 196,210 terminals as at end December 2010).

Currently, 98.2 per cent of Government payments are made via electronic funds transfer, and Bank Negara together with Jabatan Akauntan Negara Malaysia (JANM) will work on the remaining 1.8 per cent miscellaneous payments such as cash advances, petty cash and other deductions such as Tabung Haji, Kumpulan Wang Simpanan Pekerja (KWSP), Amanah Saham Bumiputra (ASB), housing loan, etc.

Malaysian Electronic Clearing Corp Sdn Bhd (MyClear), a wholly-owned subsidiary of Bank Negara Malaysia, has signed an agreement with payment network provider, Malaysian Electronic

Payment System Sdn Bhd (MEPS) to acquire the latter's e-Payment services. The acquisition, effective 16 September 2011, encompasses the services of e-Debit, MEPS interbank GIRO, MEPS Financial Process Exchange, MEPS direct debit and mobile banking.

### Moving Forward

To expand MEPS strategic partnership with key countries, the Government has broadened the scope of existing ATM partnerships to point of sales, and more advanced e-payment transactions. As such, the ATM link has been expanded to Korea, and Vietnam. Going forward, the link is to be expanded further into Philippines.

JANM will target 100 per cent of government payments to be made via electronic funds transfer by end June 2012.

In addition to this, on 6 September 2011, the government waived the import duty for POS terminals; efforts will be made to ensure that payment card terminal vendors are updated on this development.

In 2011, it was determined that the 'Deploying 1Malaysia Payments' EPP previously housed under the Communication Content and Infrastructure NKEA will now be included under the payment ecosystem integration EPP. The initiative involves the roll-out of the pilot interoperable mobile banking and payment platform, increasing the volume of mobile banking transactions by 15 per cent in 2011 and disincentivising counter services.

## EPP 5

## Insuring Most, If Not All, of Our Population

Although acceptance of life insurance has increased to 2.8 per cent of GDP, penetration is still low in Malaysia relative to other developed nations such as Singapore (6.1 per cent) and Japan (7.7 per cent). This is mainly attributed to a lack of disposable income amongst low-income earners to buy protection.

By 2020, Malaysia intends to increase its life insurance penetration to four per cent of GDP or 75 per cent of the population. This EPP is expected to create incremental GNI of RM1.5 billion by 2020 along with 9,000 new jobs. It will enhance financial security for the population and strengthen the social safety net.

### Achievements

In August 2011, the 1Malaysia Micro Protection Plan (1MMPP) has been developed to enhance accessibility and affordability of insurance and takaful protection for Malaysians. 1MMPP has been jointly developed by Bank Negara Malaysia, Life Insurance Association of Malaysia, General Insurance Association of Malaysia and Malaysian Takaful Association. At affordable rates starting at less

than RM20 per month, 1MMPP will provide insurance and takaful coverage for death and disability, personal accident, hospitalisation and protection of property against natural disasters. Currently, several banks such as OCBC, Ambank, and Public Bank Berhad are working in collaboration with insurers and takaful operators such as Great Eastern, ING, and Amlife Insurance to distribute the 1MMPP.

### Moving Forward

Moving forward, we are trying to increase insurance penetration rate for low-income households in the country. Currently, Bank Negara is gathering data on insurance penetration for low-income households via industry associations. The report will be presented to the Ministry of Finance by the end of first half of 2012, providing a baseline to allow targets for insurance penetration to be set for the remainder of 2012.

In addition to this, the Securities Commission is working to develop a private pension framework to supplement existing public pensions and targets to launch it by the first quarter of 2012.

## EPP 6

## Accelerating The Growth of The Private Pension Industry

Malaysia envisions having a model pension system and a vibrant private pension industry. By 2020, we expect the private pension industry to grow to RM73 billion, with more than 2.7 million participants. This EPP is expected to create incremental GNI of RM2.1 billion in the financial services sector and 2,200 jobs by 2020, contributing to the growth of the asset and wealth management industry and supporting a more vibrant capital market.

### Achievements

Following the government's announcement in Budget 2012, the private retirement scheme (PRS) framework was launched in October 2011 via the enactment of the Capital Market and Services Amendment Act 2011. It establishes the regulatory framework for the entire PRS framework, and sets in place the authority to approve PRS and PRS intermediaries.

The importance of tax measures to incentivise participation in private retirement schemes has also been recognised by the Prime Minister in the Budget 2012 speech, wherein it was announced that:

- Tax relief of up to RM3,000 be given on contributions by individuals to PRS approved by the SC and annuity premiums
- Tax exemption on income received by the PRS fund
- Tax deduction be given for employers' contribution above the statutory rate up to 19 per cent of employees' remuneration and includes additional contributions to EPF and approved schemes under section 150 Income Tax Act 1967 including PRS

### Moving Forward

The next step would be the release of the detailed guidelines on the PRS, which will set out the operational requirements for the PRS providers, Scheme Trustee and the Scheme itself.



PM Dato' Sri Najib Razak recognises the importance of tax measures to incentivise participation in private retirement schemes in the Budget 2012 speech. Photo courtesy of Star Publications (Malaysia) Bhd

Other steps include establishment of the PRS Administrator and approval of the PRS scheme to be offered to the public. Recently, SC has finalised the eligibility requirements for PRS providers. Eligible firms can now submit their applications for approval by 15 February 2012.

## EPP 7

## Spurring the Growth of the Nascent Wealth Management Industry

To encourage further expansion of Malaysia's wealth management industry, this EPP seeks to increase the range of wealth management products available via careful liberalisation and streamlining product approval processes to significantly shorten time to market.

Furthermore, measures are also being drawn up to implement tiered returns for EPF balances above RM1 million, attract top wealth management institutions and carve a niche in Islamic wealth management. An expected incremental GNI of RM2.1 billion will be created by this EPP, along with an additional 6,000 jobs in the financial services sector by 2020.

### Achievements

The total number of unit trust and wholesale funds as at 30 September 2011 stood at 720, comprising 590 unit trust funds and 130 wholesale funds. The net asset value (NAV) for unit trust funds was RM234.7 billion, of which conventional funds amounted to RM209.7 billion while RM25 billion were Islamic-based funds. For the first nine months of 2011, the SC approved 34 new unit trust funds and 32 new wholesale funds.

On 23 May 2011, the SC revised the *Guidelines on Compliance Function for Fund Managers* to enhance client asset protection and raise compliance standards to safeguard the interests of investors.

(more on next page)

**EPP 7** (continued from previous page)

The revised guidelines require fund management companies and their representatives to uphold a number of core principles in the conduct of their business ranging from integrity, skill, and avoiding conflict of interest to compliance culture and client asset protection.

The sales practice regime was further strengthened through streamlining the categories of sophisticated investors to limit the distribution of high-risk and complex products. The sales practices for unlisted products were reviewed to clarify suitability assessment requirements under Section 92 of the Capital Markets and Services Act 2007 (CMSA), while disclosures were enhanced through requiring the issuance of product highlight sheets.

On 9 August 2011, the SC revised its *Guidelines on Outsourcing for Capital Market Intermediaries* to provide intermediaries the ability to focus on their core strengths of intermediation by outsourcing their back office functions to other service providers. In tandem with the liberalised approach, the Guidelines also allow intermediaries to

outsource to foreign service providers with the requirement that access was provided to books and records kept offshore.

PEMANDU also assisted in the establishment of ESB Artha Global Management Sdn Bhd (ESB Artha), a company that provides fund management solutions and services to high net-worth individuals and wholesale clients.

**Moving Forward**

The SC will continue to facilitate product innovation through widening the range of asset classes for intermediation. The regulatory framework for fund-raising and product offerings will also be enhanced to tailor to specific needs of various categories of products and investors. The framework is targeted to be released in the first half of 2012. As product complexity increases on the Malaysian capital market, disclosure requirements will be strengthened to ensure more effective disclosure of product risks.

**EPP 8****Accelerating and Sustaining a Significant Asset Management Industry**

To help Malaysia achieve its ambition of becoming a thriving regional asset management hub, one of this EPP's action plans is to encourage foreign fund management companies to set up operations in Malaysia as a means to stimulate the industry. Additionally, measures are also being taken to further encourage the retail market and carve a niche in Islamic asset management.

This EPP is expected to create incremental GNI of RM2.4 billion and an additional 7,000 jobs by 2020. Assets under management are expected to grow from its current RM300 billion to RM1.7 trillion by 2020, representing a CAGR of 17 per cent.

**Achievements**

On 11 April 2011, EPF members with MyKad with savings of more than RM1 million were provided the flexibility to make withdrawals through being present at the EPF counter by producing the MyKad and Bank Passbook/Savings Account Statement/Current Account Statement.

To attract foreign firms with potential to serve as growth catalysts into Malaysia, GLICs have raised their mandates to external fund managers from five to 15 per cent of assets under management (AuM), with each mandate being sufficiently attractive in size from RM1 billion to RM2 billion.

**Moving Forward**

The role of the investment management industry is expected to further expand with

the establishment of the private retirement scheme industry to complement existing mandatory schemes. The private retirement scheme industry will assist in promoting greater diversity in the management of long-term savings. In addition, the range of asset classes for intermediation will also be broadened to facilitate portfolio diversification. A seeding strategy will also be developed to increase the diversification of Islamic investment strategies and styles.



MyKad holders with EPF savings of over RM1 million can now make withdrawals at EPF counters. Photo courtesy of Star Publications (Malaysia) Bhd

**EPP 9**

# Developing Regional Bank Champions

This EPP sees the Malaysian Government and Bank Negara assisting strong Malaysian banks to establish meaningful presence in priority markets and lead the expansion outside ASEAN through the acquisition of banking assets.

Malaysian banks will increase the proportion of overseas income over total profits from 16 per cent in 2009 to 27 per cent by 2020 through more meaningful presence in ASEAN and international markets. Malaysian banks aspire to be among the top three in ASEAN by market capitalisation in 2020, with this EPP creating incremental GNI of RM5.6 billion in the financial services sector by 2020.

## Achievements

Bank Negara has entered into MoUs with China Banking Regulatory Commission, Bank Indonesia, State Bank of Vietnam & National Bank of Cambodia. Continuous Trans-Pacific Partnership (TPP) discussions were held such as TPP negotiating round in Chicago (September 2011), Vietnam (June 2011), Malaysia-EU negotiating round in Kuala Lumpur (July 2011), and Brussels (May 2011). As a result, Malaysian banks like Maybank, CIMB and Public Bank have been investing in extensive presence across the region. Now they are in the process of strengthening their regional positions especially given the

target of becoming amongst the leaders in the regional banking landscape by as soon as 2015.

Maybank has turned in a record net profit for the second straight year and is cautiously optimistic it can keep up its growth momentum despite a weakening global economy. The stronger earnings were achieved on the back of robust loan growth in its three key markets – Malaysia (16.8 per cent), Indonesia and Singapore (25.8 per cent each) and an 85 per cent drop in provisions for bad debt. Maybank's LEAP30 transformation programme targets 40 per cent of pre-tax profit from international operations by 2015.

CIMB's universal banking footprint today covers Indonesia, Thailand and Singapore, which cumulatively contribute to about 37 per cent of group pre-tax profit. CIMB opened an office in Mumbai, India, and formed a working partnership with commercial lender Kotak Mahindra Bank Ltd, marking its maiden entry into the Indian market. CIMB has also entered into a joint venture and shareholders' agreement via its indirect wholly-owned subsidiary CIMB Securities International Pte Ltd (CIMBSI), to set up an investment banking advisory joint venture in Sri Lanka. The venture with Sri Lankan partners Alex Lovell and Reshani Dangalia

would be a subsidiary of CIMBSI on its incorporation. The shareholders have committed up to US\$2 million for the venture, in which CIMB holds 51 per cent and Lovell and Dangalia the remaining 49 per cent.

RHB Cap, which is on the lookout for acquisitions in Southeast Asia, is still keen on buying PT Bank Mestika Dharma. RHB Cap is hoping the acquisition can be completed at the end of 2011. The acquisition, which is to be funded via a RM1.3 billion renounceable rights issue, is now pending regulatory approval from Indonesia.

Other banks that have made noteworthy progress on the regional front are Public Bank and Hong Leong Bank. Public Bank's overseas operations currently contribute seven per cent of group earnings while Hong Leong Bank's China operations alone contribute 12 per cent of group pre-tax profit.

## Moving Forward

Moving forward, continuous TPP discussions will be an ongoing agenda. Discussions and negotiations for successful signings of Free Trade Agreements (FTAs) are expected to continue in upcoming years (to support the intent to develop regional champions). Greater collaborations and best practices among ASEAN regulators and financial institutions will remain as key agenda in the near future.

Exhibit 3.3

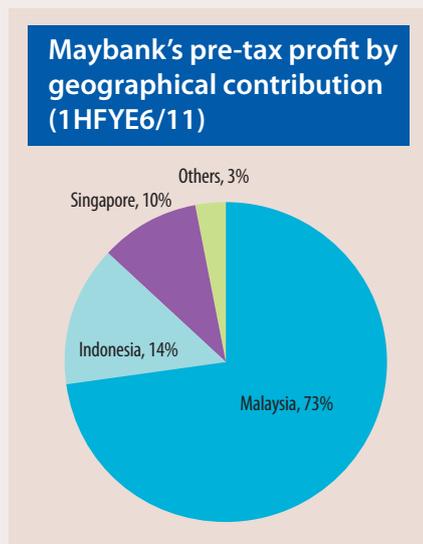
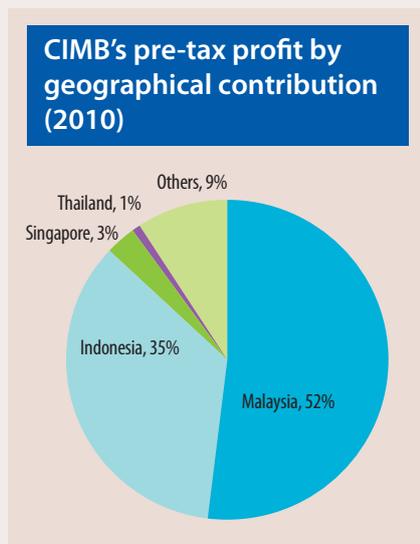


Exhibit 3.4



## EPP 10

## Becoming the Indisputable Global Hub for Islamic Finance

The nation aspires to become the intellectual and capital centre for Islamic finance with global share of Islamic banking assets targeted to increase from eight per cent in 2009 to 13 per cent in 2020. Global share of takaful contribution is targeted to rise from 11 per cent in 2009 to 20 per cent in 2020 and at least one Islamic financial institution is targeted to be among the global top ten by asset size by 2020.

The EPP is expected to create incremental GNI of RM7.2 billion and 12,000 jobs mainly in Islamic banking activities and takaful by 2020.

### Achievements

Within the Islamic finance space, Malaysia has leadership in the global market. In the *sukuk* market, Malaysia accounts for 64 per cent of global *sukuk* as at end-2010 and Bursa Malaysia is also the leading exchange for listed *sukuk*.

In the fund management industry, Malaysia has the largest number of Islamic funds, with 163 Islamic unit trusts amounting to RM25.0 billion in total net asset value (NAV) as at September 2011. Overall, Malaysia operates the most comprehensive Islamic capital market as well as occupying the top three spots in takaful (#2) and banking (#3).

Bloomberg has also launched a non-ringgit denominated *sukuk* index which was developed in conjunction with Bank Negara. The Bloomberg Malaysian Foreign Currency Sukuk Index provides a global benchmark for the performance of *sukuk* bonds and the ability to track movements of foreign currency issues. In addition, Bloomberg recently created another index with the Association of Islamic Banks in Malaysia (AIBIM), the Bloomberg-AIBIM-Bursa Malaysia Sovereign Syariah Index, which provides a performance benchmark for investors seeking exposure to Syariah-compliant ringgit-denominated Government securities.

The Malaysian government has successfully concluded the sale of *sukuk wakala* in two tranches totaling US\$2 billion (RM6.06 billion) which saw a surprisingly high subscription rate given uncertainties in the global credit markets and the gloomier global economic outlook. The government's commitment to further encourage *sukuk* issuances is evident from the wide range of tax incentives provided to issuers such as the introduction of tax deduction on expenses incurred for the Wakala structure for a period of three years commencing 2012, besides extending until 2014 the income tax exemptions for non-ringgit denominated *sukuk* issuances.

Beyond *sukuks*, the year under review also saw the introduction of Bursa Suq Al-Sila' - a commodity trading platform specifically dedicated to facilitate Islamic liquidity management and financing by Islamic banks. Initiated as a national project, Bursa Suq Al-Sila' is the result of the collaboration of Bank Negara, SC, Bursa Malaysia and the industry players in support of the Malaysia International Islamic Financial Centre (MIFC) initiative. The fully electronic

web-based platform provides industry players with an avenue to undertake multi-commodity and multi-currency trades from all around the world. This pioneering effort cements Malaysia's strength in both Islamic finance and the crude palm oil industry. Bursa Suq Al-Sila' is a world's first for Malaysia that integrates the global Islamic financial and capital markets with the commodity market. Currently, Bursa Suq Al-Sila' is operating a six-day market (except Saturday), with 40 members (29 locals and 11 foreign).

In addressing the lack of short-term liquid instruments for institutions offering Islamic financial services and the absence of robust liquidity management infrastructure on the international front, the International Islamic Liquidity Management Corporation (IILM) was established. The IILM has officially started its operations on 1 January 2011. Currently, membership of the IILM consists of 15 founding shareholders (consisting of thirteen central banks or monetary authorities of Indonesia, Iran, Kuwait, Luxembourg, Malaysia, Mauritius, Nigeria, Qatar, Saudi Arabia, Sudan, Turkey, the United Arab Emirates, and Nigeria) and two multi-lateral institutions (the Islamic Development Bank and the Islamic Corporation for the Development of the Private Sector).

Towards spearheading Malaysia's drive to become a centre of excellence for Islamic finance, research, development and education, the Kuala Lumpur Regional Centre of Arbitration (KLRCA) is making robust efforts to expand its role in promoting Islamic arbitration globally. It will launch Islamic arbitration rules to encompass other sectors such as construction and maritime (beyond its current Syariah principles-based business transactions). These new rules are expected to be launched next year and marketed globally, making KLRCA the first arbitration institution in the world to have a new set of rules. Currently, the centre has over 600 local and international arbitrators with various expertise and qualifications, and managed over 70 cases last year.

### Moving Forward

In 2012, we are targeting the issuance of syariah parameters on *Mudharabah*, *Musharakah*, *Ijarah* and *Istisna*. Review of the feedback from industry players on the parameters is ongoing.

Bank Negara is working to strengthen legal support to Islamic financial transactions. The Islamic Omnibus Act encompassing licensing framework, supervisory powers, prudential requirements, intervention and resolution of financial institutions is currently in the stage of finalising regulatory laws for Islamic finance services.

In addition to this, the Law Harmonisation Committee will focus on reviewing relevant court rules (for example, to recognise the treatment with regard to imposition of interest from the syariah finance perspective) to suit Islamic finance practices in order to create a more conducive legal system that facilitates and supports the development of Islamic finance institutions.

# Business Opportunities

In addition to the 10 high impact EPPs, we also believe that there are several key significant business opportunities in the financial services sector that would signify greater growth in the economy. The six areas that have been identified are:

## Business Opportunity 1

### Commercial Banking

Over the next 10 years, the commercial banking segment is expected to maintain a moderate growth of seven per cent per annum. Most of the incremental GNI of RM29.6 billion in 2020 is anticipated to come from baseline growth with contribution from the following business opportunities:

- Innovation in the delivery of financial services including new business models to tap underserved segments and new branch formats including branchless banking
- Increased financial inclusion via the national literacy programme
- Commercial banks supporting the growth of SMEs, which will be strengthened as engines of growth and innovation under the Tenth Malaysia Plan
- Fast growing personal finance segment

## Business Opportunity 2

### Investment Banking

The outlook for investment banking is anticipated to remain positive with strong growth of 15 per cent per annum throughout 2010 to 2015, slowing to 10 per cent over 2016 to 2020. Incremental GNI impact is expected to be RM5.2 billion in 2020. Most of the GNI value is expected to be derived from baseline growth, with additional contribution from several business opportunities:

- Increase in IPOs due to a push for innovation under the Tenth Malaysia Plan
- Integration of capital markets (e.g. exploiting the advantage of QDII status with China and mutual recognition agreements with Hong Kong and Dubai)
- Increase in merger and acquisition activities due to expected consolidation in several key sectors

## Business Opportunity 3

### Islamic Banking

The Islamic banking segment is expected to contribute RM11.1 billion in incremental GNI for 2020. This will be supported by strong growth of 15 per cent per annum from 2010 to 2015, slowing down to 12 per cent over 2016 to 2020. Most of the GNI value is expected to be derived from baseline growth, with additional contribution from several business opportunities:

- Islamic pawnbroking (ar-rahnu); and
- Migration of money lending business to conventional or Islamic banks following the proposed amendment to tighten the money lending business.

## Business Opportunity 4

### Insurance and Takaful

This segment is expected to create incremental GNI of RM13.1 billion in 2020. Industry growth for conventional insurance and reinsurance is expected to remain stable at six per cent, whereas takaful and retakaful will register stronger growth at 20 per cent over 2010 to 2014, slowing down to 15 per cent over 2015 to 2020. Most of the GNI value is expected to be derived from baseline growth, with additional contributions from several business opportunities:

- Greater insurance take-up arising from Government's efforts to educate the public on financial planning and the importance of protection
- Expected further consolidation and rationalisation will create strong institutions and platform for growth
- Micro insurance will become more viable with cheaper distribution models

## Business Opportunity 5

### Asset Management and Wealth Management

The asset management and wealth management (AMWM) segment is estimated to contribute RM1.9 billion in incremental GNI in 2020. This will be driven by an average eight per cent growth over 2010 to 2020. Whilst most of the GNI value is expected to be derived from baseline growth, several opportunities within the segment will be expected to give rise to GNI:

- Increase in access to funding for innovative start-ups arising from creation of a RM500 million fund
- Mudharabah Innovation Fund under the Tenth Malaysian Plan
- Outsourcing opportunities arising from the creation of the RM20 billion public-private partnership fund to support the Tenth Malaysian Plan
- Growing Malaysian wealth will require asset management and wealth management services
- Increase in demand for unit trusts, mutual funds and wealth management services among foreign workers and returning Malaysians
- Growing awareness and critical mass for retail aggregators who can negotiate lower fees for unit trust products, e.g. FundSupermart

## Business Opportunity 6

### Other Segments Including DFIs

The remaining segments in the financial services sector, such as DFIs, private equity and venture capital businesses, are estimated to account for RM11.0 billion incremental GNI in 2020. Most of the GNI value is expected to be derived from baseline growth, with several business opportunities identified under the following Tenth Malaysian Plan initiatives:

- Investment activities under 1Malaysia Development Berhad's RM100 million business development fund
- Opportunities in private equity and venture capital for innovation and green financing, with a strong emphasis on projects in renewable energy, especially biofuels
- Value chain impact to private equity and venture capital as the capital market becomes more vibrant and IPOs become easier
- Significant underground money lending and remittance businesses will move towards formal money lending and money transfer businesses as the economy evolves
- Back-office centralisation will enable financial institutions to focus on more productive and higher value-added activities

## Summary of Financial Services NKEA

	2020 Target
<b>Incremental GNI Impact</b>	<b>RM121.5 billion</b>
<b>Additional jobs</b>	<b>275,400</b>
<b>Critical targets for 2012</b> <ul style="list-style-type: none"> <li>• To achieve value of new listings of GLCs to RM20 bn by 2012</li> <li>• Further sell-down of Government-Linked Investment Companies (GLICs)</li> <li>• International Trading Board – To allow quotation and trading of foreign stocks or products with foreign underlying on Bursa</li> <li>• To further strengthen retail participation</li> <li>• To highlight financing to targeted sectors for DFIs</li> <li>• To improve turnaround time for loans for DFIs</li> <li>• To establish a sustainable social lending framework for DFIs</li> <li>• Further increase number of POS terminals</li> <li>• To ensure that all Government payments made payable via electronic funds transfer</li> <li>• Tax incentives to promote use of e-payment</li> <li>• To expand ATM links to Vietnam &amp; Philippines</li> <li>• To increase volume of mobile banking transactions</li> <li>• To increase insurance penetration rate for low-income households</li> <li>• To make private pension available for the public as supplement to public pensions</li> <li>• To increase range of wealth management products</li> <li>• To further expand GLIC role in stimulating industry</li> <li>• Carve niche in Islamic asset management</li> <li>• Issuance of syariah parameters on Mudharabah, Musharakah and Ijarah</li> <li>• To allow greater flexibility for foreign legal firms to provide services in Malaysia</li> </ul>	

## Here and Now in Malaysia

## Cultivating Oil Palm in Sarikei, Sarawak

In the district of Sarikei, Sarawak, Puan Salimah anak Kanawang planted pepper for a living and took on odd jobs on the side.

"Our small pepper farm gave us a stable yield and some income for the family, but it was just not enough. The pepper plants are quite sensitive to weather conditions so if the weather was bad, we would get a poor harvest. This meant I had to take on odd jobs just to supplement what little income we made from the pepper farm," said Salimah at her farm.

"Recently, things changed. I was given the opportunity to participate as a smallholder in a new oil palm planting scheme. This scheme is being managed by the Malaysian Palm Oil Board (MPOB). By participating in this scheme, I earn an average of RM2,000 and RM3,000 monthly, which is so much more than before. Between January and August 2011, I harvested a total of 40.33 tonnes of fresh fruit bunches from 2.8 hectares of land."

Through this scheme, Salimah cultivates oil palm on her land and the MPOB provides support such as fertilisers for the first two years, and soft and hard skills training. In addition, they advise her on how to better manage her plantation.

MPOB aims to increase production and yield of palm oil in Malaysia, ensuring that the participating smallholders receive quality seeds that would subsequently produce quality fresh fruit bunch consistently.



"I work on the plantation with members of my family. This also means that all the earnings from the land are for my family. We are happier and can live more comfortably than before," she said.

In addition, Salimah uses Cantas™, a motorised cutter (an invention by MPOB); to harvest the fresh fruit bunches in her plantation. The simple and efficient device cuts off her daily harvesting time by half. With the stable monthly income, a labour saving harvesting process, increased knowledge on plantation management and a support system, she can now continuously improve her plantation.

Her dedication towards the family plantation, have earned her the title of best performing female palm oil smallholder in Sarawak by MPOB.

“  
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plantation with  
members of my family.  
This also means that all  
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than before

”

Cantas™, a motorised cutter invented by MPOB to harvest the fresh fruit bunches in plantations.



## SAVE - For a Better Future

**M**r. and Mrs. Chan from Petaling Jaya were walking around Sen Heng Electric (KL) Sdn Bhd looking to buy a refrigerator as their trusty old one was acting up and they were afraid of an impending breakdown.

“We spoke about it to our friends and one of them mentioned SAVE. A programme where rebate vouchers for five-star rated refrigerators and five-star rated air conditioners have been allocated for Malaysian consumers,” said Mr. Chan.

“We feel this is a good programme to help Malaysia become more energy efficient as we work towards being a high-income nation in 2020. We looked up the programme on the website and found that rebates will be awarded on a first-come, first-served basis to qualified domestic consumers. All we needed to do was make our purchase during the rebate offer period at participating retailers,” quipped an enthusiastic Mrs. Chan.

Since the programme was established in 2011, many customers have been walking into Kemudi Timur Elektronik Sdn Bhd looking to buy energy efficient refrigerators and air-conditioners. According to its General Manager, Mohd Amir Sham Ramli, in Kelantan, the store is working to educate customers on the benefit of the five-star energy efficient products and how it will help them conserve energy and money.

Photo courtesy of Star Publications (Malaysia) Bhd

Although five star energy efficient appliances may cost a little more than ordinary appliances of the same capacity, they consume less electricity and in the long run, the savings made from reduced electricity consumption would have paid off the initial extra investment.

Besides long-term financial benefits, energy-efficient products also offer environmental benefits. The SAVE programme, created and administered by the Ministry of Energy, Green Technology and Water, is just one of the initiatives within the Oil, Gas and Energy National Key Economic Area to improve energy efficiency in the country.

“

We spoke about it to our friends and one of them mentioned SAVE. A programme where rebate vouchers for five-star rated refrigerators and five-star rated air conditioners have been allocated for Malaysian consumers

”





# Wholesale and Retail





**Dato' Sri  
Ismail Sabri Yaakob**

Minister of Domestic  
Trade, Co-operatives  
and Consumerism



**The ETP has undoubtedly improved the quality of life for all segments of society. As one of the NKEA under the ETP, the Wholesale and Retail NKEA has outlined initiatives as big as building 1Malaysia Malls abroad with an estimated Gross Development Value (GDV) of RM4.5 billion and the iconic Mines Wellness City valued at RM3.2 billion to ones as small as providing a RM60,000 soft loan to traditional sundry shop owners to assist them in modernising their business.**

The Ministry is committed to achieving its Key Performance Indicators (KPIs) this year. To date, we have successfully helped transform 519 sundry shops under the TUKAR programme and 55 automotive workshops under the ATOM (Automotive Modernisation) programme. Under the large growth EPPs, we have envisaged seven new hypermarkets and 13 superstores across the nation. Additionally, for the period of January to December 2011, the implementation of the Duty Free EPP has shown an increase in the value of Cost, Insurance and Freight (CIF) by 64 per cent in comparison to the same period in 2010.

We have also identified 20 sites to build shared infrastructure for *pasar tani*, *pasar malam* and *pasar tamu* retailers nationwide which will be completed in 2012. For the first time in 2011, the 1Malaysia Unified Sale was introduced whereby 50 subsectors of the economy, including the services sector participated during the 1Malaysia Mega Sale Carnival, increasing the total spending during to RM21.5 billion.

This transformation journey has only just started but we at the Ministry can already feel the impact of the initiatives that have been implemented. I wish to extend my gratitude to PEMANDU and my Ministry officials. I look forward to our projects in the years to come.

Photo courtesy of Star Publications (Malaysia) Bhd

## Wholesale and Retail

The Wholesale and Retail Sectors is the fourth biggest contributor to the nation's Gross National Income (GNI) among all 12 National Key Economic Areas (NKEAs). The sector contributed about RM57 billion to GNI in 2009 and RM83 billion in 2010

In achieving our 2020 GNI target, retail will be a key driver of domestic consumption, which in turn will spur economic growth.

Within the Wholesale and Retail NKEA, the Entry Point Projects (EPPs) have been grouped along the themes of 'Modernise, Globalise and Revolutionise'.

The EPPs within the Modernise theme address the process and system gaps in the traditional retail outlets. The aim is to modernise this sector with the expansion of modern format stores, improve the skills of small retailers in information technology, customer services, stock management etc.

To Globalise is to further develop the retail sector for Malaysia through the export of our skills and products. Malaysian mall operators are amongst the best in the region and we are now taking these capabilities across to other countries like Vietnam, China, India, Sri Lanka and Indonesia. We will also seek to offer global exposure to small and medium enterprises via virtual malls and this has already begun in 2011.

To Revolutionise our Wholesale and Retail sector, we are looking to deploy concepts and skills that have not been fully harnessed by the industry in Malaysia. This includes the successful removal of import duties on all finished goods making shopping more reasonable for both locals and tourists. The inaugural Unified Malaysia Sales in 2011 brought together various sectors of the retail sphere and service-oriented sectors and will continue to be an annual affair.

The *Business Monitor International (BMI) Malaysia Retail Report* for the fourth quarter of 2011 stated that total retail sales have grown to RM182.44 billion (US\$51.79 billion) in 2011. A low unemployment rate, rising disposable incomes and a strong tourism industry are key factors behind the forecast growth.



Retail is a key driver of domestic consumption. Photo courtesy of Star Publications (Malaysia) Bhd

## 2011 Key Performance Indicators

Among the 13 EPPs, only six EPPs are outlined for 2011 KPIs.

KPIs for the NKEA such as the target of modernising 500 stores by the end of 2011 were closely monitored, with reports submitted to the PEMANDU CEO every week, and to the Cabinet every month.

The details of the KPIs are in the following table:

Exhibit 4.1

NKEA Wholesale and Retail		KPI (Quantitative)							
NO.	KPI	TARGET (FY)	ACTUAL (YTD)	ACHIEVEMENT					
				METHOD 1		METHOD 2		METHOD 3	
				%		%			
EPP #2	Number of establishments modernised under the TUKAR programme	500	518	104%		100%		1.0	
EPP #3	Percentage of completion for 20 sites	100	49.5	50%		50%		0.0	
EPP #4	Number of workshops modernised	50	55	110%		100%		1.0	
EPP #9	Percentage increase of Cost, Insurance and Freight (CIF) for 328 selected imported finished products	15%	64%	427%		100%		1.0	
EPP #11	Number of programmes implemented	1	1	100%		100%		1.0	
	Number of sub-sectors involved in 1Malaysia Unified Sale	50	50	100%		100%		1.0	
EPP #7	Operational by 2012	1	1	100%		100%		1.0	
				<b>141%</b>		<b>93%</b>		<b>86%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

The 13 inclusive EPPs that have been outlined for the retail sector will contribute RM48.6 billion in GNI and create 428,000 jobs by 2020 via implementation by the private sector with government support. These EPPs are clustered into three different themes, namely Modernise, Globalise and Revolutionise. The 'Modernise' theme addresses process and

system gaps in the way traditional retail operators manage their business. 'Globalise' aims to bolster exports of our products, services and skills in the retail sector. 'Revolutionise' deigns to deploy concepts, skills and experience to break new ground in opportunities within the retail sector that have not been fully exploited.

Exhibit 4.2

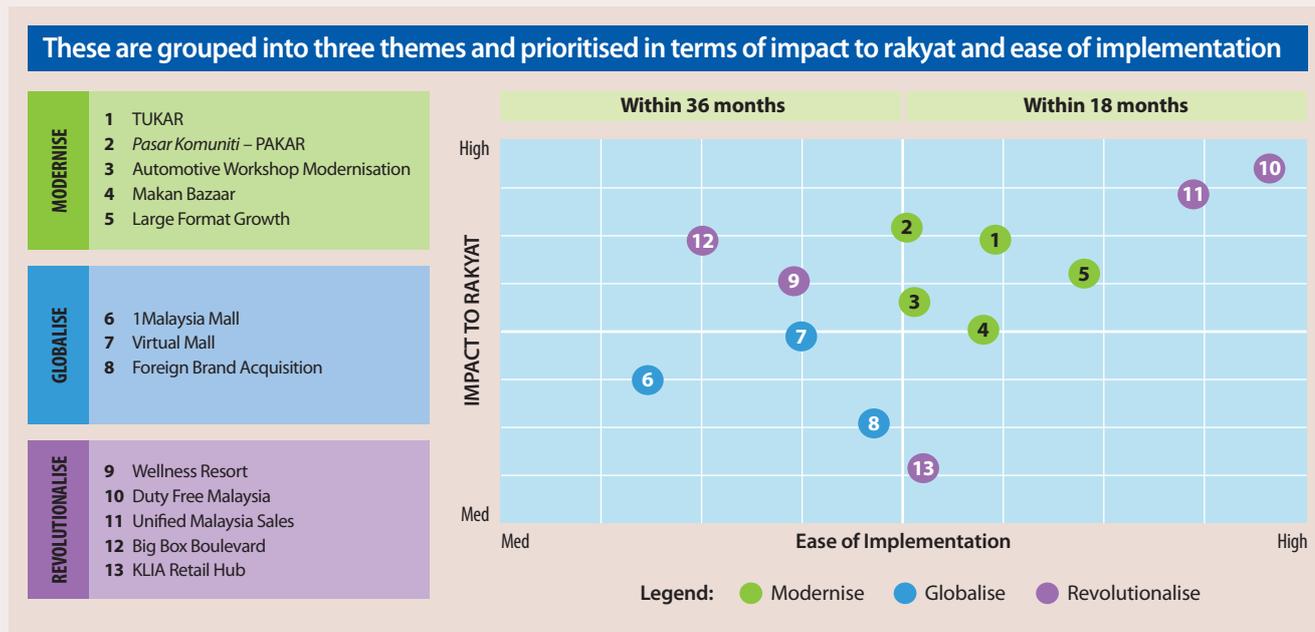
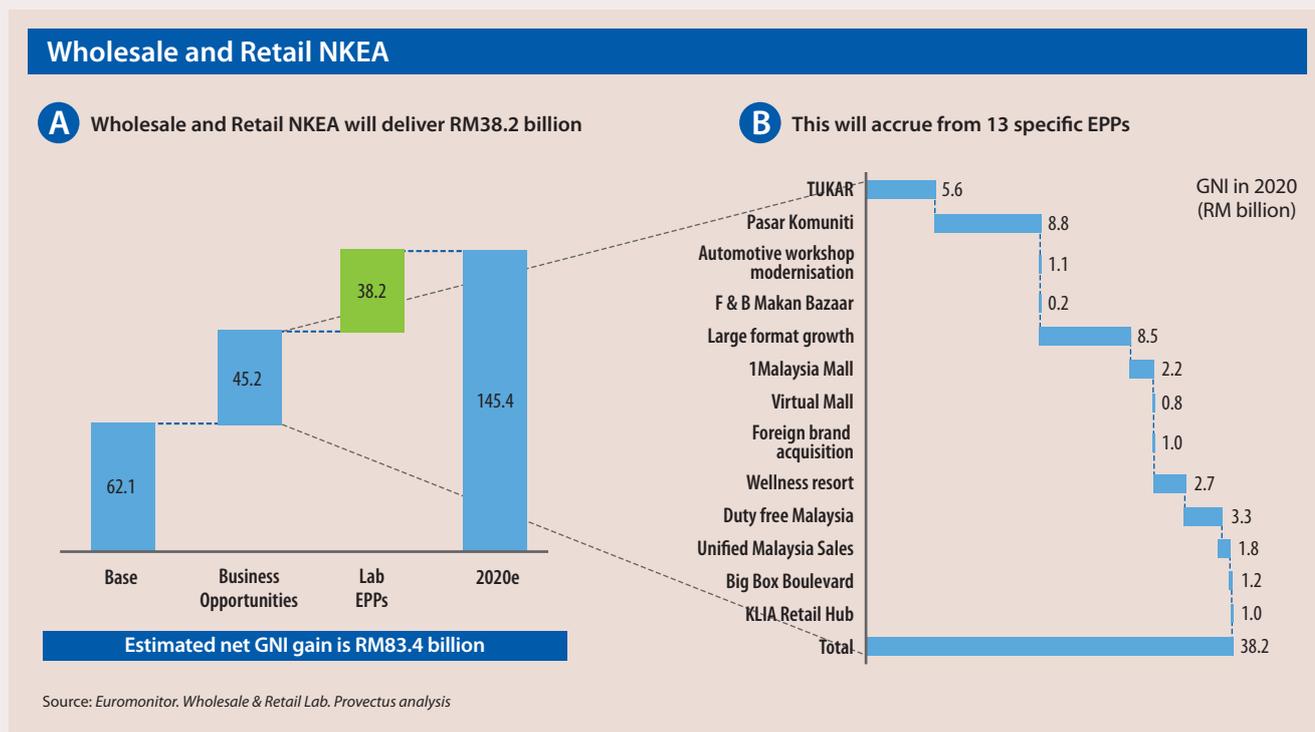


Exhibit 4.3



**EPP 1**

# Increasing the Number of Large Format Stores

The growth of the large format retail sub-sector has today seen 121 hypermarkets, 113 superstores and 133 department stores run by local and foreign players, bringing better quality, wider choice, lower product costs, greater product availability and new retailing technology and skills.

This EPP will see the establishment of 61 hyperstores (i.e. stores 5,000 square metres and larger), 163 superstores (i.e. stores of 3,000 to 5,000 square metres) and 356 supermarkets within departmental stores (i.e. stores of 2,000 to 3,000 square metres) within the next 10 years. These numbers will result in 50 per cent more floor space than that of today's current base of 1.4 million square metres. With RM17.4 billion in investments, the implementation of this project is expected to contribute RM8.5 billion to GNI and create 68,600 jobs by 2020.

## Achievements

Working hand in hand with the Ministry of Domestic Trade, Cooperative and Consumerism and local authorities, in 2011, 10 hypermarkets and 17 superstores were identified and are at various stages of development. The progress of this project has been positive as indicated in the following table:

Exhibit 4.4

No.	Operator	Site
<b>Hypermarkets</b>		
1	Mydin	Bukit Jambul, Pulau Pinang
2	Tesco	Setiawan, Perak
3	Tesco	Putra Nilai, Negeri Sembilan
4	Tesco	Kulim, Kedah
5	Tesco	Scott Garden, Kuala Lumpur
6	Tesco	Tanjung Pinang, Pulau Pinang
7	Tesco	Stargate, Alor Setar, Kedah
<b>Superstores</b>		
1	Eonsave	Kluang, Johor
2	Eonsave	Batang Kali, Selangor
3	Mydin	Nusajaya, Johor
4	Mydin	Seremban, Negeri Sembilan
5	Mydin	Kulai Jaya, Johor
6	Tunas Manja	Temerloh, Pahang
7	Tunas Manja	Kuala Rompin, Pahang
8	Tunas Manja	Jerantut, Pahang
9	TF Value Mart	Port Dickson, Negeri Sembilan
10	Giant	Jalan Loke Yew, Kuala Lumpur
11	Giant	Pandan Kapital, Kuala Lumpur
12	Tesco	KSL, Johor
13	Tesco	Bukit Beruntung, Selangor



EPP 1 hopes to increase large format stores such as Tesco

## Moving forward

The target to have five hypermarkets (5,000 square metres each) and 13 superstores (3,000 – 4,999 square metres each) to be operational in 2012 has already been achieved in 2011 itself, in fact it was beyond the target with additional two hypermarkets.



In 2011, 10 hypermarkets and 17 superstores were identified and are at various stages of development

## EPP 2

## Modernising via the Small Retailer Transformation Programme (TUKAR)

The Small Retailer Transformation Programme (TUKAR) was introduced to facilitate the modernisation of 500 traditional sundry stores nationwide in January 2011. This is to address the need for small retailers to remain competitive in a retail environment increasingly dominated by supermarkets and superstores. The implementation of this project is expected to contribute RM5.56 billion to GNI and create 51,540 new jobs by 2020.

### Achievements

With the signing of the Memorandum of Understanding on 18 January 2011 between the Ministry of Domestic Trade, Co-operatives and Consumerism and three major supermarkets, namely Mydin, Carrefour and Tesco, sundry shop owners were set to gain valuable retail expertise and knowledge from the big industry players. The supermarkets are committed to provide advisory services on modernisation, redesigning of store layout, training in the preparation of planograms and hand-holding development as well as other projects deemed necessary to the competitiveness of small retailers. Planograms are diagrams or models that indicate the placement of retail products on shelves in order to maximize sales.

The supermarkets' involvement in TUKAR also provides an alternative platform to promote corporate social responsibility projects by helping to increase supply chain efficiency for the local wholesale and retail sector across Malaysia.

In addition, Bank Kerjasama Rakyat Malaysia Bhd facilitated the screening and disbursement of loans to the owners of retail outlets participating in the TUKAR project. The owners were offered up to RM60,000 in soft loans with a repayment term of 15 years at three per cent.

TUKAR gained momentum with the increased participation from other retail experts as consultants. From three consultants in January 2011, the number of consultants increased to 12 in December 2011, including Co-operative Commission of Malaysia (SKM), Giant, AEON, Yayasan Pembangunan Usahawan Terengganu, Econsave, Sunshine, Triple S, Terus Maju, and H&L Supermarket.

By the end of 2011, 519 sundry shops were successfully transformed all across Malaysia, exceeding the 500 stores target for the year. SKM led the way for the consultants by helping to complete this process for the most number of stores, 126, followed by Mydin (105 stores), Carrefour (104 stores) and Tesco (101 stores).

The retailers saw an immediate increase in revenue between 30 to 80 per cent compared to revenue recorded by the stores before the transformation.

The composition of TUKAR participation of Malaysians from various ethnic groups was as follows. The participation of Malays was at 72 per cent, followed by the Indian community at 13 per cent while the Chinese community and others were seven per cent and eight per cent respectively.

TUKAR also witnessed the involvement of Cooperatives namely, Suria (for the Indian community) and *Jaringan Sepadu* (for the Malay community) that helped to encourage the participation of its members in the programme. We will also be establishing other cooperatives to address other communities in due course.

The table below demonstrates the breakdown of sundry shops that have been transformed across Malaysia with Selangor leading with the completion of 64 stores, followed by Pahang with 62 stores and Terengganu with 53 stores:

### Moving forward

The initial target of 500 outlets in 2011 is a major stepping stone for the EPP's target of 5,000 outlets to be modernised by 2020. In 2012, the target will be another 500 sundry shops all over Malaysia.

Exhibit 4.5

States	Visited by consultants	Interest	Cleared CTOS/CC RIS	Target	Completed
 Perlis	104	9	7	7	6
 Kedah	75	7	85	42	42
 Pulau Pinang	53	60	95	45	45
 Perak	224	36	54	38	30
 Selangor	378	124	117	60	64
 Negeri Sembilan	209	35	42	28	30
 Kuala Lumpur	101	9	20	20	24
 Melaka	0	0	33	20	23
 Johor	214	54	74	46	51
 Pahang	922	115	106	55	62
 Terengganu	50	42	82	45	53
 Kelantan	57	56	75	30	36
 Sabah	97	13	19	30	31
 Sarawak	154	11	34	30	22
 Labuan	6	2	4	4	0
<b>Total</b>	<b>2,644</b>	<b>573</b>	<b>847</b>	<b>500</b>	<b>519</b>

Number of shops in different states

**EPP 3**

## Developing *Pasar Komuniti*

The numerous local markets or pasar like the *pasar tani*, *pasar malam*, *pasar tamu* and *pasar minggu* that have become an integral part of our Malaysian culture are huge attractions for both locals and tourists avidly seeking out the unique offerings of these markets.

The lack of suitable and strategic locations with sufficient infrastructure and facilities has resulted in many such markets operating in temporary locations (e.g. playing fields, car parks, roadsides), causing cluttered and unhygienic conditions. As such, the need for a dedicated platform for small retailers to operate is essential.

The *Pasar Komuniti* and *Pasar Karavan* (PAKAR) project seeks to modernise and amalgamate the various markets into a large-sized *Pasar Komuniti*. By placing them under one roof in a permanent strategic location with better facilities, retailers and customers can enjoy a more appealing environment with more conducive retail conditions. The Federal Agriculture Marketing Authority (FAMA) is leading the setting up of the *Pasar Komuniti* with regard to site identification, refurbishment, discussions with market traders, etc.

By 2020, with an investment of RM50 million, PAKAR will not only benefit the entrepreneurs and retailers but also the consumers, who will experience a convenient and comfortable shopping environment within a solid and fixed structure. This project will contribute RM3.52 billion in GNI and create 56,400 jobs. Under the management and supervision of FAMA, the retailers operating the various markets will take turns to operate at PAKAR on an agreed upon daily timetable.

Facilities such as disabled-friendly features will vary from one location to the next depending on the size of land dedicated for



*Pasar Komuniti* will create a more appealing environment for customers and retailers

PAKAR. Covered retail space with sufficient basic infrastructure like parking space, prayer room, management office, toilet, and playground (where applicable) is scheduled to be constructed nationwide. As such, PAKAR is also designed to provide a dual function to house community events such as sports and cultural activities.

### Achievements

With the coordination of FAMA, local authorities and representatives of various agencies, the following 20 locations were identified for PAKAR in 2011:

Exhibit 4.6

A. Maran, Jengka, Pahang	K. Simpang Keparang, Bera, Pahang
B. Kerteh, Terengganu	L. Pekan, Pahang
C. Simpang Empat, Perlis	M. Kota Bahru, Kelantan
D. Kuala Kedah, Kedah	N. Air Lanas, Jeli, Kelantan
E. Puchong, Selangor	O. Grik, Kedah
F. Kota Belud, Sabah	P. Batu Pahat, Johor
G. Manjong, Perak	Q. Keningau, Sabah
H. Mersing, Johor	R. Permai Jaya, Miri, Sarawak
I. Datin Halimah, Johor Bahru, Johor	S. Baling, Kedah
J. Paroi, Negeri Sembilan	T. Tanjung Karang, Selangor



Artist impression of *Pasar Komuniti*

As of December 2011, four sites in Johor (Mersing), Perak (Manjong), Pahang (Bera) and Sabah (Kota Belud) are under construction while 10 sites are pending approval by local authorities. The remaining six sites are in the process of sourcing funds. All 20 sites are scheduled to be fully operational by 2012.

### Moving Forward

The 20 *Pasar Komuniti* sites are expected to be operational in 2012.

## EPP 4

## Transforming Automotive Workshops

As vehicle registration continues to increase year-on-year in tandem with the population, workforce and urban growth, demand for automotive service and repair sector will also increase. According to statistics from the Road Transport Department, as at 31 December 2011, there are almost 16 million active vehicles on the road, of which more than 60 per cent are passenger and commercial vehicles. As such, the need to address the large variations in the quality and service level provided in this sector is significant to take advantage of the estimated RM10 billion spent annually on vehicle maintenance.

Workshops that provide better service quality and demonstrate transparency over their charges could encourage higher spending by vehicle owners. The implementation of this project is expected to contribute RM1.1 billion in GNI and create 9,100 jobs by 2020.

### Achievements

The Automotive Workshop Modernisation (ATOM) project was kicked off in 2011. The Automobile Association of Malaysia (AAM), Automotive After-sales Industry Malaysia (AAIM), the Malaysian Association of Tyres Retreaders and Dealers Societies (MATRDS), Persatuan Pengusaha Industri-Industri Bengkel Malaysia (PPIBM), HYL Marketing Sdn Bhd, ITE Industrial Tools and Equipment Sdn Bhd and PNT Marketing were the seven consultants for ATOM authorised by the Ministry of Domestic Trade, Co-operative and Consumerism (MDTCC).

Under the ATOM project, the consultants provided their expertise and advisory services to the participating workshop owners. This included the redesigning of workshop layouts, planning for renovation and upgrading activities, purchasing of machinery and equipment including point-of-sale system terminals, outlining standard operating procedures, hand-holding and training on entrepreneurship, automotive skills and inventory management.

Additionally, Bank Kerjasama Rakyat Malaysia Bhd facilitated the screening and the disbursement of loans to the workshop owners. The owners were offered up to RM100,000 in soft loans with a repayment term of 15 years at three per cent interest.

ATOM gained momentum in October 2011, when more workshops participated in the two-month modernisation process. With sustained efforts by both the MDTCC and the consultants, seven workshops (see exhibit 4.7) have successfully completed the transformation process.

By December 2011, 55 workshops were successfully transformed, exceeding the target of 50 workshops. Currently, 11 more are undergoing the modernisation process and are expected to be completed by Q1 2012.

ATOM participation consisted of the Malay community at 76 per cent, followed by the Chinese community at 22 per cent while the Indian community was at two per cent. Among the consultants, AAM topped the list for completing the modernisation of 22 workshops, followed by HYL (17 workshops) and AAIM and PNT (two each).

Similar to TUKAR, ATOM also witnessed the involvement of cooperatives to help boost its members' participation.



Workshops across Malaysia will be transformed gradually

As highlighted in Exhibit 4.7, Penang led other states with the completion of 17 workshops, followed by Selangor (nine workshops). Melaka and Terengganu also completed six workshops each.

### Moving Forward

500 workshops are targeted to be modernised by 2020. In 2012, another 50 workshops will be transformed.

Exhibit 4.7

State	Interested	Cleared CCRIS/CTOS	Approved by Bank Rakyat	WIP	Completed
Perlis	4	5	0	0	0
Kedah	38	31	19	5	5
Pulau Pinang	106	68	28	4	17
Perak	60	32	8	4	2
Selangor	59	33	11	3	9
Negeri Sembilan	23	13	4	1	1
Kuala Lumpur	19	18	5	0	2
Melaka	25	13	10	0	6
Johor	34	29	8	1	5
Pahang	34	29	9	3	2
Terengganu	36	28	13	3	6
Kelantan	43	32	3	1	0
Sabah	22	0	0	0	0
Sarawak	96	27	2	0	0
Labuan	1	17	3	0	0
<b>Total</b>	<b>600</b>	<b>375</b>	<b>123</b>	<b>25</b>	<b>55</b>

Number of workshops in different states

**EPP 5**

## Developing Makan Bazaars

Malaysia benefits from its multi-ethnic and multi-cultural population with a diverse and unique range of cuisine. The development of a one-stop food centre serving the best of local and international fare from street hawkers to fine dining restaurants will create an attraction for food lovers, from all over the globe.

This EPP will involve an investment of RM270 million and will result in additional contribution of RM230 million to the GNI and create 4,200 new jobs by 2020.

### Achievements

The first location for a Makan Bazaar was identified in 2011 and it is expected to be operational in 2012. With an area of approximately 100,000 square feet, it can seat 3,500 diners. Since then, several sites in Kuala Lumpur, Selangor and Negeri Sembilan have been identified but only two sites are viable for this project.

With limited land area available to fit the Makan Bazaar's criteria, the Ministry of Domestic Trade, Cooperatives and Consumerism has proposed more sites on a smaller scale area under this project.

### Moving Forward

The Makan Bazaar EPP will see a total of 10 Makan Bazaar outlets built over the next nine years in major cities in Malaysia. Besides offering a plethora of food outlets, the food centre will also provide attractions like gardens, games areas, playgrounds as well as retail outlets. Privately managed, the Makan Bazaar is designed to offer high professional standards of food quality and hygiene.

**EPP 6**

## Developing 1Malaysia Malls

Over the years, Malaysia has been performing well in the retail sector and this EPP seeks to export our retail mall development and management skills. This will be done through the establishment of 1Malaysia Malls in other countries within the region.

The 1Malaysia Mall will not only increase export-based GNI contributions, but also expand the market for our home-grown and Small and Medium Enterprises (SME) retail brands, providing a competitive advantage for Malaysian businesses to secure franchises for international brands and boost tourism by promoting Malaysian culture and cuisine. This also has the effect of positioning Malaysia as the country of choice for foreign brands to base their regional headquarters given the potential for quick expansion via the 1Malaysia Malls.

The first two target markets identified for this EPP are Vietnam and China as many cities in these countries are still underexposed to large shopping malls. The proposed projects will see the development of more than 20 shopping malls similar to Berjaya Time Square, Suria KLCC or Mid Valley Megamall at selected locations in Vietnam and China. This EPP will result in an additional RM2.2 billion GNI and create 3,780 jobs by 2020.

### Achievements

On 25 July 2011, Dato' Seri Ismail Sabri Yaakob visited the 1Malaysia Mall project sites by WCT Berhad in Vietnam. An engagement via Government-to-Government channels was made to discuss major issues that plagued two projects in Ho Chi Minh City. The successful meeting co-chaired by the Minister himself and Mr Lê Hoàng Quân, Chairman of the People's Committee of Ho Chi Minh City, resulted in immediate actions to facilitate the land settlement issue and expedite the progress for the licensing and construction of their two projects.

On 19 October 2011, PEMANDU participated in the Joint Economic Trade Committee (JETC) co-chaired by Dato' Sri Mustapa Mohamed, Minister of International Trade and Industry (MITI), and Mr Chen Deming, Minister of Commerce, People's Republic of China. At the JETC, Malaysia sought China's cooperation in assisting progress for development and operations of the existing and upcoming 1Malaysia Mall projects in China.

PEMANDU and MDTCC also visited India from 12 to 23 December 2011 to explore the opportunities for the establishment of the 1Malaysia Mall in the country. The four cities visited were New Delhi, Hyderabad, Bangalore and Mumbai. During the visit, meetings and discussions were held with Indian developers and authorities as well as established Malaysian companies in India. Potential sites were also visited to gauge potential catchment and viability.

Urbis Co. Ltd, a renowned retail consultant recommended by Malaysian retailers has been appointed to conduct a feasibility study on this project. The study will provide retail information on policy matters, guidelines and recommendations for countries, cities and sites for this EPP.

### Moving Forward

The target is to have the first 1Malaysia Mall operational by 2014, and subsequently 21 malls in total by 2020. Besides China and Vietnam, we are also exploring opportunities to establish similar malls in India, Sri Lanka and Indonesia.

## EPP 7

## Developing a Virtual Mall

With market trends in high-income nations gravitating towards Internet-based retail, Malaysia's retail industry can no longer just rely on physical promotion and marketing campaign activity. Higher disposable incomes, better broadband services and a growing demand for online services underpins this EPP's target of developing a virtual mall to fill the online void for local virtual retail and hypermarket malls.

A virtual mall will enable local small and medium enterprises (SMEs) as well as large and medium size retailers to distribute their products and services online. Participating retailers, SMEs and service providers are able to leverage on shared resources at a minimum cost. The shared resources include the e-platform for system application and services to be developed using the cloud computing concept.

### Achievements

Since 2011, Doorstep Retail Sdn Bhd and Koperasi Jiwa Sdn Bhd have been working towards the expansion of their online portal to fit the requirement to provide Malaysians a wide range of products from lifestyle to groceries – replicating the physical brick and mortar hypermarket.

Addressing the issue of rising living costs, doorstep.com.my extended their product offering to include 1Malaysia products, making it available within the Klang Valley which was otherwise only available at the limited Kedai Rakyat 1Malaysia shops. Doorstep is currently in discussions with potential partners to extend its delivery services nationwide.



Doorstep delivery vans to deliver goods ordered online

As for Koperasi Jiwa, discussions with other co-operatives are currently on-going as part of its marketing effort to promote online sales of co-operatives' products and services via Koperasi Jiwa's portal. Recruitment of participating SMEs and retailers are also in progress.

### Moving Forward

The virtual mall is expected to be fully implemented nationwide in 2012. By 2020, with private investment of around RM1.3 billion, this EPP will contribute RM0.8 billion to GNI and create 6,630 jobs.



A screen shot of the virtual mall

**EPP 8**

## Facilitating Local Businesses to Acquire Stakes in Foreign Retail Businesses

Under this EPP, local retailers eyeing foreign acquisitions will be facilitated by MDTCC to source for equity and debt funding and support from investment banks and fund managers.

### Achievements

Two major brands have been identified and have gone through negotiations with the foreign partners for acquisition. As a result, 2011 saw Bonia's retail expansion in Asia when they acquired a 70% share of JECO Private limited in December 2010. The JECO Group is a licensee of Pierre Cardin's leather goods in Singapore and the master licensee for Renoma in Singapore, Malaysia and Indonesia. The group is also the sole distributor of Bruno Magli products in Singapore as well as the trademark owner and brand representative of Braun Buffel in Asia Pacific.

Parkson also entered into the burgeoning Indonesian retail market through the acquisition of 100 per cent of PT Tozy Sentosa (TS), a 96 per cent-owned subsidiary of PT Mitra Samaya (MS), for

USD12.8m (RM38.7m). As a result, Parkson gained immediate access to Centro, an Indonesian departmental store chain and Kem Chicks, a gourmet supermarket located at Plaza Semanggi (Jakarta), Discovery Shopping Mall (Bali), Margo Citi Square, Depok, Plaza Ambarrukmo (Yogyakarta), Mall of Indonesia, Kelapa Gading, (Jakarta) and Pacific Place, (Jakarta). To date, Parkson has expanded its operations at two more Centro stores located in Mal Galaxy (Surabaya) and Summarecon Mal Serpong (Greater Jakarta) while works are still in progress at two more locations located in Metropolitan Grand Mal, Bekasi (Greater Jakarta) and Solo Paragon (Solo).

### Moving Forward

The target for this EPP to have one foreign brand acquisition by 2012 has already been reached. By 2020, with RM3 billion in private funding and investment, this project will contribute RM1 billion to GNI.

**EPP 9**

## Making Malaysia Duty Free

Announced during the 2010 Budget Speech, Making Malaysia Duty Free was a call to promote spending for non-essential or luxury items that have high elasticity and pent-up demand. Duty Free Malaysia leads to more competitive prices and higher demand for goods that will provide more choices for tourists and locals.

Following this project, 328 products have been identified. The implementation of the policy in removing import duty to these selected finished products was effective beginning 1st January 2011. The 328 products include jewellery, cosmetics, perfumes, garments and clothing accessories as well as footwear. Automotive goods and sin products like tobacco and alcohol are not included.

The key factor to gauge the effectiveness of the import duty removal is through the value of CIF. The CIF is simply the agreement where the seller/exporter is responsible for the payment of freight to carry goods to a named destination, as agreed with the buyer/importer. In this case, the importer is our Malaysian retailers. The seller/exporter is also responsible for providing cargo insurance at minimum coverage against the buyer/importer's risk of loss or damage to the goods during transport.

The increment in the CIF value will provide a positive and immediate contribution to the removal of the imports of these products from Malaysia.

### Achievements

From January to October 2011, the removal of import duty showed a 64 per cent increment on the value of CIF into Malaysia for the 328 products as compared to the same period in 2010.

Therefore Malaysians saw more of these duty free goods coming into our country in comparison with previous years. Now, manufacturers/principles acknowledge that Malaysia is an ideal distribution hub. Ultimately, we can expect a price drop in those items as we become a first tier reseller.

### Moving Forward

This EPP will contribute to RM3.3 billion GNI and create 31,150 jobs by 2020. In year 2012, we are expecting the growth to rise by 100 per cent compared to the baseline of 2010.

Exhibit 4.8



## EPP 10 Setting Up Wellness Resorts

Globally, medical tourism has been identified as a key source of foreign exchange. As Malaysia is endowed with competitive advantages in this industry, such as low costs (relative to the US and Europe), the large number of modern private health institutions and increasing air links via low-cost airlines, growth in this sub-sector is likely to accelerate.

Wellness resorts will be established in strategic locations, currently identified to be Penang (leveraging on its already vibrant medical tourism market), Selangor (Mines Wellness City) and Pahang (Berjaya Hills). These fully integrated resorts will encompass all aspects of anti-ageing, aesthetic and regenerative treatments complete with supporting retailing outlets. The marketing effort by the developers is expected to attract 500,000 foreign tourists and 30,000 Malaysian tourists annually.

### Achievements

One of the players identified to kick off this EPP, Country Heights Holding Berhad, has an existing facility in Seri Kembangan, Selangor and will expand this into a 40,000 square feet centre equipped with state-of-the-art facilities. The newly expanded, RM30 million centre was launched on 29 March 2011.

The expansion of the centre is the first phase in the development of the Mines Wellness City master plan that seeks to transform the current RM2.5 billion development spanning over 1,000



A map of the Mines Wellness City in Selangor

acres. While the centre conducts approximately 22,000 check-ups annually, the City, once completed by 2020, will be set up to complete 58,400 health procedures annually.

### Moving Forward

With the first Wellness Resort project to be operational by 2014, this EPP project involves an investment worth RM3.3 billion and will contribute to RM2.7 billion GNI and create 21,540 incremental jobs up to 2020. A wellness resort project in Teluk Bahang, Penang is currently under construction and is expected to start operations in 2013.

## EPP 11 Organising Unified Malaysia Sales

Over the last 10 years, Malaysia has seen nationwide sales several times a year which resulted in reasonable returns for the retail sector. To expand returns, this EPP will bring together various sectors of the economy from retailers to food and beverage outlets to hotels to land and air transportation providers in the annual 1Malaysia Unified Sale.

### Achievements

Working closely with the Ministry of Tourism, the Ministry of Domestic Trade, Cooperatives and Consumerism co-organised the launching of the Unified Malaysia Sale in June 2011 at Suria KLCC.

From 15 June to 4 Sept 2011, the 1Malaysia Unified Sale saw the participation of 50 sub-sectors comprising 3,182 companies and retailers. The sale captured RM7.5 billion in total local and tourist spending based on credit charges to MasterCard alone.

### Moving Forward

In 2012, there are plans to organise a retail fiesta to promote the 1Malaysia Unified Sale and increase its exposure to the public. This EPP project will contribute RM1.8 billion to GNI and create 14,312 jobs by 2020.



The 1Malaysia Unified Sale logo is easily recognisable

## EPP 12 Transforming KLIA into a Retail Hub

As described in the ETP Roadmap, the Kuala Lumpur International Airport (KLIA) served as a gateway to 29.7 million passengers and an entry point to 54 international flights flying to 101 international destinations. To fully capitalise on the retail potential, this EPP will create a hub as a spin off from the development of KLIA2. The transformation of the KLIA Retail Hub consists of:

- The development of the KLIA2 Integrated Complex (IC) with additional retail space of approximately 34,000 square metres;
- The development of Landside Mall with approximately 70,000 square metres of gross area and 45,000 sq metres of net lettable area;
- Factory Outlet Store with 10,000 square metres of net lettable area; and
- Food and Beverage Centre with 10,000 square metres of space (registered under EPP5: Makan Bazaars)

### Achievements

The construction of the IC kicked off in 2011 with the signing of the concession agreement between MAHB and WCT Berhad in September 2011. The project development of the 50-acre land for the Factory Outlet Centre, Food and Beverage Centre and Auto City was also kicked off by the completion of the Request for Proposals process by December 2011.

### Moving Forward

The IC is expected to be completed in June 2012 and will be opened to the public in October 2012, whilst construction for the Factory Outlet Centre, Food and Beverage Centre and Auto City is expected to begin in early 2012. This EPP project will contribute RM960 million in GNI and create 7,700 jobs by 2020.

## EPP 13 Developing Big Box Boulevards

Within this EPP, large-scale integrated retail outlets, referred to as Big Box Boulevards (BBB) will be designed and developed as an aggregation of 12 'category killer' retailers in a single integrated location. These are expected to generate sales revenue of RM5 billion per annum. These anchor category stores will comprise hypermarkets, furniture superstores, digital products and electronics equipment malls as well as toy and sporting goods stores, large automotive showrooms, textile centres, garden and hardware superstores. The total built-up retail space will be around 26 hectares. The Big Box Boulevards will be supported by food and beverage outlets, convenience stores, liquor and tobacco retailers. The Big Box Boulevards will leverage from the existing and planned future 'power centres' to attract the regional market.

### Achievements

In 2011, three locations for the first BBB have been identified in Nusajaya (Johor), Subang Skypark (Selangor) and Nilai 3 (Negeri Sembilan). Promoting the BBB at the international level, on 19 October 2011, PEMANDU participated in the Joint Economic Trade

Committee (JETC) co-chaired by Dato' Sri Mustapa Mohamed, Minister of International Trade and Industry (MITI) and Mr Chen Deming, Minister of Commerce, People's Republic of China, where Malaysia sought out Chinese investors to consider their retail expansion in Malaysia. Discussions were also held with potential investors from Singapore.

### Moving Forward

The site in Nusajaya, Johor is targeted to be operational by 2014. By 2020, the BBBs will result in an additional RM1.2 billion GNI annually and create 5,300 jobs.

## Business Opportunities

Business opportunities and baseline growth are expected to contribute RM45.2 billion to GNI, and create around 226,000 additional jobs. New business opportunities have also emerged throughout the implementation of the TUKAR project.

One of the consultants involved in transforming and modernising sundry shops, Sunshine has expanded its market share in Penang through the development of its Sunshine Tower in Farlim.

Sunshine Tower will not only offer the community in Bandar Baru Ayer Itam their first shopping mall but has also created economic and tourism opportunities through its luxury service apartments, a three-star hotel as well as an office tower with a small office home office (SOHO) concept.

## Enablers

In ensuring the success of each EPP, the Government through the Ministry of Domestic Trade, Cooperatives and Consumerism (MDTCC) has implemented a weekly Problem-Solving Meeting (PSM) together with the Delivery Management Office (DMO) and PEMANDU, chaired by Dato' Sri Ismail Sabri Yaakob, the Minister himself. PSM acts as a platform to highlight issues, propose solutions and draft action plans where decisions could be taken immediately where possible.

To materialise the solutions, each EPP will have a working group to monitor the achievements of every project. This small group will coordinate with the relevant agencies on board the team to further accelerate the process in executing the solutions.

A case in point is the 1Malaysia Mall EPP, where WCT Berhad was facing land issues with the Vietnamese Government. The working group arranged a Government-to-Government meeting between

the Vietnamese and Malaysian Government. Dato' Sri Ismail Sabri Yaakob headed the delegation from Malaysia and had a face-to-face meeting with the Chairman of the People's Committee of Ho Chi Minh City and all issues were resolved positively.

In another example, consultants for the Small Retailer Transformation Programme (TUKAR) EPP were facing difficulties in getting participants to be enrolled into the programme. The Government stepped in by leveraging on MDTCC's state and branch offices to help scout for participants whilst Bank Rakyat checked on the credit worthiness of the participants. We also helped to arrange for the awareness and promotion campaign to educate the public, particularly sundry shops owners, to adopt the programme.

Other cases generally revolved around expediting licence approval, support in getting tax incentives, business matching and correspondences with financial institutions.

## Summary of Wholesale and Retail NKEA

	2020 Target
Incremental GNI Impact	RM38.2 billion
Additional jobs	364,686
<b>Critical targets for 2012</b>	
<ul style="list-style-type: none"> <li>• 500 TUKAR shops</li> <li>• 50 ATOM Workshops</li> <li>• End-to-end nationwide virtual mall</li> <li>• 35 per cent increase in CIF compared to 2010 baseline</li> <li>• Completion of 20 PAKAR sites</li> </ul>	

# Opportunity of a Lifetime

**Z**uel Sammy hails from Long Lamai, a remote village in Sarawak, and had dreams of furthering his studies and attending college. However, it hung by a thread when his funds ran dry.

The second of seven siblings, Zuel came from a humble family who are not well off. He had enrolled at a secondary school in Selangor in the hope of a better future.

“My father is a priest and my mother is a housewife,” he said.

His plan was to return home quickly and help out the family.

Zuel then received an opportunity to read Diploma in Hotel Management at UCSI University, Sarawak on a scholarship. This work-based learning programme under the Malaysian Centre for Tourism and Hospitality Education (MyCenTHE), meant that Zuel will be trained in luxury hotels and convention centre. As he earned a monthly allowance, this gave him the opportunity to alleviate the financial burdens of his family and support himself too.

Tourism economist, Dr. Wong Kong Yew and an independent management team within UCSI University are the champions of MyCenTHE and the driving force behind this initiative. Designed to upskill workers in the hospitality industry, 50 per cent of students must obtain a diploma-level qualification by 2020. Additionally,

the effectiveness of the MyCenTHE’s programme will be gauged through the industry’s response.

To date, three five-star hotels, a convention centre and a cultural village have already signed up as programme partners in the Sarawak cluster.

On the national front, MyCenTHE has been implemented successfully in Kuala Lumpur and Sarawak, led by UCSI University. There are also two other clusters around Malaysia implementing this programme. In Penang it is led by KDU College and in Sabah, by Inti College.

“  
The second of seven siblings, Zuel came from a humble family who are not well off. He enrolled at a secondary school in Selangor in the hope of a better future

”





# Palm Oil and Rubber





**Tan Sri  
Bernard Dompok**

Minister of Plantation  
Industries and  
Commodities

**Palm oil, the most important commodity, has a planted area of 4.9 million hectares with a production of 17 million tonnes of palm oil in 2010. It is the largest exporter of palm oil and exported to more than 100 countries with export earnings of RM62 billion. Being an NKEA under the ETP, the industry is targeted to achieve a GNI of RM178 billion by 2020. Eight EPPs are being implemented to achieve this.**

Encouraging results were displayed during the year, stemming from the efforts of these EPPs. Impacts were apparent in the replanting initiatives, where the industry maintained the hectareage of land replanted vis-a-vis previous year's records, despite high prices of crude palm oil. The industry also managed to reverse the annual downward trends for oil extraction rate, contributing significant GNI to the economy.

Under the Rubber NKEA, four EPPs are being implemented including maintaining the tappable area of one million hectares and increasing the average yield. It also covers accelerating downstream activities and commercialising new rubber products. The rubber industry is targeted to contribute RM52.9 billion to the GNI by 2020.

I am glad to note that significant progress was made for all the targets. This reflects the commitment of all the parties involved, both the government agencies and the private sector. I also would like to record my appreciation to the Palm Oil and Rubber NKEA team for their tireless effort in ensuring the success of the NKEA.

# Palm Oil and Rubber

The palm oil industry is a significant contributor to the Malaysian economy with over 4.9 million hectares of planted area

## Palm oil

The palm oil industry is a significant contributor to the Malaysian economy with over 4.9 million hectares of planted area. The industry, supported by strategic policies as well as research and development (R&D) activities from the Malaysian Palm Oil Board (MPOB), has experienced steady growth over the years with exciting developments for potential growth in the downstream sector.

There are a number of pertinent issues facing the sector. Development can best be described as heavily skewed towards the upstream sector, with most of the contributions coming from crude palm oil exports. Recent statistics have also shown that there is a backlog of aged oil palm trees which are due for replanting. This will impact the supply of fresh fruit bunches (FFBs) and crude palm oil either for exports or for the downstream sector.

Eight Entry Point Projects (EPPs) were identified under the Palm Oil National Key Economic Area (NKEA). These are divided into two strategic thrusts. The first strategic thrust aims to ensure sustainability and improve the productivity of the upstream sector. Five EPPs are clustered under this:

**EPP 1:** Accelerating the replanting and new planting of oil palm

**EPP 2:** Improving fresh fruit bunch yield

**EPP 3:** Improving worker productivity

**EPP 4:** Increasing the oil extraction rate

**EPP 5:** Developing biogas facilities at palm oil mills

The second strategic thrust aims to develop the downstream sector of the palm oil industry, greatly expanding production of high value oleo derivatives, commercialisation of second-generation bio-fuel for power generation as well as expediting the growth of food and health-based products in the downstream sectors. Three EPPs come under this thrust:

**EPP 6:** Focus on high value oleo derivatives

**EPP 7:** Commercialising second generation bio-fuels

**EPP 8:** Expediting growth in food and health-based downstream segments

Under the Palm Oil NKEA, the target contribution to GNI for 2020 is RM178 billion, with some 41,600 jobs created.

## Rubber

Malaysia's rubber industry spans the entire value chain from upstream plantations to downstream manufacturing activities. The industry faces stiff competition from two rubber producing countries – Indonesia and Thailand. Initial analysis by the Malaysian Rubber Board (MRB) data in July 2010 estimated that the rubber industry could contribute RM31.1 billion in incremental GNI in 2020.

In November 2010, a lab was conducted by PEMANDU and the Malaysian Rubber Board with key industry players. Four EPPs were identified in the lab and are projected to contribute RM52.9 billion in GNI by 2020:

**EPP 1:** Increasing average national rubber productivity

**EPP 2:** Ensuring sustainability of the upstream rubber industry

**EPP 3:** Increase world market share of latex gloves to 65 per cent by 2020

**EPP 4:** Commercialise Ekroprena and Pureprena (Green Rubber)

Together, the Palm Oil and Rubber NKEAs are targeted to deliver RM230.9 billion in GNI by 2020.

## 2011 Key Performance Indicators

Exhibit 5.1

NKEA Palm Oil and Rubber		KPI (Quantitative)							
NO.	KPI	TARGET (FY)	ACTUAL (YTD)	ACHIEVEMENT					
				METHOD 1		METHOD 2		METHOD 3	
				%		%			
EPP #1	Area of backlog cleared by plantations and organized smallholders (ha)	100,000	83,200	83%	●	83%	●	0.5	●
	Area of replanting and new planting by smallholders (ha)	26,500	19768.54	75%	●	75%	●	0.5	●
EPP #2	Number of TUNAS Officers recruited and trained	100	100	100%	●	100%	●	1.0	●
	Number of smallholders cooperatives	10	11	110%	●	100%	●	1.0	●
	Area of plantations/smallholders complying with COP/NSGAP/RSPO/best practice (ha)	125,000	124,294	99%	●	99%	●	0.5	●
EPP #3	Number of Cantas™ sold to plantations and smallholders	3,000	2,189	73%	●	73%	●	0.5	●
	Number of diamond sharpening tool taken up by plantations and smallholders	3,000	3,633	121%	●	100%	●	1.0	●
EPP #4	Mills with dedicated MPOB Quality Enforcement Officer	186	186	100%	●	100%	●	1.0	●
	Number of POM certified by MPOB for Code of Practice	20	20	100%	●	100%	●	1.0	●
	Oil extraction rate	20.75%	20%	98%	●	98%	●	0.5	●
EPP #5	Total number of mills built with biogas facility	36	48	133%	●	100%	●	1.0	●
EPP #6	Take-up rate for the pre-commercialisation and technology acquisition funds	254.20	225.3	89%	●	89%	●	0.5	●
	Total amount of investments on oleo-derivatives (RM million)	57.6	81.177	141%	●	100%	●	1.0	●
EPP #7	Percentage of Completion of (1) bio oil plant project development and construction	40%	22%	56%	●	56%	●	0.5	●
EPP #8	Take up of funds for food and health based products	100%	92%	92%	●	92%	●	0.5	●
	Number of SMEs participating in anchor model	2	2	100%	●	100%	●	1.0	●
	New revenue generated from MPOB's commercialised Food and Health based products (RM million)	20	22.8	114%	●	100%	●	1.0	●
EPP #1	Malaysian export revenue of Latex Product (RM million)	11,770	11,290	96%	●	96%	●	0.5	●
	Malaysian export revenue of natural rubber and compound rubber (RM million)	16,550	17,520	106%	●	100%	●	1.0	●
	Percentage of completion of one Ekoprena plant	100%	80%	80%	●	80%	●	0.5	●
				<b>98%</b>		<b>92%</b>		<b>75%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

### Accelerating the Replanting and New Planting of Oil Palm

This EPP will accelerate the replanting of approximately 370,000 hectares of low yielding oil palm areas by plantation companies and smallholders. Implementation of this EPP using new planting materials will boost the stability of crop supply with higher average yield level of 26.2 tonnes per hectare per year by 2020, up from the estimated yield of 21 tonnes per hectare per year currently.

This EPP is primarily private sector-driven, with plantations and organised smallholders already conducting the replanting exercise as part of their business model. The government will focus on independent smallholders, granting RM7,000 per hectare plus subsistence allowance of RM500 per month over 2 years to accelerate the replanting of their oil palm areas. Taking into consideration the land availability in East Malaysia which is suitable for the planting of palm oil the Palm Oil NKEA Steering Committee has also extended the project scope to include developing of new oil palm areas by smallholder.

#### Achievements

As at December 2011, 102,969 hectares of oil palm plantation backlog have been replanted, out of which the total area of backlog cleared by plantations and organised smallholders has reached 83,200 hectares with an estimated investment of RM582.4 million. In addition, the total area of oil palm replanting

and new planting implemented by independent smallholders was about 19,800 hectares. An estimated amount of RM169 million has been allocated by the Government in 2011 as grants to assist independent smallholders.

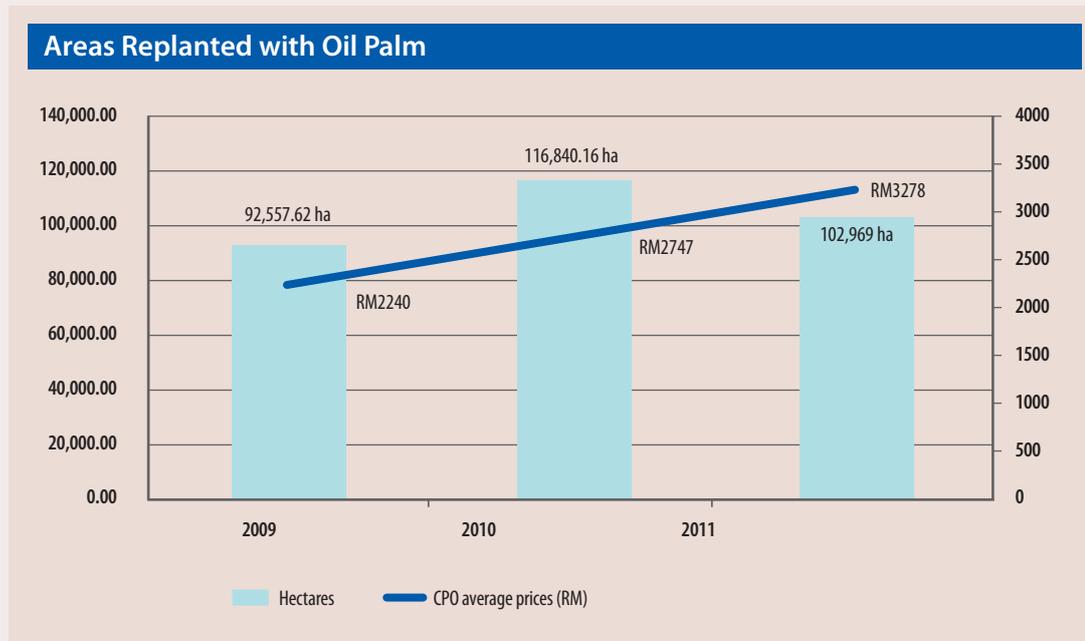
Exhibit 5.2

Private Sector Driven		Hectare
Area of backlog cleared by plantations and organised smallholders		83,200
Area of replanting and new planting by independent smallholders		Hectare
Application received		37,423.64
Applications verified and approved		29,995.09
Area felled and planted		19,768.54

#### Moving Forward

Replicating the successes of the initiatives implemented this year, in 2012 MPOB is targeting a total area of replanting and new planting by independent smallholders at 40,000 hectares and total area of backlog cleared by plantation companies and organised smallholders at 100,000 hectares. The total investment from both the private and public sector is expected to top RM980 million in the year 2012 for the 140,000 hectares under this EPP.

Exhibit 5.3



## EPP 2

## Improving Fresh Fruit Bunch (FFB) Yield

Lack of exposure to best practices and the insufficient economies of scale amongst smallholders have led to lower yield in comparison with organised smallholders and plantation companies. In order to improve the national average of FFB yield, MPOB targets to group the 161,000 independent smallholders nationwide into regional cooperatives to enable the *Tunjuk, Ajar dan Nasihat* (TUNAS) officers to provide more focussed and specialised advisory and extension services.

Coupled with the successful replanting programme under EPP 1 and the consolidation of independent smallholders into cooperative schemes, the national average yield is expected to increase to 26.2 tonnes per hectare per annum in 2020.

### Achievements

In 2011, the MPOB has hired and deployed an additional 100 TUNAS officers throughout the country to provide advisory services to the plantations, particularly to independent smallholders with low yielding areas. In total, there are 307 MPOB officers nationwide under this EPP.

Besides providing advisory services, the TUNAS officers are tasked to group independent smallholders into cooperatives, tapping into the benefits of scale operations and efficiencies.

To date, a total of 15 cooperatives (four in 2010, 11 in 2011) have been formed by MPOB. They cover a total area of approximately 135,000 hectares of land owned by 30,444 smallholders in various states including Perak, Selangor, Malacca, Johor, Pahang, Sabah and Sarawak.

The national fresh fruit bunch yield is expected to grow, reversing consecutive drops in yield in 2009 and 2010. This can be attributed to the successes of the key initiatives under both EPP 1 and 2.

Exhibit 5.4

Location (Cluster)	No. of SH	Ha	Co-operative	
			Potential Membership	Ha
Tongod, Sabah	1,230	4,920	615	2,460
Saratok, Sarawak	544	1,870	544	1,870
Kunak, Sabah	910	8,265	455	4,103
Jasin, Melaka	912	3,824	456	1,912
Kluang Utara, Johor	5,689	19,542	2,845	9,771
Belaga, Sarawak	511	1,191	511	1,191
Kinabatangan, Sabah	3,648	22,104	1,824	11,052
Tawau, Sabah	1,644	11,202	822	5,601
Kulaijaya, Johor	2,355	7,065	1,178	3,533
Kuala Selangor Selatan, Selangor	2,683	5,173	1,342	2,587
Temerloh, Pahang	1,185	6,001	593	3,001
Beluran, Sabah	4,701	26,917	2,351	13,459
Bera, Pahang	2,350	9,350	1,175	4,675
Selama, Perak	1,378	4,425	689	2,212
Serian, Sarawak	704	3,358	704	3,358
<b>Total</b>	<b>30,444</b>	<b>135,207</b>	<b>16,104</b>	<b>70,785</b>

(more on next page)

## EPP 2 (continued from previous page)

Exhibit 5.5

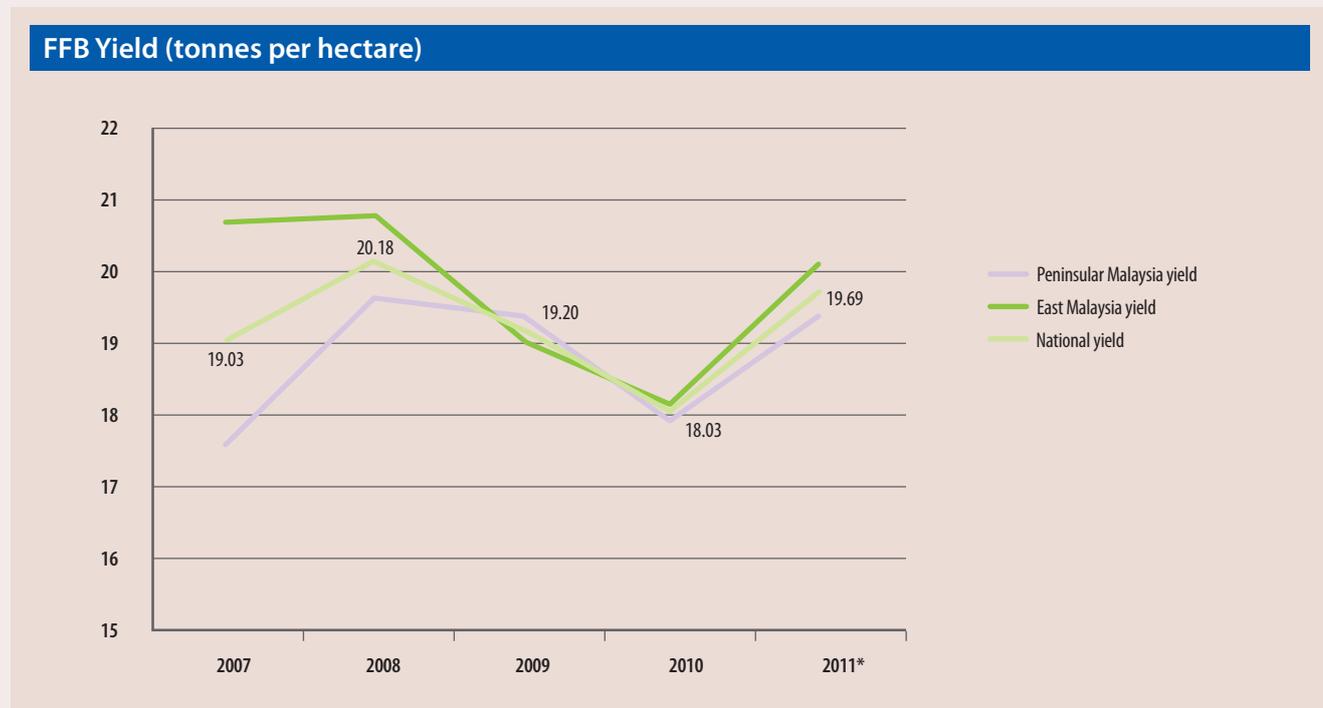


Exhibit 5.6

Yield (tonnes per hectare)	2007	2008	2009	2010	2011*
Peninsular Malaysia yield	17.59	19.63	19.36	17.91	19.24
East Malaysia yield	20.68	20.78	19.04	18.15	20.10
<b>National yield</b>	<b>19.03</b>	<b>20.18</b>	<b>19.20</b>	<b>18.03</b>	<b>19.69</b>

\* based on MPOB official statistics

## Moving Forward

MPOB will be recruiting an additional 60 TUNAS officers over the next two years to fast track the formation of seven new cooperatives and to increase national average yield levels to 26.2 tonnes per hectare per annum in 2020.

**EPP 3**

# Improving Worker Productivity

The main source of labour supply for plantations in Malaysia has been severely impacted as foreign workers prefer to work in the plantations in their home country. This is compounded by the fact that the scope of work in estates is deemed unattractive by Malaysians.

As a result, the industry has to overcome the reliance on manual labour in plantations and shift towards initiatives that improve workers' productivity. This involves scaling up production and promoting the use of the motorised sickle Cantas™ to harvest oil palm fruits as well as the diamond sharpening tool which complements the use of Cantas™ through faster and less frequent sharpening of sickles and chisels.

Cantas™ is a 15-foot long motorised sickle used to harvest oil palm fruits. The persistent promotional emphasis of MPOB on the use of Cantas™ has led to a series of improvements and development in both the motor and sickle head used.

## Achievements

The adoption of Cantas™ by plantation companies and smallholders over the year has tremendously improved the harvesting coverage area as well as the productivity of harvesting per harvester per day.

Through the usage of the Cantas™, the industry has seen remarkable improvements with both the harvester to area coverage and productivity increasing by at least 50 per cent.



A worker using Cantas™ to harvest

Exhibit 5.7

Category	Cantas™	Manual	Difference	% Difference
Individual productivity (MT/man-day)	2.69	1.67	+1.02	+61
Worker to land ratio	1:34	1:22	+12	+55
Tool to land ratio	1:102	1:43	+59	+137

With feedback from users, the MPOB has assisted Cantas™ manufacturers in setting up in-house standard quality control procedures with 'zero-defect testing' upon delivery to buyers. The product-testing phase has also been strengthened, with more stringent reliability tests and field trials. Today, the two Cantas™ manufacturers – Fancy Power Sdn Bhd and Jariz Technologies Sdn Bhd – have established service centres throughout Malaysia. In addition to this, two new manufacturers have been licensed and started operations in 2011 with their prototypes expected to be ready by the first quarter of 2012.

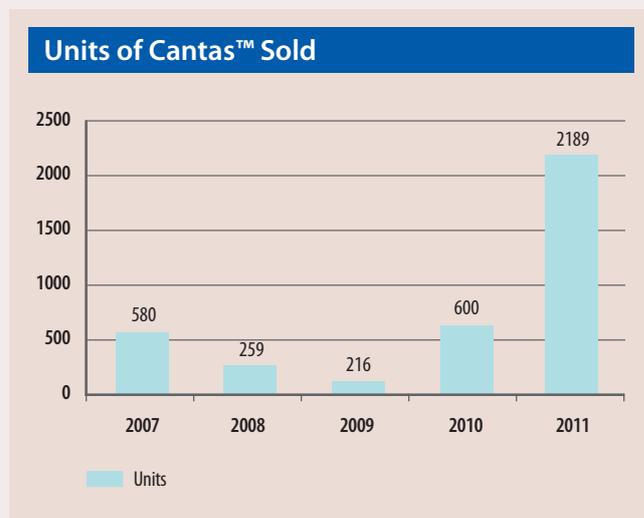
In 2011, the Government also introduced a RM1,000 Cantas™ discount scheme, initially for smallholders which is now also extended to plantation companies.

A total of 2,189 units of Cantas™ and 3,633 units of diamond sharpening tool have been purchased by plantation companies, organised smallholders and independent smallholders in 2011.

## Moving Forward

MPOB will continue with the promotion and marketing efforts of Cantas™ together with the manufacturers to be taken up by plantation companies and smallholders. In order to ensure continuous reliability, MPOB will also be investing in several research and development projects to improve the durability of the equipment as well as introducing more variants with differing pole length that will improve the productivity of the workers in the oil palm industry.

Exhibit 5.8



## EPP 4

## Increasing the Oil Extraction Rate (OER)

In recent years the oil extraction rate (OER) has hit a plateau due to inconsistent quality of fresh fruit bunches delivered to mills. This EPP aims to improve mill performance by filtering poor quality crop before processing. MPOB has recruited and deployed a total of 186 enforcement officers to specific low performing mills to provide advisory and enforcement services on quality of crops.

### Achievements

The Malaysian Palm Oil Board has grouped all the mills in Malaysia into four categories based on crop intake and OER performance. The four categories are:

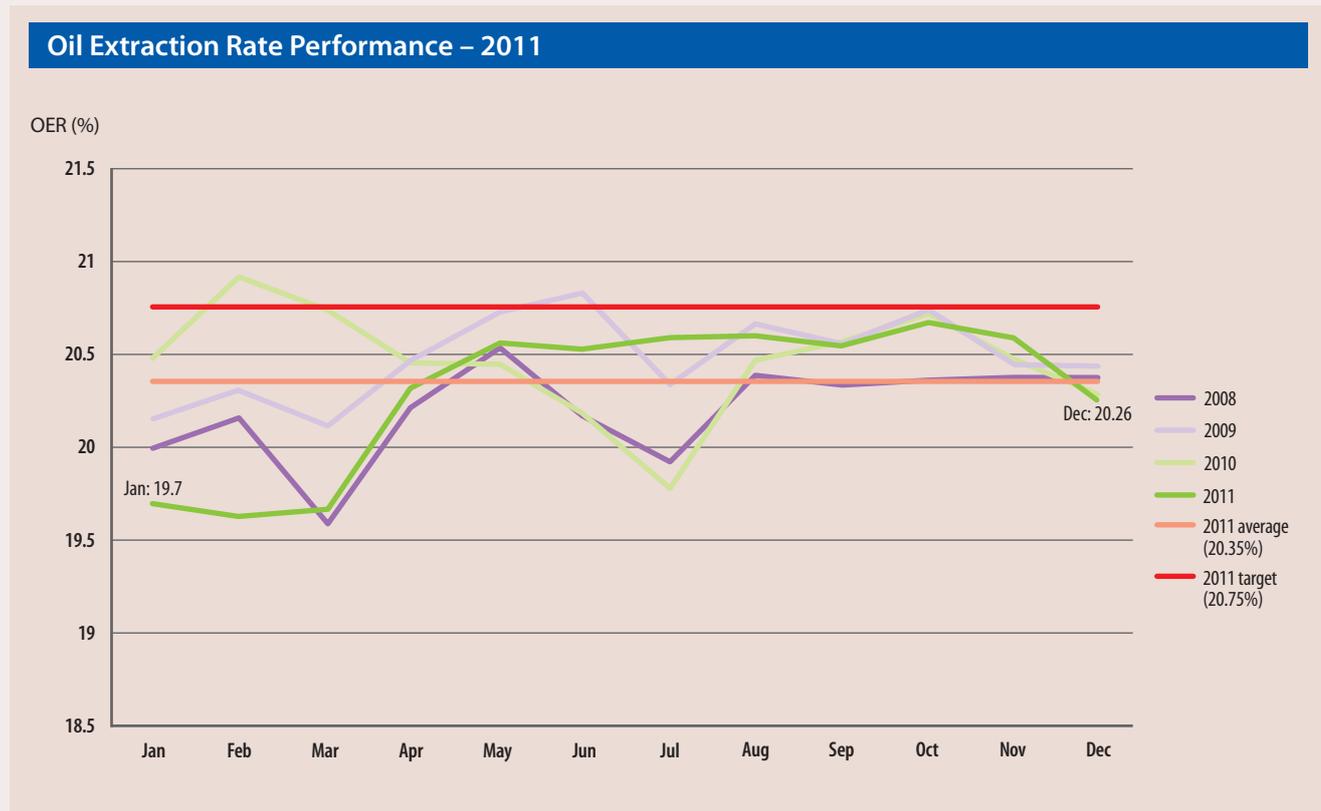
- A: OER < 20 per cent and using >50 per cent outside crops of their total intake
- B1: FELDA mills
- B2: OER > 20 per cent, or, using < 50 per cent outside crops of their total intake
- C: Palm oil mills that receive/process their own crops only

MPOB has also clustered mills by region and placed them under the responsibility of enforcement teams which are ranked competitively to ensure high OER performance by the mills. Overall in 2011, the OER has increased from a three year low of 19.70 per cent in January, to end with an average of 20.35 per cent. This EPP has seen a significant improvement in the OER with successful reversal of downward trends traditionally observed in two periods – February-March and June-August.

### Moving Forward

In 2012, the focus will be on improving the national oil extraction rate to 21.05 per cent. An additional 55 enforcement officers will be hired and deployed to FELDA-owned mills to monitor the FFB acceptance process by mills and displacement of FFB to ensure only good quality crops are processed.

Exhibit 5.9



**EPP 5**

## Developing Biogas at Palm Oil Mills

Methane gas released during the treatment of palm oil mill effluent (POME) waste, a by-product of the milling process, is a greenhouse gas (GHG) that contributes to global warming by trapping more heat than carbon dioxide.

To mitigate this release of greenhouse gases, EPP 5 aims to encourage more mills to capture methane gas to generate electricity and in turn be more environmentally friendly. The energy generated can be sold to the national grid or used by mills internally. Other benefits include a compliance with the 35 per cent GHG emission savings requirement for biodiesel under the EU Renewable Energy Directive, allowing greater market access in the European market.

### Achievements

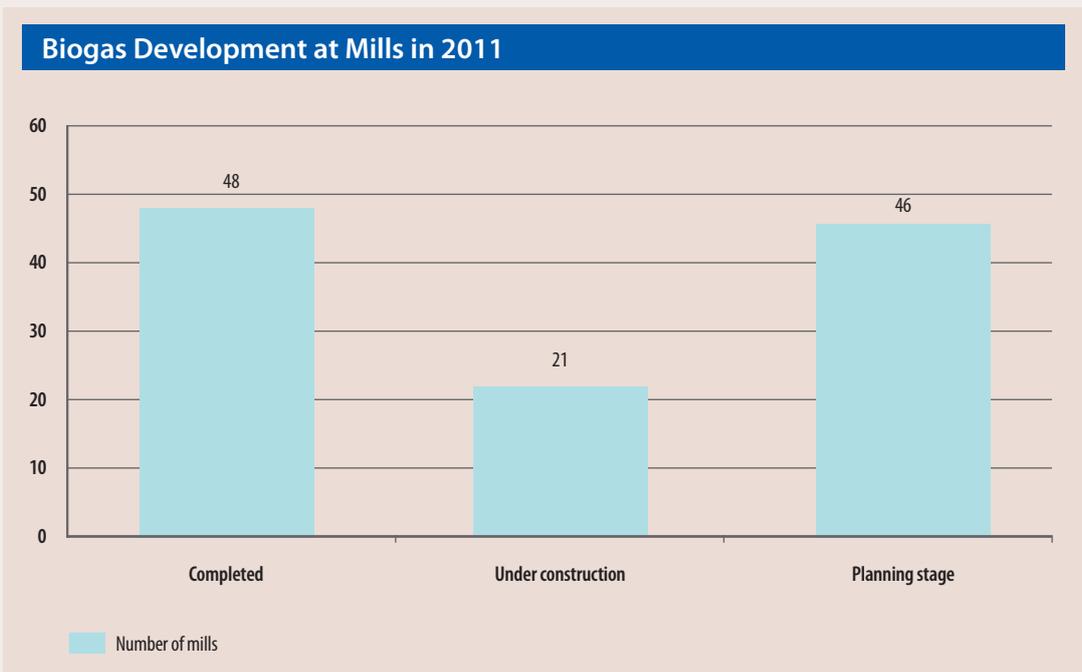
As at December 2011, 48 biogas plants have been completed and are operational of which two plants are connected to the grid. A total of 21 biogas plants at mills are under construction and another 46 mills have begun planning to construct biogas plants at their respective mills.

### Moving Forward

In December 2011, the Feed-in-Tariff (FiT) programme was introduced, with attractive energy incentives for biogas producers to sell electricity to Tenaga Nasional Berhad (TNB) via connection to the national grid. The MPOB will identify mills with completed biogas plants that are suitable for grid connections together with TNB to accelerate the use of green energy in Malaysia. This collaboration underlines the commitment of Malaysia to renewable sources of energy from the oil palm industry.

In the coming year, MPOB will also be focussing on the completion of the 21 mills with biogas plants under construction and the materialisation of the planned additional 46 biogas plants by providing technology and advisory services to the respective mills.

Exhibit 5.10



## EPP 6

## Developing Oleo Derivatives

There has been an increase in the market saturation as well as a stagnating growth in the basic oleochemical industry. Of the current non-food downstream industry 99 per cent are basic oleochemicals such as fatty acids, fatty alcohols and glycerine while the remaining one per cent are in the higher value-add derivatives.

EPP 6 aims to shift the composition of downstream industry towards a higher production of high value add derivatives. A developed local downstream market also plays a vital role in insulating upstream producers from commodity price shocks.

### Achievements

In 2011, four major business proposals to develop oleo derivative plants in Klang Valley and Penang have been submitted for evaluation and approved by the Palm Oil NKEA Steering Committee under EPP 6. These companies, with total investments of RM1.33 billion over the next two years, are:

Exhibit 5.11

EPP 6 companies	Estimated investments (RM mil)
Emery Oleochemicals Group	416
ICM Specialty Chemicals Sdn Bhd	134.4
KL Kepong Berhad	646
IOI Oleochemical Industries Berhad	130
<b>Total</b>	<b>1326.4</b>

To date, significant progress has been made by Emery Oleochemicals Group. Emery has committed to develop three oleo derivative plants in Teluk Panglima Garang, Selangor to produce bio lubricants and green additives as well as surfactants. The first plant for bio lubricants has been completed and it is ready for production by the first quarter of 2012 while the remaining two plants are currently being constructed.

Emery's first plant in Teluk Panglima Garang that will be completed by end of the fourth quarter of 2011 and begin production by the first quarter of 2012

Four other major companies will also begin the construction of oleo derivative plants in 2012 with total estimated investments of RM1 billion.



Operational oleochemical plant



Operational oleochemical plant

**ICM Specialty Chemicals Sdn Bhd**, a joint venture between RSA Jaya and Chemical Mate with technology support from Inventa Technologies (Singapore), will produce specialty esters, surfactants and glycerol derivatives. The oleo derivative plant will be ready by 2013 in Pulau Indah, Selangor. This is a strategic joint venture given Chemical Mate's vast experience and network in the global market, while Inventa Technologies has global experience in research and manufacturing.

**KL Kepong (KLK) Berhad**, via its subsidiaries, will invest in two oleochemical projects – an integrated methyl ester sulfonate (MES) plant and a specialty fatty ester plant. It will also establish a world-class consolidated research and development centre from its global operations. The integrated MES plant will be undertaken by KLK Oleomas Sdn Bhd and is scheduled for completion by early 2013. It will see an increase of MES capacity by approximately 100,000 tonnes. The fatty ester plant will be undertaken by Palm Oleo Klang Sdn Bhd and is dedicated to producing esters for the food and pharmaceutical industries. It will produce an additional 10,000 tonnes by the first quarter of 2013. This will position KL Kepong as the leading global supplier for the medium chain triglyceride (MCT) oil segment.

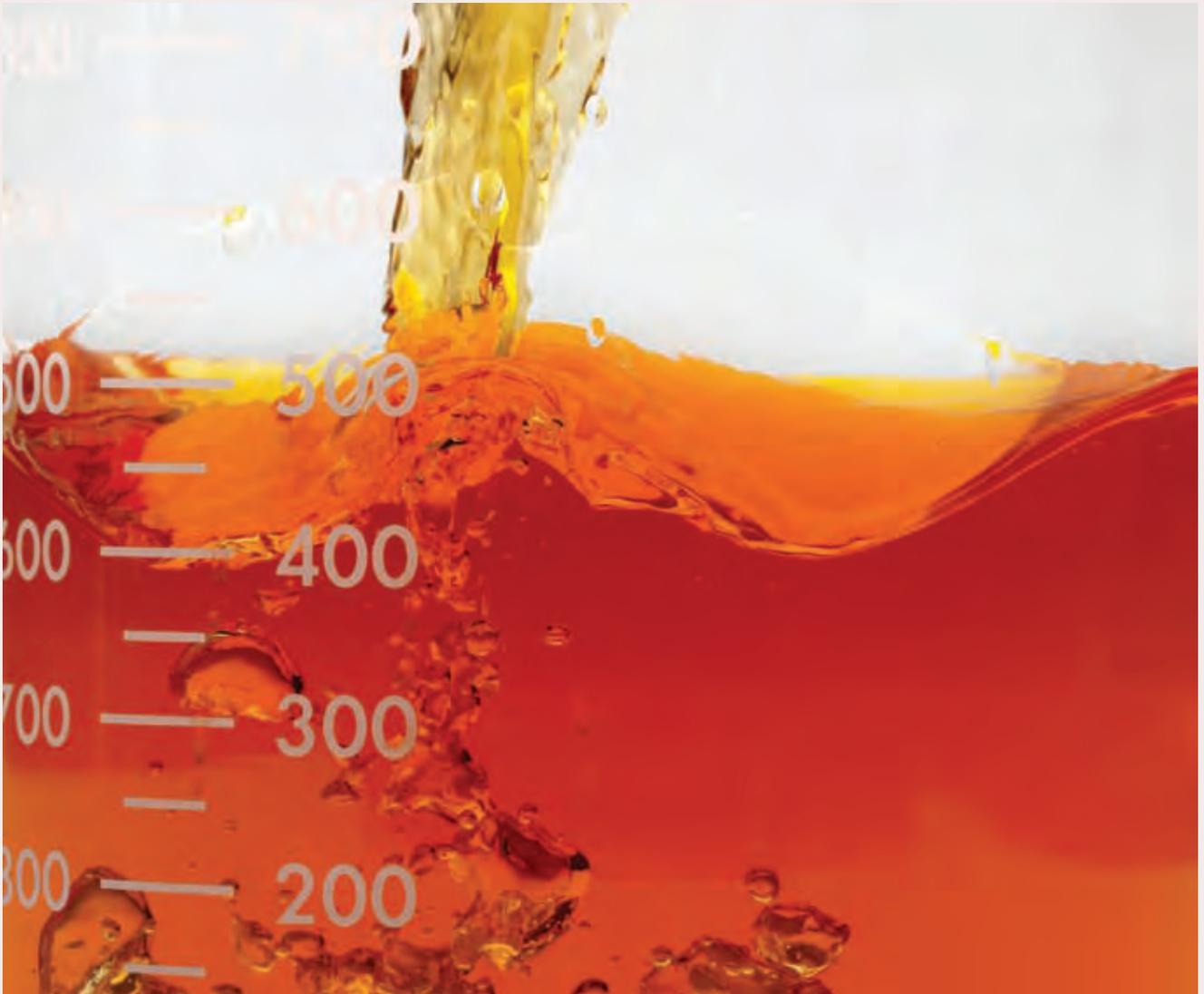
**IOI Oleochemical Industries Berhad**, via its subsidiary Esterchem (M) Sdn Bhd, will develop two ester plants, each with a 10,000 MT per year capacity in the Prai Industrial Complex, Penang. The project is expected to be operational in 2014. The plants will be a food grade facility and cosmetic grade facility.

### Moving Forward

This EPP will continue to encourage the shift from basic oleochemicals to oleo derivatives focussing on five key products – surfactants, agrochemicals, bio polyols, bio lubricants and glycerol derivatives – with pre-commercialisation and technology acquisition grants from the Government. MPOB will be monitoring the progress of projects and realisation of a targeted RM500 million of investments in 2012 with continuous R&D programmes as enablers to support the growth of oleo-chemicals sector in Malaysia.

## EPP 7

## Commercialising Second-Generation Biofuels



EPP 7 aims to process oil palm biomass for bio oil extraction

Embracing the notion that Malaysia should position itself to develop the renewable energy industry in a bid to mitigate fluctuation in fossil and coal prices, EPP 7 aims to process oil palm biomass for bio oil extraction. Bio oil derived from oil palm biomass is regarded as the better alternative for renewable energy production, given the maturity of technological processes in Malaysia, the abundance of raw material supply as well as its potential as a green fuel for transportation, power and for chemicals.

### Achievements

Sahabat Renewable Fuel Ventures Sdn Bhd is in intensive planning stage to build five bio oil plants with a view to an eventual completion of 29 plants, contingent on the success of the first five plants. The company is a joint venture between Premium

Renewable Energy and Felda Palm Industries Sdn Bhd, with the latter being one of the largest palm oil plantation companies, boasting ample supply of feedstock. The plant will be built in FELDA Sahabat, Sabah using empty fruit bunches to generate bio oil using biomass-to-liquid technology (pyrolysis) and will deliver end-to-end production of biomass into green electricity. The plant has received approval from the Department of Environment and consultations on the Environmental Impact Assessment (EIA), soil investigation and engineering are to begin in the fourth quarter of 2011.

### Moving Forward

The focus of this EPP in the coming year will be to ensure that the construction of the first plant in Sabah progresses according to schedule and the target is to complete 60 per cent of development and construction by the end of 2012.

## EPP 8

## Expediting Growth in Food and Health-based Downstream Segment

With the vast application of palm-based derivatives in many food and health-based products, EPP 8 aims to expedite the development of palm-based food and health-based products in the downstream segment. EPP 8 is also seen as an impetus, complementary to the aspiration under EPP 6, to shift the production composition in the downstream sector towards higher value-add products.

### Achievements

Tocotrienols, which are forms of natural vitamin E from palm oil, have various health applications such as antioxidants and anti-cancer effects with some studies suggesting that they are more potent than a competing form of vitamin E, Tocopherols, which are from soy oil. Realising the potential of Tocotrienols, MPOB has approved R&D funds for six clinical trials on tocotrienols which will be carried out by leading research institutions. They are:

Exhibit 5.12

Research	Key Researcher	Independent External Reviewers
Natural Tocotrienol Against Ischemic Stroke Event	Prof Chandan K. Sen (Ohio State University, USA)	The Ohio State University Medical Centre
		Burke-Cornell Medical Research Institute
Gamma-tocotrienol as Potential Maintenance Treatment in women with Metastatic Breast Cancer	Prof Yip Cheng Har (UMMC)/ Dr. Kalanithi Nesaretnam (MPOB)	Roswell Park Cancer Institute
Effect of oral consumption of gamma tocotrienol on overall survival of men with metastatic castration refractory prostate cancer (CRPC) and on disease progression of men with metastatic hormone	Prof Fong Chee Wai (Davos Life Science, Singapore)	Department of Surgery, Queen Mary Hospital, Hong Kong
		Institute of Neurology and Nephrology, Kuala Lumpur Hospital
Neuroprotection of Tocotrienols in type 1 and type 2 Diabetes Mellitus	Prof Yuen Kah Hay (USM)	School of Pharmaceutical Science, Universiti Sains Malaysia
		Mahidol Oxford Tropical Medicine Research Unit University of Oxford
Molecular Targets of Tocotrienol for Prevention of Coloectal Cancer	Prof Bharat B. Aggarwal (M.D. Anderson Cancer Center, USA)	Department of Gastrointestinal Medical Oncology, UT MD Anderson Cancer Center
		Department of Gastroenterology, Hepatology, and Nutrition, UT MD Anderson Cancer Center
		Gastrointestinal Cancer Research Laboratory, Baylor Research Institute, Baylor University Medical Center
Tocotrienol supplementation in school going children with ADHD – a randomised controlled trial	Dr. Tan May Loong (PMC)	Clinical Research Centre, Penang Hospital

In addition to the approved clinical trials, MPOB has also secured two major investments in tocotrienols and carotenes. They are:

**Davos Life Science Sdn Bhd**, a subsidiary of KL Kepong Berhad, will be developing one of the world's largest tocotrienols production complex in Westport, Selangor with planned investment of RM60 million. This project will be completed and fully operational by 2012 and is expected to generate RM19 million in GNI in 2020.

**Carotino Sdn Bhd**, will be developing a food grade plant in Pasir Gudang, Johor with planned investment of RM10.72

million. This plant, which will be operational by first quarter of 2013, will produce natural palm carotenes and tocotrienols with technology transfer and support services from MPOB.

### Moving Forward

This EPP will encourage the oil palm industry to venture into the food and health-based segment with pre-commercialisation and technology acquisition grants from the Government. MPOB will be monitoring the progress of the R&D and commercialisation projects with a targeted investment of over RM50 million in 2012.

# Rubber

Malaysia's rubber industry spans the entire value chain from upstream plantations to downstream manufacturing activities. Rubber is the second most important commodity for Malaysia. Malaysia faces competition from two neighbouring rubber countries – Indonesia and Thailand. Initial analysis by the Malaysian Rubber Board (MRB) data in July 2010 estimated that the rubber industry could contribute RM31.1 billion in incremental GNI in 2020.

It was then decided in 2010 that the rubber industry would be given special focus under the ETP due to its present in downstream strengths and potential, and also the fact that it provided income for over 400,000 smallholders with a conceptual target growth rate of six per cent per annum towards 2020.

Acknowledging the significance of the rubber industry and its contributions to the income of over 400,000 smallholders, a subsequent lab conducted by PEMANDU and the MRB in November 2010 along with key industry players. Four EPPs were identified in the lab to further develop the rubber industry for Malaysia. They are:

## **EPP 1:**

Increasing average national rubber productivity to 2,000 kg/ha/year by 2020

## **EPP 2:**

Ensuring the sustainability of the upstream rubber industry

## **EPP 3:**

Increase world market share of latex gloves to 65 per cent by 2020.

## **EPP 4:**

Commercialising Ekoprena and Pureprena (Green Rubber)

The four EPPs are expected to generate an incremental GNI of RM28.4 billion in 2020, bringing the targeted total rubber industry GNI to RM52.9 billion in 2020.

“

**Initial analysis by the Malaysian Rubber Board data in July 2010 estimated that the rubber industry could contribute RM31.1 billion in incremental GNI in 2020.**

”

## Entry Point Projects

### EPP 1

## Increasing Average National Rubber Productivity to 2,000 kg/ha/year by 2020

To ensure only high yielding and quality planting materials are planted, among the key initiatives identified include verification of clones in source bush nurseries, establishment of Malaysian Rubber Budwood Centres, as well as adoption of good agricultural practices and formation of cooperatives among smallholders. These key initiatives were developed to ensure that only high yielding and quality materials are planted.

The Malaysian Rubber Board (MRB) has developed plans to establish Malaysian Rubber Budwood Centres in Penampang (Sabah), Similajau (Sarawak), Bukit Kuantan (Pahang), Sg Sari (Kedah) and Kota Tinggi (Johor) over the next three years.

To date, rubber plants in 84 nurseries have been inspected by MRB for elimination of rogue clones to ensure that only recommended quality clones are planted in the country by smallholders and estate companies. This sets the foundation to complement the replanting and new planting initiatives implemented under EPP 2.

This EPP aims to generate an incremental GNI of RM3.11 billion in 2020

### EPP 2

## Ensuring Sustainability of the Upstream Rubber Industry



Replanted rubber trees tapped for latex

To ensure sustainability of the rubber industry, the Government has decided to accelerate replanting and encourage new planting of rubber areas with grants provided for smallholders. Application forms are made available in all MRB, RISDA, LIGS and JPS offices nationwide.

This EPP targets to replant 40,000 hectares annually and to plant 18,000 hectares of new rubber areas over the next five years with advisory services to be provided by the Malaysian Rubber Board (MRB). By accelerating the replanting and new planting of rubber areas, this will bring significant positive impact to the rubber industry as it is important for the stability of supply from the upstream sector to continue supporting the midstream rubber processing plants and downstream rubber product manufacturing plants.

This EPP aims to generate an incremental GNI of RM3.24 billion in 2020.

## EPP 3

## Increase World Market Share of Latex Gloves to 65 per cent by 2020

In this EPP, MRB aims to boost the rubber glove industry's global market share from 62 per cent (85 billion pieces in 2009) to 65 per cent by 2020, growing at 13 per cent year-on-year as compared to historical organic growth of six per cent year on year. This EPP aims to generate an incremental GNI of RM20.75 billion in 2020.



Latex gloves

## EPP 4

## Commercialise Ekoprena and Pureprena (Green Rubber)

Felda Rubber Industries Sdn. Bhd. (FRISB) and Mardec Rubber Processing Sdn. Bhd. (MPSB) have been selected as recipients of the technology for the commercialisation of Ekoprena and Pureprena with an initial capacity of 12,000 tonnes per year up to a target capacity of 300,000 tonnes per year by 2020.

Ekoprena is an established class of specialty rubber and is regarded as a green material for the rubber product manufacturing industry particularly in tyre manufacturing as it is produced from a renewable natural source. Pureprena is a highly purified

natural rubber and an eco-efficient form of deproteinised natural rubber with distinguished raw rubber properties for dynamic and engineering applications.

This project comprises of several defined activities to ensure effective technology transfer and commercialisation of Ekoprena and Pureprena to FRISB and MPSB. The commercialisation process is carried out to enable both FRISB and MPSB to produce Ekoprena and Pureprena.

This EPP aims to generate an incremental GNI of RM1.3 billion in 2020.



Felda production plant

# Business Opportunities

Global demand for oils and fats, including palm oil, has grown in the last decade driven by increasing world population, higher incomes and changing dietary habits. Malaysia's palm oil industry is expected to grow over the next 10 years driven by three business opportunities worth RM57.6 billion by 2020. These Business Opportunities (BOs) involve expansion of upstream activities, development of existing downstream activities and development of biodiesel activities. The BOs address key challenges to the industry which are increasing mechanisation to raise upstream yields and filling the knowledge and expertise gaps for downstream jobs.

## Business Opportunity 1

### Expansion of Existing Upstream Activities

Besides the steps taken in Palm Oil EPPs 1-4 to sustain upstream activities, Malaysian plantation companies have begun to look for land suitable for plantations abroad, focussing in Indonesia and Africa. By 2020, companies are expected to have an additional two million hectares in Indonesia, other parts of Southeast Asia and in West Africa. This BO will potentially contribute an additional GNI of RM17.6 billion by 2020.

## Business Opportunity 2

### Development of Existing Downstream Activities

Malaysia is already a major basic oleochemicals player and has potential to grow by expanding the current production with stable palm feedstock availability in Malaysia and increasing regional demand. For the food and health based segment, the gradual

increase in demand backed by a growing population is expected to drive the increase in production of palm-based food and health products. This BO will potentially contribute an additional GNI of RM11.2 billion by 2020.

## Business Opportunity 3

### Development of National Biodiesel Activities

Malaysia has a large amount of unused biodiesel production capacity. Out of the national capacity of 3.5 million tonnes, only 117,000 tonnes were produced by the biodiesel plants in 2010, almost all of which are exported. To accelerate the development of biodiesel usage in Malaysia and to reduce the CPO stockpile in the market, the Government has introduced B5, a 5 per cent biodiesel blend with petroleum diesel in 2011 in Klang Valley, Negri Sembilan and Malacca as a start. This BO will potentially contribute an additional GNI of RM1.6 billion by 2020.

## Moving Forward

The Malaysian palm oil and rubber industry faces immense competition from fast-growing competing producers such as Indonesia and Thailand. The way forward is through productivity improvements as well as accelerating the replanting and new planting initiatives besides tapping into niche markets as first movers to command a significant market share ahead of competing nations. Continued efforts and collaborations between the Government and the private sector will be vital to ensure that the EPPs stay on track to meet the GNI target of RM230.9 billion GNI in 2020.

## Summary of Palm Oil and Rubber NKEA

	2020 Target
Incremental GNI Impact	RM230.9 billion (inclusive of Rubber)
Additional jobs	41,600
<b>Critical targets for 2012</b>	
<b>Palm Oil</b>	
<ul style="list-style-type: none"> <li>Accelerate the replanting of oil palm plantation backlog and development of new palm oil areas to 140,000 hectares</li> <li>Form 7 new regional cooperatives to group more independent smallholders together</li> <li>Improve labour productivity via sales of Cantas™ and diamond sharpening tool</li> <li>Improve national oil extraction rate to 21.05 per cent</li> <li>Encourage uptake of connection to the Feed in Tariff system by biogas plants</li> <li>Ensure completion of 21 biogas plants under construction</li> </ul>	
<b>Rubber</b>	
<ul style="list-style-type: none"> <li>Accelerating the replanting of rubber estates backlog and development of new rubber areas by smallholders to 51,000 hectares</li> <li>Ensure 12,000 tonnes of production of Ekoprena and Pureprena</li> </ul>	

## Creating Knowledge Workers in Malaysia

After two years in her current role, Siti Rohani Napis, 34, decided it was time to gain more knowledge and skills to fulfil her responsibilities at Fraser and Neave (F&N) Malaysia. The company is amongst the region's oldest companies and its brand enjoys the rare distinction of being a market leader and household name in many fast-moving consumer goods categories.

"I had heard about MSC Malaysia's MyProCert (SAP) Programme through friends and I thought it would be a good career boost for me. I did some research on the structure and costs, and advised my manager. This five-week programme provides a comprehensive curriculum based on current market demand for high-end skills," said Siti.

"I was very excited about attending this instructor-led course. I knew that my objective would be met at the end and I would come away with more knowledge apart from obtaining the SAP certification. I was fortunate that the management at F&N allowed me to take time off from work to attend classes in December 2011."

Established under the Human Capital Development Strategic Reform Initiative, MSC Malaysia MyProCert Programme is a catalytic initiative for Malaysians who wish to upgrade their skills to international ICT certification standards. Besides SAP, individuals



can also choose to be trained and certified in Oracle, Huawei, Apple and IAOP (International Association of Outsourcing Professionals) programmes.

According to Multimedia Development Corporation (MDeC) Chief Executive Officer Datuk Badlisham Ghazali, the programme is aimed at increasing the

global competitiveness of the Malaysian ICT workforce.

Participating partners will provide a marked reduction of the usual certification fees, while the government provides a one-off cash incentive for individuals who pass the required certification examination," he said.

“

I knew that my objective would be met at the end and I would come away with more knowledge apart from obtaining the SAP certification.

”

BERRY



# Tourism



**Dato' Sri  
Dr. Ng Yen Yen**

Minister of Tourism



### **Moving Forward towards 2020:36:168**

The tourism industry remains a major contributor to GNI, foreign exchange earnings and employment. The targets set for each of our EPPs in 2011 were significantly realised with an overall achievement of 88 to 118 per cent. Malaysia welcomed 24.7 million international tourists in 2011 registering an increase of 0.5 per cent. Duty Free Shopping under EPP 1 recorded a substantial increase with shopping expenditure representing 32 per cent of total tourist expenditure which exceed the target of 29 per cent. The opening of Johor Premium Outlets as the first outlet centre in South East Asia will enhance the product offerings in shopping and attract more tourists. We also managed to boost business and golf tourism in line with the strategy giving greater emphasis on high-yielding market segments.

Moving forward, I am convinced that with the excellent groundwork carried out in 2011, the Tourism NKEA is poised to achieve greater heights. I would like to take this opportunity to record my appreciation to everyone for the strong support and close collaboration in ensuring the achievement of outcomes and KPIs of the Tourism NKEA in 2011. I look forward towards enhancing our public-private partnerships in our quest to successfully implement the EPPs, to surpass the targets set for the Tourism NKEA in 2012 and beyond.

# Tourism

Malaysia is in an excellent position to further improve its standing as one of the world’s top global destinations, given its abundant tourist destinations. Already we are the ninth most visited country in the world

Our receipts of RM1 billion per week from tourists ranks us 13th globally in terms of tourist’s receipts.

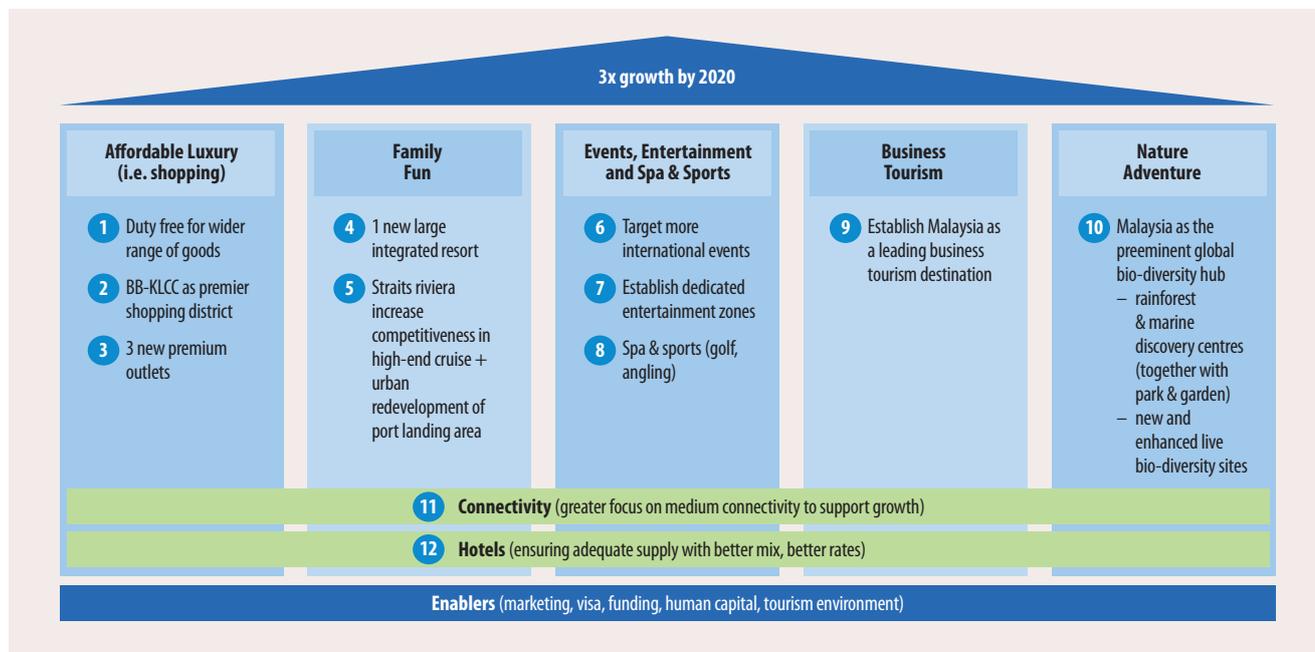
The tourism industry is the seventh largest contributor to the Malaysian economy with a GNI total of RM37.4 billion in 2011 and is poised to enjoy consistent growth. Recognizing that we have a strong global competitive position, the Tourism NKEA intends to enhance the sector’s contribution to the national economy.

By 2020, Malaysia’s tourism industry is projected to provide an incremental contribution of RM66.7 billion to the national GNI. To achieve this target, the Tourism NKEA has identified 12 Entry Point

Projects (EPPs) across five themes as demonstrated in Exhibit 6.1. These will generate an increment of RM28.4 billion in GNI. With an additional RM39 billion in GNI expected from Business Opportunities (BOs), baseline growth and multipliers, the total GNI contribution in 2020 will be RM103.6 billion with a projection of 36 million tourist arrivals.

Since January 2011, the Prime Minister Dato’ Sri Najib Tun Razak has announced nine initiatives under six EPPs. These initiatives have a cumulative private investment of RM16 billion, providing a GNI contribution of RM6.5 billion and creating 37,900 jobs by the year 2020.

Exhibit 6.1



## 2011 Key Performance Indicators

In 2011, the Tourism NKEA had a GNI target of RM40.7 billion and 55,600 new jobs. Each EPP within the NKEA had unique KPIs designed to assist performance achievement and a stringent weekly monitoring process to ensure proper performance tracking. The targets and achievements of each of these EPPs are summarised in Exhibit 6.2.

Exhibit 6.2

NKEA Tourism		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Percentage of shopping spend	29%	32%	110%	●	100%	●	1.0	●
	Total Tourist Spend per Arrival (RM per tourist)	694	736.5	106%	●	100%	●	1.0	●
EPP #2	Retail revenue per sq ft (RM/square feet)	1,732	1,762	102%	●	100%	●	1.0	●
	Length of covered walkways (meters)	1,350	1,350	100%	●	100%	●	1.0	●
EPP #3	Percentage of completion of construction of Johor Premium Outlets	100 %	100%	100%	●	100%	●	1.0	●
EPP #4	Upgrade of sites to meet Malaysia Mega Biodiversity Hub certified standards	5	98%	98%	●	98%	●	0.5	●
EPP #5	Percentage of pre-booking received for beachfront & golf course villas	40%	43.90%	110%	●	100%	●	1.0	●
EPP #6	Passenger Sea Ports Infrastructure and Cruise Tourism Blueprint	Formulation of a Cruise and Ferry Integrated Seaport Infrastructure Blueprint for Malaysia	Blueprint completed	100%	●	100%	●	1.0	●
EPP #7	Total revenue from international events (RM mil) (per cent increase)	519	845	163%	●	100%	●	1.0	●
EPP #8	Establish entertainment zones	1	1	100%	●	100%	●	1.0	●
EPP #9	Revenue generated from spas (RM mil)	20.74	20.7	100%	●	100%	●	0.5	●
	Revenue generated from golf tourism (RM mil)	249.50	286	115%	●	100%	●	1.0	●
EPP #10	Number of events secured (with minimum size of 650 delegates)	20	49	245%	●	100%	●	1.0	●
	Percentage of business travelers/arrivals	5.24%	5.20%	99%	●	99%	●	0.5	●

(more on next page)

(continued from previous page)

NKEA Tourism		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #11	Increment of weekly seats to identified priority countries as follows : China, Japan, Taiwan, India, Australia, South Korea	9,097	8,619	95%	●	95%	●	0.5	●
	Increase in number of international passenger traffic from all airports in Malaysia	7.20%	11.40%	158%	●	100%	●	1.0	●
EPP #12	Approval of incentives for 4 & 5 star hotels	Treasury approval	100%	100%	●	100%	●	1.0	●
				<b>118%</b>		<b>100%</b>		<b>88%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

### Positioning Malaysia as a Duty Free Shopping Destination

This EPP aims to position Malaysia as a duty-free haven, allowing our prices to be more competitive in the region and attract tourists to shop more and in turn, increase sales. In the 2010 NKEA labs, the categories of goods proposed for duty exemption were: cosmetics and perfumes (Section 33), leather goods (Section 42), textiles, apparel and clothing (Sections 61-63), footwear (Section 64), headgear (Section 65), jewellery excluding coins (Section 71), electrical goods (Section 85) and toys (Section 95).

#### Achievements

In the 2011 Budget, the Prime Minister announced the abolishment of import duties for 328 items, under the categories mentioned above.

Tourism Malaysia also stepped up efforts in promoting Malaysia as an attractive shopping destination. As a result, the *Departing Visitor's Survey* by the Shopping Secretariat Malaysia under the Ministry of Tourism reported that the percentage of shopping spend in Malaysia increased from 28 per cent in 2010 to 32 per cent in 2011

while the total tourist spend per arrival increased from RM660 to RM736.5 in the same period.

#### Moving Forward

The prices of goods will continue to be monitored to gauge competitiveness of the products *vis-a-vis* regional markets. Concurrently, Tourism Malaysia will continue to promote Malaysia as an attractive destination for shopping. Efforts will also focus on encouraging principal brands to choose Malaysia as a logistics and distribution hub.

## EPP 2

### Designating the Bukit Bintang-Kuala Lumpur City Centre Area as a Vibrant Shopping Precinct

The Bukit Bintang (BB) - Kuala Lumpur City Centre (KLCC) area has been designated as Malaysia's premier shopping precinct. The Ministry of Tourism is leading efforts to increase shopping spend in the precinct by creating better pedestrian connectivity, increasing commercial mix and improving streetscaping.

#### Achievements

The BB-KLCC Tourism Association was set up in September 2011 to represent the interests of landowners, mall operators and retailers within the precinct. Its core responsibilities include the coordination of marketing and promotional activities and the development of the precinct into a major tourist shopping destination.

Currently, members of the association include BB Plaza, Berjaya Times Square, fahrenheit88, Federal Hotel Kuala Lumpur,

JW Marriott Kuala Lumpur, Lot 10, Piccolo Mondo, Plaza Low Yat, Pavilion Kuala Lumpur, Ritz-Carlton Kuala Lumpur, Sungei Wang Plaza, Suria KLCC and Starhill Gallery.

#### Integrated Events

The BB-KLCC Association combined the promotional efforts of its members to collaborate on a number of events held in the precinct. These events included the Formula 1 Street Exhibition held in March 2011 in conjunction with the 2011



Formula 1 Street Exhibition

Formula 1 Race held in Malaysia, the 'Superheroes' campaign during the mid-year school holidays in May 2011 and the Malaysian Year End Sale in November 2011. Promoted both domestically and internationally, these events showcased collaborative efforts by the major malls to ensure the success of the events.



Superheroes Campaign

(more on next page)

**EPP 2** (continued from previous page)

**Covered Walkways**

Apart from integrated events, major physical improvements were also made to provide seamless connectivity between shopping malls, offices and hotels in the area. Elevated and air-conditioned walkways totaling 537 metres were erected between Suria KLCC and Pavilion Kuala Lumpur, linking directly to buildings and major road intersections.

The section linking Berjaya Times Square to Lot 10 was commissioned by DBKL and completed in December 2011. The underground tunnel between fahrenheit88 and Hotel Grand Millennium was also refurbished by DBKL allowing for foot traffic to cross Jalan Bukit Bintang safely. In total, 1,350 metres of covered walkways were completed in 2011.

**Moving Forward**

Throughout 2012, the BB-KLCC Tourism Association will continue to organise more cohesive events in the precinct. One of the initiatives being considered is to further enhance the precinct via festive decorative street lighting. The building owners will also continue efforts to link up remaining sections of the covered walkways.



EPP 2 will transform BB-KLCC into a vibrant shopping district

**EPP 3** Establishing Premium Outlets in Malaysia

To complement the current multiple retail offerings in Malaysia and make us a top shopping destination, outlet centres offering discounted luxury items will be established. Premium outlet centres are also known to drive higher tourist volume, increase retail spend and food and beverage sales, and higher hotel occupancy rates.



PM Dato' Sri Najib Razak officiated the Johor Premium Outlets on 11 December 2011



Johor Premium Outlets is the first outlet centre in SEA

**Achievements**

The first outlet centre in Malaysia, the Johor Premium Outlets, was officiated by the Prime Minister on 11 December 2011. The outlet centre, located in Kulaijaya, also has the distinction of being the first outlet centre in South East Asia. The project is a joint venture between Genting Group and Simon Property Group. The project, located on 44 acres of land, involved total investment of about RM150 million with a total of 80 outlet stores.

**Moving Forward**

For 2012, Genting Simon Sdn Bhd will embark on the design and feasibility development of the second phase of Johor Premium Outlets. This development is proposed to feature 60 outlets and will be coupled with a theme park, a convention centre and a 200-room hotel.

**EPP 4**

# Establishing Malaysia as a Global Biodiversity Hub

By leveraging on its natural eco-assets, Malaysia aims to become one of the best wardens of biodiversity in the world. Biodiversity sites will be assessed, upgraded, developed or rehabilitated to improve their accessibility, hygiene factors and presentation of attractions. These biodiversity sites will then be promoted via the Rainforest and Marine Discovery Centres.

## Achievements

The Malaysia Mega Biodiversity Hub (MMBH) Interim Board was established in December 2010 as a certification body to determine and facilitate the desired standards of excellence in the management and preservation of key ecotourism sites. One of the main responsibilities of the MMBH is to certify and monitor each site, ensuring the sustainability of ecotourism development and activities.

The MMBH is represented by members from the Ministry of Natural Resources and Environment, Ministry of Tourism, Ministry of Rural And Regional development, Malaysian Nature Society, Malaysian Ecotourism Association, World Wildlife Fund for Nature, Institute for Environment and Development, University Kebangsaan Malaysia, Economic Planning Unit, Tourism Malaysia, Sarawak Forestry Department, Sabah Tourism Board and private sector representatives.

In 2011, the MMBH identified three sites for upgrading, and the recognition of one site as a marine discovery centre.

Some 117,500 hectares of land within the Belum Rainforest were given Royal status on 31 July 2003 when it came under the protection of the Perak royal family. To provide better access to the attractions on shore, 14 key sites within the **Royal Belum Rainforest** have been provided with floating jetties to enable visitors to disembark from boats.



Floating jetties in the Royal Belum Rainforest



The new 1 km botanical walkway in Gunung Mulu

**Gunung Mulu** is a UNESCO World Heritage Area, having 52,000 hectares of equatorial rainforest with an outstanding diversity of flora and fauna. In 2011, a new one kilometre botanical walkway was built as an extension to the existing trail, showcasing the rich biodiversity of the park.

Two new resting pontoons have also been installed for the use of visitors in **Pulau Tioman**. To make the island more accessible to the physically challenged, toilet facilities in the Pulau Tioman Visitor's Centre have been upgraded to offer wheelchair access. These efforts were completed in December 2011.



Wheelchair access in Pulau Tioman Visitor's Centre

**Aquaria KLCC** has been designated as a Marine Discovery Centre and is a state-of-the-art oceanarium showcasing over 5,000 different exhibits of aquatic and land-bound creatures. Aquaria spans a 60,000 square-foot space in the concourse level of the Kuala Lumpur Convention Centre.

## Moving Forward

Renovation works are underway for a 5,000 square foot extension to Aquaria KLCC, to be used for an additional rainforest and river biodiversity display. This display is scheduled for completion in June 2012.

Also, three additional sites have been identified by the MMBH Interim Board for upgrading works in 2012. Taman Negara Pahang will have a new five kilometre boardwalk to showcase the park's biodiversity. The Kuala Gandah Elephant Sanctuary will also be upgraded based on the recommendations of the master plan commissioned by the Ministry of Natural Resources and Environment. Kinabalu National Park has also been earmarked for upgrading.

In addition to this, the Ministry of Natural Resources and Environment will be establishing a Rainforest Discovery Centre to facilitate a central promotional effort showcasing Malaysia's biodiversity.

## EPP 5

## Developing an Eco-Nature Integrated Resort in Sabah

An eco-nature resort city will be developed in Karambunai, Sabah. It will comprise of a rainforest safari, nature lodges, mangrove centre and a discovery cove via a RM9.6 billion private investment by Karambunai Corporation Berhad.

### Achievements

In September 2011 the first set of initial developments started with the construction of a new RM4.9 million restaurant. This new facility will be completed and operational by April 2012.

Significant ground work was made to ensure the necessary processes and approvals for the development were covered. Projects under the first phase of the development such as the Resorts Residences were approved for development. Construction is expected to start in mid 2012 and this will be the first of 11 resort residence sections that make up the beachfront community.

### Moving Forward

For 2012, the focus will be in obtaining approvals for the development of the golf and waterfront community, local township, hillside community and beach resorts.



Artist's impression of Karambunai Integrated Resort

## EPP 6

## Creating a Straits Riviera

The international cruise market has seen rapid growth over the past ten years, with an average growth rate of 14 per cent for the number of passengers carried. This EPP intends to improve Malaysia's competitiveness as a cruise destination.

### Achievements

The *Cruise and Ferry Integrated Seaport Infrastructure Blueprint for Malaysia* was commissioned by the Economic Planning Unit (EPU) in 2011. This blueprint provides the vision and strategic recommendations on developing the cruise industry in Malaysia by evaluating the suitability of existing infrastructure and identifying the requisite locations to be developed as cruise terminals.

The blueprint has identified three ports as having potential to contribute significantly to the Malaysian cruise industry, namely, Penang, Klang and Kota Kinabalu. These ports currently have existing cruise infrastructure, a network of cruise arrivals and/or access to immediate tourism products.

In April 2011, the Ministry of Transport and the Ministry of Tourism initiated efforts to form a public-private stakeholders' advisory committee called the Malaysia Cruise Council. This council is expected to provide more integrated and cohesive implementation policies to help make Malaysia a more desirable cruise destination.

### Moving Forward

The Ministry of Tourism via Tourism Malaysia and the respective state tourism boards will assist cruise terminal operators and ground handlers to develop cruise related tourism products. Concurrently, the Ministry of Transport will develop the cruise infrastructure at relevant sites in line with the blueprint recommendations.

**EPP 7**

## Targeting More International Events

Hosting major international events is an important platform to promote Malaysia as a travel destination. Towards this end, existing returning events will be repackaged and reclustered in order to boost the number of spectators. Meanwhile, the efforts to attract more international shows and campaigns will be intensified.

### Achievements

#### International Events Unit

A dedicated International Events Unit (IEU) under the Malaysian Convention and Exhibition Bureau (MyCEB) was set up in January 2011 to identify and bid for international events, develop homegrown events and produce clusters of smaller shows around major international events.

In 2011, IEU supported the development of several homegrown and home hosted events and produced event clusters which were promoted by Tourism Malaysia and event organizers nationwide. To track the impact of international events in Malaysia, IEU developed an Events Tracking

Mechanism to track international and domestic tourist expenditure generated from events hosted, as well as monitor the number of spectators attending events. This mechanism will be ready for implementation by event organizers in 2012.

#### Repackaging F1 and MotoGP

In an effort to boost the number of spectators to the Formula 1 (F1) and the MotoGP Race in Malaysia, Sepang International Circuit (SIC) repackaged the 2011 events for overseas promotions. As a result of these efforts, F1 in 2011 recorded a 6.5 per cent increase of spectatorship from 2010 while MotoGP 2011 recorded a 22 per cent increase.



F1 in 2011 recorded a 6.5 per cent increase of spectatorship from 2010

#### Amendments to the PUSPAL Guidelines

The Guidelines for the Application of Filming and Foreign Artists (PUSPAL) was amended to further facilitate the hosting of international events in Malaysia. These amendments can be found on the website of the Ministry of Information, Communication and Culture (KPKK) ([www.kpkk.gov.my](http://www.kpkk.gov.my)).

#### Moving Forward

IEU will continue to assist event organizers to secure bids and to cluster events around major international events in Malaysia.



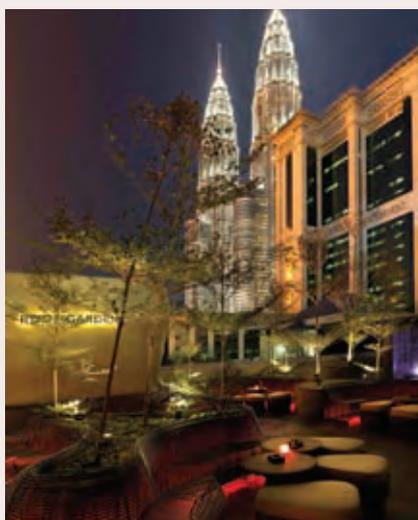
**EPP 8**

## Establishing Dedicated Entertainment Zones

As Kuala Lumpur attracts more visitors, a vibrant entertainment industry is an integral part of its livability, requiring the need for Dedicated Entertainment Zones (DEZ).

### Achievements

The Kuala Lumpur City Hall (DBKL) has agreed, on a case by case basis, to allow extended operating hours to premises that comply fully with the DEZ requirements. Applicants need to ensure that their premises fulfill sound-proofing requirements as defined by the local authority's building codes; adequate transport accessibility; and offer adequate private security to ensure public safety in the surrounding areas.



Dedicated Entertainment Zones will improve the vibrance of Kuala Lumpur

DEZs have been designated in non-residential areas only and must be located at least 100 metres away from any residential area and/or site of a house of worship.

In 2011, Zouk Club was established as a DEZ in Kuala Lumpur.

#### Moving Forward

The Ministry of Tourism will continue to facilitate discussions between potential entertainment premises and their respective local councils for the establishment of additional DEZs around the country.

## EPP 9a

## Developing Local Expertise and Better Regulating the Spa Industry

The spa industry in Malaysia has experienced rapid growth in the region for the last five years. However there is currently a shortage of local spa therapists and a need to better regulate the spa industry.

### Achievements

The Ministry of Tourism awarded the Centre of Excellence (COE) status to Energy Academy and Stella-In Beauty Academy in August and October 2011 respectively. These COEs will serve as training centres to produce locally trained therapists for the spa industry.

In July 2011, the National Spa Council was established to provide a platform for Government authorities and the spa industry to discuss and resolve issues pertaining to the industry. The Council comprises representatives from the private and public sectors as well as industry professionals within the country.

Since its establishment, the Council has developed an official accreditation criteria to rate spas. To date, 249 spas have been rated, of which 58 spas were given a four-star or five-star rating.



COEs serve as training centres to produce trained spa therapists

### Moving Forward

COEs will be focusing on producing local therapists for the spa industry in Malaysia. Steps will also be taken to improve the spa training syllabus for Levels 1 to 3 of the National Occupational Skills Standard (NOSS) for Spa Therapists.

## EPP 9b

## Golf Tourism

Golf tourism in Malaysia is relatively under-tapped. The sector is poised to grow through concerted efforts in enhancing product delivery to target the high yield segment. The strategy is to work closely with the private sector to develop and propel golf tourism.

### Achievements

The Malaysian Golf Tourism Association (MGTA) comprising members from golf club operators, tour operators and airlines, was formed in March 2011. The Association aims to develop and implement programs to boost the number of golfers visiting Malaysia. The association's website ([www.GolfTourismMalaysia.com](http://www.GolfTourismMalaysia.com)) features a listing of tourist-friendly golf clubs, resorts, tourist attractions, international events and latest golf updates.

Golf clubs in Malaysia with courses which are of high standard and equipped with well-maintained facilities are audited by the International Association of Golf Tour Operators (IAGTO) and those meeting the audit standards are classified as export-ready clubs. To date, the International Association of Golf Tour Operators (IAGTO) has certified 25 golf clubs in Malaysia as being tourist-friendly and export-ready. These clubs are being actively promoted by MGTA via international golf seminars, tour operators' familiarization visits as well as during international golf conventions. The IAGTO has also provided MGTA with the Golf Traveller™ tracking software, which is available to members of MGTA. This software will assist members to monitor the number of golfers coming to Malaysia.

### Moving Forward

The MGTA will continue to work with IAGTO to get more golf clubs in Malaysia to be certified as export-ready. Efforts will be stepped up to promote Malaysia as a major golfing destination. In this respect, promotions will leverage on the first IAGTO Asia Golf Tourism Convention that will be held in April 2012 at Kuala Lumpur to feature Malaysia's golf tourism offerings. About 127 golf tour operator companies from 39 countries will be participating in this event.



The Malaysian Golf Tourism Association was formed in March 2011

## EPP 10

## Establishing Malaysia as a Leading Business Tourism Destination

Business tourism being a high-yielding segment is an attractive prospect to develop. MyCEB was established to develop and position the country as the world's leading meetings, incentives, conventions and exhibitions (MICE) destination. Subvention funding has been provided to support the growth of business tourism in Malaysia.

### Achievements

The Government has allocated an annual contribution of RM50 million to MyCEB to grow business tourism, specifically, in the MICE arena. The funding will assist MyCEB's efforts in facilitating effective end-to-end business bidding which includes preparing the bid documents, supporting due diligence during the selection process, providing subsidies to defer costs during the event itself and finally, to support post event activities.



The Government has allocated RM50 million to MyCEB to grow the MICE business

In 2011, MyCEB succeeded in securing 49 events with an estimated 94,000 delegates, creating a projected economic impact of RM780 million. Among the events secured include the Seventh International Aids Society (IAS) HIV Conference in Pathogenesis, Treatment and Prevention 2013. Scheduled to take place in Kuala Lumpur in 2013, the conference is expected to attract over 6,000 delegates.

### Shell Sites

In August 2011, MyCEB signed a Memorandum of Understanding (MoU) with two shell sites, namely the Forest Research Institute of Malaysia (FRIM) and Central Market. These shell sites, with a capacity to hold 1,000 participants provide alternative venues which can be utilized to host business tourism events.

MyCEB launched the Industry Partners Programmes on 22 February 2011 as part of an initiative to grow the number of industry players that are proactive in the international business tourism market. Through this programme, MyCEB will provide cooperative sales and marketing opportunities, sales-led distribution, industry education and training, shared market intelligence and networking opportunities to companies who participate in this programme. To date, over a hundred industry players have signed up for the programme.

### Moving Forward

For 2012, MyCEB will continue its collaboration with business events organizers to identify and secure business events. MyCEB will also continue its efforts to identify other venues as new shell sites.

In addition to this, the *Kesatria 1Malaysia* Programme will also commence. The appointed *Kesatria* (industry champions) will assist in the promotion of Malaysia as a business events destination through his or her professional networks nationally and internationally. Apart from this, the *Kesatria* will also facilitate introductions between MyCEB and their professional networks and to present success stories on the benefits of hosting an international convention to their industry colleagues who may become potential future hosts.

This will assist Malaysia to bid for and attract international conventions that relate to the country's key economic growth sectors, thus enabling Malaysia to strengthen its international profile and engagement.

## EPP 11

## Enhancing Connectivity to Priority Medium-Haul Markets

For Malaysia, the medium haul market comprising China, Japan, Australia, India, Korea and Taiwan represents a source of high yielding tourists. These countries have both the critical population mass and economic strength to directly contribute towards the economy of Malaysia.

### Achievements

In June 2011, restrictions on almost all international destinations were lifted for Malaysian carriers. With this move, Malaysian carriers were able to launch additional flights to priority medium haul cities in China, Japan, Taiwan and Australia.

As of December 2011, there was an overall 11 per cent increase to 8,619 weekly seats capacity to these countries from Malaysian carriers. China saw the largest increase with an additional 3,000 weekly seats and Taiwan was second with an increase of 2,082 weekly seats.

Overall, international passenger traffic has increased by 11.4 per cent for the year of 2011.

### Moving Forward

The Ministry of Transport will continue to work with the industry to ensure that the medium haul market will be geared to cater for the increase in tourist arrivals leading up to 2020.

**EPP 12****Improving Rates, Mix and Quality of Hotels**

To improve the quality and mix of hotels in Malaysia catering for the projected increase in arrivals of high-yield tourists, there is a need for more four-star and five-star hotels. The Government has also approved several tax incentives to encourage investments in the high-end hotel industry.

**Achievements**

Under the 2012 budget announcement, the Ministry of Finance (MoF) has approved an Investment Tax Allowance and Pioneer Status for new hotels with a four-star and five-star rating. Hotels which are 100 per cent foreign-owned will also be eligible for these incentives.

In addition, MoF has also revised the equity conditions for eligibility to tax incentives to encourage more Malaysians to participate in hotels which have one-star and two-star ratings while the foreign equity conditions will be gradually liberalized for hotels which have a three-star rating.

Efforts under this EPP also saw significant commitment and investments from the following hotels:

**St. Regis Kuala Lumpur**

Located at Kuala Lumpur Sentral, St. Regis Kuala Lumpur involves a total development area of 1.4 million square feet, on a 2.2 acre site. The total investment is estimated at RM1.2 billion. The construction commenced in early 2011 and the hotel is expected to be operational by November 2014.



Artist's impression of the St. Regis

**Majestic Kuala Lumpur**

The Majestic Kuala Lumpur is located on a 3.2 acre site along Jalan Hishamuddin, Kuala Lumpur. The total investment in the luxury hotel is estimated at RM160 million. Currently under construction, the hotel is expected to be fully operational by December 2012.



Artist's impression of the Majestic Kuala Lumpur

**Gaya Island Resort**

Gaya Island Resort is located on Pulau Gaya, the largest of a cluster of five islands that form the Tunku Abdul Rahman Park in Sabah. The resort boasts a rainforest setting, bordered by a golden sandy beach, and surrounded by coral reefs. Total investment in this resort is RM80 million. The resort is currently under construction and expected to be operational by July 2012.



Artist's impression of Gaya Island Resort

**Moving Forward**

Efforts will be stepped up to focus on attracting more four-star and five-star hotels to be developed in the country.

# Business Opportunities

## Business Opportunity 1

### Food and Beverage Outlets

Business opportunities pertaining to food and beverage (F&B) outlets will increase with the progression of EPPs. For instance, the Johor Premium Outlets launched in December 2011 has a food court with 24 outlets.

The Pulau Gaya Resort will have two restaurants hiring an estimated 60 staff, and the Majestic Kuala Lumpur will have three F&B outlets with a projected 90 staff. In the future, the St Regis Kuala Lumpur will boast four F&B outlets offering approximately 190 additional jobs.

The launch of further EPP projects is expected to result in more of such instances and will be a key area of growth for the tourism sector.

## Business Opportunity 2

### Local Transportation

The targeted 150 per cent increase in tourist arrivals from 2010 to 2020 will fuel an increase in demand for taxis in the country. Currently, there are over 38,000 licensed budget and executive taxis. To improve taxi services, the Land Public Transport Commission (SPAD) will be implementing the Taxi Transformation Plan which takes into consideration the supply and demand for taxis as well as international best practices. This is expected to be implemented in stages between 2013 and 2014.

## Business Opportunity 3

### Tour Operator Segment

In 2011, there was a five per cent increase of tour operators registered with the Ministry of Tourism to 3,929. Besides the increase in tour related businesses, there was also a 19 per cent increase in tour guides comprising both city guides and nature guides to 9,532 in 2011. The number of city guides has increased from 6,182 in 2010 to 7,425 in 2011 while nature guides increased from 1,796 in 2010 to 2,107 in 2011.

# Enablers

## Increase and Focus Marketing

The need to increase engagement and focus on potential tourist markets via the Internet is ever increasing as more travelers conduct their research, bookings and updates online. The first phase is currently ongoing with the redevelopment of the Tourism Malaysia website which will feature content in multiple languages. A comprehensive online advertising programme will be rolled out to attract potential tourists to the Tourism Malaysia website, since December 2011.

Tourism Malaysia also carried out targeted campaigns to attract additional tourists from the medium haul market. These campaigns include:

- **Niche Product Package Development and Promotions**  
Targeted products to attract a particular segment of the tourism market to Malaysia such as weddings, golf holidays, cruises and beach excursions
- **Chartered Flight Promotions**  
To develop new destinations with no existing direct flights for example to Russia, India and secondary cities in China
- **Joint Promotions with Foreign Airlines and Tour Operators**  
Provide assistance to foreign carriers to cross-market and produce targeted advertising, and media and agents familiarization trips

## Rollout of Visa Facilitation Services

To enhance the delivery of Visa issuance in China, the Ministry of Tourism has set up 15 Visa Facilitation Service (VFS) Offices in Beijing, Shanghai, Chengdu, Guangzhou and Shenzhen. In India, five VFS offices were also set up in Mumbai, Delhi, Hyderabad, Chandigarh and Kolkata. As these two markets are projected to contribute significantly to Malaysia's tourist arrivals, the Ministry of Tourism will continue to expand its VFS offices in China and India in 2012.

## Ensure an Adequate Supply of Qualified Human Capital

The Ministry of Tourism has taken the lead in the training of nature guides together with the Ministry of Natural Resources and Environment and the Ministry of Education. This effort is being actively addressed under the Human Capital Development (HCD) Strategic Reform Initiative (SRI).

Two programmes under the HCD SRI initiative have been completed in 2011, the first being a Marine Nature Guides Course, held in Pulau Tioman in October 2011. The objective of this course is to enhance the income of the surrounding communities by giving them a stake in Tioman's tourism activities. Using a tailored module which is specially-suited to local island resorts, the Wild Life Department with assistance from the Tioman Development Authority (TDA) identified interested locals from Tioman Island to attend the course.

The second programme was a mini lab held in November 2011 to improve on the Continuing Tourism-Related Education (CTRE) courses on nature-based topics and develop specialized nature guide courses in the specific fields including island, marine, birds, caves and mountains.

## Improve the Tourism Environment

By leveraging on regular 'Police in Tourist Areas' initiatives, the safety of tourists was enhanced in 50 crime hotspots. This is an initiative under the Crime National Key Result Area (NKRA) which encompasses the states of Kuala Lumpur, Selangor, Johor Bahru and Penang.

To train and campaign for clean public areas, the Minister of Tourism Dato' Sri Dr. Ng Yen Yen launched the 1Malaysia Clean and Green campaign website ([www.1malaysiagreenandclean.com.my](http://www.1malaysiagreenandclean.com.my)), enabling visitors to bring to light the areas that need cleaning by posting photographs on this website.

## Summary of Tourism NKEA

	2020 Target
Incremental GNI Impact	RM66.7 billion
Additional jobs	497,000
<b>Critical targets for 2012</b> <ul style="list-style-type: none"> <li>• Coordinated promotional programme along the BB-KLCC area</li> <li>• Development of the second phase for Johor Premium Outlets</li> <li>• Physical commencement of the Integrated Resorts project in Sabah</li> <li>• Availability of preliminary cruise infrastructure and attractions</li> <li>• Implementation of the tracking mechanism for International Events</li> <li>• Setting up an additional Entertainment Zones</li> <li>• Setting up an additional Centre of Excellence to train spa therapists</li> <li>• Increase in numbers of bids won for MICE</li> <li>• Greater proportion of medium haul tourists into Malaysia</li> <li>• More investments in four-star and five-star hotels</li> </ul>	

## Giving Farmers a Chance in Batang Lupar

**T**an Anak Lining, a farmer from Rumah Luyuh, lives in one of the longhouses in Batang Lupar, and was initially skeptical when he heard about a project to modernise paddy farming in his area.

His first thoughts were, "Why change something that was already working? This is a government project? Are you sure? Talk is easy. If you are not serious, do not disturb the way we work. Our livelihood depends solely on paddy so please do not disappoint us."

The project within Entry Point Project 11 of the Agriculture National Key Economic Area is a collaboration between the Ministry of Modernization Agriculture Sarawak, Department of Agriculture Sarawak and BERNAS.

This project which began in September 2011 saw the participation of an adjacent block of 77.73 hectares of fields with 144 families from 11 long houses. In a bid to promote commercial-scale farming, some of the efforts to help the community include improving irrigation density and the use of equipment as well as planting methods to increase their yield.

"We are happy with our success so far. My neighbours and I have learnt about time and labour saving methods in paddy planting. Now we can increase the size of our farms and plan for other off-farm activities such as fisheries to increase our income," he said.

The farmers have begun to see the benefits of these new methods. With an increased income as a result of increased productivity, it is hoped that Tan and his friends will enjoy the fruits of their labour.

Tan is no longer cynical after seeing the rewards of his hard work and the implementation of this project. "Direct sowing is time and labour saving."



“  
**We are happy with our success so far. My neighbours and I have learnt about time and labour saving methods in paddy planting. Now we can increase the size of our farms and plan other off-farm activities such as fisheries to increase our income**

”



# Electrical and Electronics

**Dato' Sri Mustapa  
B. Mohamed**

Minister of International  
Trade and Industry



**The Electrical and Electronics Sector (E&E) has been a lynchpin of Malaysia's export-led economy for four decades, during which this sector powered the nation's transition from an agro-based to an industrial economy. The establishment of Free Trade Zones (FTZ) opened the gates for Foreign Direct Investment (FDI) and paved the way for multinational**

**corporations to base their operations in Malaysia. Today, global players such as Intel, First Solar, IBM, Dell, Sony, Samsung and Siemens call Malaysia home.**

For the sector to survive stiff competition from developed and emerging economies in East and Southeast Asia, and maintain its appeal to FDI, measures must be introduced to revitalise the sector and ensure its continued role as a key contributor to exports and the national economy. This is where the EPPs under this sector come in. I am confident that they will set the stage for us as a nation to meet our goals for 2020.

**Datuk Seri  
Dr Maximus Ongkili**

Minister of Science,  
Technology and  
Innovation



**The challenge to revitalise the E&E sector requires a two-pronged strategy. The manufacturing infrastructure of our country – both hard and soft infra – needs to be continually refined and advanced to meet the constant push for increased efficiency and operating costs required by high volume and low mix producers.**

Focus is also needed to accelerate the innovation capabilities of Malaysian E&E companies. Malaysia, with its limited human resources, must shift the balance of economic contributions away from labour-driven activities and move towards knowledge-driven work and innovation-driven activities. To this end, MOSTI and its agencies will increase efforts to assist local companies to increase their participation in high value-added EPPs like product development and other niche high-margin manufacturing services like testing and certification, within the NKEA strategy. My ministry will execute its critical role in enabling the achievement NKEA targets, and look forward to another great year ahead.

# Electrical and Electronics

The Electrical and Electronics (E&E) industry accounts for RM37 billion or six per cent of the Gross National Income (GNI), RM250 billion or 40 per cent of total exports and provides approximately 522,000 skilled and semi-skilled jobs

There are currently 1,900 active companies in this sector, spread across a diverse range of sub-sectors including the semiconductor and industrial electronic industries.

E&E has been instrumental in the development of the Northern Corridor (semiconductors and industrial electronics), Klang Valley (sophisticated services), Johor (logistics intensive E&E manufacturing) and Sarawak (developing cluster for silicon substrate manufacturing), contributing significantly to the socio-economic development of the relevant communities. Supplementing the impact of these industries are emerging sub-sectors such as solar photovoltaic technology (solar) and light emitting diodes (LEDs).

However, the E&E sector faces significant challenges in maintaining growth with

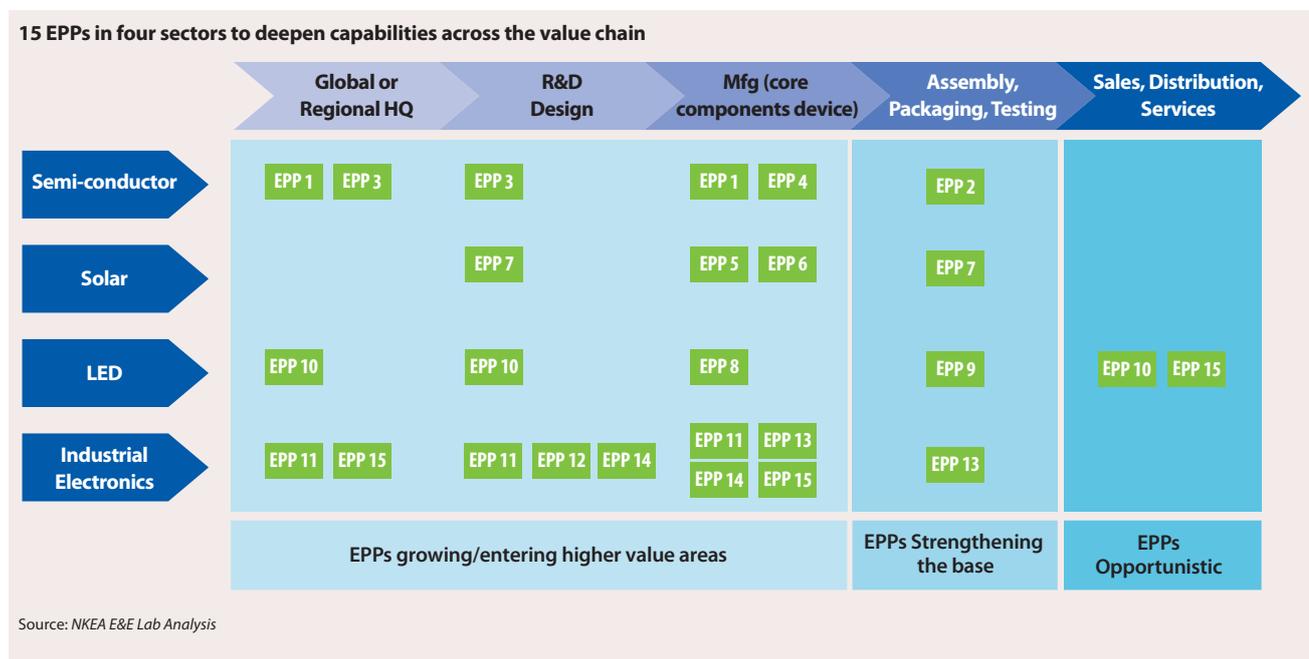
growing competition from China, Taiwan, Singapore and other Asian countries. Over the last 10 years, E&E's share of Malaysian exports has gradually declined. Of greater significance, however, is Malaysia's position in the value chain compared to our competitors. Malaysia's E&E sector remains focussed on assembly, the lower value-added part of the industry while countries like Taiwan, South Korea and Singapore have captured the higher value-added activities in research and development (R&D), design and manufacturing.

To overcome the sector's challenges, last year's Economic Transformation Programme (ETP) Lab outlined a programme that provides the necessary focus on four identified sub-sectors. These subsectors are integrated circuits, solar photovoltaics, light emitting diodes

and solid state lighting and integrated electronics. These sectors are selected based on the high potential to significantly contribute towards Malaysia's GNI targets, due to the presence of private investors with the necessary skills and expertise.

The E&E sector is also a diverse industry, offering products that have unique market characteristics and different global trends. This diversity has resulted in haphazard development strategies that focus on short-term goals rather than a structured long-term approach that sustains GNI growth from foreign and local players. As a result, there is a disproportionate allocation of attention and resources to established players, irrespective of their potential to contribute to sectorial growth for the long term and efforts to nurture local players in emerging segments are hampered.

Exhibit 7.1



## 2011 Key Performance Indicators

Exhibit 7.2

NKEA Electrical and Electronics		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Per cent completion of construction of 200mm wafer fab	100% by Dec 2011	100%	100%	●	100%	●	1.0	●
	Number of MoUs signed with local companies for vendor development program	1	1	100%	●	100%	●	1.0	●
EPP #2	Total number of Advance Packaging firms set-up	1	1	100%	●	100%	●	1.0	●
EPP #3	Total number of IC design firms set-up	10	5	50%	●	50%	●	0.0	●
	Fabless IC Design CoE by 2011 = 1 (MOSTI)	1	1	100%	●	100%	●	1.0	●
	Failure Analysis lab by 2011 = 1 (MOSTI)	1	100%	100%	●	100%	●	1.0	●
	Contactless testing lab by 2011 = 1 (MOSTI)	1	0%	0%	●	0%	●	0.0	●
EPP #4	Total number of Substrates manufacturer set-up	1	100%	100%	●	100%	●	1.0	●
	MOU signed with local supplier by 2011 = 2 (MITI)	2	2	100%	●	100%	●	1.0	●
EPP #5	Number of MoU signed with Silicon Substrate	1	1	100%	●	100%	●	1.0	●
	Percentage of completion of land acquisition	100% by June 2011	100%	100%	●	100%	●	1.0	●
	Percentage of completion of construction	30% by Dec 2011	30%	100%	●	100%	●	1.0	●
EPP #6	Solar cell production (GW)	1.05	4.01	382%	●	100%	●	1.0	●
EPP #7	Total number of Solar Module Plants set-up (additional companies)	2	2	100%	●	100%	●	1.0	●
	Total number of local companies engaged for vendor development program	2	2	100%	●	100%	●	1.0	●
EPP #8	Total number of LED Front-end companies set-up	1	90%	90%	●	90%	●	0.5	●
	Number of sites secured	1	1	100%	●	100%	●	1.0	●
EPP #9	Percentage increase of LED packaging growth capacity in Malaysia	15%	15%	100%	●	100%	●	1.0	●
EPP #10	Number of SSL companies which are able to penetrate the global market	2	3	150%	●	100%	●	1.0	●
EPP #11	Developmet of WSN, Complete PoC by 2011 = 100 per cent complete (MOSTI)	100%	100%	100%	●	100%	●	1.0	●

(more on next page)

(continued from previous page)

NKEA Electrical and Electronics		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #14	Completion of MOU and subsequently leading to formation of JV between the parties involved in setting up the High Power Test Lab.	Dec-11	21-02-2011 signed MoU. Pending JV	100%	●	100%	●	1.0	●
				<b>108%</b>		<b>92%</b>		<b>88%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

### Executing a Smart Follower Strategy for Mature Technology Fabrication

As leading-edge business is capital intensive, there is currently a focus on fabrication using matured technology. However, smaller companies that focus on selected niche technologies (e.g. analogue, power) and use mature technology (defined as 90 nanometre or larger transistor feature size) are able to earn attractive returns. Apart from the most demanding logic, memory, graphics and field-programmable gate array applications, mature technology fabrication are competitive in a wide range of applications, accounting for 65 per cent of worldwide semiconductor revenue.

Refurbished equipment also provides an opportunity to provide a fabrication machine at a significantly lower cost. A mature technology fabrication using refurbished equipment can be built for an estimated cost of only RM1.8 billion, compared to RM11 to 18 billion for a leading-edge fabrication. The closure of fabrications in high-cost countries provides an opportunity to acquire refurbished fabrication assets at a low cost. Refurbished equipment currently accounts for about 11 per cent of equipment sales and the global growth rate of sales for refurbished equipment is expected to be 18 per cent per annum.

#### Achievements

The Malaysian Investment Development Authority (MIDA) has successfully relocated QT Hightech, an equipment refurbishment company, to Malaysia with the support from the Northern Corridor Implementation Authority (NCIA). QT Hightech Malaysia has decided to set up the QT Training Centre, a wafer fabrication equipment refurbishment and process training centre in Kulim High Tech Park. The centre aims to train a total of 2,500 skilled workers through programmes provided at their facilities. QT Hightech Malaysia will be investing RM100 million and creating 75 technical staff for the training centre at Kulim High Tech Park construction of its three-storey office and two-storey factory building was at 75 per cent completion at the end of 2011.

#### Moving Forward

The Government intends to leverage on the investment by QT Hightech as an enabler to attract fabrications refurbishment companies to set up or expand their production capacity using both QT Hightech's equipment refurbishment and training facilities. The goal is to bring in by the end of 2012 one new wafer fabrication company and approve one wafer fabrication expansion project.

## EPP 2

### Developing Assembly and Test Using Advanced Packaging Technology

The nation's long-established base for semiconductor assembly and test operations provide a ready platform for migration to higher value-added activities. In particular, advanced packaging services such as bumping or wafer-level packaging are a natural progression up the value chain. Currently, there are insufficient companies engaged in such operations to meet the growing domestic demand. By attracting foreign players and at the same time nurturing potential local firms, Malaysia can develop a hub for advanced packaging services to not only serve the local market but also increase exports to regional as well as global markets.

#### Achievements

Infineon Technologies (M) Sdn Bhd, announced its plan to invest RM480 million to upgrade its manufacturing facilities and expand its production capacity while also extending the scope of its research and development (R&D). Based in Melaka, the German multinational corporation assembles and tests discrete

semiconductors, power semiconductors, logic integrated circuits (ICs) and sensor products. The investment is aimed at increasing Infineon Technologies' capacity to produce power semiconductors for energy efficiency applications. The company currently employs almost 7,000 workers.

#### Moving Forward

The Government intends to leverage on the investment by Infineon Technologies' as a catalyst to attract other companies to set up advanced packaging services here. The goal is to bring in by the end of 2012 three service providers that can collectively contribute a total GNI of RM1.3 billion and create 1,300 jobs by 2020. Towards this end, the Northern Corridor Implementation Authority (NCIA) with the support of the Malaysian Investment Development Authority (MIDA) will continue to offer incentives such as Pioneer Status and Investment Tax Allowance to external as well as existing semiconductor assembly and test companies in Malaysia.

**EPP 3**

# Developing Integrated Circuit Design Firms

Integrated Circuit (IC) design companies are ideal test beds to produce highly-skilled human capital as they require knowledge workers with the inventiveness to create intellectual property. Malaysia has only achieved moderate success in this field, with a mere 15 active IC design firms comprising a blend of multinational and domestic companies before 2011. Nevertheless, the success of existing IC design facilities like Intel's Penang Design Centre has set the stage for others to follow in their footsteps.

The goal of this EPP is to add another 50 IC design companies beyond the present number. Batu Kawan in Penang has been designated as a hub for high value E&E including IC design services.

## Achievements

Five out of the original 2011 target of 10 IC design firms have been set up. Additionally, an IC Design Centre of Excellence has been completed on schedule while the Failure Analysis Lab is estimated at 65 per cent completion. However, the 2011 target for a Contactless Testing Lab, eg. Penang Skills Development Centre's (PSDC) EMC lab, to achieve international accreditation was only obtained in early January 2012. Additional resources will be invested to assist PSDC to increase the reach and effectiveness of the EMC Lab, which was funded by an initial Economic Planning Unit (EPU) grant. This service offered by this lab will further strengthen efforts to grow the high value-added design and development cluster.

Exhibit 7.3

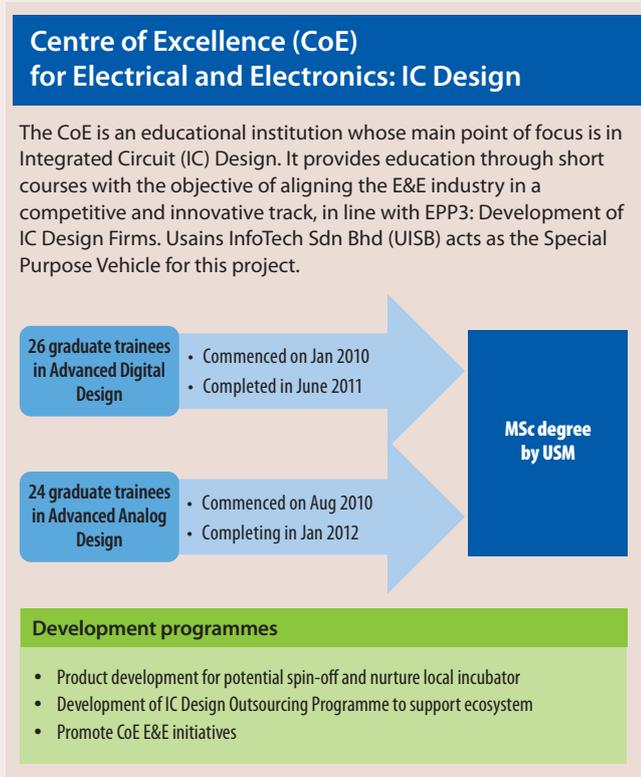
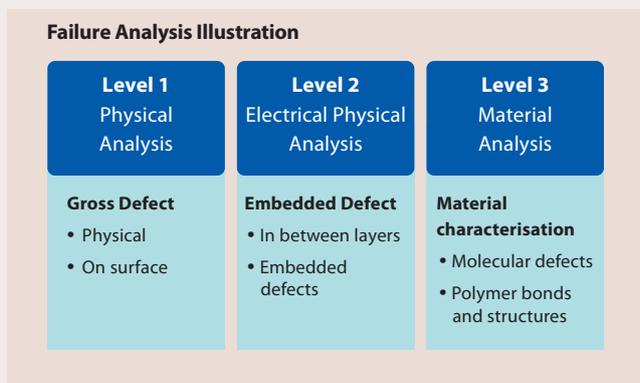


Exhibit 7.4



## Moving Forward

A concerted effort will be made in 2012 to address the shortfall in meeting this year's KPI targets. Specifically, the lead (MIDA) and supporting agencies (NCIA, EPU, MDeC, Silterra and the fabrication consortium) for this EPP will intensify the drive to attract multinational corporations and grow local players at the originally-proposed rate of 10 per year for a total of 50 by 2015.

The agencies will continue to identify and encourage potential IC design companies to set up in Malaysia with the value proposition of proximity to fabrication facilities. MIDA will seek to entice potential firms with pre-approved incentives with particular focus on filling the niche for smaller design firms. Such incentives seek to encourage multinationals to outsource their IC design to domestic firms. Meanwhile, the EPU will increase financial support to skills development centres to develop human capital in IC design. To support the emergence of aspiring local companies, NCIA is putting in place several measures to lower the start-up costs for home-grown firms. These include the provision of a prototyping lab, a test lab for certification and standards, and the requisite electronic design automation tools on a sharing and pay-per-use basis.

**EPP 4**

## Supporting the Growth of Substrate Manufacturers and Related Industries

Malaysia is already a manufacturing location for leading wafer substrate manufacturers Shin Etsu and MEMC, which are number one and four in the world market share respectively. The growth of the core semiconductor value chain as well as adjacent industries such as equipment and epitaxy manufacturers will increase Malaysia's attractiveness as a site for substrate manufacturers.

### Achievements

MIDA will lead this EPP and target to bring in at least two more wafer substrate manufacturers to Malaysia. NCI with the support from MIDA and PEMANDU have facilitated the substrates production expansion of a Local Advance Silicone Polymer manufacturer to kick start volume production for fine silicones and hybrids. The aim is to develop a high tech cluster of local formulation companies based on the manufacturer's upstream advanced silicones and hybrids. In addition to this, this EPP also plans to ramp up volume and further intellectual property (IP) development immediately into the manufacturer's synthesis facility to accelerate installing of sufficient volume of fine silicones and hybrids by leveraging on the company's existing intellectual property.

### Moving Forward

There are plans in the pipeline to further improve the investment environment in Sarawak. For example, the Regional Corridor Development Authority (RECODA) will expedite approvals for new substrate projects and reduce the process duration to maximum of two months.

MIDA will launch a targeted promotion to substrate manufacturers and other related industries to set up in Malaysia. The Ministry of Science, Technology and Innovation (MOSTI) will provide technical advice and support in R&D, technology platform and innovation. It will also identify basic research areas with universities and applied research areas with local and international research institutions.

Sarawak is a suitable site for silicon wafer substrate manufacturing due to the availability of high quality silica and low-cost power. The target is to set-up one substrate plant in Sarawak by 2012 and a second plant by 2014.

**EPP 5**

## Increasing the Number of Silicon Producers

Manufacturers of solar silicon ingots require a steady supply of high-grade silica and large amounts of reliable energy provided at reasonable price to process raw silica. Sarawak is an ideal location for this as it has a source of high-grade silica and offers renewable energy (e.g. hydropower) at attractive rates with guaranteed reliability. Tokuyama is constructing a solar silicon wafer manufacturing plant at the Samalaju Park in Sarawak to take advantage of the low cost of power.

### Achievements

MIDA, with the help of other government agencies, has attracted one selected major company to set up operations in Malaysia and to increase the amount of silicon produced in Malaysia from six kilo tonnes today to around 170 kilo tonnes in 2020. Malaysia will also develop two domestic silicon companies.

MIDA has started the process of attracting silicon producers at the beginning of 2011. To take the first company as an example, the process would begin in January 2011 and the plant would start operations in January 2014. The targets for the domestic champions are to have the first plant in operation by October 2012 and the second plant by December 2014.

### Moving Forward

To jumpstart the substrate industry in Sarawak, a domestic champion for substrate manufacturing will be created in the form of a joint venture with a leading international company to provide access to the technology. MIDA will promote Sarawak overseas as a site for silicon producers and solar glass, providing incentives (tax incentive, power rebates) to new silicon producers with pioneer status. MOSTI will provide technical advice and support in solar substrate R&D, technology platform and innovation. It will also identify basic research areas with universities and applied research areas in collaboration with local and international research institutions. Furthermore the Government will invest in making Miri and Bintulu into attractive and liveable cities. As the nearest towns to Samalaju industrial park, Miri and Bintulu are important to Sarawak's solar initiative, but their current conditions do not attract talent to work there.

To address the power needs of the industry, priority will be allocated for hydroelectric power to the solar industry rather than other energy intensive industries like aluminium and steel.

## EPP 6

## Growing Wafer and Cell Producers

Malaysia needs to increase its production capacity by 10-fold to reach its goal of becoming the world's second largest producer of solar cells. The target set for 2020 is a solar capacity of 23 gigawatts (GW) from the current 2.3GW. The fabrication of silicon wafers and photosensitive cells are the intermediate processes along the production chain from silicon feedstock to solar modules. The nation already has in place an attractive environment to attract multinational solar companies to our shores. This includes an established semiconductor industry with a value chain similar to that of solar cells. The Northern Corridor housing the semiconductor clusters is ideal for solar wafer and cell manufacturers with a ready supply of silicon coming from Sarawak.

## Achievements

The achievements for total cell production capacity for 2011 was 2.03GW installed capacity, which is 193% of the 2011 target of 1.05GW. Additionally, AUO Sunpower announced the construction of a new facility in Melaka capable of generating more than 1,400 megawatts of high-efficiency solar cells annually by 2013. The joint venture between Malaysia's Sunpower and Taiwan's AU Optronics designs, manufactures and delivers the most powerful solar cells in the world for use in virtually every sector of the economy.

## Moving Forward

To achieve the 10-fold increase in solar cell production, MIDA has set a target of bringing in at least one company every year for the next 10 years, with the capacity to produce a cumulative 2GW of wafers and cells. The lead agency for this EPP is offering pioneer-status incentives to prospective wafer and cell producers. Supporting MIDA's efforts on this score is MOSTI, which is establishing a shared solar test centre that can provide product certification so as to lower start-up costs for individual manufacturers.

Additionally, MOSTI will also establish a solar R&D lab and IP centre to research thin film and crystalline solar technology. Meanwhile, the Standards and Industrial Research Institute of Malaysia (SIRIM) is working to establish national standards for solar products to ensure safety and enhance the competitiveness of Malaysian products in the international markets. On their part, the PSDC and Selangor Human Resource Develop Centre (SHRDC) are collaborating with the private sector to introduce courses or modules in solar wafer and cell manufacturing to fulfil the human capital requirements.

## EPP 7

## Increasing Solar Module Producers

The availability of the Senai Airport and Tanjung Pelepas Seaport as well as proximity to Singapore's Changi International Airport makes Johor an ideal location for module manufacturers targeting the markets of Southeast Asia, China, India and Australia. Malaysia's attractive ecosystem can ensure the capture of a significant share of the modules market bearing in mind that demand is set to skyrocket in 2020 when all major Asian economies reach grid parity. This EPP has a target of bringing in two multinational module manufacturers and facilitating another five joint ventures.

## Achievements

The achievements for 2011 were highly encouraging with two local companies successfully engaged in a Vendor Development Programme and one company out of the targeted two commencing production of solar modules.

## Moving Forward

MIDA is working with the Iskandar Regional Development Authority (IRDA) to promote Johor as a hub for module production by offering pioneer status incentives to potential investors. One of the measures taken is to attract glass producers to Johor to complete the supply chain for solar module production. Glass is required to produce thin film solar modules. In the meantime, MOSTI is approaching universities

to provide technical advice and support in solar module R&D, technology platform and innovation for local small and medium enterprises (SMEs).

Additionally, the Government is pursuing possible collaboration with neighbouring Singapore to attract solar investments spanning both Malaysia's southernmost state and the island nation.



Glass is required to produce thin film solar modules

## EPP 8

## Developing LED Front-end Operations

For Malaysia to capitalise on its position in the global solid state lighting (SSL) market, it needs to further develop the cluster by filling in missing gaps and investing in its strengths. By bringing in the missing higher value parts of the value chain (front end) and providing the right environment for designers of SSL products, we can make Malaysia the world's preferred location for SSL companies.

### Achievements

MIDA has reported a six per cent growth in Malaysia's front-end light emitting diodes (LED) manufacturers' installed capacity. We need to continue to grow LED wafer fabrication production in Malaysia. There is already one wafer fabrication plant for LEDs, but more is needed to fully develop this part of the cluster.

### Moving Forward

MIDA will aggressively target front-end materials and substrate suppliers and epitaxy manufacturers (e.g. Dow Corning, Hysol) to bring one of each into Malaysia by 2014. At the same time, MIDA will attract at least one new global company to set up wafer fabrication operations here by 2015. MIDA will increase financial support and incentives (e.g. R&D and training grants, revolving loans) for

the expansion of LED companies already in Malaysia (e.g. Phillips Lumileds, Nichia). Local contract manufacturers (e.g. Globetronics) will be assisted by MITI and Malaysia External Trade Development Corporation (MATRADE) in reaching out to foreign lighting companies with the intent of helping local manufacturers gain a larger share of the LED outsourcing market. The objective is to help Malaysia grow its LED packaging market share by at least 15 per cent annually for the next 10 years.

Based on industry feedback, tariffs imposed on LED products exported to China are impeding the growth of Malaysia's LED industry. Reviewing the ASEAN-China Free Trade Agreement, Malaysia will negotiate to remove tariffs on all LED products exported to China to improve access for local manufacturers into the Chinese market.

This EPP also targets to have one substrate manufacturer and one epitaxy manufacturer open plants in Malaysia by 2014 and at least one wafer fabrication plant by 2015 while growing packaging by 15 per cent annually. MOSTI will provide technical advice and support in R&D, technology and innovation.

## EPP 9

## Expanding LED Packaging and Equipment

The aim of this EPP is to grow the packaging and application design landscape organically as well as invite the remaining lighting multinationals that are not yet in Malaysia to begin operations here. New local companies are expected to be developed in order to meet the demand of niche services required by the industry.

### Achievements

Philips Lumileds Lighting has announced the setting up of a new LED manufacturing facility in Bayan Lepas, Penang. The state-of-the-art facility will include an R&D centre as well as a design centre, which will help position the company for growth in LED lighting. This facility is slated to be the first in Malaysia to be designed with 100 per cent LED lighting and will significantly help to reduce its carbon footprint and energy consumption.

Additionally, Hong Leong Manufacturing Group (HLMG) has acquired a strategic share in DSEM Holdings Sdn Bhd, which will allow DSEM to rise from a contract manufacturer to become a company with



EPP 9 aims to grow the packaging and application design landscape organically

its own brand, allowing it to compete directly in the global SSL market. The venture is expected to create high-value jobs, especially in product development, business development and materials engineering. This will also enhance manufacturing spin-offs to local suppliers.

### Moving Forward

As three of the largest global players are already based in Malaysia, MIDA will encourage them to expand their existing services by providing them with the necessary incentives and also continue to attract new investments in this area.

## EPP 10

## Creating Local Solid State Lighting Champions

Malaysia has the potential to become a global leader and hub for solid state lighting (SSL), which is a sub-segment of the larger lighting market. Currently, four of the largest global SSL companies either operate in or contract a significant portion of work to companies in Malaysia. These companies require encouragement and assistance to make their presence felt on the global lighting market. One key aspect that will help boost the sales of Malaysian-made SSL products is the setting up of a certification system that will verify compliance to global standards as well as help to increase global awareness of these products. The target for 2020 is to grow five SSL companies into global champions in technology and manufacturing as well as to develop a certification lab for LED products to ensure compliance to local and international standards.

### Achievements

This EPP has exceeded its 2011 KPI by having three SSL companies break into the global market instead of the targeted two firms.

Additionally, the first-of-its-kind LED-SSL Certification Centre outside of the US was set up in Penang this year. A local company also announced plans to expand its production facility to meet the needs of the domestic market as well as regional markets.

### LED-SSL Certification Centre

Developed jointly by NCIA and QAV Technologies Sdn Bhd (QAV), the LED-SSL Certification Centre in Penang is equipped to perform testing in accordance with the standards of the American National Standards Institute (ANSI). The centre, an enabler for this EPP, serves as a platform to verify the compliance of Malaysian products compared to global standards as well as to help local companies develop their test and certification procedures. This will enable local companies to capture customers from not only within Malaysia, but also from Asia, USA and Europe. The testing and certification facility for LM79 and LM80 have been in operation since 1 April 2011.

Standards Malaysia is working with the SSL-LED Cluster Working Group to draft the Malaysian Standards (MS) for LED

and SSL, members of the working group includes, SIRIM, The Electrical and Electronics Association of Malaysia, Federation of Manufacturers Malaysia, QAV Technologies Sdn Bhd, SILQ, Philips Lumileds, AVARGO, SIRIM QAS, Institution of Engineering Malaysia, Globetronics, ItraMAS, Megalux, Nexus, SITECO, PCO LITE ELECTRICAL, Novabrite, PSL, Public Works Department and the Lightings Technical Committee of Malaysia. The MS will help to increase and maintain the quality of local products to enable these products to penetrate the international markets, as well as serve as a tool to limit the import of inferior products into Malaysia.

### Local Assembly and Manufacturer for Light Emitting Diodes and Solid State Lighting (LED/SSL)

Avialite Sdn Bhd is a fully Malaysian-owned manufacturer of LED Aviation Warning Lights which is manufactured to international process quality standards (ISO9001:2008) and towards ROHS compliance for a greener sustainable future. Avialite was recognised and awarded Pioneer Status for the product by MIDA, for being the first homegrown manufacturer in the field of aviation lighting technology using LEDs.

### Moving Forward

By leveraging on the LED-SSL Certification Centre in Penang as well as the MS for LED and SSL, it is hoped that local companies can gain deeper inroads into the global lighting market. Standards Malaysia will adopt and use the LED/SSL MS before the end of 2012, to ensure that a standard on LED/SSL is in place as a safety and quality benchmark for the local market. The target of growing one local company annually to become globally recognised will be continued unabated until 2016. The government will continue to approve working visas for foreign talent involved in SSL (e.g. engineers and designers) to ensure that there is no shortage of such expertise. The Ministry of Higher Education along with the local skills development centres will develop local talent with SSL skills sets to meet the rising demand.



A range of AVIALITE's aviation warning lighting products



## EPP 11 Building a Test and Measurement Hub

Malaysia has a strong opportunity to establish itself in the electronics test and measurement field based on its established foundation. Agilent, which has close to 30 per cent of the global market share in electronics measurement, produces the bulk of these equipments in Penang.

The presence of numerous local suppliers that support Agilent in Malaysia has created an ecosystem that in turn attracts other test and measurement companies, e.g. National Instruments. It should be noted that test and measurement knowledge is seen as a key enabler for other sub-sectors within the electronics industry. As such, enhancement of this knowledge can help accelerate the expansion of the electronic industry as a whole.

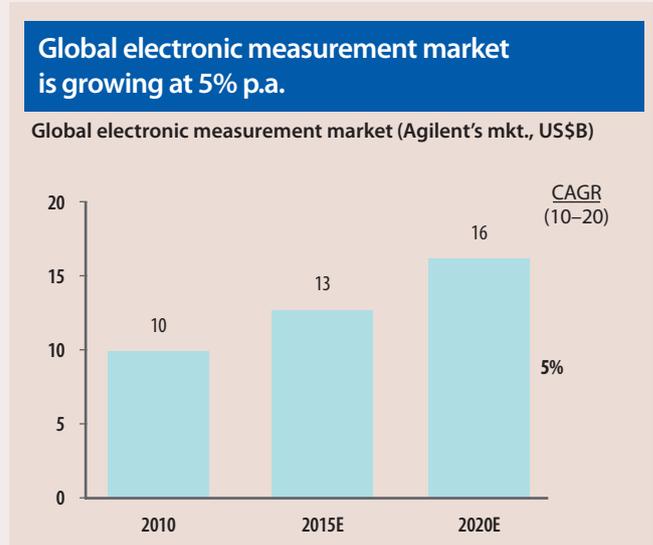
### Achievements

Agilent, working in tandem with the NCIA, will host the Power Source Solutions Lab and Audio and Signal Analysis Solutions Lab (including Design Validation). These labs will help local design partners to offer more than just product design and development; it will enable them to move up the value chain into areas such as IP creation, manufacturing, market access and customer and application specification, and eventually, production of their own products.

### Moving Forward

Leading test and measurement multinationals such as Rohde and Schwarz, Fluke, Keithley and Tektronix will be enticed to set up operations in Malaysia by leveraging on the presence of Agilent and National Instruments. Related industries such as bioanalytics will also be targeted. The Northern Corridor will continue to provide the necessary incentives and support to these

Exhibit 7.5



companies as well as other multinationals companies (MNCs) that can leverage on Malaysia's test and measurement competency and capability. Local design houses that service the test and measurements MNCs will also be incentivised accordingly.

With the above measures, Malaysia hopes to attract an additional 30 per cent more in investments in test and measurements from MNCs and to have more local test and measurements design partners.

## EPP 12 Expanding Wireless Communication and Radio Frequency Identification (RFID)

Motorola designs and manufactures a substantial proportion of its two-way subscriber radio products in Penang. These products serve the critical communications needs of global customers. Similar to the strategy articulated for test and measurement, together with support from the Government, Motorola's presence can become a strong base for growing local outsource design partners and Malaysia based original design manufacturers and eventually building a complete wireless communication ecosystem. The competencies developed from more than 30 years of design and development work by Malaysian engineers in designing sophisticated products provide a core to grow local design houses. However, the cost of entry into design work for wireless communications is prohibitively high, and action needs to be taken, both by the private sector and the Government, to jump-start this industry.

Radio frequency identification (RFID) uses radio waves to identify people or objects, with applications in contactless payment, asset management, trusted identification (ID) and document tracking. The current global market size (2009) for RFID is RM19.9 billion and is expected to grow to RM54 billion in 2020.

The strategy is to grow RFID in Malaysia by supporting the growth of local companies. The Malaysian Communications and Multimedia Commission (MCMC) is the lead agency for developing the RFID industry. The Government has already taken steps to support the growth of the RFID industry including establishing an RFID Centre of Excellence, supporting international RFID standards and creating a National RFID Roadmap.

(more on next page)

**EPP 12** (continued from previous page)**Achievements**

We target to complete User Acceptance Test on the Proof-of-Concept (POC) on applications of Wireless Sensor Networks (WSN) in precision agriculture at three sites (Sabah, Terengganu and Penang) in Malaysia.

Smartag Solutions Berhad was given the approval to set up the Security and Trade Facilitation System, which entails the setting up of RFID infrastructure to provide security and automation of paperless Royal Malaysian Customs checkpoints throughout Malaysia. Under this project, containers entering, leaving, and moving within the country will be tracked under the RFID system based on ISO18186:2010 and GS1 EPCglobal EPCIS standards. The reusable RFID Seal affixed to containers are scanned by RFID readers set up at locations to retrieve the container information. The RFID tags will be manufactured in accordance with standards set by the Malaysian Communications and Multimedia Commission (MCMC). ISO18186:2010 and GS1 EPCglobal EPCIS standards were co-developed by Smartag Solutions Berhad with the Chinese government. The application of the devices and standards can be applied in many areas.



Smartag's Security and Trade Facilitation System reader

**Moving Forward**

For wireless communications, NCIA will establish a two-way radio shared service lab for local design firms. This will reduce their start-up costs and make Malaysia more attractive as a site for wireless communication design and outsourced services. The Government with the support from NCIA will also establish an Innoplex design centre, a facility for shared design services and local design houses. Public or private funding can be in the form of a build-and-lease arrangement.

RFID needs to be enabled in logistics and transportation industry. MCMC is working with Customs to develop RFID as a tool to facilitate trade between free trade zones, free industrial zones, bonded zones and transit container yards. A proof of concept has been deployed at the Johor port, and there are plans to roll-out to other ports in Malaysia. The success of this initiative will require close coordination among government departments, and the relevant agencies (MCMC, Customs, Immigration) will work together to implement this.

MCMC and MIDA will organise promotional activities and awareness campaigns for end-users (consumers, Government bodies and business) on the advantages of RFID. They will also promote the Multimedia Super Corridor MSC Status and selected areas as key testing and commercialisation trial sites to RFID companies. MCMC will work with GS1 Global, which designs and implements global standards to make Malaysia the Asia centre of excellence for the electronic product code global RFID and electronic product code information service initiatives. MATRADE, MDeC and MCMC will support and encourage local RFID companies in government procurement and through Malaysian trade missions and embassies. The e-halal project will require global acceptance of Malaysia's halal certification. JAKIM will promote and negotiate the acceptance of Malaysia's halal certification worldwide.

## EPP 13 Growing Automation Equipment Manufacturing

Automation equipment refers to equipment used to automate processes, for example, manufacturing plant automation equipment. This includes complex equipment such as robotics. However, most vendors only assemble automation equipment – and not manufacture its core components – in Malaysia. Given the presence of these MNCs, the natural next step is for Malaysia to build new capabilities as an automation equipment manufacturing site. MIDA takes the lead on this project.

### Achievements

To hasten the momentum of this industry transition, the Government of Malaysia invested in a Centre of Excellence for Machinery and Engineering Services via the NCIA, and assisted by the MIDA and the Federation of Malaysian Manufacturers. This facility will provide design and development services for local machinery and engineering players to reduce entry barriers into new markets.

### Moving Forward

The Centre of Excellence for Machinery and Engineering Services is expected to be operational at the NCIA Technology Design Centre (NTDC) by Q1 2012. To leverage on this important enabler, MIDA is leading the effort to create the national Machinery and Engineering Hub to consolidate the numerous small companies in Malaysia into a more potent global force. This project was initiated in the last quarter of 2011 and its three-year implementation plans are being developed with a view towards final completion in the first half of 2012.

## EPP 14 Building Transmission and Distribution Companies

Production of electricity transmission and distribution equipment such as switch gears, transformers and cables are primarily produced in Europe or Japan due to the high production costs involved. Malaysia intends to make inroads into this sub-segment by growing local players as well as attracting multinationals to set up manufacturing activities here. The ultimate goal is to develop a cluster of transmission and distribution manufacturers in the country.

Currently, most transmission and distribution products are certified by accredited short circuit testing liaison labs based in Europe. As a result, manufacturers are compelled to conduct prototyping and testing in Europe, bearing the high costs as a consequence. The presence of a high-voltage test lab in Malaysia would make for an attractive site for transmission and distribution manufacturing since the cost of new product development and turnaround time would be significantly reduced.

### Achievements

The EPP is halfway to achieving its target for 2011 following the signing of a Memorandum of Understanding (MoU) for the setting up of a high voltage power lab. The local partner is currently finalising the joint venture (JV) agreement with the foreign investor.

Toshiba Corporation announced in 2011 its plans to develop and position Toshiba Transmission and Distribution Systems Asia (TTDA) in Malaysia as its global supply chain hub, regional full turnkey (FTK) centre and R&D centre for its Transmission and Distribution (T&D) business.

### Moving Forward

The JV with an STL accredited lab will allow the local lab based in Malaysia to be recognised as an accredited member. The lab will be operational by end 2012 and will produce 10 local test specialists within a two-year period.

In the meantime, MIDA will continue to promote Malaysia as a manufacturing hub to key transmission and distribution equipment manufacturers by providing the necessary incentives such as Pioneer Status and Operational Headquarters incentives. In addition to this, MNCs established locally are encouraged to bring in more high value production as well as R&D work into Malaysia.

**EPP 15**

# Building an Electrical Home Appliance Manufacturing Hub and International Distribution Network

Malaysia is home to a number of local home appliance companies that have manufacturing expertise and a local market presence. Pensonic, the largest of them, plans to expand by merging or acquiring smaller scale home appliance companies to build a strong international distribution network.

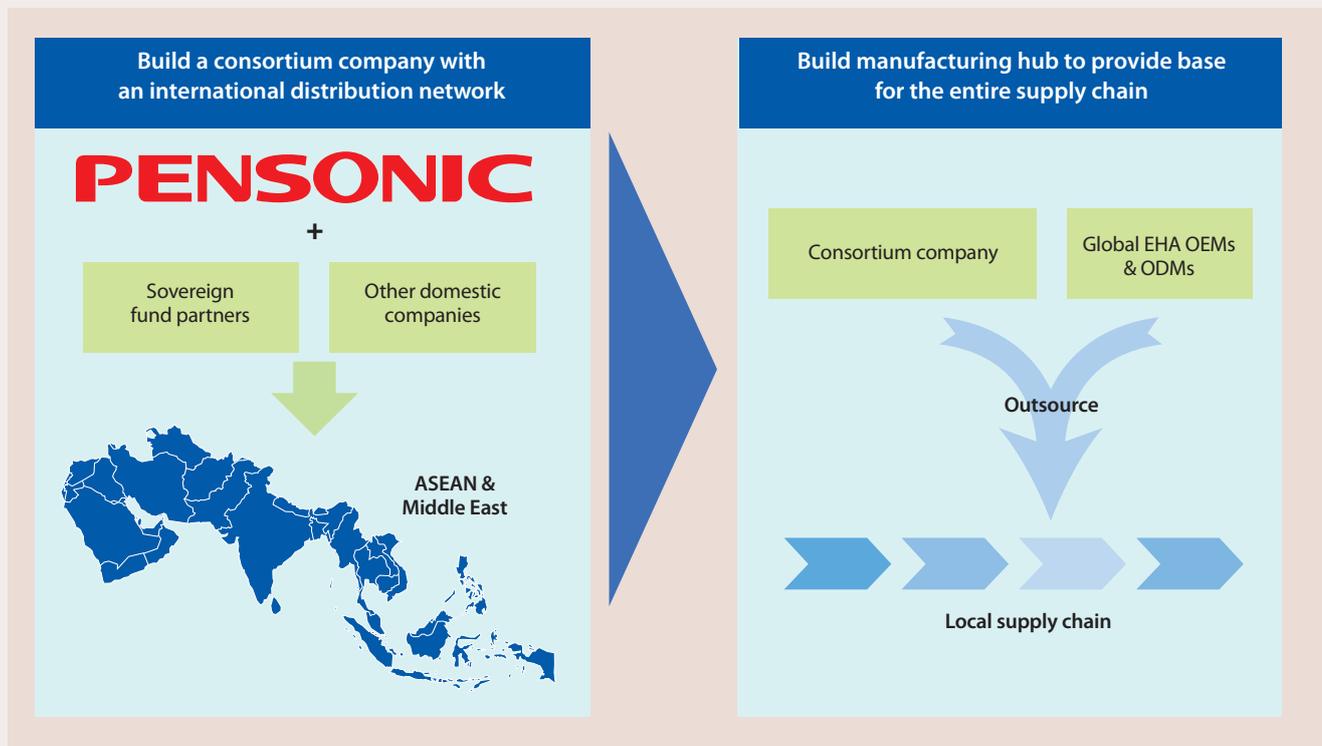
This will enable the company to exploit the lucrative ASEAN and Middle East markets. The increase in sales is expected to have a positive impact on the SMEs that are part of the supply chain. Opportunities in original equipment manufacturing (OEM) and original design manufacturing (ODM) will also be explored as top Asian and European electrical appliance brands are actively

looking for outsourcing partners outside China. One other key initiative of this EPP is the setting up of a manufacturing hub to host the entire supply chain. This will help to support the surge in sales to both the local and new international markets.

## Achievements

MIDA has put together an assistance package for Pensonic and the company is currently carrying out fundraising activities with sovereign fund partners. Land acquisition and hiring of staff are underway as part of the expansion exercise which will result in a manufacturing hub, international distribution network of electrical home appliances (EHA) and an international distribution network.

Exhibit 7.6



## Moving Forward

Pensonic, via mergers and/or acquisitions, will build a consortium with a strong international distribution network. It will also put in place a strong human resources development programme and ensure that the local SME suppliers are able to meet the expected demand. The proposed consortium is expected to hit annual sales of RM2.2 billion and to source 50 per cent of its requirements locally by 2020.

# Business Opportunities

As stipulated in the Roadmap, there are four Business Opportunities outlined under this NKEA:

Business Opportunity 1 : **Semiconductors**

Business Opportunity 2 : **Solar**

Business Opportunity 3 : **Light Emitting Diodes**

Business Opportunity 4 : **Industrial Electronics**

To date, the MITI and MOSTI have yet to transform the Business Opportunities into EPPs as the focus for the first year was on the successful implementation of the EPPs.

# Enablers

Four cross-cutting common enablers were also listed as critical enablers to the Electrical and Electronics NKEA - Northern Corridor, Klang Valley, Johor, Sabah and Sarawak. In the last quarter of 2011, PEMANDU held a three-month long Cities and Corridors Lab together with the corridor authorities such as IRDA and NCIA as well as various stakeholders in the area. The common enablers under this NKEA were addressed in these labs, of which the three-feet programmes will be announced in 2012.

## Summary of Electrical and Electronics NKEA

	2020 Target
Incremental GNI Impact	RM53.4 billion
Additional jobs	157,000
<b>Critical targets for 2012</b> <ul style="list-style-type: none"> <li>• Drive the setting-up of Failure Analysis Lab – To complete level 2 Failure Analysis - Embedded Defects Failure Analysis</li> <li>• Executing a smart follower strategy for Wafer fabrication                             <ul style="list-style-type: none"> <li>– Percentage of completion of 1 new plant – 30 per cent</li> <li>– Percentage completion of 1 expansion – 100 per cent</li> </ul> </li> <li>• Developing assembly and test using advanced packaging technology                             <ul style="list-style-type: none"> <li>– Number of R&amp;D Centre for Advance Packaging implemented – 2</li> <li>– Complete installation of (Silver/Gold) bumping line – 100 per cent</li> </ul> </li> <li>• Developing Integrated Circuits (IC) design firms                             <ul style="list-style-type: none"> <li>– Additional IC design firms (Approved) – 10</li> <li>– Additional IC design firms (Implemented) – 5</li> </ul> </li> <li>• Supporting the growth of substrates manufacturers and related industries                             <ul style="list-style-type: none"> <li>– Substrates manufacturer approved (formal acceptance of offer) – 1</li> </ul> </li> <li>• Increasing the number of silicon production                             <ul style="list-style-type: none"> <li>– Progress completion of the 2 approved silicon producers (Land clearing) – 100 per cent</li> <li>– Progress completion of the 2 approved silicon producers (Begin construction) – 100 per cent</li> </ul> </li> <li>• Growing solar wafer and cell producers                             <ul style="list-style-type: none"> <li>– Progress completion of the 2 Cell producers (In operation) – 100 per cent</li> <li>– Progress completion of the 2 Cell producers (Begin construction) – 100 per cent</li> <li>– Production of solar cell capacity (GW) – 2.08</li> </ul> </li> <li>• Increase Solar Module production                             <ul style="list-style-type: none"> <li>– Progress completion of Solar Module Plants (In operation) – 100 per cent</li> <li>– Progress completion of Solar Module Plants (Begin construction) – 100 per cent</li> </ul> </li> <li>• Developing LED Front End operation                             <ul style="list-style-type: none"> <li>– LED Wafer Fabrication plant approved (Approved) – 100 per cent</li> <li>– LED Wafer Fabrication plant approved (Complete construction) – 100 per cent</li> </ul> </li> <li>• LED packaging and equipment                             <ul style="list-style-type: none"> <li>– Set up of 1 R&amp;D Centre for LED packaging – 100 per cent</li> </ul> </li> <li>• Creating local Solid State Lighting (SSL) champions                             <ul style="list-style-type: none"> <li>– 1 local SSL company in operation – 1</li> <li>– Establish MS for solid state lighting products – Dec-12</li> <li>– Develop Government procurement policy for local SSL product – Dec-12</li> </ul> </li> <li>• Growing Test and Measurement Hub                             <ul style="list-style-type: none"> <li>– Implement vendor development programme – 100 per cent</li> </ul> </li> <li>• Growing automation equipment manufacturing                             <ul style="list-style-type: none"> <li>– Number of consortium set up to provide total automation solutions for manufacturing – 2</li> </ul> </li> <li>• Building Transmission and Distribution companies                             <ul style="list-style-type: none"> <li>– pending target</li> </ul> </li> <li>• Building a home appliance manufacturing hub and international distribution network – pending target</li> </ul>	

## Here and Now in Malaysia

# Transforming the Economy Slowly but Surely

Since the Economic Transformation Programme (ETP) was unveiled in 2010, 110 projects were announced which include a range of large projects, smaller initiatives, public private partnerships and some projects funded by the private sector. These were announced by the Prime Minister at regular updates between October 2010 and November 2011.

Here are some of the feedback given by Entry Point Project partners about the ETP and its initiatives.

## Dixon Chew, Group Managing Director, PENSONIC

"The ETP represents a concerted effort between the Government and the private sector in promoting Malaysia as a major regional player in the electrical home appliance sector. This is the right strategy which can be duplicated in other sectors in placing Malaysian businesses more prominently on the world map.

Pensonic has always wanted to expand its operations beyond the billion ringgit mark and the ETP is essentially fast-forwarding our vision. We thank the government for the intervention," he said this in April 2011.



## Datuk Dr Abd Shukor Abd Rahman, Director General, MARDI

"This RM26.6 million Entry Point Project is an opportunity to introduce specialty rice in non-granary areas, resulting in a reduction of imports and an increase in the local farmer's income. MARDI will use this opportunity to expand the cultivation of fragrant rice and market organic rice with the aim of capturing 40 per cent of the specialty rice market in Malaysia by 2020."



On the baseline study on e-counter services and paperless Government, he said, "Our Government is in the midst of transformation; this means services provided must address the needs of our most important stakeholders – the Rakyat. With the support of current policy and ICT innovation, we are confident we will achieve our goals."

## En. Ghazali Omar, CEO VADS Berhad

"In June 2011, VADS Berhad and Cisco signed a collaborative agreement to build the first TelePresence Exchange infrastructure in Malaysia. It offers Managed TelePresence Services to the private and public sectors in Malaysia and the region.

The construction of the first Telepresence in Malaysia involves an investment of about RM11.3 million, and is part of VADS' roadmap offering a hub of diverse collaborative services for businesses. It is also in line with the Communications Content and Infrastructure Entry Point Projects of 'Connecting 1Malaysia'.

"Through the planned hub, our services would facilitate the growth of businesses and be a catalyst for value increment and dynamic change. The ability to offer Managed TelePresence as a service will raise the competitiveness of Malaysia as a regional hub and as a business centre. It will also provide opportunities for organisations to embrace new technologies towards becoming a connected nation."



Photos courtesy of Star Publications (Malaysia) Bhd

**Kiran Mazumdar-Shaw,  
Chairman and Managing  
Director, BIOCON**

"We are establishing the RM1.972 billion biopharmaceutical manufacturing and development facility which will stimulate growth for the biotech sector in Malaysia and provide commercial opportunities for small and medium enterprises. This will also promote more vigorous domestic direct investment. As this is the first recombinant biopharmaceutical plant in Malaysia, a key development component would be to focus on developing human capital to support high technology operations."

**Mohd Faidzal Ahmad Mahidin,  
Managing Director of Tanjong  
Agas Supply Base & Marine  
Services Sdn Bhd**

"In November 2011, the ETP will help transform the Tanjong Agas Oil and Gas and Logistics Industrial Park in Pekan, Pahang into a state-of-the-art hub. At an investment of RM30 billion over the next 10 years, it will cater to the region's enormous and rapidly growing upstream and downstream of Oil and Gas Exploration, Exploitation and Production Activities."

**Datuk Badlisham Ghazali  
CEO, Multimedia Development  
Corporation (MDeC)**

In addition to the Entry Point Projects, the Strategic Reform Initiatives (SRIs) announced in July 2011 are being implemented in various stages. These six SRIs is the second key component of the ETP that will set



Datuk Badlisham Ghazali

a dynamic environment to boost Malaysia's global competitiveness.

Amongst the initiatives within the Human Capital Development SRI is the MyProCert programme to upskill Malaysians to international certification standards.

"Sustainable talent development is key in meeting the ETP requirement. Information Communications Technology (ICT) is the primary enabler for more than 60 per cent of the proposed EPP, hence the need to develop talents with the relevant ICT skills. The SRI on Human Capital are important in addressing the demand for ICT talents and we believe the MyProCert is the complementing approach to generate the right talent pool," said Datuk Badlisham Ghazali in September 2011.

"The ETP has two key thrusts – focus, through the 12 NKEAs, and competitiveness, to be delivered by the SRIs. Malaysia is making excellent progress on both these fronts. We are at the beginning of this marathon that will take us to Vision 2020."

“  
The ETP has two key thrusts — focus, through the 12 NKEAs, and competitiveness, to be delivered by the SRIs. Malaysia is making excellent progress on both these fronts. We are at the beginning of this marathon that will take us to Vision 2020  
”

Photos courtesy of Star Publications (Malaysia) Bhd



# Business Services



**Datuk Seri  
Dr. S. Subramaniam**

Minister of  
Human Resources



**The Business Services sector is a key one which continues to accelerate changes within specialised areas in many developed nations and consequently drive higher economic growth and greater efficiency.**

Our aspiration is to see Business Services become a catalyst and a driver in Malaysia's transformation into a high-income economy. The Business Services sector has a unique role to play in driving the competitiveness of a wide range of business segments, industries and professional services. We intend to more than quadruple the GNI contribution of Business Services to bring it to RM78.7 billion by 2020.

To achieve this, we will build on Malaysia's existing strengths by accelerating growth in sectors comprising Maintenance, Repair and Overhaul for the aviation industry, Business Process Outsourcing (BPO) services and services related to Data Centres and Disaster Recovery Centres. We are also developing future growth segments that include exportable and differentiated high value services such as 'Pure-play' engineering design services and Green Technology.

To meet future anticipated demand for human capital, efforts have also been undertaken to increase the percentage of skilled workforce in business services from 35 per cent in 2010 to 46 per cent by 2020 by building local capacity, attracting global talent and increasing women's participation in the workforce. As Minister of Human Resources, I am committed to unleashing the potential of this sector and hope that all Malaysians will support me and my team in this endeavour.

# Business Services

According to the Roadmap, the Business Services National Key Economic Area (NKEA) aims to serve as a catalyst in transforming Malaysia into a knowledge economy. The characteristics of Business Services as one of the 12 focus sectors will help propel Malaysia towards achieving a high-income nation status by 2020

With human capital development as an integral component, the Business Services sector is a highly differentiated industry, comprising a range of high-value skills and services. This makes it a high-value-add sector that is poised to nurture innovation and broaden the knowledge and skill base within the country. As a result, the sector is also central to efforts in raising productivity and enhancing the competitiveness of the entire economy, leading to a multiplier effect on its wider economy.

Projects introduced under this NKEA are intended to grow the sector's GNI contribution by four fold to RM78.7 billion in 2020. They are categorised into two themes, representing a two-pronged approach.

Theme 1 Accelerate the growth of differentiated sectors	Theme 2 Develop future growth segments
EPP 1: Growing aviation maintenance, repair and overhaul services	EPP 4: Jump-starting a vibrant green technology industry
EPP 2: Building globally-competitive outsourcers	EPP 5: Growing large pure play engineering services
EPP 3: Positioning Malaysia as a world-class data centre hub	EPP 6: Developing Malaysia as a global Islamic finance KPO hub

The first theme intends to build on Malaysia's existing strengths and competitive advantage streamlining the focus of the Business Services sector. To start, the first three EPPs look at accelerating growth in Maintenance, Repair and Overhaul (MRO) services; outsourcing in business, IT and knowledge processing; and data centre where we have existing capabilities and comparative advantage to be globally competitive. The second theme focusses on developing opportunities in segments with high potential for future growth, exports and job creation. Pure-play engineering design services; green technology; and Islamic banking Knowledge Process Outsourcing (KPO) were the three EPPs identified in the Roadmap.

“  
The sector is central to efforts in raising productivity and enhancing the competitiveness of the entire economy.”

## 2011 Key Performance Indicators

Exhibit 8.1

NKEA Business Services		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Revenue from fleet technical management – RM million	140	219.9	157%		100%		1.0	
	Revenue from training centers – RM million	12.68	12.3	97%		97%		0.5	
	Revenue from airframe MRO (Line and Base maintenance) – RM million	787	793.8	101%		100%		1.0	
	Revenue from engine MRO – RM million	1,689	901.9	53%		53%		0.5	
	Revenue from components MRO – RM million	742.2	1,176.5	159%		100%		1.0	
EPP #2	Number of MNCs to outsource non-core operations	5	24	480%		100%		1.0	
	Overseas sales revenue – RM million	610	848	139%		100%		1.0	
EPP #3	Percentage of market share from Asia Pacific Data Centers excluding Japan	6%	3.30%	55%		55%		0.5	
	Sales of floor space – square feet	100,000	208,000	208%		100%		1.0	
EPP #4	Number of green tech jobs created	3,000	3,203	107%		100%		1.0	
	Development of Occupational Analysis (OA) in Green Technology Sector	1 OA	1 OA and 71 job titles	100%		100%		1.0	
	Development of National Competency Standard (NCS) in Green Technology Sector	1 NCS	1 NCS, 6 groups and 21 abilities	100%		100%		1.0	
EPP #5	Revenue from Engineering Services (Strand) – RM million	6.2	4.67	75%		75%		0.5	
	Revenue from Engineering Services (DESB) – RM million	6.2	6.2	100%		100%		1.0	
				<b>138%</b>		<b>91%</b>		<b>86%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

## Growing Aviation Maintenance, Repair and Overhaul Services

The goal of this EPP is to develop Malaysia into a regional MRO services hub to capitalise on a global market projected to grow at 4.4 per cent per annum to reach RM208 billion by 2019. The rapid growth of regional demand particularly from China and India makes this objective all the more timely and attractive. MAS Aerospace Engineering (MAE), the engineering and maintenance division of Malaysia Airlines (MAS), is now supported collectively by an industry-driven working group comprising various entities within the MRO landscape. Key to the success of this EPP is the improvements to key civil aviation regulations, geographical expansion, migration to higher value-added services and development of the requisite human capital by the industry.

### Achievements

#### Improvements to Industry Structure and Regulation

The British Civil Aviation Regulations have been replaced and updated to stay abreast with global standards and to enhance further the regulatory oversight of the civil aviation industry. As of September 2011, Department of Civil Aviation (DCA) policies and procedures with regard to regulations, certification, approval and examinations have been replaced with the European Aviation Safety Authority (EASA) standards, specifically Part 66 and 147 of EASA.

DCA also granted MAE the Approved Training Organisation certificate, in order to encourage principle-based regulation and to reduce risk of current bottlenecks for large numbers of trainees for on-the job training in terms of live aircraft practical training. This will allow MAE to carry out approved courses and examinations on behalf of the DCA for MAS trainees and/or staff, thus cutting down the turnaround time in inducting them into the system. DCA had also adapted the approval requirements for Design Organisation which will allow organisations to design repair schemes and modifications to aircrafts.

#### Expand Geographically and into Higher Value-Added Services

Due to the growing demand for MRO services across Asia, it is critical to establish a physical presence across this region to further improve market access. On this score, MAE has set up a joint venture entity with GMR Hyderabad International Airport Limited (GHIAL) on 2 November 2011 to establish a satellite centre in Hyderabad, India. The satellite centre will focus on more

mechanical services such as airframe and line maintenance work. This will enable the complex and higher value-added MRO work such as component and engine repair to be channelled to MAE's MRO facility in Subang.

#### Industry-wide Collaboration and Alliances to Develop the Future of the MRO Business

An Industry Working Group (IWG) was established on 16 August 2011 following an MRO seminar held on 6 June 2011 attended by more than 25 DCA-registered MROs. The IWG is recognised as a 'business-led' aviation industry body which will support MRO and its related industry players to contribute towards the ETP as well as act as a dedicated platform for MRO players, business enablers, policy makers and stakeholders in making Malaysia the MRO Centre of Excellence.

The IWG, chaired by MAE and co-chaired by AIROD, has put in place three work streams: human capital development; domestic business development and international business development. To compete in the global market and maintain an optimum operating environment, the IWG has come up with a list of recommendations that consists of fiscal and non-fiscal incentives for the entire industry. This package was presented to the Economic Council at its meeting on 19 September 2011 and a detailed roadmap is being planned. Fresh foreign investments are expected for this field due to the favourable environment and the booming MRO ecosystem. For example, two MRO players from Singapore are expected to invest in facilities at Senai Airport in Johor.

#### MAS and Airasia Share Swap

MAE currently serves airlines other than MAS. Due to its excellent service and large customer base, in 2010\* the MAS and AirAsia share swap deal, while still at the infancy stage, will lead to MAE potentially having a greater base-load, which in turn will provide an opportunity to increase revenue, more business opportunities to existing vendors in the local MRO ecosystem and effectively develop a supply chain management system.

#### MAE and Airod Collaboration

As part of the optimisation of the local industry, MAE and Airod had a General Terms of Agreement signed on 20 July 2011 to optimise the use of skills, manpower and resources.

\* Source: Aviation Week

(more on next page)

**EPP 1** (continued from previous page)

GMR Hyderabad International Airport

**Moving Forward**

Malaysia Airport Holdings Bhd (MAHB) is a key partner in international airports at Hyderabad, New Delhi and the Maldives. As with the case of the MAE-GMR joint venture in Hyderabad, these other airports can potentially provide strategic locations in which the supply chain management is integrated to improve turnaround time.

MAE may set up a rotatable spare parts supply chain at Subang Airport by 2013 with the aim of supplying component spares to customers in the ASEAN, Indian subcontinent and Middle Eastern markets.

The completion of the MAS and AirAsia share swap may result in AirAsia's MRO requirements being fully handled by MAE. The increase in business is a step in the direction of making MAE one of the largest and subsequently autonomous MRO service providers in the world.

To address the issue of sufficient supply of MRO talent, MAE is ramping up the training programmes and collaborating with the local institutions as an alternative source of manpower supply. For 2012, this EPP aims to generate revenue of RM300 million from Fleet Technical Management, RM18 million from training centres and RM1.2 billion from Airframe MRO (Line and Base maintenance).

**EPP 2****Building Globally Competitive Outsourcers**

The aim of this EPP is to create a globally competitive local outsourcing industry, comprising top-tier<sup>1</sup> and second-tier<sup>2</sup> firms. It also includes incentives and initiatives to allow the smaller players to flourish. The Multimedia Development Corporation (MDeC) and Outsourcing Malaysia (a chapter of PIKOM – the National ICT Association of Malaysia) being the public and private sector lead respectively, worked closely with the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) and PEMANDU to deliver this EPP. This will be achieved across three levels – through multinational company (MNC), government linked company (GLC) and Government outsourced contracts and demand for such services locally and regionally; build global awareness; enhance capability and credibility.

**Achievements**

The Government (via MAMPU) has put in place programmes to start outsourcing selected services, to enable local companies to reach a critical scale while reducing their operating cost. The

consolidation of data centres and outsourcing as well as the consolidation of unified communication for nine ministries and eight agencies, covering 200,000 users is currently in progress.

To accelerate the growth of the local outsourcing industry, Malaysian outsourcing firms adopted new growth programmes led by MDeC. This resulted in top local firms committing to generate 37,690 new jobs by 2017 or 87 per cent of the total target for this EPP in 2010.

In addition to generating new business from existing clients, the industry attracted approximately 50 new prospective clients from market development and acquisition programmes by MDeC and Outsourcing Malaysia. Four Senior International Representatives (SIRs) were appointed by MDeC to accelerate business generation and acquisition for Malaysian outsourcers. More SIRs are expected to be appointed before the end of 2011.

<sup>1</sup> Top-tier firms are comparable to the top 15 outsourcing firms in the world

<sup>2</sup> Second-tier firms are comparable to the top 50 outsourcing firms in the world

(more on next page)

**EPP 2** (continued from previous page)

On attracting FDI, Malaysia continues to attract global service operations from multinational firms. This is due to Malaysia's key strengths on global business services namely, serving Asian markets, high value activities and as a 'best-shore'<sup>1</sup> location. Malaysia attracted almost 20 new projects in 2011 into the country with commitments of over 5,300 new high value jobs including multinationals such as IBM, Paypal, Schlumberger and Eli Lilly.

**Moving Forward**

In 2012, MAMPU will conduct a Government-wide study to pinpoint duplication across non-core business process. The result of the study will lead to the setting up of a government-shared service centre. The design and implementation of the centre will be supervised by a Project Management Office based on a public-private partnership, with MAMPU being the central coordinating agency.

<sup>1</sup> Secondary site to locate high value activities to a primary major location

In promoting global awareness as well as the capability and credibility of the Malaysian outsourcing industry, MDeC and Outsourcing Malaysia will continue to work together to further implement the programmes in these areas. This includes promoting local outsourcing industry players to MNCs already located in Malaysia. To stimulate growth, the MDeC project team will conduct up-sell and cross-sell activities in cooperation with local players. The project team will also work with outsourcing players to help them acquire more business from their existing client base. Despite having the highest salaries, exciting projects and greater career prospects, there is a misperception that the outsourcing industry is not appealing. To address this, the project team will launch a major programme in 2012 in collaboration with multinational firms to promote the outsourcing industry as the employee's industry of choice in Malaysia.

**EPP 3****Positioning Malaysia as a World-Class Data Centre Hub**

Data Centres are secure facilities used to house computer systems such as telecommunications equipment, servers, storage and associated computing components – equipped with redundant/backup power supplies, data and internet communication infrastructure, environmental controls systems and security devices. The data centres industry in Asia Pacific is expected to grow by 16.3 per cent annually, reaching RM10.9 billion by 2014<sup>2</sup>. Malaysia has the potential to emerge as a world-class data centre hub. This is defined as having a significant share of Asia Pacific's data centre revenue, credible local data centre service providers and a recognised capability in providing high-value managed services.

The EPP aims to establish Malaysia as the preferred destination for data centre investors and increase the supply of data centre space in Malaysia from 0.5 million square feet to 5.0 million square feet by 2020.

**Achievements**

In 2011, this EPP outperformed its target of developing new data centre space by over 210 per cent with the establishment of four data centres that have a combined investment value of RM770 million in mainly infrastructure outlay. One of the four data centres has been completed and launched in January 2012 with the remaining three at an average completion rate of over 40 per cent. These data centres are expected to be fully operational between the first and second quarters of 2012, providing over 350 jobs, mainly in technical and engineering fields.

<sup>2</sup> Strategic Analysis of the Asia Pacific Infrastructure Hosting Markets, Frost & Sullivan, Feb 2009

In encouraging industry-wide collaboration and alliances to develop the local data centre industry, a data centre Focus Group comprising local member companies coordinated by Outsourcing Malaysia was established. It is a business-led group set up in 2011 to:

- represent the industry to market Malaysia as a preferred data centre hub
- develop and sustain data centre knowledge exchange initiatives (i.e. conferences, white papers, workshops etc.)
- champion issues related to the data centre industry

In addition, MDeC and Outsourcing Malaysia organised the Data Centre Summit on April 2011. The Summit serves as a platform for members of the global data centre fraternity to understand the challenges and issues confronting the industry, identifying ways to reduce impediments and roadblocks as part of continued efforts to reduce the current fragmentation.



Teliti Data Centre

(more on next page)

**EPP 3** (continued from previous page)

Five data centres with the financial assistance of the Government and in collaboration with MDeC have embarked on the Data Centre Industry Certification programme and will pursue certifications such as the globally recognised Uptime Institute Tier Certification. This is towards enhancing the credibility of Malaysian data centres to attract foreign clients. In addition, the five data centres are also sending their employees for the industry professional certification programmes. The increased number of certified data centres and professionals will raise the profile and standards in Malaysia, boosting the industry's attractiveness especially to foreign clients.

### Moving Forward

The data centre focus group will stimulate knowledge sharing in the Malaysian data centre sector through conferences, workshops and human capital development in collaboration with MDeC's K-Workers Development Initiative. It will also collaborate with MDeC to improve the ease with which foreign companies can operate in Malaysia.

In upscaling the credibility of Malaysian data centres and the strength of Malaysia's privacy standards across the industry, MDeC and Outsourcing Malaysia will work to have more data centres certified to be at par with global standards. With the gazetting of the Personal Data Protection Act, the Ministry of Information, Communications, Culture and Arts will, via a commission, raise public awareness and seek public feedback to develop regulations related to data privacy protection.

There will be continual efforts towards meeting the rising demand for data centre professionals throughout 2012:

- To build a data centre foundation at universities by having MDeC, Outsourcing Malaysia and the Ministry of Higher Education (MoHE) introduce data centre-related courses at universities (including network, server virtualisation, green IT), as part of existing or potentially new degree programmes

- Data centre-related subject lecturers will be certified as Certified Data Centre Experts (CDCEs), accredited by the Examination Institute for Information Science. This will fall under the Multimedia Super Corridor Capability Development Programme led by MDeC
- Concurrently, the Communications Content and Infrastructure NKEA is driving efforts to reduce bandwidth cost to increase Malaysia's competitiveness. Efforts are also underway to address possible improvement holistically for data centre investments including electricity tariff

For 2012, this EPP aims to increase Data Centre White Floor Space (Rackspace) to 150,000 square feet, have 11 Data Centre Organisational Certifications and RM395 million in Data Centre services revenue.



Construction site of MyTelehaus

**EPP 4**

## Jump-starting a Vibrant Green Technology Industry

In line with global trends, Malaysia has already taken steps to grow the green technology industry, particularly in the areas of policy and legislation. For example, incentives for importers and manufacturers on Renewable Energy and Energy Efficiency have been extended until 2015 and 2012 respectively. The Green Building Index (GBI) incentives have been extended until 31 December 2014. A green technology industry will also benefit Malaysia by helping the nation to reduce carbon emissions by 40 per cent in 2020, generating cost savings by up to RM295 billion through energy efficiency, and creating highly-skilled jobs.

As stipulated in the Roadmap, this EPP aims to jumpstart the green technology industry by boosting demand for green products and services, strengthening suppliers, and measuring as well as monitoring and publicising Malaysia's environmental progress.

### Achievements

In 2011, the Government has introduced the guidelines for Eco-labelling and Environmentally Preferred Purchase. This will bring the awareness of such products to the forefront to encourage green consumerism.

To support the green technology industry at an accreditation and skills development level, the Ministry of Energy, Green Technology and Water (KeTTHA) has been working closely with the Ministry of Education to integrate green elements in the school syllabus. Analyses of existing green technology-related courses in both public and private higher institutions have been also carried out. Green technology services require a workforce comprising professionals including architects, engineers, energy managers and carbon managers.

(more on next page)

**EPP 4** (continued from previous page)

In further defining the industry workforce, the National Competency Standards profile and Occupational Analysis template for Green Technology was completed in 2011. These outline the National Occupational Skills Standard (NOSS) for green technology, which will provide a list of green technology jobs. This will function alongside the Malaysian Skills Certificate to establish a common standard for green technology practitioners.

The Malaysia Green Tech Corporation (MGTC) is responsible for administering and evaluating risks for the green certification application to assist in propelling the green technology industry. This certification will be utilised by applicants to apply for financing. The Green Technology Funding Scheme (GTFS) was established by the Government to kick-start and finance companies that offer green products and services. Currently, a total of 24 projects have been awarded involving financing amounting to RM350 million from the original fund of RM1.5 billion to producers and users of green technology. They include 12 projects related to energy efficiency, 10 water and waste-related and the remaining two for transportation.

The prevailing challenge for many energy service companies to obtain bank financing for energy efficiency projects still stands as the nature of risk and returns for these projects are not well understood by the financial institutions.

In March 2011, the GBI Township Tools was introduced to facilitate planning, design and building of sustainable townships. This process will be aided by the Low Carbon City Framework and rating tools developed by the Ministry of Energy, Green Technology and Water to be used by local councils and developers.

In the area of energy efficiency, MyLED Group, Malaysia's solid state lighting (SSL) and light emitting diode (LED) manufacturer, signed sealing sales Memorandum of Understandings (MoUs) with 15 international and local companies comprising six Original Equipment Manufacturers (OEMs) from Germany, Japan, Taiwan and Malaysia on 23 November 2011. Three of the OEMs – Amprex International (Japan), Light-Trend (Taiwan) and Osram Opto Semiconductors (Germany), will also provide MyLED with technology and expertise in research & development. MyLED Group is expected to achieve more than RM2 billion in sales for its lighting components over the next five years.

## Moving Forward

KeTTHA will be setting efficiency targets stipulating that all ministries must reduce electricity and water consumption by 10 per cent per year up to 2013. Additionally, KeTTHA plans to complete the accreditation framework for energy services companies to improve and regulate the quality of energy services companies by 2012.

With the continued efforts of MGTC, PEMANDU will facilitate projects related to green buildings, energy efficiency, waste, renewable energy, and transport. As of December 2011, two projects, one under the RE (Renewable Energy) segment and another under the Waste segment are currently being pursued with each contributing a significant amount of GNI when successfully implemented.

KeTTHA in collaboration with MGTC is presently studying the modality in implementing the Malaysia Green Labelling Programme (MGLP). MGLP will encompass the inclusion of existing label schemes available such as National Eco Labelling Scheme, Energy Rating Label and similar schemes that are in the pipeline such as Water Efficiency Label Scheme and Carbon/Water Footprint Label Scheme. This exercise will involve the collaboration and cooperation with other ministries/government agencies as well as private organisations and non-government organisations (NGOs).

MGTC will pursue projects related to bio-fuel and alternate energy including bio-diesel, hydrogen and methanol fuel. As more and more projects are being undertaken, the imminent need to access financing is critical. While the GTFS is one of the main options available, MGTC is looking at alternative financing which is more venture capital based to assist seed funding for those who may not be eligible under the conventional banking requirements that is Malaysian based, perhaps with elements of Islamic Banking.

In view of rapid developments in this sector, demand for new skills especially for professionals in this field is crucial to remain relevant and competitive in the global market. As such, efforts are underway to develop carbon trading expertise in Malaysia with extensive engagement with the relevant stakeholders within the industry.

For 2012, this EPP aims to create 4,000 jobs, generate RM1.79 billion in revenue from the main segmentation within the clean energy areas including RE, Energy Efficient Energy, Waste Management, Green Technology Financing Scheme. It also aims to establish an accreditation framework for Energy Service Companies.

## EPP 5

## Growing Large Pure Play Engineering Services

'Pure play' engineering refers to the use of people and computers for design and analysis work. Pure play engineering services companies are firms that are not part of an Original Equipment Manufacturer (OEM) and are focussed only on the provision of engineering services. This is in contrast with the existing local competencies such as manufacturing, which is labour-intensive and lower in the value chain. In relation to contracts with aerospace OEMs, they fall into two tiers:

- **Tier 1**

These are large-scale suppliers who contract directly with OEMs, e.g. GKN Aerospace with Airbus. These suppliers handle larger volumes of work that are charged at a higher rate

- **Tier 2**

These are companies who provide services to Tier 1 suppliers at a lower rate as the complexity of the work is usually the same, but with less project management component

This EPP is focused on two strategic levers: to develop industry capabilities and capture market share. For this purpose, Strand Aerospace Malaysia (SAM) was identified to spearhead the aerospace sector while DreamEdge Sdn Bhd (DESB) was tasked to lead the automotive sector to achieve the aim of creating two globally-competitive engineering services companies. DESB and SAM are both Tier 3 companies set up by Malaysians, in partnership with UK and Japanese engineering firms. Both SAM and DESB are looking to be upscaled into Tier 2 companies through the growth programme in this EPP.

To date, both DESB and SAM have successfully executed several local and international contracts. The companies have been successful at delivering the work without the need for extensive onsite expat support, through a holistic adoption of the UK and Japanese engineering cultures. Capitalising on this strength, the offshore presence and government endorsement Malaysia External Trade Development Corporation (MATRADE), DESB and SAM are negotiating larger work packages than originally intended as part of their original business plans.

## Achievements

### Strand Aerospace Malaysia (SAM)

With the Government's financial assistance, SAM has now grown from a company of just under 10 engineers to 40 engineers. In 2011, SAM has secured contracts worth over RM2.5 million including a contract from Ferchau Engineering of Germany representing an almost 100 per cent jump in revenue in over a year. SAM has also successfully established strategic alliances

with Dassault Systemes, a renowned technology provider in the aerospace sector. This strategic alliance is expected to deliver further opportunities in terms of outsourced work from Europe to Malaysia and promote the 'Malaysian Design Engineering Services' brand.

The Malaysian Industry Council for Defence, Enforcement & Security conducted a successful site audit on SAM that will enable SAM to be part of the offset network to the government. Structural integrity technology is equally applicable to other industries such as oil and gas and power generation, with the potential of increasing the usability of ageing equipment.

SAM has established a research and development centre for aerospace engineering in collaboration with Feiran Sdn Bhd which will focus on areas in which Malaysia has expertise: composite technology and process design optimisation.

### Dreamedge Sdn Bhd (DESB)

DESB was a company earning less than RM1 million one year ago. It is currently generating RM6.2 million. Over 40 engineers have been recruited as part of its ambitious plans to break into the competitive Japanese market. DESB has placed a total of six engineers to work with an automotive company in Japan, Fujitsu Digital Process Limited, which will help improve market access in Japan as well as initiate technology transfer for DESB.

Malaysia's MITI trade mission in July 2011 saw preliminary interest from four Tier-1 companies from Japan to work closely on design and development work with DESB while establishing operations in Malaysia.

In Malaysia, DESB has secured a significant number of contracts with the national car-maker, Proton, in the areas of design, product life-cycle management as well as research and development work. Hicom Automotive Manufacturers will be utilising 100 engineers from DESB to assemble Volkswagen cars in Malaysia. DESB was also invited to participate in the Kuala Lumpur Monorail Expansion Project in August 2011 by SCOMI Group. These mark the local industry leaders' confidence in DESB's capabilities.

The Northern Corridor Investment Authority (NCIA) has agreed to sponsor the establishment of a Centre of Excellence (CoE) in Taiping. The CoE will be industry-led and it will serve as a R&D platform to coordinate university and industry collaboration to produce marketable products. The CoE will also act as a repository of R&D knowledge.

*(more on next page)*

**EPP 5** (continued from previous page)**Moving Forward**

The government will continue to provide training and software grants to new engineers at SAM and DESB. MATRADE, DESB and SAM are negotiating larger work and will continue to market the Malaysian Engineering Services brand in the global market, emphasising the world-class engineering services available in Malaysia.

By 2013, SAM and DESB are expected to achieve a critical mass of over 700 trained engineers and a strong track record of projects

executed for global clients. At this stage, the companies will seek more joint venture partnerships and strategic alliances with global companies such as Bombardier, Airbus, GKN Aerospace, Nissan and Honda. This will improve the local companies' market access and technology transfer as well as ensure sufficient workflow over the next eight years to fuel growth of the industry.

For 2012, this EPP aims to generate RM24 million in revenue and procure RM3.5 million in investments for SAM, generate RM24 million and procure RM2.16 million in investments for DESB.

**EPP 6****Developing Malaysia as a Global Islamic Finance KPO Hub**

Malaysia is a global leader in Islamic finance with the third largest market in the world. Some 48 per cent of global *sukuk* issuance originates from Malaysia. In addition, our leading position is supported by world's first Syariah-compliant commodity trading platform and is underpinned by a dispute resolution framework that is also compliant with Syariah. The goal of this EPP is to capitalise on our leading position to develop the nation into a global hub for Islamic Finance Knowledge Process Outsourcing (KPO). The EPP is expected to create incremental GNI contribution of RM3.1 billion and create 2,010 new jobs by 2020.

**Achievements**

An Islamic Finance Advisory and Consulting Services (I-FACS) consortium has been successfully established and trademarked as Islamic Core Banking Trust (ICB Trust). Currently, it is in the process of getting funding and developing a software application platform for Syariah Advisory functions. An operational I-FACS will consist

of Syariah scholars and practitioners, Islamic finance lawyers, accountants, actuaries and Syariah auditors who can carry out Syariah-compliance functions. The I-FACS consortium will provide an avenue to address global industry challenges effectively. These include the complex origination process of *sukuk* issuance that can meet global benchmarks; development of Islamic financial products, harmonisation of standards and access to expertise.

**Moving Forward**

This EPP was moved into Financial Services NKEA upon consultation with Bank Negara Malaysia. Following further discussion between both teams and Bank Negara, this EPP will be treated as an advisory service to be set up privately without direct involvement of the NKEA teams. This will mean that the eventual entity that is set up will act akin to a business offering a myriad of services as part of Bank Negara Malaysia's ongoing initiative.

# Business Opportunities

## Business Opportunity 1

### Multi-Disciplinary Practice Construction

Under the business opportunity of multi-disciplinary practice construction firms, the efforts in promoting the stability and soundness of this industry by the Construction Industry Development Board underpins its long-term goals to increase efficiency and effectiveness of the industry as a whole. Part of these efforts include introduction of rating tools on the capability of local contractors in line with the requirements under the Construction Industry Masterplan.

## Business Opportunity 2

### Accounting Sector

The NKEA of Business Services encompasses a vast array of industries and professions, covering 41 sub-segments based on the UNITED NATIONS (UN) classification. And part of business services includes professional services such as accounting and

architecture. Malaysia is one of the ASEAN market leaders in provision of accounting services. The Malaysian Institute of Accountants (MIA) in consultation with the accounting industry has proposed to capitalise on exportability of accounting services. Among others, MIA's practice will be reviewed and revised to emulate best practices in other markets (Singapore, Thailand, Indonesia) to strengthen quality and remain competitive. This will be done with adequate design of qualification procedures, criteria and exam papers by engaging key industry players. However, this does not preclude those who do not own such a qualification from offering accounting-related services.

## Business Opportunity 3

### Creative Multimedia Content Industry

The business opportunity on creative multimedia content industry has been reassigned to be part of the Communications Content and Infrastructure NKEA in view of the structural similarities to the EPPs within the said NKEA.

# Enablers

Previously, increasing the skilled workforce to meet the growth of the business services was identified as an enabler under this NKEA. It has since evolved into the Human Capital Development Strategic Reform Initiative (SRI) which will implement strategic programmes to transform the workforce and the workplace.

## Summary of Business Services NKEA

	2020 Target
Incremental GNI Impact	RM78.7 billion
Additional jobs	245,000
<b>Critical targets for 2012</b>	
<ul style="list-style-type: none"> <li>• 3 announced data centres to provide over 350 jobs, mainly in technical and engineering fields, and be fully operational by the first or second quarter of 2012</li> <li>• Overseas sales revenue (for the outsourcing industry) – RM1.011 billion</li> <li>• Creation of 8,000 jobs (for the outsourcing industry)</li> <li>• Projected increment rack-space: Data Centre White Floor Space – 150,000 square feet</li> <li>• 11 Data Centre Organisational Certifications</li> <li>• Total Data Centre services revenue – RM395 million</li> <li>• Number of jobs created for Data Centre – 4,000 jobs</li> <li>• To complete the accreditation framework for Energy Service Companies by 2012 – 100%</li> </ul>	



# Communications Content and Infrastructure



**Dato' Seri Utama  
Dr. Rais Yatim**

Minister of Information,  
Communications and  
Culture



**As the Minister responsible for the Communications Content and Infrastructure NKEA, I am pleased to share with you some of the key milestones that we have achieved after one year of its implementation.**

In communications content, more than 30,000 hours of national archives, films, documentaries, visual and audio content have been digitised to promote and commercialise Malaysia's cultural richness, a departure from past practices of just archiving. In addition, more than RM300 million worth of content and intellectual property rights have been exported globally by the industry through Radio Televisyen Malaysia (RTM), Astro, Media Prima, Multimedia Development Corporation (MDeC) and Film Development Corporation Malaysia (*Perbadanan Kemajuan Filem Nasional Malaysia* – FINAS) during the first half of the year.

To continuously expand the infrastructure and reduce the digital divide, more than 1,500 *Kampung Tanpa Wayar* and Community Broadband Centres (CBCs) are operational nationwide, benefiting more than one million people in the rural areas. As for the urban community, two initiatives i.e. Connected@KL (Kuala Lumpur) and Connected@KK (Kota Kinabalu) were launched to promote broadband proliferation at business premises and residential areas.

To make our bandwidth price more competitive, a network consortium named Konsortium Rangkaian Serantau Sdn Bhd has been established comprising 24 companies licensed in network facilities provision and network service provision by the Malaysian Communications and Multimedia Commission (MCMC). The consortium will begin to consolidate its aggregate bandwidth purchase to leverage on the economies of scale while examining the viability of venturing into development of additional cable systems for Malaysia. All the initiatives mentioned will further assist in achieving the broadband penetration target of 75 per cent by 2015. Currently, the broadband penetration is 62 per cent.

I am also pleased to announce that more than 100 Small and Medium Enterprises (SMEs) have benefited directly and indirectly through some of the projects implemented under the Communications Content and Infrastructure NKEA. The journey has just begun. The Communications Content and Infrastructure NKEA will continue its efforts under the ETP towards a highly connected and culture-rich society.

# Communications Content and Infrastructure

The Communications Content and Infrastructure (CCI) sector spans a wide ecosystem covering content, network applications, services and devices. In 2009, the sector contributed RM22 billion of Gross National Income (GNI) from telecommunications, TV, broadcasting, post and courier

For Malaysia to transition from a middle-income to a high-income economy, the continued development of the CCI sector is fundamental.

The CCI National Key Economic Area (NKEA) aims at driving continued growth in communications services and enabling the paradigm shift from infrastructure and access to applications and content. The 10 Entry Point Projects (EPPs) within the CCI NKEA are clustered into three themes that aim to refocus the sector towards stimulating demand for CCI services rather than only building supply.

The first theme, Serving Tomorrow, addresses the paradigm change of shifting profit pools from infrastructure and access to applications and content, by strengthening Malaysia's domestic value-add in advanced services, particularly creative content creation (EPP 1), payments and electric commerce which was transferred to the Financial Services NKEA due to the nature of its governing structure (EPP 2) and connectivity applications (EPP 3). Following the transfer of EPP 2 to the Financial Services NKEA, a new EPP named Track and Trace has been added to this theme spurring the use of Radio Frequency Identification Technology or RFID.

To facilitate Malaysia's shift towards a knowledge-based economy, the second theme of Pushing Boundaries fully leverages CCI in strategic sectors through coordinated efforts to provide access, devices, applications and content. The emphasis in this cluster revolves around three key areas, namely establishing e-Learning for students and professional training (EPP 4), the introduction of e-Healthcare (EPP 5) and increasing the use of CCI technology in the provision of government services to the public and for trade facilitation (EPP 6).

To support the future growth of Malaysia, the third theme of Enhancing Foundations capitalises on next generation infrastructure opportunities with a particular focus on coverage, affordability and quality of access for all Malaysians. Our broadband for all mandate (EPP 7) targets access gaps (mostly in urban areas) by legally treating broadband similarly to other utilities such as water and electricity as a means for ensuring that all new residences will have ready access to broadband services. For rural dwellers, the access to broadband, computers and relevant applications are provided through extending reach programmes (EPP8). In addition, infrastructure will also be built in suburban and rural areas that uses shared infrastructure to reduce cost and to address the affordability and quality access of CCI services through a smart network (EPP 9) that uses shared infrastructure to reduce costs and accelerate roll out. International submarine cable capacity is also being laid and data centres built to host content by extending the regional network (EPP 10).



Establishing e-learning for students and professional training

“  
For Malaysia to transition from a middle-income to a high-income economy, the continued development of the CCI sector is fundamental

”

## 2011 Key Performance Indicators

Exhibit 9.1

NKEA Communications Content and Infrastructure		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Content export revenue uplift (US\$ million) Uplift is US\$10 mil or RM32 mil	32	108.2	338%		100%		1.0	
	Number of hours of digitised content (hour)	28,000	35,702	128%		100%		1.0	
EPP #3	Telepresence sites/end points (unit)	20	37	185%		100%		1.0	
EPP #5	Health facilities connected (%)	25	28.9	116		100%		1.0	
EPP #6	Online services (%)	25	39.6	158%		100%		1.0	
	Completion of Digital Document Management System (%)	100	30	30%		30%		0.0	
EPP #7	Household broadband penetration (%)	60	62.5	104%		100%		1.0	
EPP #8	Non-urban broadband subscription (%)	30	18.9	63%		63%		0.5	
	Number of cumulative programme sites commissioned (Unit)	902	1,588	176%		100%		1.0	
EPP #9	Tiered pricing plans offered by Service Providers – supply (%)	15	27	180%		100%		1.0	
	Internet Smart Network (SN) plan users – demand (%)	3	14.90	497%		100%		1.0	
EPP #10	Data-centre bandwidth revenue (US\$ million)	73	94.34	129%		100%		1.0	
	Completion of legal entity set-up to fix Buy-Build timeline for additional bandwidth (%)	100	100	100%		100%		1.0	
EPP #11	Number of JKDM sites installed with container tracking system	10	18	180%		100%		1.0	
				<b>170%</b>		<b>92%</b>		<b>89%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

## Nurturing Malaysia's Creative Content Industry

This EPP aims to nurture domestic content creation, services and distribution/broadcasting sectors with the ultimate aim of transforming Malaysia into a regional hub for digital content and in the process creating 10,326 jobs. Also known as the MY Creative Content EPP, it also represents a new industry-led public-private collaboration to grow the export and domestic content segments at 20 per cent and 13 per cent respectively every year. Beyond GNI benefits, this EPP will help preserve Malaysia's culture and heritage for the 21st century and future generations. The initial focus for this was the sector of filming and animation, laying the foundation for an expansion into music, arts and craft and performing arts.

### Achievements

To address the current lack of critical mass of local content, several initiatives led by the National Film Development Corporation Malaysia (*Perbadanan Kemajuan Filem Nasional Malaysia* – FINAS), Arkib Negara Malaysia (ANM), Filem Negara Malaysia (FNM) and Radio Televisyen Malaysia (RTM) are underway. To date, 35,702 hours of Malaysian content have been digitised to preserve our national heritage and subsequently promote Malaysian culture regionally. The Government is also providing financial assistance to Computer-Generated Imagery (CGI) and mobile applet content makers through the CGI Fund and Integrated Content Development 2 (ICON2) programmes in support of computer graphics and multimedia applications respectively.

Two projects are well underway to distribute Malaysian content locally and globally. SelectTV Sdn Bhd is promoting Malaysian-made content on its Internet Protocol television system to nearly 30,000 hotel rooms in markets such as Dubai, Thailand and Singapore, while Asia Media Sdn Bhd is pushing the content through its system on 1,500 buses and trains.

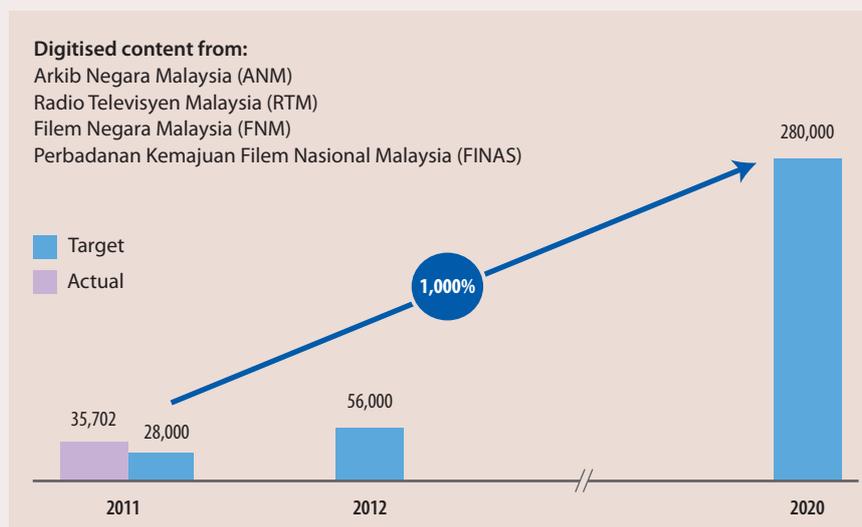


Exhibit 9.2: Digitisation will double up in 2012 until 2020

Two new entities were also set up to promote Malaysia and its home grown content. FINAS has created a new division called *Bahagian Galakan Penggambaran* to promote Malaysia as a destination hub for filming and the Malaysia Creative Content Association was established, led by industry players with the aim of increasing export of local content overseas.

In improving talents, the framework for the Creative Industry Lifelong Learning Programme has been finalised to address talent gaps in the creative content industry. The Government is allocating financial grants for this programme under the administration of the Multimedia Development Corporation and Ministry of Science, Technology and Innovation. Further in accrediting and listing of talents, the Creative Content Industry Guild was established to increase professionalism in the industry.

*Dasar Industri Kreatif Negara* (DIKN), a national policy framework for the creative industry, was initiated by the Ministry of Information, Communications and Culture. Its focus on multimedia, arts and culture seeks to promote and guide the creative industry holistically. This overarching policy sees traction in the form of projects identified above that are largely led by the industry.

### Moving Forward

In an effort to host content locally, FNM is in the process of establishing an integrated content hosting platform with a local content hosting provider. The platform will provide easy access to local content by interested parties, drive the content towards digital format.

## EPP 2 Track and Trace

The 1Malaysia Payments EPP has been transferred to the Financial Services NKEA for more efficient and effective governance. In its place is the Track and Trace EPP which sees the application of Radio Frequency Identification (RFID) technology as a means to generate economic gains. The first project under this EPP is the use of RFID in Security and Trade Facilitation. This project enables the monitoring of containers to facilitate clearance within domestic ports and selected high volume routes. This initiative is led by SmarTAG Solutions Sdn Bhd in collaboration with the *Jabatan Kastam Di Raja Malaysia* and Malaysian Communications and Multimedia Commission (MCMC).

The enhancement of container security using an online RFID track and trace system reduces the risk of terrorism, dangerous chemicals, contraband, etc from reaching our borders whilst increasing the efficiency of container movement through Customs checkpoints. The transparency of the online tracking system also helps increase Malaysia’s ranking within Transparency International and World Bank’s Competitiveness Index.

The Malaysian swiftlet nest industry makes up 20 per cent of the global market share and we compete with a significant number of fakes or adulterated swiftlet nests from neighbouring countries, some of which are smuggled into Malaysia for re-export to China. Therefore the second project within the EPP is the Swiftlet Nest Online Traceability System that uses RFID technology to ensure tracking and traceability of high quality and sustainable swiftlet nest production in Malaysia to high value markets in China, Japan and Taiwan. This project is jointly led by MCMC and Department of Veterinary, Ministry of Agriculture.

Currently, Malaysia is the only country in Southeast Asia with the rights to export directly to China, the world’s largest swiftlet nest market.

### Achievements

The Security and Trade Facilitation project successfully met its target of completing trials at 10 Customs checkpoints in Malaysia. As a result, the clearance process by Customs for each container is quicker by 43 minutes. To date, 18 Customs checkpoints have been installed with the system.

This system is one of the first in the world and was cited for the ISO TC 104/SC4 technical specifications. Following its commercial launch on 26 September 2011, the project is now, supported by freight forwarders in the country.



RFID Container Tracking System



RFID Swiftlet Nest Online Traceability System

In parallel with the project in Malaysia, SmarTAG Solutions Sdn Bhd has also completed trials with the Royal Customs of Thailand with similar success.

On the other hand, the Swiftlet Nest Online Traceability System was launched on 12 August 2011. A total of 60 (six per cent) out of 980 birds’ nest houses and processing plants are currently using the system.

### Moving Forward

SmarTAG is venturing to roll out the Security and Trade Facilitation system at 80 Customs sites nationwide in 2012. It is also in negotiations to set the commercial rates for the service.

Under the Swiftlet Nest Online Traceability System, efforts are underway to get 300 birds’ nest houses and processing plants registered with a total of 3,600 transactions. The current ban on birds’ nests by China due to high levels of nitrite has caused excessive stocks of birds’ nests in the market.

The relevant authorities are negotiating with China for the level of the acceptable nitrite. Once the import ban by China is lifted, Malaysia’s swiftlet nest exports done via the Swiftlet Nest Online Traceability System will have added security that ensures the authenticity of birds’ nests from Malaysia.

## EPP 3

## Connecting 1Malaysia

Connecting 1Malaysia aims to fast track the adoption of new, value-added communication services for business, household and government use by creating an ecosystem conducive to the accelerated adoption of these technologies. A three-pronged approach is being taken, comprising efforts to catalyse demand for new services, accelerate adoption and dismantle barriers that prevent large-scale deployments.

The initial emphasis of this EPP is on cloud computing, enhanced personal communication through tele-working and tele-presence, location aware services such as location-based services and fleet logistics, and digital infotainment. Connecting 1Malaysia will collectively generate RM1.8 billion in GNI and create 2,056 incremental jobs by 2020.

### Achievements

Within the tele-working and tele-presence focus, a hosted infrastructure platform for Telepresence services, has been established. Telepresence is the next generation in video conferencing technology that allows virtual meetings to be conducted using life-sized, high-definition video and spatial discrete audio.

To this end, VADS Berhad and Cisco signed a collaborative agreement to build the first Telepresence exchange infrastructure in Malaysia. It offers Managed Telepresence Services to the private and public sector locally and within the region. To date, the project has charted commendable progress, with 37 sites completed where Telepresence services are operational, including Menara VADS, Menara TM and PT VADS Indonesia.



Telepresence transforms communications

In tandem with this EPP's aim to increase technical skills and technology transfer, another initiative by Cisco has seen 30 local people trained in the manufacturing of Carrier Routing System 1 (CRS1) that has generated RM400 million worth of revenue from the sale of the product.

### Moving Forward

VADS is venturing into a partnership with an international firm to expand the Telepresence service. Interconnection is expected to be ready by January 2012 to locations around the world.

We continue to encourage participation from the private sector in promoting People-to-Machine and Machine-to-Machine applications.

## EPP 4

## Establishing e-Learning for Students and Professional Training

The e-Learning EPP aims to establish a common knowledge platform for students and professionals that will enhance teaching methods in terms of quality, interactivity and accessibility, encourage continuous learning for professionals and help prepare the general population as the country shifts towards a knowledge-based economy. Malaysia's e-Learning approach is based on tight collaboration between the public and private sector, where the latter is instrumental in accelerating the deployment of fibre infrastructure around the country. Broadband connectivity and the development of a knowledge platform based on broadband connectivity will link all Malaysian schools and related parties such as educators, students and their families as well as other relevant institutions such as libraries, museums and universities. To further facilitate this, all students and teachers will be provided with their own desktops and notebooks or mobile services for accessing the platform.

In addition this platform will support Continuous Professional Development for professionals such as teachers, lawyers and accountants, with the potential for a regional roll out once completed.

e-Learning will generate incremental GNI of RM1.5 billion, 800 new jobs and spur the growth of connected devices used for e-Learning from 0.5 million to eight million by 2020. A total of 64 per cent of Malaysian schools will also be connected by 2012.

### Achievements

To raise awareness of the benefits of e-Learning, the Ministry of Education has been actively promoting educational online content. To date, a total of 4,166 educational programmes and education-related programmes have been uploaded onto EduWebTV (accessible at [www.eduwebtv.com.my](http://www.eduwebtv.com.my)). So far, it has 113,205 registered users.

### Moving Forward

Under this EPP, the 1BestariNet project is underway to provide connectivity to and inside schools, connectivity support and a virtual learning platform to more than 9,000 schools in Malaysia by 2013. This project will ensure connectivity of up to 10 Megabits-per-second (Mbps) to all urban schools and up to 4 Mbps for rural schools.

The Government also continues to engage with the private sector in efforts to provide affordable devices and innovative content both for the local and export markets.

## EPP 5 Launching e-Healthcare

The e-Healthcare EPP aims to connect all medical institutions to the Healthnet platform that hosts productivity applications for healthcare providers and gives companies and patients access to healthcare-related services. e-Healthcare also encompasses the deployment of Information Technology (IT) equipment to medical institutions and the roll out of applications for personal and remote monitoring of chronic diseases.

In addition, it will enable the exchange of documents and information between companies and medical institutions as well as streamline insurance claims processes by linking insurance companies and medical providers.

e-Healthcare will generate an incremental GNI impact of RM1.4 billion and 250 new jobs by 2020. From less than 100 institutions today, the target is 500 hospitals and 8,000 clinics to be connected to Healthnet, resulting in more than five million patients gaining access to the system.

### Achievements

1,156 public health facilities have been connected with a broadband speed of 2Mbps.

### Moving Forward

The effort to wire up Malaysia’s medical institutions continues with an additional 3,000 public health facilities targeted for connectivity by 2015. The Ministry of Health is also planning to roll out several applications and working towards establishing the common ICT platform.

	Total	Target 2011	Actual 2011
Hospitals	139	137	126
Clinics	3,433	563	868
College and Institutions	46	45	31
Laboratories	26	21	9
Health Offices	361	229	122
<b>Total</b>	<b>4,005</b>	<b>995</b>	<b>1,156</b>
<b>Per cent Achieved</b>		<b>25%</b>	<b>29%</b>

Exhibit 9.3: 1,156 Number of Health locations connected with broadband.

## EPP 6 Deepening e-Government

The e-Government EPP uses CCI technology to enhance access and delivery of government services to the public and businesses. Its goal is to foster a better business environment, strengthen good governance, broaden public participation and improve the productivity and efficiency of government agencies, building on the existing initiatives already launched by the government in this area, many of which have been recognised internationally. e-Government will have a GNI impact of RM1.1 billion in 2020 and create 1,000 new jobs.

### Achievements

Currently, more than 3,000 government applications are available online, in line with the goal of zero counter services by 2020. This initiative is spearheaded by MAMPU, the Malaysian Administrative Modernisation and Management Planning Unit.

MyEmail, a privately initiated project by Tricubes Berhad, was launched to enable a secured communication channel to government e-Services that is accessible through all devices. Since its introduction, the service has garnered more than 7,000 users. In addition, the company is currently looking into providing value-added services to the e-mail facility such as electronic bill presentation.

### Moving Forward

MAMPU will continue to provide more online government services in collaboration with other ministries and agencies. At the same time, MAMPU is also establishing a digital document management system as part of the effort to create an end-to-end online process for job applications, internal circulars and online certificates.



Explaining the usage of broadband to students at the Karnival Jalur Lebar 1Malaysia at Temerloh

## EPP 7

## Ensuring Broadband for All

The goal of this EPP is to increase broadband accessibility by designating broadband access as an essential utility for consumers, like water and electricity, and bridging the digital divide in our nation. This is a practice that is already in place in other countries such as Finland where universal broadband access is legally mandated. The United Kingdom and Sweden have also announced similar plans.

The focus is primarily on easing the provisioning of fibre-optic cables through readily available ducts, particularly for new residential areas, and the gazetting of landed and rooftop sites for wireless infrastructure.

This initiative will result in RM1.7 billion in GNI contribution and create 5,468 new jobs by 2020.

It is expected that 0.75 million new fixed broadband subscribers, 1.92 million new mobile data subscribers and 2.4 million new voice subscribers to sign up for these services by 2020.

### Achievements

To address the access gaps (mostly in urban areas), the Malaysian Cabinet approved and made amendments to the Uniform Building By-Laws (Undang-undang Kecil 25 and 27) 1984 Act that requires all developers to provide broadband infrastructure (e.g. internal ducting with copper/fibre cable, external ducting without cables and manholes without cable) for all new housing developments. The National Council for Local Government subsequently accepted the announcement in May 2011 and all states are now in the process of adopting the amendment at the state level.

The local councils of Kuala Lumpur and Kota Kinabalu have adopted the 'Connected@City' programme to increase broadband adoption among SMEs and businesses through an annual license renewal requirement. The Mayors of the two cities have announced that business operators (e.g. food and beverages outlets, hotels, universities, shopping malls) are encouraged to offer wireless internet facilities.

### Moving Forward

The team will continue to encourage other major cities like Johor Bahru and Kuantan to launch the Connected@City programme.

## EPP 8

## Extending Reach

In Malaysia, urban areas enjoy particularly high broadband subscription rates of up to 60 per cent, in contrast to the sub-urban, rural and remote rates of 25 per cent, 20 per cent and 15 per cent respectively. This EPP aims to drive up broadband subscription levels in non-urban areas to as much as 90 per cent of households in 2020, resulting in 3.4 million new broadband subscribers. The forecast for the corresponding GNI impact is RM2.4 billion and a total of 2,090 new jobs created.

The initiatives under this EPP mainly utilise a shared infrastructure approach to reduce costs and public-private partnerships. Among them are the formation of a consortium by wireless service providers to actively share infrastructure to lower the cost of providing access and enabling the private sector to utilise MCMC's Universal Service Provision (USP) fund's contributor utilisation clause to build the necessary infrastructure for rural and remote areas.

### Achievements

The Community Broadband Centre initiative led by MCMC focuses on providing ICT services to the community in rural areas. To date, there are 252 centres in operation nationwide, providing internet services at a very affordable rate to the rural community.

*Kampung Tanpa Wayar* is an initiative inspired by the Minister of Information, Communications and Culture. It is part of

MCMC's ongoing efforts towards realising the USP objectives outlined under the Communications and Multimedia Act 1998, Universal Service Provision Regulations 2002 (the Regulations) with regard to the provisioning of collective and individual Internet service access in underserved areas.

To date, the service has been commissioned in more than 1,300 villages and 215 towers have been erected. A total of 1,588



A community broadband centre in Selangor

(more on next page)

**EPP 8** (continued from previous page)

Kampung Tanpa Wayar, CBCs and Rural Wireless Towers have been commissioned in 2011, exceeding the target of only 902, for this EPP. These are indicated in Exhibit 9.4.

**Moving Forward**

MCMC together with the Ministry of Information, Communications and Culture will continue to build and commission 1,600 more sites nationwide, expand the wireless towers and community broadband centres in 2012.

With regards to Community Broadband Centres, MCMC in collaboration with EPU will address all telecentres around the country to ensure better coordination and uniform experience for the *rakyat*.

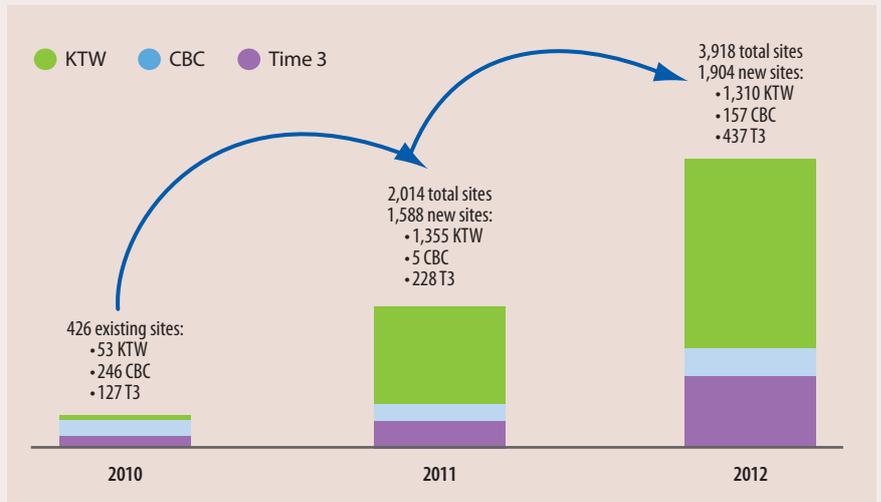


Exhibit 9.4: Additional 1,588 sites providing broadband services in the rural areas have been commissioned in 2011, targeting another 1,904 sites in 2012

**EPP 9**

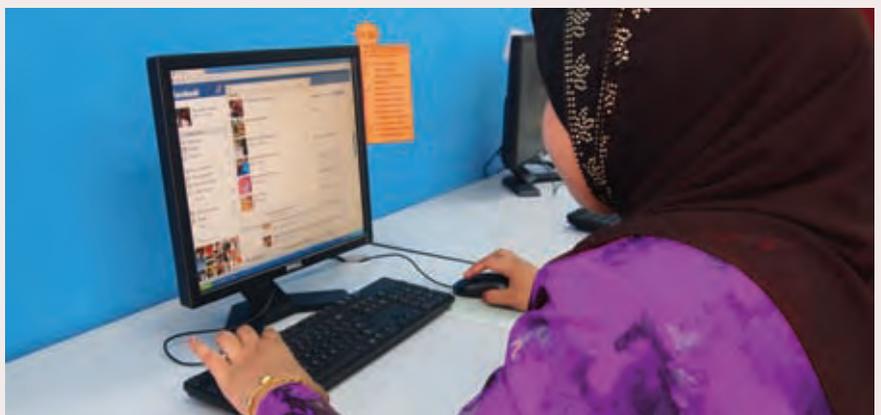
**Offering a Smart Network**

This EPP aims to address the affordability and quality of Malaysia’s internet services by creating tiered broadband price plans based on priority of service and usage caps. Network operators were encouraged to develop differentiated packages that catered to the broad spectrum of user needs, from the high-end segment that is willing to pay for faster speeds to the more price-conscious users who desire lower barriers to entry and functionally sufficient services.

It is also an instrument to fairly charge the small minority of users who consume a disproportionate amount of bandwidth.

**Achievements**

The service providers have responded to the smart network call by the proliferation of tiered packages for the market. Coupled with the National Broadband Initiative by the Ministry of Information, Communications and Culture and market response, the number of subscribers for such packages surpassed the initial industry target of 15 per cent of total packages available in the market.



With affordable and quality internet services, Malaysians can have better access to the internet

**Moving forward**

In the following year, the industry will present the latest smart broadband packages to the public. These new packages will offer more value to customers according to needs and affordability.

## EPP 10

## Extending the Regional Network

Given that 80 to 90 per cent of Internet traffic in Malaysia goes outside the country, we require significant bandwidth in international submarine cables. Malaysia's capacity has historically lagged behind demand and Internet Protocol (IP) transit costs are higher than other markets such as Hong Kong, Japan and Singapore that have built up capacity more aggressively. Quality has also suffered due to congestion on the international network.

Today, there are approximately 200 Gigabits-per-second (Gbps) of capacity being used in Malaysia, with an estimated increase to 600 Gbps. To close the gap, much needs to be done to further add the capacity with demand expected to be seven Terabits-per-second (Tbps) of international bandwidth by 2020. The increased bandwidth will lower wholesale costs and allow the industry to reduce costs to consumers, generating RM2.3 billion in incremental GNI and 1,220 new jobs by 2020. In addition, it supports the growth of an additional three million square feet of data centre space which will enable business services companies to operate advanced data centres and move up the value chain by offering premium differentiated services. It is also a critical means to support local content and locally host foreign content.

### Achievements

Three projects are progressively on track to reduce IP transit costs and bandwidth price. The first is the formation of Konsortium Rangkaian Serantau Sdn Bhd – a consortium comprising 24 telecommunications companies that is expected to address the bandwidth capacity and cost via a two-stage approach.

The initial stage is to buy bandwidth capacity from existing suppliers in bulk and pass the savings back to the consortium members whilst the next stage is to build submarine cable systems for members of the consortium subject to a viable business model. Currently, the consortium is aggregating bandwidth demand among members and conducting a feasibility study for the cable system.

The second project is the Batam Dumai Melaka Cable System (BDM) by Telekom Malaysia Berhad, PT XL Axiata Tbk and PT Mora Telematika. The BDM cable system consists of two fibre pairs, designed to provide 1.28 Tbps by adopting Dense Wavelength Division Multiplexing (DWDM) technology to provide upgradable, future-proof transmission facilities.

The BDM will carry 20 Gbps of capacity and connect approximately 400 kilometres of distance between the two countries with two routes, Melaka-Batam and Melaka-Dumai. The BDM cable system commenced in January 2012.

The third project is Cahaya Malaysia Cable System led by Telekom Malaysia Berhad and NTT Communications Corporation (NTT Com). Cahaya Malaysia is a two-fibre pair cable system that links Malaysia directly to Japan and Hong Kong that will provide Malaysia with 500 Gbps of capacity when it is put into service in mid-2012.

At full capacity, Cahaya Malaysia is capable of carrying a total of five Terabits of bandwidth. Besides serving the Asia Pacific region, Cahaya Malaysia also provides seamless interconnection with other existing trans-Pacific cable systems such as the UNITY cable system, Trans Pacific Express (TPE), TGN cable system and the Japan-US Cable Network (JUCN) for traffic bound to North America. Similar to the BDM project, the shore-end operations have been completed.

### Moving Forward

We will continue to encourage other industry players to further invest on international cables and expedite the business operations of the Konsortium Rangkaian Serantau Sdn Bhd (KRS) to ensure that the industry beneficiaries attain what they had hoped for. The completion of the feasibility study by KRS will help chart the future of the consortium.

# Business Opportunities

Growth in this area will come primarily from fixed broadband and data lines. Fixed broadband subscribers will grow by 10.5 per cent compound annual growth rate (CAGR), as existing fixed line users take advantage of bundled packages and consumer appetite for services such as IPTV, online gaming and music increase.

## Business Opportunity 1

### Fixed Services

Fixed data lines will grow by 2.6 per cent CAGR as more companies require their own internal networks, contributing RM1.7 billion in incremental GNI and creating 3,250 new jobs by 2020.

The industry has seen marginal growth of just under two per cent, representing a revenue rise of RM200 million which is a significant increase given the maturity of Malaysia's fixed line business. The upturn is due to growing demand for data services and the advent of new applications that require higher bandwidth. The High Speed Broadband Project, a public-private partnership, has seen strong acceptance, surpassing the world benchmark for uptake in a supply driven project.

Fixed-line services is seeing a greater uptake by the industry. The high mobile penetration rates have made the mobile players extend their services to include fixed line services. The technology convergence and expanded demand has also seen satellite players incorporating fixed services into their offering. The constant market competition, technology convergence and expanded demand by the end users will see a further demand for fixed services largely concentrating on data and no longer voice.

## Business Opportunity 2

### Mobile Services

Subscriptions to mobile services are expected to increase in all segments: voice, data and broadband, contributing RM3.6 billion in incremental GNI and creating 5,788 new jobs by 2020. Voice lines will rise by 2.7 per cent CAGR due to Malaysia's growing population and subscribers' increasing tendency to have multiple mobile accounts. Mobile data, inclusive of SMS, content and services that do not require internet connections will grow in line with subscriber uptake. Mobile broadband subscription will see the most significant rise of 10.5 per cent CAGR as 3G users begin to access the Internet, more advanced devices encourage Malaysians to use their mobile phones as their primary means of Internet access and lower costs allow mobile Internet access to become more affordable.

As at the first half of 2011, mobile penetration rate stood at 123.5 per cent or 35.3 million subscribers of which 80 per cent are prepaid users. Meanwhile, 3G subscriptions are at 9.8 million.

The higher demand for data will see a demand for new spectrum to be made available to the market. This is further compounded by technology advancement such as Long Term Evolution (LTE). In addition, increased competition and technology convergence will see new services being offered which may impact the margins of the players. This is only to be expected in such a mature market.

## Business Opportunity 3

### Courier, Post and Broadcast

Courier, post and broadcast GNI contribution will grow by 5.2 per cent annually over the next ten years, contributing RM1.6 billion in incremental GNI and creating 7,563 new jobs by 2020.

This sector will also offer a broader range of services including commercial transaction fulfilment, warehousing, inventory management, demand planning for manufacturers and assembly services. MCMC's new multi-tiered licensing system will impose higher requirements for top-tier licence holders and encourage consolidation, raising the sector's investment capacity.

The post and courier sector also has the opportunity to capitalise on the expected growth in electronic commerce by offering services specifically designed to meet merchant needs. Additional opportunities also exist in regional logistics expansion.

Based on the recent development of the market for post and courier services as a result of divestment of equity by the government investment arm in Pos Malaysia, new services will be introduced for the betterment of the public.

The entry of a new Japanese courier provider Ta-Q-Bin that began its services in September 2011 will see the market move into a more specialised service. Pos Malaysia too has expanded its courier portfolio to offer more personalised services including home services through its partnership with VADS.

Even though paid broadcasting penetration has almost plateaued, new opportunities for the broadcast sector will open up as new services are introduced. Digital Terrestrial TV will permit more channels to be broadcast and positively impact revenues beginning 2014 when MCMC plans to mandate the switching off of analogue broadcasting.

Digital Terrestrial TV will see the regulator tendering out for the private sector in the fourth quarter of 2011. This will start the process of analog conversion to digital in a more coordinated way as well as realise the importance of the Digital Spectrum dividend in the era of broadband.

Upside opportunities may also come from mobile TV and 3D TV content, with solutions being explored to address content creation for these new channels and overcoming barriers to adoption.

On broadcasting, much will be dependent on the outcome of the DTTB tender as 2012 will see the initial planning and rollout by the industry with challenges from market dynamics to ensure that this is a viable business.

## Business Opportunity 4

### Regional Operations

Malaysian companies in this sector such as Axiata, Maxis and Astro are aggressively pursuing opportunities in large and rapidly growing markets such as Indonesia, India and Bangladesh. These investments currently account for approximately RM2.5 billion of GNI and will generate additional GNI of RM4.8 billion with 664 new jobs by 2020.

## Enablers

While there have not been new expansions of Malaysian companies in this sector, all of them have strengthened their operations and are further contributing to the Malaysian economy through profits gained from their existing regional operations.

The companies will continue to strengthen the position through increasing subscribers, improving efficiency and strengthening margins. New services will be introduced depending on regulatory frameworks which are different for different territories.

The Communications Content and Infrastructure sector will require 43,162 jobs by 2020. Of this, 25,899 employees will be required to support the EPPs while existing business opportunities require an additional 17,263 employees.

The sector will continue to grow professional development in the industry. In telecommunications, a consolidated approach between PEMANDU, TalentCorp and the Ministry of Higher Education (MoHE) was initiated to ensure that the number of graduates in relevant telecommunications and engineering fields would be met by 2020.

From the creative content and multimedia perspective, the Ministry of Science, Technology and Innovation (MOSTI) has completed the

framework of the Creative Industry Lifelong Learning Programme in collaboration with several key stakeholders such as MDeC, Ministry of Information, Communications and Culture and the Public Services Department (JPA).

This initiative will financially support the students who have been selected to pursue tertiary programmes in creative content at local universities or educational centres abroad. It also provides financial assistance for professionals in the creative content sector to pursue masterclasses locally or abroad.

Further within the content sector is the accreditation of creative talents led by the Creative Content Industry Guild (CCIG). The first phase of the accreditation will focus on three skill sets, i.e. Actor/Actress, Directors, and Production Crews. This initiative aims to raise the standard of professionalism and quality of the creative content practitioners and subsequently shift the industry income bracket to the next level.

The accreditation will complement the drive to have more productions done in Malaysia. In addition, the second phase of the Integrated Content Development programme was launched in October 2011 by MDeC to provide financial assistance to computer-generated imagery (CGI) and mobile content producers in support of computer graphics and multimedia applications.

## Summary of Communications Content and Infrastructure NKEA

	2020 Target
Incremental GNI Impact	RM35.7 billion
Additional jobs	43,162
<b>Critical targets for 2012</b> <ul style="list-style-type: none"> <li>• Revenue from exporting creative content to total RM660 million</li> <li>• Accumulative digitised content to total 50,000 hours</li> <li>• To commission 1,904 cumulative programme sites</li> <li>• Data centre bandwidth revenue to total RM300 million</li> <li>• To create 100 Telepresence sites/endpoints</li> <li>• Ensuring 65 per cent broadband penetration</li> <li>• Ensuring 10 per cent of bandwidth price reduction</li> <li>• To provide 50 per cent accumulative online government services</li> <li>• To ensure two agencies adopt the Digital Document Management System</li> <li>• To ensure 200,000 containers transacted using Smartag readers</li> </ul>	

## Internet for Everyone

**H**azira Yaacob, a housewife and entrepreneur from Kampung Bukit Changgang, Selangor frequents the Community Broadband Centre (CBC) in the area.

The CBC is an initiative by the Malaysian Communications and Multimedia Commission to provide broadband Internet access service to underserved rural areas.

“As I do not have Internet access at home, I travel to the CBC within my *kampong*. I have been making and selling cookies over the years but through interaction with friends, I have found that I can sell my chocolates and other goodies online,” said Zira, as she is fondly known in the Centre.

After many hours and with help from the supervisor at the CBC, Zira put together a blog where she posts photos of chocolates and cookies that can be ordered online. Now, Zira travels every morning to check on orders that arrive in her inbox and works on responding to queries from interested customers. She has a partner whom she calls to explain orders that have come in and deadlines to be met.

Under the Communications Content and Infrastructure National Key Economic Area, ensuring broadband



for all is an Entry Point Project to address the digital divide in sub-urban and rural areas around the country. The CBC provides an opportunity for Malaysians to obtain information and gain access to communications technology training programmes. The trainings conducted in these centres include basic computer usage, introduction to the Internet, word processing as well as electronic services such as electronic banking.

Zira is just one of the many up and coming entrepreneurs in *kampongs* across Malaysia using CBCs to sell their products from biscuits to honey to *krepek* and other cottage industry products over the Internet.

“  
As I do not have Internet access at home, I travel to the CBC within my *kampong*. I have been making and selling cookies over the years but through interaction with friends, I have found that I can sell my chocolates and other goodies online  
”



# Education



**Tan Sri  
Muhyiddin Yassin**

Deputy Prime Minister/  
Minister of Education



**The Education NKEA has made commendable progress in the first year of implementation, with almost all of the EPPs taking off. I am also encouraged by the addition of a new EPP, the Premium Health Education Cluster in Bandar Springhill, Negeri Sembilan.**

The Government and the private sector are now collaborators and partners in growing private education, and are aligned in the vision of making Malaysia a major education exporting country.

Our target is to be the sixth largest education exporting country globally in 2020 with 200,000 international students. Education opportunities will continue to be a growth area for Malaysia, as we continue to reduce our dependency on resource-based sectors and shift our emphasis to the services sector.

I am pleased to conclude that the Education NKEA has been very focussed in 2011 in achieving its milestones and on track to achieve the GNI and investment targets for the year.

**Dato Seri Khaled  
Nordin**

Minister of Higher  
Education



**My vision is to develop Malaysia as a regional, and ultimately, international hub for higher education excellence.**

Under the Education NKEA four discipline clusters in the areas of Hospitality and Tourism, Islamic Finance and Business, Health Sciences and Advanced Engineering, and Science and Innovation have been developed. The initiatives under the Education NKEA will produce quality Islamic finance and business specialists, scientists and researchers, more engineers, and allied health and hospitality professionals, who will meet the human capital needs of the other NKEAs such as Tourism, Electrical and Electronics, Healthcare, Oil and Gas, Finance Services, to name a few.

Through efforts under the EducationMalaysia and SkillsMalaysia initiatives, Malaysia has been able to attract 94,000 international students, with a target of approximately 100,000 international students in 2012. The journey has only started and we are very much on the right track.

# Education

The Education National Key Economic Area (NKEA) is focussed on four prioritised segments based on existing market share and potential for future growth: early childcare and education (ECCE), basic education (primary and secondary), technical education and vocational training (TEVT), and tertiary education (both domestic and international students)

Malaysia’s private education sector has made major contributions in all segments by complementing the Government’s efforts in providing access to quality education to the rakyat.

The early childcare market (birth to four years) is largely untapped with a low four percent enrolment rate. Although private sector participation in pre-school education (five to six years) has been more significant, there is increased demand for better quality pre-school education.

Meanwhile, enrolment in international schools have been steadily increasing since 2006, when the Government liberalised the intake of Malaysian students. Malaysians now make up nearly 43 per cent of students enrolled in international schools.

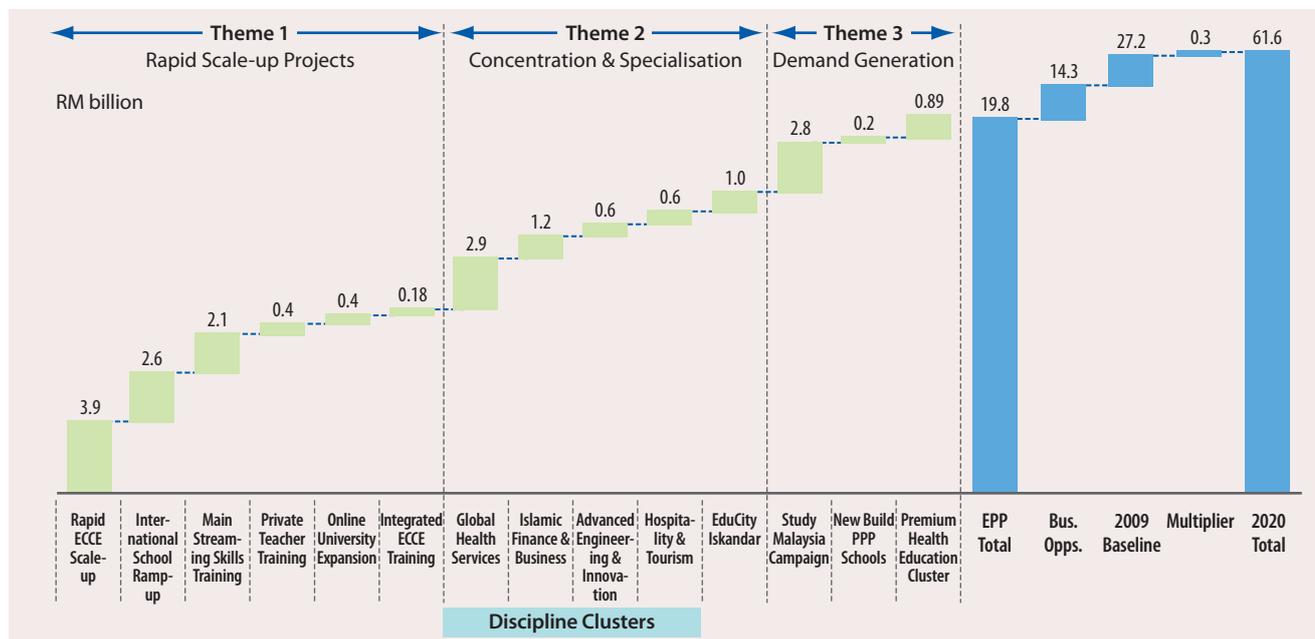
On the tertiary front, about 46 per cent of students<sup>1</sup> pursuing tertiary education are enrolled in private higher education institutions. Malaysia’s aspiration to be a major destination for international students is enhanced by broad offerings of programmes and the establishment of branch campuses by internationally recognized institutions such as Newcastle University, Swinburne University, Curtin University, Monash University and Nottingham University, to name a few.

TEVT has been identified as a critical enabler for the success of the Economic Transformation Programme (ETP), with nearly one million jobs requiring vocational certificates or diplomas by 2020. Several initiatives have been introduced to raise the quality of TEVT offerings and to ensure the programmes are in line with industry needs and requirements. Additional funds have been allocated to the Skills Development Fund (*Perbadanan Tabung Pembangunan Kemahiran – PTPK*), giving more students the opportunity to undertake TEVT programmes in private skills training institutes.

During the 2010 Education NKEA labs, 13 Entry Point Projects (EPPs) together with business opportunities and baseline growth were projected to deliver a total of RM60.7 billion in GNI by 2020. In 2011, we successfully implemented the addition of a new EPP — Premium Health Education Cluster, bringing in an additional investment of RM900 million and 2,143 new jobs. As a result, the Education NKEA with its 14 EPPs will now deliver RM61.6 billion in GNI in 2020.

Exhibit 10.1 depicts the revised GNI reflecting the addition of one new EPP, totalling 14 EPPs for Education NKEA.

Exhibit 10.1



<sup>1</sup> Source : Statistics of Higher Education Malaysia, 2010

While focussing on the EPPs, the additional focus for 2012 will also be on ensuring that industry specific human capital requirements are addressed through increasing the number of discipline clusters and emphasising the need and opportunities available in the TEVT segment.

## 2011 Key Performance Indicators

Exhibit 10.2

NKEA Education		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Student enrolment for pre-school and childcare ('000)	387,000	348,874	90%	●	90%	●	0.5	●
	Student Assistant scheme (RM million)	6	11	183%	●	100%	●	1.0	●
	Number of pre-school centres set up	8000	5,997	75%	●	75%	●	0.5	●
	Number of childcare centres set up	1,000	770	77%	●	77%	●	0.5	●
EPP #2	Number of pre-school teachers trained	4,500	4,996	111%	●	100%	●	1.0	●
	Number of childcare minders trained	1,950	9,261	475%	●	100%	●	1.0	●
EPP #3	Number of students enrolled	21,160	26,860	127%	●	100%	●	1.0	●
	Number of new schools in operation	57	68	119%	●	100%	●	1.0	●
EPP #4	Number teachers trained by private Teacher Training Institute	221	200	90%	●	90%	●	0.5	●
EPP #5	Number of SKM qualified students (including successful PTPK funding) (private students only)	22,100	33,722	153%	●	100%	●	1.0	●
	Number of skills programs accredited by JPK using COPSPA (Code of Practice Skill Program Accreditation)	300	769	256%	●	100%	●	1.0	●
	Number of foreign TEVT students studying in Malaysia	1,000	1,043	104%	●	100%	●	1.0	●
EPP #6	Number of international online students	3,208	1,497	47%	●	47%	●	0.0	●
EPP #7	Number of students enrolled	2,370	5,047	213%	●	100%	●	1.0	●
	Total percentage of employability (job within 3 months)	81%	60%	74%	●	74%	●	0.5	●
EPP #8	Number of total medical and allied health students	63,000	108,000	171%	●	100%	●	1.0	●
	Total percentage of employability (job within 3 months)	72%	71%	98%	●	98%	●	0.5	●
EPP #9	Number of advanced engineering students with cluster contact	1,300	15	1%	●	1%	●	0.0	●
	Total percentage of university income from R&D	1%	0	0%	●	0%	●	0.0	●

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NKEA Education		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #10	Number of students	18,700	35,181	188%	●	100%	●	1.0	●
EPP #11	Number of tertiary students enrolled in Iskandar	1,600	115	7%	●	7%	●	0.0	●
EPP #12	Number of international students	85,000	93,300	110%	●	100%	●	1.0	●
EPP #5	Target number of PPP schools	2	0	0%	●	0%	●	0.0	●
				<b>120%</b>		<b>77%</b>		<b>65%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

### Scaling Up Early Child Care and Education Centres (ECCE)

Under the Government Transformation Programme (GTP), the Ministry of Education aims to increase pre-school enrolment from 67 per cent in 2009 to 87 per cent in 2012. Since 2010, the Ministry of Education has been providing student fees assistance for pre-school children coming from low-income families. In 2011, the Government provided RM11 million in fee assistance to 14,122 children from low income families, who would otherwise not have gone to pre-schools, thus unlocking further demand for pre-school education.

While there are plans under the National Key Results Area (NKRA) to open approximately 4,278 pre-schools over 2010 to 2012, significant private sector support will be required in the form of funds and the provision of pre-school education to meet its targets. To date, the number of students enrolled in private pre-schools and childcare centres is 348,874. With the successful implementation of this EPP, we hope to see more participation from the private sector in the expansion of ECCE to include both the pre-school segment and the early childcare segment, thus increasing the number of children receiving early childcare education.

#### Achievements

In order to accelerate the supply of ECCE centres, a number of enablers have been put in place. The Minister of Education officially launched the ECCE Council on 18 August 2011. The Council's role is to set standards and guidelines to raise the professionalism of

ECCE educators, promote professional development and offer certification for childcare centres and pre-schools. This will result in improved career paths for ECCE educators and ultimately, enhance the quality of private ECCE services.

To date, there are approximately 6,767 private pre-schools and childcare centres nationwide.

#### Moving Forward

The ECCE Council together with the Ministry of Housing and Local Government have presented a paper to the Steering Committee of Education NKEA, proposing a number of initiatives that will enable the ramping up of ECCE centres such as the setting-up of a one-stop centre for all submissions and applications pertaining to licensing, the shortening of licensing approval process from 14 days to seven working days and the harmonising nationwide, of the rate of conversion from residence to business status and the processing and licensing fees. The proposal has been approved by the Cabinet and waiting to be presented to the local council. At the same time, the Steering Committee will continue in its efforts to ramp up the number of quality ECCE centres, to cater for the increased target of enrolment in 2012. The Council will also commence the certification process for childcare centres and pre-schools. The Ministry of Education will play a key role in regulating the centres, in terms of standard, quality and accessibility of private ECCE education.

## EPP 2

### Improving Early Child Care and Education (ECCE) Training

A key success factor to the development of higher standards across the sector is the quality of ECCE educators. Currently, we estimate that 93 per cent of teachers within this segment do not possess any formal teacher training certification. The 10th Malaysia Plan aims to change this by encouraging a minimum diploma level qualification for all ECCE teachers. In order to achieve this target, there is a real need to upskill existing teachers and provide pre-service training.

#### Achievements

The private sector is expected to take the initiative in developing high quality ECCE programs recognised by the Malaysian Qualification Agency.

In 2010, under the GTP, 6,580 private pre-school teachers were trained by private ECCE training centres for three weeks. In 2011, 6,421 pre-school teachers were trained and in 2012, another 6,999 will be trained by both the Government and the private sector.



Planned ECCE hub

(more on next page)

**EPP 2** (continued from previous page)

SEGi Education Group, the champion for this particular EPP, has pledged RM398 million to establish an ECCE hub in Kota Damansara, Selangor Darul Ehsan and satellite ECCE centres nationwide.

In July 2011, a Memorandum of Understanding (MoU) to establish a consortium of ECCE Training Centres was signed by SEGi Education Group, Institute of Early Years Development, DIKA College, Alpha International College (REAL Education Group), Kirkby International College, Institute CECE, The Children's House and *Persatuan Pengasuh Berdaftar Malaysia*.

Since its establishment, the consortium has presented to the Government a *10 Year Early Childhood Care and Education (ECCE) Workforce Training Roadmap (2011 – 2020)*. Among the targets within the roadmap are the upskilling of the existing workforce, provision of multiple and accessible training opportunities, active recruitment of qualified childcare providers and educators, availability of career options for graduates and, clustering of training centres into an ECCE hub. In the meantime, a showcase hub has been set-up in SEGi College Subang Jaya.

The consortium is currently mapping the demographics, qualifications and experience of the current ECCE workforce, to understand steps which need to be taken to upgrade in-service teachers. The study is funded by a SEGi University College research grant amounting RM20,000.

**Moving Forward**

Supported by the Teacher's Training Division under the Ministry of Education, the consortium is currently preparing the platform for the announcement of the minimum qualification for all preschool teachers.

On top of this, the Government will be identifying another 6,999 private pre-school teachers for a three-week training course in 2012 where a significant portion of the training will be outsourced to private ECCE training centres.

**EPP 3****Scaling Up International Schools**

International schools have been growing at a rate of 10 per cent over the past five years, driven by growth in the expatriate population as well as the liberalisation of entry of Malaysian students into international schools. Looking ahead, this demand is expected to further increase in line with Greater Kuala Lumpur/Klang Valley NKEA's target of increasing the expatriate and returning diaspora population.

**Achievements**

Currently, 68 international schools are in operation. An additional 20 operators have been granted licences but have yet to commence operations. This rapid scale-up of international schools is a notable achievement towards our target of 87 international schools by 2020 with a target enrolment of 75,000 students.

The Government has also introduced Investment Tax Allowances to encourage the growth of international schools. Existing and new international schools are now eligible for a 100 per cent Investment Tax Allowance on qualifying capital expenditure incurred within a period of five years.

**Moving Forward**

The Ministry of Education will propose to remove the quota for Malaysian students in international schools as well as deregulate the tuition fees. This EPP will also continue to focus on increasing the number of International students by promoting studying in Malaysia. The Ministry of Education will play a key role in facilitating local international schools to promote Malaysia as the preferred education destination.

## EPP 4

## Expanding Private Teacher Training

Ministry of Education has begun intensive efforts in training new teachers and upskilling existing teachers, particularly in subjects such as English, where there are shortages in quantity and quality. However, public institutes for teacher's training do not have sufficient capacity to meet the increasing demands for trained teachers. Rather than investing heavily in capacity expansion at Government-run teachers' training institutions, the Teacher Quality Lab, an initiative under the GTP Education NKRA, proposed the liberalisation of the market to include private providers of teacher-training for increased competition. This EPP is thus designed to support the delivery of that initiative.

### Achievements

The target for 2011 is to have 220 pre-service teachers to be enrolled in private institutes of higher learning. In July 2011, the training of 200 students, funded by the Ministry of Education was outsourced to four private teachers training institutes. The shortfall is due to 20 students declining the offer. The four higher education institutes are Kirkby International, SEGi University, University College Sedaya International (UCSI) and Universiti Tun Abdul Razak (UTAR).

A consortium championed by Kirkby International College has been formed consisting of private higher learning institutes with education faculties such as Management and Science University, UCSI, Technology Park Malaysia College, Malaysia University of Science and Technology, Asian e-Learning University (AeU), Alpha College, SEGi University College and Mahsa University College. The consortium has provided a roadmap on how private institutes of higher learning can participate in providing affordable and quality teachers' training by participating in both pre-service and in-service training of teachers. An example of this is this year's training of 200 pre-service teachers.

### Moving Forward

Moving forward, this EPP will continue to focus on liberalising further teacher training by encouraging the participation of private industry players.

## EPP 5

## Scaling Up Private Skills Training

The aim of this EPP is to reduce the percentage of unskilled and semi-skilled workers from 76 per cent in 2009 to 50 per cent in 2020. This can be achieved by providing post *Sijil Peperiksaan Malaysia* (SPM) students or school dropouts with greater opportunities to pursue skills education. This will be implemented through demand side funding to stimulate private sector involvement, via the Skills Development Fund Corporation as the main channel for disbursement.

### Achievements

Some RM232 million has been allocated in 2011 to the Skills Development Fund for programmes in private skills training institutions. As a result of demand-side funding managed by the Skills Development Fund Corporation, close to 33,722 students have received skills training thereby exceeding the target of 22,100 students set for 2011.

In March 2011, the Department of Skills Development conducted an audit and rating of accredited skills training programmes offered by 258 accredited centres under the Department of Skills Development (*Jabatan Pembangunan Kemahiran, JPK*). Accredited centres were rated from Tier 5 (excellent) to Tier 1 (weak). The disbursement of funds to *Perbadanan Tabung Pembangunan Kemahiran (PTPK)* for private training institutions is based on the results of the Star Rating exercise and is in line with skills requirements of various NKEA sectors.

Several promotional initiatives, including nationwide road shows, career counselling symposia and skills competitions have been organized under the SkillsMalaysia campaign to raise public awareness about opportunities for skills training and to reduce negative perception that skills training is an unattractive career



Skilled workers at an assembly line

path. At the same time, to ensure that programmes cater for the wide range of skills sets demanded by various industries, JPK has successfully increased the number of accredited skills programmes by 769 exceeding the target of 300 set for 2011.

### Moving Forward

The focus for 2012 will be to increase private sector participation in the skills training market, with increasing collaboration between PTPK, JPK and private training institutions to ensure that Government funding is maximised and that skills-sets demanded by industry are met.

There will also be an increasing focus on developing Malaysia as a regional skills training hub, in line with JPK's intention to increase the number of international skills training students in Malaysia. For a start, JPK is collaborating with SEGi University College to offer the SkillsMalaysia INVITE programme in selected accredited centres.

## EPP 6

## International Expansion of Distance Learning

This EPP was identified to capitalise on the increasing demand for distance learning, a globally booming market, with Asia alone seeing an average growth rate of 12 per cent per year over the past 10 years. One of the key focuses within this EPP will be to facilitate the creation of a leading regional distance learning provider in Asia.

### Achievements

Asia e-University (AeU) was appointed as the main gateway for distance learning due to its accreditation in all Asia Cooperation Dialogue (ACD) countries. The Malaysia Education Online website (<http://www.medo.my/>) was launched in April 2011 by the Minister of Higher Education.



Students in a PhD class



A group of Korean students in a Masters class

As of November 2011, a total of 25 programmes are available on this website. The Programmes offered on the website reflect collaborations between AeU and various other institutions, namely, DLC Worldwide (UK), Islamic Banking and Finance Institute Malaysia (IBFIM), Kuala Lumpur Infrastructure University College (KLIUC), Malaysian Insurance Institute (MIM), UCSI University, University Malaysia Sabah (UMS), Universiti Sultan Zainal Abidin (UniSZA), University Sains Islam Malaysia (USIM) and University Utara Malaysia (UUM).

### Moving Forward

Malaysian Education Online will encourage more aggressive participation from public and private universities in the form of a wider range of programme offerings, i.e. undergraduate through to doctoral. Besides academic programmes, Malaysian Education Online will increase the number of collaborations with international professional education partners. This is intended to cater for lifelong learners.

## EPP 7

## Building an Islamic Finance and Business Education Discipline Cluster

In the Islamic Finance sector, Malaysia is currently ranked fifth globally after the United Arab Emirates, Saudi Arabia, Kuwait and Qatar with around RM3.2 trillion worth of Islamic banking assets. In the fast growing sub-field of Sukuk, commonly referred to as the Islamic equivalent of bonds, Malaysia is the top issuer in the world with a 67 per cent market share.

Despite this strong position in Islamic Finance, we are currently lagging as a provider of Islamic Finance and Business education. One reason is the lack of national consensus on what should constitute a standard curriculum for an education in Islamic Finance and Business. This has hindered us from developing an internationally recognised professional certification, critical to major markets like the Middle East. We have also yet to systemically brand Malaysia as a hub in this field.

### Achievements

Championed together by Bank Negara and the International Islamic University (IIUM), a new discipline cluster has been established in January 2011. The cluster will aim to provide the benchmarks for minimum standards in Islamic Banking and Finance education. It will also focus on designing curriculum for all areas under Islamic banking and finance education.

### Moving Forward

The targets for 2012 are to enroll 3,500 international students, establish a standardised Islamic Finance and Business curriculum, and undertake a concerted marketing campaign focused on this innovative curriculum to gain wider acceptance beyond our shores.

## EPP 8

## Building a Health Sciences Education Discipline Cluster

Under this EPP, anchor institutions from the education sector and allied health industry will collaborate to address the shortage of healthcare professionals in Southeast Asia and to address industry issues, for instance the issue of insufficient practicum placements, thereby enabling Malaysia to take a leading role in addressing the shortage of professionals against the backdrop of over 200 health services education institutions.

### Achievements

In 2011, the Cluster consisting of Masterskill University College of Health Sciences, SEGI University College, Sime Darby Healthcare Education Group and KPJ Healthcare focused on addressing the minimum requirement for a Diploma in Nursing and collaborated to develop a framework to address the issue of insufficient practicum places for medical, nursing and allied health students.

The framework to address the shortage of practicum places included a proposal to set-up Malaysia Centre for Clinical Attachment and Placement (MyCCAP), a non-government independent placement agency, which aims to serve as an allocation mechanism for public and private institutions to access

practicum opportunities in public and private hospitals. The proposal was presented to the Ministry of Health which was of the opinion that private sector educational institutions should be encouraged to resolve the lack of practicum places through other means instead of further utilizing government hospitals.

As part of the second prong of the framework to resolve practicum issues, several cluster members have separately embarked on initiatives to increase the number of practicum places available through development of teaching hospitals, namely Masterskill University College of Health Sciences and Sime Darby Healthcare Educational Group.

### Moving Forward

In 2012, the focus of this EPP will be to broaden programmes being offered in this discipline to provide educational opportunities to cater for the biomedical devices industry and further enhance the quality standard of health science education in Malaysia through collaboration between local players and international partners, towards the creation of an industry-recognised quality standard.

## EPP 9

## Building an Advanced Engineering, Science and Innovation Discipline Cluster

Due to high market fragmentation and academic silos, interdisciplinary collaboration among researchers, industry and investors is rare. Even more scarce are vital resources such as cutting-edge facilities and industry linkages with the goal of commercialisation are almost non-existent.

In an effort to move the various economic sectors up the value chain, this EPP serves to enhance scientific collaboration between researchers, industry and investors, thus increasing the quality of research capabilities in Malaysia as well as increase opportunities to commercialise research.

### Achievements

Memoranda of Understanding (MoUs) have been signed between Technology Park Malaysia Corporation (TPM), University Tenaga Nasional (UNITEN) and Multimedia University (MMU) to explore opportunities to collaborate in areas related to this EPP.

A comprehensive Collaboration Agreement has been signed between TPM (host entity), UNITEN (research capability) and UNI10 Energy Sdn Bhd (commercialisation support) in October 2011 for the Waste Cooking Oil Biodiesel Programme. This programme is aimed at the sustainable development and product commercialisation of biodiesel as part of the nation's effort to achieving low carbon economy, with the generation of proficient subject matter experts in the area of biodiesel.

The Government has agreed to support this project with a RM1.27 million grant, in light of the Government's move to encourage green technology.

### Moving Forward

In 2012, this EPP will focus on increasing the number of parties involved in the cluster and broaden its support of projects which build strong research capabilities and enhance commercialisation of research in line with NKEA growth sectors. Discussions are underway with Universiti PETRONAS Malaysia to focus on research in two identified areas in the Oil and Gas sector, namely carbon dioxide management and enhancing oil extraction. Monash University has also expressed an interest to undertake research on green electronics which potentially will boost the electronics and electrical sector.



Opportunities abound in the engineering and science disciplines

## EPP 10

## Building a Hospitality and Tourism Discipline Cluster

The Tourism NKEA aspires to grow the tourism sector threefold by 2020. To enable the industry meet this aspiration, we will need to increase our annual output of hospitality personnel from 20,000 in 2009 to 50,000 students by 2020, and the share of graduates with diplomas or degrees from 13 per cent to 50 per cent in the same period.

### Achievements

UCSI University has been chosen as champion of this EPP. Since December 2010, an Independent Management Team (IMT) consisting of industry players and private institutions of higher learning was established to promote tourism and hospitality education in Malaysia.

The first project is to design and pilot a work-based learning diploma programme where students get to immediately be attached to industry partners with guaranteed monthly financial allowance given. The pilot programme commenced in May 2011 in Sarawak where students are trained in luxury hotels and convention centre namely Grand Margherita Hotel, Riverside Majestic Hotel, Pullman Hotel and Borneo Convention Centre, Kuching.

The Malaysia Centre for Tourism and Hospitality Education (MyCenTHE) was officially launched on 18 August 2011, MyCenTHE will serve as the driving force behind the EPP 10 initiative and

to promote its worked-based learning programme. Under this initiative, MyCenTHE aims to make tourism and hospitality education affordable through attractive financial aid packages amounting to 60 to 80 per cent of tuition fees offered by all member institutions.

As a means of exercising corporate social responsibility, MyCenTHE has also started a nationwide project to empower the rural populace through the provision of scholarships, employment and business opportunities to remote villages in Sarawak, Sabah and the northern region of Peninsular Malaysia.

Presently, five clusters have been or are being established. They are, Penang by KDU College, Johor by KFCH International College, Sabah by INTI University College, and Sarawak and Kuala Lumpur by UCSI University. Except for the Sarawak Cluster which began in May 2011, the other four clusters will commence operations in Q2 2012.

### Moving Forward

In 2012 all five clusters will be operational and by 2015 each cluster can expect to receive an average of 2,000 student intakes. In addition, the MyCenTHE will expand its Work-Based Learning programme by offering programmes in retail and event management and partnering with vocational and community institutions to offer upskilling programmes.

## EPP 11

## Launching Educity@Iskandar

The objective of this EPP is to develop fully integrated education hubs comprising universities and institutions of higher education, research and development centres, accommodation and recreational facilities. This multi-varsity campus environment is intended to contribute to the Ministry of Higher Education's and Ministry of Education's strategic blueprint in positioning Malaysia as a regional hub in the global education network.

It will also provide Malaysians with the opportunity to study at renowned institutions from around the globe, at a cost that is significantly lower than studying at the home campus. Educity@Iskandar in Johor, Malaysia was the first major development under this EPP.

### Achievements

Educity@Iskandar has successfully secured investments from Newcastle University Medicine Malaysia (NUMed), Netherlands Maritime Institute of Technology (NMIT), Raffles University Iskandar, Reading University Marlborough College and Raffles American School.

NUMed's operations commenced in the fourth quarter of 2011 with 100 students. It was officially opened by His Royal Highness the Duke of York on 1 November 2011. The medical school anticipates an enrolment of 900 students by the year 2017.



NUMed – Bell's Court, Administrative Building

Progress of Marlborough College in Iskandar is also on track, reporting a 40 per cent completion as at November 2011. Meanwhile, NMIT commenced its first intake in May 2011 in a temporary campus and to date has commenced three intakes.

*(more on next page)*

**EPP 11** (continued from previous page)

**Summary of Projects in EduCity**

Exhibit 10.3

<b>Educational Institutions</b>	<b>Newcastle University Medicine Malaysia (NUMED)</b> 13.5 acres	<b>Netherlands Maritime Inst of Technology (NMIT)</b> At Multi-varsity Entreprise Complex	<b>University of Southampton Malaysia Campus (UMSC)</b> At Multi-varsity Entreprise Complex	<b>Raffles University at Iskandar</b> 65 acres	<b>Reading University Iskandar</b> 30 acres	<b>Marlborough College</b> 90 acres	<b>Raffles American School</b> 45 acres
<b>Programmes Offered</b>	Medicine and Biomedical Sciences	Diploma, degree in transport, shipping, seafaring, maritime and logistic management (students adjusted based on discussion)	Engineering, Aerospace	Multi discipline Design, Merchandising (students based on meeting in Aug)	Multi discipline (business school, pharmacy, chemistry, built environment)	International School Co-ed and boarding	International School with American curriculum, Co-ed and boarding
<b>Operation Date</b>	Sept 2011	May 2011 (at KotaRaya)	Sept 2012	Jan 2012 (at KotaRaya)	2012 (start at KotaRaya with IELTS and Exec Education)	Aug 27 2012	4Q2012

Following the successful launch of Educity@Iskandar, Educity@KLEC (Kuala Lumpur Education City) was named as another key project under this EPP. Under this Educity, Bank Negara Malaysia and KLEC have agreed to proceed with a joint-venture to bring and promote the Cambridge Judge Business School in Kuala Lumpur. The first intake of students for executive programmes took place in December 2011.

**Moving Forward**

Construction and development of the Epsom College Malaysia

branch campus in Educity@KLEC is underway. The college is expected to begin operations in September 2012 in a temporary campus while construction of the new campus is expected to be completed by 2013.

In addition, this EPP will continue to facilitate the development of educational hubs throughout the country in line with the Government’s intention to position Malaysia as a regional education hub. The development of new initiatives will ensure that top tier foreign universities are attracted to establish branch campuses in Malaysia.

**EPP 12**

**Championing Malaysia’s International Education Brand**

Since international student mobility is expected to increase to about six million by 2020, this EPP aims to position Malaysia as a regional hub of choice in the global education network, through various initiatives to raise awareness about educational opportunities, enhance consideration for students from high priority countries, facilitate easy decision making and improve international student experiences in Malaysia.

**Achievements**

The National Association of Private Educational Institutions (NAPEI) and the Malaysian Association of Private Colleges and Universities (MAPCU) have collaborated on an initiative to increase the number of international students in Malaysia. This incentive-based initiative is also focused on developing marketing capability across all educational institutions. As of December 2011 they have received a RM2 million grant for building capability for international marketing purposes.

Roundtable discussions have been held between PEMANDU, TalentCorp, and several private and public institutions of higher education on a proposed programme to enable top tier international students to seek jobs in Malaysia. International

students are currently not allowed to work in Malaysia. The Economic Council has agreed in principle to the programme and the Ministry of Higher Education has agreed that post-graduate students be allowed to work in Malaysia. The Ministry of Higher Education is considering critical industry sectors in which undergraduate international students may seek employment.

An initiative is underway to rationalise the visa application process for international students applying for programmes in institutions of higher education and in TEVT institutions, towards a more consistent approach to offering visas for international students.

**Moving Forward**

In 2012, the focus of this EPP is on initiatives which will ensure that the target of 200,000 international students by 2020 is realised. A key initiative is the further development of Education Malaysia into an effective corporatised government entity responsible for managing the marketing of Malaysian education, processing of visa applications as well as managing international student welfare.

**EPP 13****Introducing Public-Private Partnerships in Basic Education**

Currently, the Ministry of Education runs about 10,000 schools across Malaysia and has an additional 92 schools in its pipeline for 2011. On average, the Government spends RM5,000 (direct cost) on each student in a public school.

As the number of schools increases, the challenges of managing them all at a high standard becomes increasingly complex. Governments worldwide in similar situations are increasingly separating the role of funder and regulator from that of provider. The public-private partnership model that this split creates offers several benefits. First, it provides greater choice to families through a broader portfolio of school models at an affordable price and leverages the private sector as a partner in meeting national objectives. Second, the competition generated raises overall standards across both public and private schools. Third, private providers find it easier to expand their business or to enter the market as they do not have to invest heavily in capital expenditure.

**Achievements**

Recognising the immense opportunities offered by the implementation of a public-private partnership (PPP) model, the Ministry of Education has agreed to implement the model in vocational secondary schools. As of December 2011, the Government has short-listed four skills training providers to pilot the PPP on TEVT in schools, as part of the Ministry of Education's Vocational Transformation Programme.

**Moving Forward**

In 2012, the Ministry of Education aims to pilot two normal day schools to be turned into PPP schools.

**EPP 14****UCSI Premium Health Education Cluster**

The UCSI Premium Health Education Cluster in Bandar Springhill, Negeri Sembilan, aims to provide a platform for premium health education by establishing state of the art infrastructure and offering quality medical expertise to produce excellent medical professionals.

It also serves to provide a strategic link between health, education and research to enhance physician capabilities, patient experience, medical procedures, publications, and cutting-edge innovation. Phase 1 of the development of this Cluster involves the construction of an international school, a 800-bed teaching hospital and a resort, convention centre and student hostel; while Phase 2 includes the development of UCSI's main university campus, a skin research centre and a marine and aquatic research centre.

**Achievements**

Construction and development work amounting to close to RM900 million of private investment up until 2020 has begun as planned under Phase 1. Substantial support from the Negeri Sembilan government was obtained as part of the negotiations to facilitate the construction of this development.

**Moving Forward**

The teaching hospital is expected to be completed by first half of 2013. Phase 2 of the Cluster is expected to commence in 2013 which will also be fully privately funded and is expected to be completed in 2016. It is estimated that 50 per cent of jobs created as a result of this EPP will be high-income professional jobs.



Artist's impression of the UCSI Premium Health Education Cluster



Construction in progress

# Business Opportunities

## Business Opportunity 1

### Discipline Clusters to Support NKEAs

There are currently four discipline clusters focused on Islamic Finance and Business, Health Sciences, Advanced Engineering and Hospitality and Tourism Sector under the Education NKEA's current EPPs. However, there needs to be an increased focus on high demand sectors such as the oil, gas and energy sector to support the extensive pipeline of human capital and skills resources required. In 2011, several private institutions of higher learning have approached the Education NKEA team to explore opportunities to start new discipline clusters. The groundwork for the formation of several new clusters has been put in place.

In 2012, the Education NKEA will focus on developing new clusters to meet industry demand, with at least two clusters announced in the first half of the year. In particular, a new education cluster

for oil, gas and energy will be formed. Another cluster will cover game development which focuses on building capability in animation and game technology. This cluster presents Malaysia with the opportunity to compete with countries such as South Korea, China and Singapore.

## Business Opportunity 2

### Centre for Excellence in Language Learning

The original intention of this business opportunity, was to capitalise on Malaysia's unique position as a multi-cultural and multi-lingual environment, as well as a leading tourist destination to develop a language hub in the country. There has been little demand for new language centres and therefore the focus of the Education NKEA has been on delivering outcomes on existing EPPs and developing opportunities in other areas.

# Enablers

## Raise Quality through Regulatory Reforms

There is a need for broader regulatory reforms targeted at raising the profile, branding and quality of private education on the whole. This enabler aims to amend existing policy frameworks to provide a platform for all private sector colleges and institutions to enhance performance of student outcomes. The first Malaysia Quality Evaluation System (MyQuest) developed under the purview of the Ministry of Higher Education rated 210 private colleges which qualified to be audited based on the criteria set by the Ministry. Over 60 per cent of these private colleges have been rated as satisfactory and above according to MyQuest with a score of four stars and above. The Ministry has suggested that colleges rated with three stars and below implement capability building programmes.

Following the results of the ranking, the Ministry plans to work with private colleges which are ranked weak to help them with improving quality and performance. The MyQuest ranking would also be used as a reference point for National Higher Education Fund Corporation (PTPTN) loan approvals and requests to be upgraded to university college status, among others.

## Improve Access to Supply-side Financing

There is much demand in the education sector, in particular the ECCE industry for accessible and affordable loans to grow and upgrade ECCE centres. Discussions are currently ongoing with the intention to provide soft loans to existing ECCE providers to upgrade their centres and grow the industry.

In 2012, the focus will be to work with commercial banks to draw up a disbursement mechanism for soft loans to be accessible to ECCE operators.

## Shift to Demand-Side and Performance-Based Financing

The objective of this enabler is to increase the amount of demand-side financing through various initiatives (for example: a fee assistance scheme for pre-schools, for performance-based funding by linking funding allocation to quality and employability of students). Additional funding for technical education and vocational training (TEVT) of RM232 million has been given in 2011 via the Skills Development Fund (Perbadanan Tabung Pembangunan Kemahiran, PTPK) to provide students with more opportunities to pursue TEVT. The allocation of these funds via PTPK is based on a Star Rating Exercise conducted by the Department of Skills Development in the first quarter of 2011 which rated the performance of private training institutions registered with PTPK.

In 2012, the Ministry of Education intends to work together with private TEVT operators via a public-private partnership model to buy places in private sector TEVT institutions to supplement the number of seats available in public vocational schools as part of the Ministry's Vocational Transformation Programme. A target of four agreements has been set for 2012. The Star Rating Exercise in 2011 will be enhanced and will continue to be conducted in 2012, in particular for new training institutions. There will also be funding allocated for PTPK as part of the effort to provide increasing opportunities for students to pursue TEVT with private sector institutions.

## Remove Barriers to Entry for Foreign Students

The intention of this enabler is to facilitate the increase of international students in the private higher education sector. This is in line with the Ministry of Higher Education's target of 200,000 international students in Malaysia by the year 2020. The Education NKEA Steering Committee has agreed that high performing post-graduate international students in Malaysia will be given the opportunity to pursue jobs in the country upon completion of their studies. Talent Corp and the Ministry of Home Affairs are currently in discussions to set guidelines and operationalise this process.

In 2012, the focus will be on streamlining immigration processes, in particular for the issuance of student passes for international students, including improving processes to enable international students to pursue TEVT courses in Malaysia.

## Improve Ease of Doing Business

The focus of this enabler is to improve the process for which private sector educational institutions may set up business. The licensing mechanism for *taska* and *tadika* in Malaysia is very diverse. Each state has its own rules and regulation on licensing, conversion rates and licensing fees. Therefore, via EPP 1: Ramp up of ECCE Operators, the Ministry of Housing and Local Government together with ECCE Council have finalised a national guideline for registering/approving licences for *taska* and *tadika* which will be uniform in all states.

## Summary of Education NKEA

	2020 Target
Incremental GNI Impact	RM61.6 billion
Additional jobs	535,000
<b>Critical targets and milestones for 2012</b> <ul style="list-style-type: none"> <li>Align industry demand for skills with TEVT programmes and disciplines that are being supported by the government</li> <li>Increase the number of students involved in TEVT</li> <li>Enhance involvement of public sector institutions of higher learning in online and distance learning to open up opportunities for these institutions to tap on international online student revenue</li> <li>Increase number of researchers involved in cluster initiatives and enhance research commercialization efforts</li> <li>Set up one stop centre for preschool and childcare licensing</li> <li>Increase the number of students involved in ECCE diploma and <i>Kursus Asuhan Awal Kanak-kanak</i> (KAAK) certificate</li> <li>Re-train and provide course option for surplus in-service teachers</li> <li>Develop new curriculum for Islamic finance and business education which meets industry requirements</li> </ul>	

## TUKAR: Making a Difference

Participating in TUKAR (Small Retailer Transformation Programme) is a decision that 519 store owners around Malaysia will not regret, including Jessica Wong, a 42-year-old single mother who manages a sundry shop in Bandar Bukit Puchong.

In April 2011, she decided to join the pioneer programme and within weeks, saw her weekly revenue increase from RM20,000 to RM29,000. The TUKAR programme was initiated in January 2011 to aid sundry shops increase their competitiveness through the adoption of modern technology and efficient business processes.

With the guidance and help of Mohamad Harith De Souza Abdullah, Tesco's commercial project manager, the shop was transformed from a dimly-lit sundry store to an attractive and brightly-lit retail outlet. What used to be a disorganised store became modern and systematic in just 10 days after Harith's advice.



"This store is re-energised. Once, I only had the dusty concrete floors and rusty shelves. Now, the floors are tiled and I have new shelves and air-conditioning, making it a pleasant shopping experience for my customers," she said.

Photos courtesy of Star Publications (Malaysia) Bhd



She also received advice on improving efficiency of the shop by changing its layout and operating systems, preparing planograms and revamping the management of stocks in the store.

TUKAR was also a life-changing experience for Mrs. Francisca Jeyanthan who inherited a sundry shop from her father in Merlimau. She was on the verge of giving up the business as revenues were low, making her unsure if she would be able to manage it for much longer. TUKAR transformed her store beyond recognition.

"Before the transformation, Pasar Mini Bandar Baru Merlimau was an old-fashioned sundry shop that made between RM1,000 and RM1,900 a day. With the guidance of Mydin, it is now an efficient and well-

organised mini mart with increased sales of up to RM3,000 a day," said Francisca.

"The refrigerator was seven years old and we only had a cement floor. This was replaced with mosaic tiles, new and safe electrical wiring in the shop, shiny new racks, new appliances and our goods rearranged to be more attractive. I am forever grateful to this programme," Francisca said.

The government has allocated RM30 million for the programme in 2011. The retailers are offered soft loans between RM20,000 and RM60,000 with a 15-year repayment period.

TUKAR will eventually see 5,000 outlets transformed and modernised throughout the country by 2020.



# Agriculture



**Datuk Seri  
Noh Bin Omar**

Minister of Agriculture  
and Agro-based Industry



**The transition from agriculture to agribusiness under the NKEA will be led by private sector investment as the primary driver of economic growth. The transition from agriculture to agribusiness under the NKEA will be led by private sector investment as the primary driver of economic growth. With this programme, Agriculture is set to achieve an incremental GNI of RM28.9 billion to bring the total GNI contribution from Agriculture to RM49.1 billion, as well as creating 74,600 job opportunities by 2020.**

To date we have already achieved more than 100 per cent of the Agriculture NKEA's targets for the first year with the private sector committing to invest up to RM3.2 billion to implement the projects under the EPP.

The challenges for the agriculture sector are tremendous and require good coordination between different agencies. Though the Government is giving the lead to the private sectors, we must not lose sight of how the ETP should benefit the *rakyat*. In all projects, the projects owners must think of ways to include the participation of the target groups, such as through the concept of contract farming, profit-sharing as well as developing the local community surrounding the project area.

We must harness private investment initiatives to bring greater development and economic impact to the country without forgetting our promise of 'people first and performance now'.

# Agriculture

The Agriculture National Key Economic Area (NKEA) focusses on transforming a traditionally small-scale, production-based sector into a large scale agribusiness industry that contributes to economic growth and sustainability. This transformation will be based on an integrated and market-centric model that focusses on economies of scale and value chain integration

The transformation strategy comprises four key themes:

1. Capitalising on competitive advantages
2. Tapping premium markets
3. Aligning food security objectives with increasing Gross National Income (GNI)
4. Participation in the regional agriculture value chain

Based on the four themes, the NKEA Agriculture Lab in 2010 mapped out 16 Entry Point Projects (EPPs) and 11 Business Opportunities (BOs). These initiatives are expected to generate RM28.9 billion in incremental GNI and 74,600 jobs by 2020.

One of the significant milestones in the Agriculture NKEA this year was the development of an incentive procedure that allows the private sector to undertake the planning and implementation of

a desired project. Previously, agriculture projects with the private sector were subjected to Treasury Instructions and detailed planning by the government department was required before any project could be considered for approval. All procurements would be conducted through the government departments. This procedure could take up to six months to complete and there was a constant risk of mismatch in terms of the specifications given by the government department against those needed by the private sector.

In October 2011, PEMANDU and the Delivery Management Office (DMO) in the Ministry of Agriculture (MoA) obtained approval from the Ministry of Finance for a new disbursement mechanism specifically designed to implement the EPPs under the Agriculture NKEA. The table below shows a comparison of the normal procurement procedure and the new mechanism:

Exhibit 11.1

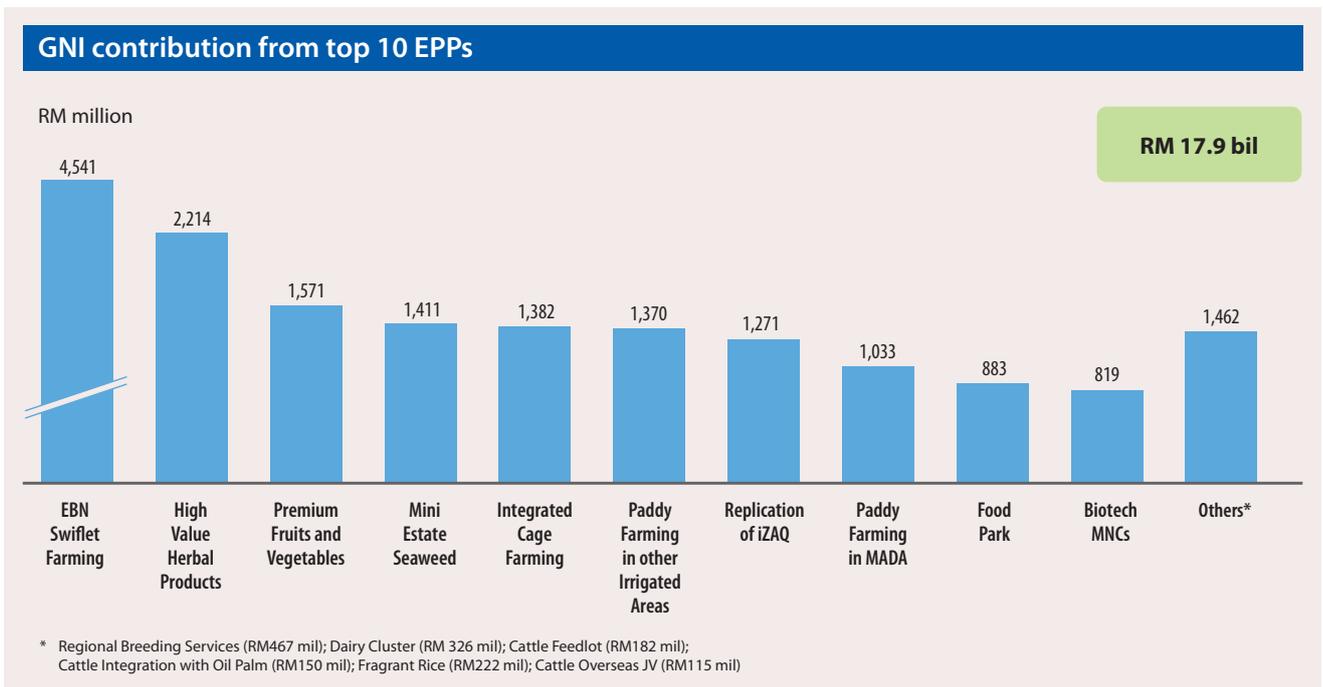
	Normal Procurement Procedure	NKEA Incentives Procedure
Duration	420 days	60 days
Government cost	100% project cost	30% project cost*
Payment to private sector	Forward payment	Reimbursable basis
Construction design outcome	May or may not meet private sector's specifications	Built by private sector
Project cost overrun	Borne by government	Borne by private sector
Project off-take by private sector	Depending on interest by private sector	Secured, private sector's own project

\* for applicable EPPs

To support this, PEMANDU and the DMO have established a set of common criteria that is transparent and meritocracy-based in the selection of anchor companies across all EPPs. To date, the NKEA incentives procedure saw the approval for 69 companies, with committed private investments of up to RM3.2 billion to generate RM10.22 billion in GNI by 2020 and a cumulative of 31,504 jobs (42 per cent of overall target by year 2020) by the end of each project's completion date. Private investment for EPPs surpassed the original target of 66 per cent to achieve 91 per cent by the end of 2011. This significantly reduced public investment to nine per cent from the initial estimate of 34 per cent.

These incentives provided by the government to the anchor companies are given with a caveat that the surrounding community of any given project within this NKEA must be involved and thus benefit economically. This approach ensures the *rakyat's* inclusiveness in the ETP by enabling them to generate better income and quality of life in the agricultural ecosystem.

Exhibit 11.2



## 2011 Key Performance Indicators

Exhibit 11.3

NKEA Agriculture		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Total number of clinical trial to be conducted for nutraceutical and cosmeceuticals	5	5	100%	●	100%	●	1.0	●
	Mobilization of CoE to conduct research for product development	13	23	177%	●	100%	●	1.0	●
	Establishment of marketing plan for nutraceuticals and botanical drugs	5	7	140%	●	100%	●	1.0	●
	Establishment of Herbal Cultivation Park at Pasir Raja and Chegar Perah	100%	100%	100%	●	100%	●	1.0	●
EPP #2	Total sales value for edible bird nest (RM mil)	100	81	81%	●	81%	●	0.5	●
	Total number of newly registered EBN premise	2,000	3,379	169%	●	100%	●	1.0	●
	Total newly certified processing plant (VHM)	15	7	47%	●	47%	●	0.0	●
	Total newly certified EBN premises (SALT)	1,000	807	81%	●	81%	●	0.5	●
	To establish new EBN website for traceability	100%	100%	100%	●	100%	●	1.0	●
	To establish R&D referral centre with UPM	100%	100%	100%	●	100%	●	1.0	●
	To establish new EBN Collection and raw-clean EBN processing Centre	8	10	125%	●	100%	●	1.0	●
	To establish new EBN international trading house	100%	100%	100%	●	100%	●	1.0	●
EPP #3	Tonnage of dried seaweed produced (MT)	22,000	23,941	109%	●	100%	●	1.0	●
	Total land areas gazetted for seaweed farming	3,000	3,000	100%	●	100%	●	1.0	●
	Total mini estate established	15	11	73%	●	73%	●	0.5	●
	To establish database for identified areas	100%	70%	70%	●	70%	●	0.5	●
	To begin construction of R&D centre	1	1	100%	●	100%	●	1.0	●
EPP #4	Total production of farmed fish (MT)	19,458	27,209	140%	●	100%	●	1.0	●
	Total number of cages in operation	40	20	50%	●	50%	●	0.0	●

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NKEA Agriculture		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #5	Total number of inseminated cows	1,000	0	0%	●	0%	●	0.0	●
	Average success rate for conception	70%	0	0%	●	0%	●	0.0	●
	Total land area available (ha)	340,000	543,525	160%	●	100%	●	1.0	●
EPP #6	Total export from IZAQ	2 IZAQs Under Construction – 50%	97%	97%	●	97%	●	0.5	●
	Total areas earmarked for IZAQ	500	4,107	821%	●	100%	●	1.0	●
EPP #7	Total export volume of premium fruits and vegetables (MT)	14,000	21,628	154%	●	100%	●	1.0	●
	Intercrop Development (Banana) (MT)	1,825	1,891	104%	●	100%	●	1.0	●
	Intercrop Development (Pineapple) (MT)	550	602.5	110%	●	100%	●	1.0	●
	Total investment by anchor companies (RM million)	268.8	316.2	118%	●	100%	●	1.0	●
EPP #8	Total investment by anchor companies (RM million)	76.2	23	30%	●	30%	●	0.0	●
	Completion of food park	100%	100%	100%	●	100%	●	1.0	●
EPP #9	Total tonnage of fragrant rice produced (MT)	580	246	42%	●	42%	●	0.0	●
	Total area planted (ha)	180	164.5	91%	●	91%	●	0.5	●
	R&D for production of new Jasmine and Basmati-type varieties and agronomic packages for both type by 2013	25%	25%	100%	●	100%	●	1.0	●
EPP #10	Total of land area amalgamated (ha)	5,000	5,016	100%	●	100%	●	1.0	●
	Total land areas approved to be acquired for infrastructure (ha)	121	119	98%	●	98%	●	0.5	●
EPP #11	Total land areas amalgamation (ha)	50	77.7	155%	●	100%	●	1.0	●
	R&D activities to document local rice varieties	3	3	100%	●	100%	●	1.0	●

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NKEA Agriculture		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #12	Ratio of domestic production vs total consumption	1:3.3 (51,161 MT) (170,475 MT)	1:3.07 (38,310 MT: 117,592 MT)	108%		100%		1.0	
	Total number of heads	19,800	16,826	85%		85%		0.5	
	Total kg of beef produced (MT)	2,800	1,428.7	51%		51%		0.5	
EPP #13	Total production of fresh milk (mil liter)	12	15.9	133%		100%		1.0	
	Total heads of dairy cow	25,500	31,997	125%		100%		1.0	
	Production of milk per cow per lactation (litres per day)	15	10.5	70%		70%		0.5	
EPP #14	Total production of seed (MT)	600	2,444	407%		100%		1.0	
	Total number of validations achieved	10	10	100%		100%		0.5	
	Establishment of National Seed Council	100%	100%	100%		100%		1.0	
	Revision of policies to attract private sector's participation	100%	100%	100%		100%		1.0	
EPP #15	Total sales from MNC's products (RM million)	256	270	105%		100%		1.0	
	Total investment by MNC (RM million)	92	110	120%		100%		1.0	
	Sites secured for construction/move-in	1	1	100%		100%		1.0	
EPP #16	Total revenue generated from oversea ventures (RM million)	21	24	114%		100%		1.0	
				<b>119%</b>		<b>88%</b>		<b>78%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

# Entry Point Projects

## EPP 1

## High-Value Herbal Products

This project taps into the country's vast and unique biodiversity as a potential hub for high-value herbal products. It is aimed at strengthening product quality and marketing efforts to penetrate global export markets for nutraceutical products and botanical drugs. Investment in this EPP is focused on research and development for five key herbs (*tongkat ali*, *kacip fatimah*, *misai kucing*, *hempedu bumi* and *dukung anak*) to obtain the necessary scientific data as well as awarding grants for purpose of pre-clinical and clinical trials to companies with existing products in the market. These trials are necessary to determine the safety, efficacy and subsequently increase the potential market value of these products.

### Achievements

The following key initiatives under this EPP have been implemented to date:

- The Herbal Development Council was established and its inaugural meeting was held on 14 July 2011
- 12 universities and research institutions were organised into four main clusters to conduct high-impact, outcome-based research to continually develop and bridge gaps in scientific knowledge on the five herbs identified
- The East Coast Economic Regional Development Council (ECERDC) has recently completed design work on Herbal Cultivation Parks in Pasir Raja (406 hectares) and Durian Mentangau (151 hectares) for large-scale farming on December 2011. Tender process to seek anchor companies to manage the operations of these parks has also been completed
- Seven companies have successfully passed stringent evaluation procedures to be selected as anchor companies to spearhead the marketing of the high-value herbal products

Exhibit 11.4

Company	Investment (RM mil)*
Biotropics Berhad	25.86
Novalab Sdn Bhd	16.29
Aning Resources Sdn Bhd	25.04
Natureceuticals Sdn Bhd	8.03
Phyto Biznets Sdn Bhd	9.80
Natural Wellness Sdn Bhd	26.0
Bioalpha International Sdn Bhd	13.0

\* investment for first two years of trial, subject to review based on trial results



Clinical trials are necessary to determine the safety and efficacy of high-value herbal products

In 2011, 10 nutraceutical/cosmeceutical/botanical products from the selected seven companies have been secured for testing and are undergoing pre-clinical and clinical trials. While this is a step forward, the challenge will be in the rigorous testing required to penetrate the international market.

### Moving Forward

In 2012, the Herbal Development Office (HDO) will continue to pursue more companies with market-ready products to undergo pre-clinical and clinical trials. Pre-clinical and clinical trials that commenced in 2011 will be monitored. The year 2012 will see five high-value nutraceutical products with certified claims, as a result of the trials, marketed and launched in the global market. These products will now have the potential to command a selling price that is 10 times more than the original price, pre-certification and trials.

At the same time, the research institutions/universities within the four clusters will provide research and development support to develop and commercialise the five herbs. ECERDC will be completing the design work for the Herbal Cultivation Park in Rantau Manis, Kelantan by 2012 with construction work of the Herbal Cultivation Park in Pasir Raja and Durian Mentangau slated to begin in 2012 and ready for operations by January 2013.

## EPP 2

## Edible Bird's Nest Swiftlet Farming

Malaysia is the second largest producer and exporter of edible bird's nest (EBN), with China as its main market. With a price of up to RM7,000 per kilogramme for raw cleaned bird's nest, the local edible bird's nest production industry is highly profitable. At present, most local edible bird's nest producers are unregistered to avoid tax, depriving the country of income from this industry.

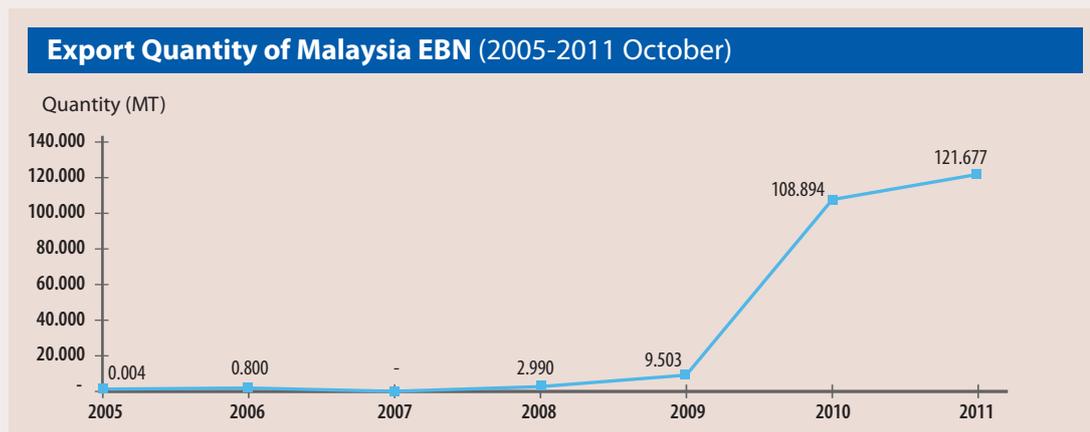
This EPP aims to regulate the industry and improve traceability through the registration of edible bird's nest premises. It also aims to boost productivity of the industry by encouraging the establishment of new premises and processing plants, moving the operations toward downstream product development.

### Achievements

In 2011, 3379 edible bird's nest premises were registered under the Department of Veterinary Services (DVS) which translated into an export value of RM81 million.

The chart below shows a significant jump in export quantity since registration of edible bird's nest premises in 2010:

Exhibit 11.5



According to the Roadmap, more swiftlet nest production facilities are needed within Malaysia to support the planned growth of the local edible bird's nest industry in the next nine years. Three companies, Yanming Resources Sdn Bhd, Golden Silver Inc Group and Duta Sialin Biotechnology Sdn Bhd, have pledged their participation in this project by building processing facilities for bird's nest to produce higher value raw-clean edible bird's nests.

### Moving Forward

The ongoing task is to improve the sustainability and quality of edible bird's nest premises and processing plants through the enforcement of Good Animal Husbandry Practices and the Veterinary Health Mark by the Department of Veterinary Services. At the same time, we are moving industry players to produce high-value edible bird's nest products by encouraging the registration of an additional 3,000 premises in 2012 and building more processing plants.

## EPP 3

## Mini Estate Farming for Seaweed

This project aims to transform the seaweed farming industry by improving productivity to increase yield as well as total area planted to boost the output of seaweed to 150,000 MT in 2020. This is done by clustering farms under the mini estate farming concept and moving the industry towards downstream product development. In 2011, 15 mini estates were expected to be established over 3,000 hectares of newly gazetted areas for seaweed farming in Semporna.

### Achievements

In 2011, 11 companies have been appointed to be part of this project. Four mini-estates have been established through the

clustering of small farms into an optimal size of 200 hectares while construction is still in progress for the mini estate platforms to be used by each cluster.

### Moving Forward

The Department of Fisheries, Sabah and University Malaysia Sabah, as the owners of the project, aim to increase production of seaweed to 35,000 tonnes in 2012. Research and development (R&D) is also being conducted with a target to develop a total of 15 downstream products derived from seaweed as raw material.

**EPP 4**

## Integrated Cage Farming

This EPP aims to increase production for high-value fish species (sea bass, grouper, tilapia), to effectively account for an additional 28 per cent growth of total aquaculture production in 2020. This will be implemented through an anchor company, which will be tasked to manage the operations of its own farm as well as providing extension services such as providing training, setting standard operating procedures and guidelines to its contract farmers. The contract farmers in turn will gain from a guaranteed buy-back agreement with the appointed anchor companies.

### Achievements

Four anchor companies have been appointed to manage the farm operations in Tasik Temenggor, Tawau and Kota Belud respectively. The status of the projects is as follows:



Proposed site for grouper cage farming

Exhibit 11.6

Company	Location	Private Investment (RM mil)	Public Investment (RM mil)	Status of Project (as at 31 December 2011)
Trapia Sdn Bhd	Tasik Temenggor, Perak	100.0	5.59	Finalising procurement of additional 20 cages. 20 graduates offered jobs with Trapia's production line
Pegau Aquaculture Speciality Farming Sdn Bhd	Kalabakan, Tawau	67.7	9.31	Construction is 74% complete. Funding covers both EPP #4 and #6
Inno Fisheries Sdn Bhd	Kota Belud, Sabah	300.0	TBD	Land acquisition from state government in progress
Plentiful Harvest Sdn Bhd	Sandakan and Lahad Datu, Sabah	73.63	TBD	Drawing up design for farm expansion

### Moving Forward

The Department of Fisheries will monitor the progress of the four companies to ensure the construction of the cages and other infrastructures are completed as planned in 2012. Simultaneously, more companies will be approached to participate in the project to achieve the 2012 high-value fish production target of 30,258 metric tonnes (MT).

**EPP 5**

## Cattle Integration in Oil Palm Estates

The target for this project was to integrate rearing of 300,000 heads of cattle in large oil palm plantations, generating RM150 million in GNI, securing RM343 million in investments and creating 3,600 jobs in 2020.

### Achievements

Despite the implementation challenges due to low take-up by large oil palm players, the Department of Veterinary Services secured 25 medium-sized plantations in the cattle integration business to participate in this project. This collectively amounted to 543,625 hectares of land available for integration.

To support this EPP, the Government is providing incentives of additional cattle to the plantations as well breeding and feed programmes to support the livestock industry.

### Moving Forward

In addition to the low take-up rate from the private sector, it was found upon re-evaluation that the GNI impact of this project does not justify the amount invested in the long run. As such, no further development will be done on this project from 2012 onwards. However, the Department of Veterinary Services will continue to monitor the 25 plantations.

**EPP 6**

## Replicating Integrated Zone for Aquaculture Model (IZAQs) to Tap Market for Premium Shrimp

This project aims to increase export quality shrimp production through the establishment of Integrated Zone for Aquaculture Models (IZAQs). The size of each IZAQ is expected to be a minimum of 40 hectares and placed under the management of an anchor company. RM1.6 billion in public funding has been allocated for implementation of this project, with the expectation of another RM1.6 billion from private investment.

### Achievements

Through the new incentive procedure, six companies were appointed in 2011 as anchors for the operation of six IZAQs. Of the six, the construction of five IZAQs has commenced in 2011. The status of the six IZAQs is shown in exhibit 11.7.

The incentives approach received favourable response from the private sectors. Six private companies participated and committed RM1.23 billion in investments up to 2020. This resulted in a significant reduction in public funding requirement. From the initial projection of RM640 million, public funding contribution was reduced to RM100.1 million for five IZAQs, representing an 85.8 per cent decrease in public funds allocation.

### Moving Forward

The Department of Fisheries will continuously monitor the construction of each IZAQ and ensure that the companies will meet their production target to achieve the GNI. The Department of Fisheries will continue to pursue more project champions to complete the 10,000 hectares target for the replication of IZAQs by 2020.

Exhibit 11.7

Company	Location	Private Investment (RM mil)	Public Investment (RM mil)	Status of Project (as at 31 <sup>st</sup> December 2011)
Blue Archipelago Bhd	Setiu, Terengganu	313.87	23.13	Tender for construction of hatchery in progress
LKPP Corporation Sdn Bhd	Permatang Pauh, Pahang	105.2	41.7	Tender for construction in progress
Hannan Corporation Sdn Bhd	Selinsing, Perak	150.0	20.88	23% completion for construction of access road, main bund and inlet canal
Pegagau Aquaculture Speciality Farming Sdn Bhd	Kalabakan, Tawau	67.7	9.31 (Funding covers both EPP #4 and #6)	Construction is 74% complete *company is doing both EPP #4 and EPP #6
Sunlight Aqua Sdn Bhd	Pitas, Sabah	426.3	TBD	Drawing up design and bill of quantity
Asia Aquaculture Sdn Bhd	Desaru, Johor	167.4	5.03	98% completion for construction of basic infrastructure and ponds

**EPP 7**

## Premium Fruits and Vegetables

This project is focussed on the production of six high-value, non-seasonal tropical fruits (rock melon, starfruit, papaya, jackfruit, banana and pineapple) to boost total production by 68 per cent by 2020. Production of three high-value highland vegetables (lettuce, tomato and capsicum) will also be intensified using the anchor company approach. This project will leverage on the existing Permanent Food Production Zones (*Taman Kekal Pengeluaran Makanan – TKPM*) and explore the intercropping approach used in oil palm plantations with banana and pineapple.

### Achievements

To date, 22 existing TKPMs are being upgraded to enhance the production of identified fruits and vegetables. Of these, 16 Permanent Food Production Zones are already in production, three have completed expansion works and an additional three new ones are currently being developed. Four companies have been selected to become the anchor companies for this project.



EPP 7 is focussed on the production of high value tropical fruits and highland vegetables

(more on next page)

**EPP 7** (continued from previous page)

Exhibit 11.8

Company	Location	Private Investment (RM mil)	Public Investment (RM mil)	Status of Project (as at 31 December 2011)
Exotic Star Sdn Bhd	20 Permanent Food Production Zones in Semenyih, Batang Si, Serdang, Siswazah Serdang, PLPP Besut, Btg Merbau, IPAH, Pagoh, Gemas, Sendayan, Lancang, PLP Inderapura, Rengat, Jelai, Ulu Sungai, Tebing Tinggi, Kota Perdana, Sg Atong, Serenggam, Bkt Sapi	80.31	TBD	Negotiating with contract farmers to participate in TKPM; planning construction of a Collection, Processing and Packaging Centre (CPPC) for premium fruits
K.C Kwang & Sons Sdn Bhd	Lojing I and Lojing II, Gua Musang, Kelantan	69.0	TBD	Negotiating with contract farmers for Lojing I and Lojing II; planning construction of a CPPC for highland crops
JTP Trading Sdn Bhd	Ulu Tiram, Johor	1.0	TBD	Drawing up design and bill of quantity
Fresh Momentum Sdn Bhd	Lojing, Kelantan	117.40	TBD	Drawing up design and bill of quantity

## Moving Forward

Following the upgrading of the listed Permanent Food Production Zones and re-alignment for production of focus fruits under the anchor companies, the Department of Agriculture (DoA) will monitor the implementation of the TKPM and establish additional 5,000 hectares to plant the focus fruits under this EPP. The year 2012 will see focus on construction and repair work on the Permanent Food Production Zones, with its first harvest expected to happen within the same year.

Acknowledging the difficulty in implementing the intercropping project, DoA is also actively pursuing private companies to anchor the operations in several TKPMs and continue to provide assistance to the companies seeking to expand their farms. For 2012, DoA aims to increase the export value of these focus fruits to RM304 million.

## EPP 8 Food Park

One of the EPPs that require 100 per cent private investment, the concept of a Food Park is to create an integrated facility for producing ready-to-eat packed food by small and medium enterprises (SMEs) marketed by an anchor company. This EPP aims to establish five food parks by 2020. For 2011, the MoA was tasked with attracting RM76.2 million in private investments and establishing one food park.

### Achievements

The uptake for this EPP was slow due to the lack of incentives and lack of big-scale players who are willing to anchor the operations for a Food Park. Rukun Saksama Sdn Bhd was the first anchor company to participate in this EPP with an initial investment of

RM10.5 million in exchange for being allowed to operate in an available space in Malaysian Agricultural Exposition Park Serdang (MAEPS). In September 2011, Pertubuhan Peladang Negeri Johor (PPNJ) signed up as the second anchor company managing 10 SMEs producing poultry-based products in Kempas with an investment of RM9 million.

### Moving Forward

MoA plans to re-strategise the approach in pursuit of more potential anchor companies to secure their participation in this EPP, aiming to attract up to RM70 million in private investments for 2012.

## EPP 9

## Fragrant Rice Varieties in Non-Irrigated Areas

Seeing the potential for producing fragrant rice in non-irrigated areas, Sime Darby Bhd and Infoculture Sdn Bhd obtained the licence to produce and market the MRQ76 (Jasmine-like) and MRQ74 (Basmati-like) varieties respectively, developed by the Malaysian Agricultural Research and Development Institute (MARDI). The goal is to produce 73,000 MT in 2020 to substitute the 160,000 tonnes of fragrant rice imported annually, through the revival of 18,200 hectares of abandoned land.

### Achievements

The implementation of this EPP saw some challenges in the initial stage as it was essential to gain buy-in from local farmers and the local authorities to engage them as contract farmers to operate in paddy fields that had long been abandoned. With the cooperation from local contract farmers under Infoculture Sdn Bhd, planting of higher value crops has also led to a two-fold increase in income for the contract farmers.

Today, MRQ74 rice produced by Infoculture is retailing at RM15 per kilogramme in Justlife stores under the brand name 'Regenta'. Its low Glycemic Index (GI) appeals especially to consumers with diabetes.

### Moving Forward

Infoculture is in the process of securing 1,000 hectares of land in various locations nationwide for planting in 2012. At the same time, MARDI will continue to further encourage private sector participation to carry out the production for Basmati-like rice.



Exhibit 11.9 : Two anchor companies growing fragrant rice in 2011

Company	Location	Area planted (hectares)	Date of planting	Tonnage produced (MT) 2011	Tonnage produced (MT) 2012
Infoculture Langkawi	Langkawi	6	Sept 2010	15	
		10	Dec 2011		35
	Seberang Perai	2	Oct 2010	6	
		2	April 2011	7	
		3	Nov 2011		12
	Titi Tinggi, Perlis	3	May 2011	12	
		10	Nov 2011		35
	Wang Tepus, Kedah	4	June 2011	Destroyed by pest	
	Rantau Panjang, Kelantan	34	June 2011	40	
	Paya Pesagi, Pahang	15	Sept 2011		50
	Lubuk China, Melaka	15	Nov 2011		50
Gual Ipoh, Perak	15	Dec 2011		50	
Sime Darby Bhd	Seberang Perai	1.5	Oct 2010	7	
		2	Apr 2011	10	
		2	Oct 2011	9	
	Sik, Kedah	15	May 2011	60	
	Semanggul, Perak	15	Dec 2010	40	
		10	Apr 2011	40	
<b>Total</b>		<b>164.5</b>		<b>246</b>	<b>232</b>



Planting of higher value crops has also led to a two-fold increase in income for the contract farmers

## EPP 10

## Strengthening Productivity of Paddy Farming in MADA

With national paddy productivity increasing at 1.73 per cent since 2005, a game-changing measure needs to be made to increase local rice production towards establishing long-term food security for Malaysia. This EPP aims to use the estate farming approach under a single management in the Muda granary area spanning Kedah and Perlis, which in turn should increase productivity from the current 4.71 metric tonne per hectare (MT/ha) to 8.0 MT/ha by 2020. This will be achieved by amalgamating 50,000 hectares of paddy fields by 2020. For 2011, the Muda Agricultural Development Authority (MADA) was expected to amalgamate 5,000 hectares of land and obtain approvals of approximately 2,500 farmers to lease their land for management under MADA.

### Achievements

Preliminary work to kick-off this EPP included 50 briefings conducted by MADA to almost 4,224 farmers in the Muda area between December 2010 and July 2011. This project was eventually launched on 13 September 2011 by the MoA. MADA amalgamated 5,000 hectares of land involving 2,982 farmers from 27 Farmer's Organization (*Pertubuhan Peladang Kawasan*). An organisational structure was created with involvement from the Farmer's Organization, to conduct operations according to the planting and harvesting schedule set by MADA, which allows optimal use of mechanisation in paddy farming. Planting commenced in October 2011 and its preliminary harvest in January 2012 is expected to yield between six to eight MT.

### Moving Forward

MADA is undertaking the upgrading and construction of a tertiary system in the irrigation infrastructure for a more efficient water management in the Muda area. This infrastructure will be carried out in phases, from 2012 up to 2020. Depending on the success of the project this year, another 5,000 hectares have been targeted for further amalgamation in 2012. MADA is collaborating with BERNAS, an organisation responsible for the domestic rice industry in Malaysia, to form a special-purpose vehicle which will manage the paddy farming operations in the Muda granary.



Ploughing activities by Bridge (Wilayah II)

## EPP 11

## Strengthening Productivity of Paddy Farming in Other Granaries

The project is slated to commence in 2012 as an expansion of EPP 10's success. The estate-farming model used in the Muda area will be replicated in other granaries under this project. The aim is to increase paddy productivity in other areas, thereby boosting Malaysia's self-sufficiency in rice to 85 per cent.

### Achievements

A pilot project was planned in Batang Lupar, Sarawak to increase the yield and introduce modern paddy farming in the area. The project was started on 50 hectares of traditional paddy fields in Block C, Bijat-Stumbin. Padiberas Nasional Berhad (BERNAS), Ministry of Modernization Agriculture Sarawak and the Department of Agriculture Sarawak held numerous briefings with the long house communities in the area since April 2011 to obtain the people's approval for the amalgamation of paddy fields

under BERNAS' management. Responses by the Sarawak locals were favourable, with full support garnered from the farmers to participate in the project. The result was a contiguous block of 77.73 hectares of fields amalgamated with the participation of 144 families from 11 long houses. Modern paddy planting commenced in September 2011 at Batang Lupar, Sarawak with direct participation from the farmers.

In April 2011, the Department of Agriculture Sarawak proposed to transform Bario, Sarawak, from its traditional subsistence farming model to a commercial-scale estate farm. With Bario Ceria Sdn Bhd as the anchor company, 30 hectares of virgin paddy fields have been mechanised and operated on using the estate-farming model in September 2011. The yield per hectare previously stood between 0.8 to 1 MT/ha. The farmers are currently harvesting approximately 2.5 MT/ha.

(more on next page)

**EPP 11** (continued from previous page)



Batang Lupar, Sarawak



Ploughing activity in Block C, Bijat-Stumbin

**Moving Forward**

To complete the modernisation of paddy farming in Batang Lupar, the Government will invest in building a proper irrigation infrastructure to support agriculture activities there. The same proposed method of using an anchor company to manage the

operations of the paddy fields will be applied to 1,054 hectares in the other granaries (Kemubu Agricultural Development Authority area in Kelantan and all Integrated Agriculture Development Authorities) to ensure the full value chain will be captured in an organised and profitable manner.

**EPP 12** Expansion of Cattle in Feedlots

This project requires an anchor company to manage end-to-end operations of 71 satellite feedlot farms built by the Department of Veterinary Services. This project requires 100 per cent private-funding by the respective project owners.

**Achievements**

Given the lack of a strong anchor company to manage and operate all the satellite farms, the Department of Veterinary Services identified 57 operators under four companies located in Negeri Sembilan, Johor and Kelantan. These four companies cover the operations of 53 feedlot farms. The Department of Veterinary Services is still identifying operators for farms in Terengganu, Perak and Kedah.

**Moving Forward**

The Department of Veterinary Services is tasked to monitor the implementation of the existing satellite farms to ensure that the project meets the expansion target of 240,000 heads in terms of feedlot capacity.

Upon re-evaluation, it was found that the GNI impact of this project does not justify the amount invested in the long run. As such, no further development will be done on this project from 2012 onwards. Nevertheless, the Department of Veterinary Services will continue to monitor the participating 57 operators.



Cattle feedlot farm

## EPP 13 Dairy Clusters

This project aims to reduce the reliance on imported fresh milk, which accounts for 32 per cent of total fresh milk in the market, by increasing the production of local fresh milk. Using the anchor company concept to integrate operations from upstream production to downstream processing and marketing, four dairy clusters are to be established by 2020. The target for 2011 was to establish one dairy cluster.

### Achievements

Two anchor companies for two dairy clusters kicked off this project. As anchors, they pledged a milk buy-back guarantee at market price to the contract farmers under their respective clusters. In addition, they will also provide technical assistance to farmers in their cluster to ensure that a marketable quality of milk is produced. The status of the dairy clusters is shown in exhibit 11.10.

Exhibit 11.10

Company	Location of dairy cluster	Private Investment (RM mil)	Public Investment (RM mil)	Status of Project (as at 31 <sup>st</sup> December 2011)
Evergreen Livestock Sdn Bhd	Keningau, Sabah	18.6	9.6	<ul style="list-style-type: none"> <li>Anchor company to farmers under Koperasi Tenuku Keningau</li> <li>Contract farmers engaged: 89</li> <li>Building a processing plant to produce value-added processed milk-based products in Tenom</li> </ul>
Allied Dairy Sdn Bhd	Kota Tinggi, Johor	37.0	8.6	<ul style="list-style-type: none"> <li>Anchor company to farmers under Koperasi Tenuku Johor</li> <li>Contract farmers engaged: 15</li> <li>Building a processing plant to produce value-added processed milk-based products in Kota Tinggi</li> </ul>

### Moving Forward

In 2012, the Department of Veterinary Services will continue its efforts in attracting two more companies to anchor the milk production industry in East and West Peninsular, whilst ensuring that the

two existing clusters will be able to achieve the target of 10 million litres in terms of production of milk for 2012.

## EPP 14 Seed Industry Development

In Malaysia, the agriculture industry is heavily dependent on imported seeds as the local seed industry is highly under-developed. This project was launched to establish the capabilities for producing high quality seed/genetic material for the country using Marker-Assisted Selection (MAS) technology. MAS has the capability to select seeds with desired traits, significantly reducing the number of breeding years and guesswork required to develop high quality progeny.

### Achievements

With this project's objective firmly in mind, Malaysian Biotechnology Corporation (BiotechCorp) acquired the technology from DNA Landmarks, a subsidiary of BASF Ltd based in Canada, and appointed MARDI as custodian to provide this service to the local industry. The technology is housed at the Centre for Marker Discovery and Validation (CMDV) in MARDI, Serdang.

MARDI held its first seminar to promote the CMDV's services in June 2011 and established the centre in July 2011. By December, it had already completed ten projects which involved validation of more than 1000 samples and development of DNA fingerprints for 20 plant varieties. The project has also attracted the participation of two companies, RB Biotech Sdn Bhd and Green World Genetics Sdn Bhd, to carry out the breeding activities for MAS validated seeds.

### Moving Forward

In 2012, CMDV will continue to undertake validation of 2,000 seeds and embarks on more development projects for crops and livestock. In addition, the MoA will groom local players to participate in the seed industry using validated seeds from CMDV to increase the genetic quality of Malaysian agriculture output, and commence the preparation of the bill for Malaysia's Seed Act.

## EPP 15

## Participation of MNCs

This initiative aims to attract foreign direct investment in Agricultural Biotechnology to benefit the industry in multiple areas and to develop highly-skilled human capital. BiotechCorp was tasked with formulating packages to attract foreign direct investment and encourage domestic direct investment into this sector.

### Achievements

In the area of domestic direct investment, BiotechCorp secured investments from Sabah Softwood Hybrid Fertiliser, a joint-venture company between All Cosmos Industries Sdn Bhd (Taiwan) and Malaysian-based Sabah Softwood Bhd. The bio-organic fertiliser plant will operate in the Lahad Datu Palm Oil Industrial Cluster (POIC) with a total investment of RM50 million.

### Moving Forward

The construction of the fertiliser plant is scheduled for completion in 2012. In continuing the programme, BiotechCorp needs to secure RM250 million in foreign and domestic direct investments in agriculture biotechnology for 2012, as well as ensuring the setting up of at least three more multinational companies by 2020.

## EPP 16

## Overseas Acquisition/JV of Cattle Farms

This EPP aims to secure supply of beef and cattle for local consumption and breeding at more profitable locations by encouraging the private sector to acquire stakes in foreign cattle companies. The project depends entirely on private investments of RM1.3 billion for over a 10-year period.

### Achievements

To date, three companies are participating in this EPP:

Exhibit 11.11

Company	Foreign Location	Investment (RM mil)
SEDC Sarawak	Australia	42
Ternakan Kamran Sdn Bhd	Australia	1.1
Bumi Yadanar Sdn Bhd	Myanmar	0.5

The ministry targets to secure more players to achieve the investment and GNI targets set for 2020.

### Moving Forward

The target for 2012 is to generate RM42 million in revenue from the overseas ventures.

## Business Opportunities

There are 11 Business Opportunities (BOs) identified under NKEA Agriculture to generate RM 2.8 billion of GNI in 2020 and creating 14,840 jobs.

To date, the Ministry of Agriculture has yet to transform the BOs into EPPs as the focus for the first year is on the successful implementation of the 16 EPPs.

Business Opportunity 1 : **Nutraceutical Products**

Business Opportunity 2 : **Foreign Distributor**

Business Opportunity 3 : **Ornamental Fish Farming**

Business Opportunity 4 : **Aquaculture Feed Mill**

Business Opportunity 5 : **Aquaculture Export Centre**

Business Opportunity 6 : **Snacks Industry**

Business Opportunity 7 : **Free-range chicken rearing**

Business Opportunity 8 : **Button mushroom farming**

Business Opportunity 9 : **Packaged fruit production such as jackfruit**

Business Opportunity 10 : **Foreign Direct Investment in Herbal Products**

Business Opportunity 11 : **Snack Food Industry (SFI)/County Food Facilities**

## Enablers

The ETP listed five key enablers to support the implementation of the EPPs and BOs:

1. Provide incentives for anchor companies
2. Strengthen the adoption of Good Agricultural Practices (GAP) and Good Manufacturing Practices (GMP) to enhance market access
3. Change regulations and policies
4. Strengthen logistics infrastructure
5. Ensure sufficient pipeline of human capital

PEMANDU and the MoA have continually worked towards setting up the mechanism to provide incentives for the anchor companies under selected EPPs to ensure the participation of the private sectors. Presently, the Ministry is in discussion to enforce the other enablers and proceed into implementation stage in 2012.

## Summary of Agriculture NKEA

	2020 Target
Incremental GNI Impact	RM28.9 billion
Additional jobs	74,600

### Critical targets for 2012

- 5 clinical trials started for herbal products (nutraceutical/cosmeceutical/botanical drugs)
- 5 pre-clinical trials started for herbal products (nutraceutical/cosmeceutical/botanical drugs)
- 15 pre-requisites research started by universities and research institution for companies
- Establishment of Herbal Cultivation Park in Pasir Raja and Chegar Perah (Phase 1) – 100 per cent
- Total revenue generated from sales of herbs from seven herbal clusters in Pulau Pinang, Perak, Selangor, N. Sembilan, Melaka and Johor set up in 2011 – RM 1,000,000
- Total production of Edible Bird's Nest product by registered premises (MT) – 100
- Total number of newly registered premises – 3,000
- Total number of newly certified EBN premises (SALT) – 1,100
- Tonnage of dried seaweed produced (MT) – 35,000
- Total new mini estate operational – 20
- Total seaweed products to be developed from R&D activity – 15
- Total land areas gazetted for seaweed farming – 3,000
- Total production of farmed fish (MT) – 30,258
- Total number of cages in operation – 1,000
- Total production of shrimps (MT) – 10,464
- Total area earmarked for IZAQ replication (ha) – 1,000
- Total export value for premium fruits and vegetables – RM304 mil
- Establishment of new area for planting of premium fruits (ha) – 5,000
- Total investment by private companies (premium fruits) – RM395 mil
- Total investment by anchor companies (premium fruits) – RM70 mil
- Total revenue generated from sales of products from participating (premium fruits) companies – RM1 mil
- Total tonnage of fragrant rice produced (MT) – 2,500
- Total area planted (ha) – 750
- R&D activity conducted for production of new Jasmine and Basmati-type varieties and agronomic packages for both type by 2013 – 40 per cent
- Total new land area amalgamated (ha) – 5,000
- Total land areas approved to be acquired for infrastructure – 77 (hectare)
- Completion of construction for irrigation infrastructure – 20 per cent
- Total land area amalgamated for paddy farming in other granary areas (ha) – 1,540
- R&D conducted to improve local seed variety to be planted in Batang Lupar – 25 per cent
- Total beef produced from satellite farms (MT) – 4,750
- Total fresh milk produced from cluster under NKEA (million liters) – 10
- Average production of milk per cow per lactation from clusters under NKEA (liters per day) – 15
- Total number of seeds validated by CMDV – 2,000
- Total production of seeds validated by CMDV (MT) – 4,500
- Total types of certified seeds produced through MAS – 10
- Formation of Seed Act– 30 per cent completed
- Total investment by agriculture biotechnology companies (foreign & domestic) (RM mil) – 250
- Total revenue generated from overseas ventures and acquisition (RM mil) – 42

## Home is Where the Heart is

**A**fter a five-year stint working overseas, Mohd Zaki Awang decided to return to Malaysia. He is one of the Returning Experts within the TalentCorp Programme which began in 2011.

"I began my career in Malaysia and after a few years, I was fortunate to experience an overseas assignment in Vietnam for three years. Following that I moved to Saudi Arabia with Saudi Aramco and gained invaluable insights from working for a key player in the oil industry," said Mohd Zaki Awang.

"I guess home is where the heart is and Malaysia has always been home. I decided that it was time to return so I could contribute to the development of my country. In addition, I felt Malaysia offered a wider range of education options for my son which are not available in Saudi Arabia," he continued.

After finding out about the Returning Expert Programme through a friend, Mohd Azmi began to put plans into place to return to Malaysia. With assistance from TalentCorp, Azmi began his job search and now works as a Senior Production Technologist at Talisman Malaysia Limited, a Canadian company which has a Production Sharing Agreement with PETRONAS.

The Returning Expert Programme was launched to facilitate the return of Malaysian professionals from overseas. This is to fulfil the objectives of overcoming the shortage of professional and technical expertise



in the country, and creating a world-class workforce in Malaysia, especially in the context of the Economic Transformation Programme (ETP).

As the nation moves towards a high income economy by 2020, it is estimated that the ETP via its 12 National Key Economic Areas (NKEAs) will require many middle to high-level experts, and the Government aims to tap into this expertise via returning Malaysian talents.

For returning Malaysians, Mohd Azmi had this to say, "Of course, you need to prepare yourself mentally before returning home as it is a different work culture and atmosphere. I believe we can perform better here at home, in our culture, using the knowledge acquired from being outside Malaysia."

Photo courtesy of Star Publications (Malaysia) Bhd

“  
Of course, you need to prepare yourself mentally before returning home as it is a different work culture and atmosphere. I believe we can perform better here at home, in our culture, using the knowledge acquired from being outside Malaysia  
”



# Healthcare



**Dato' Sri  
Liow Tiong Lai**

Minister of Health



**In our first year of implementation, we embarked on the journey to unleash the tremendous economic potential of the Malaysian healthcare industry. We have concentrated our efforts as key enablers to the industry by removing roadblocks and putting in place industry-friendly policies.**

Throughout 2011, the Ministry of Health has revised several major policies to encourage growth in the healthcare industry. We have shortened the compulsory service for pharmacists from three years to one year, designed an off-take agreement for locally manufactured pharmaceutical products, relaxed advertising rules for medical institutions and agreed to corporatise the Malaysia Healthcare Travel Council.

In our continuous efforts to explore new horizons, I have made several successful business trips, not only to enhance cooperation in the field of public health but to discuss health related trade issues with my counterparts. Our counterparts from Hong Kong, Egypt and Bangladesh and many other countries are very supportive of our ETP efforts. We are confident that the ties fostered will see us through more future collaborations.

In 2012, we will continue our efforts to ensure the successful delivery and implementation of the Healthcare NKEA .

# Healthcare

The healthcare industry in Malaysia has become a powerful engine of economic growth due to demographic shifts as well as greater affluence and changing lifestyles

The three key sub-sectors of the larger healthcare eco-system, namely pharmaceuticals and biotechnology, medical technology, and health services, have delivered strong performances relative to the larger, more traditional economic sectors.

The Healthcare National Key Economic Area (NKEA) focusses on bringing both the public and private sectors into collaboration. Its main aim is to identify private sector initiatives and opportunities to develop the healthcare industry in a more organised and coherent manner.

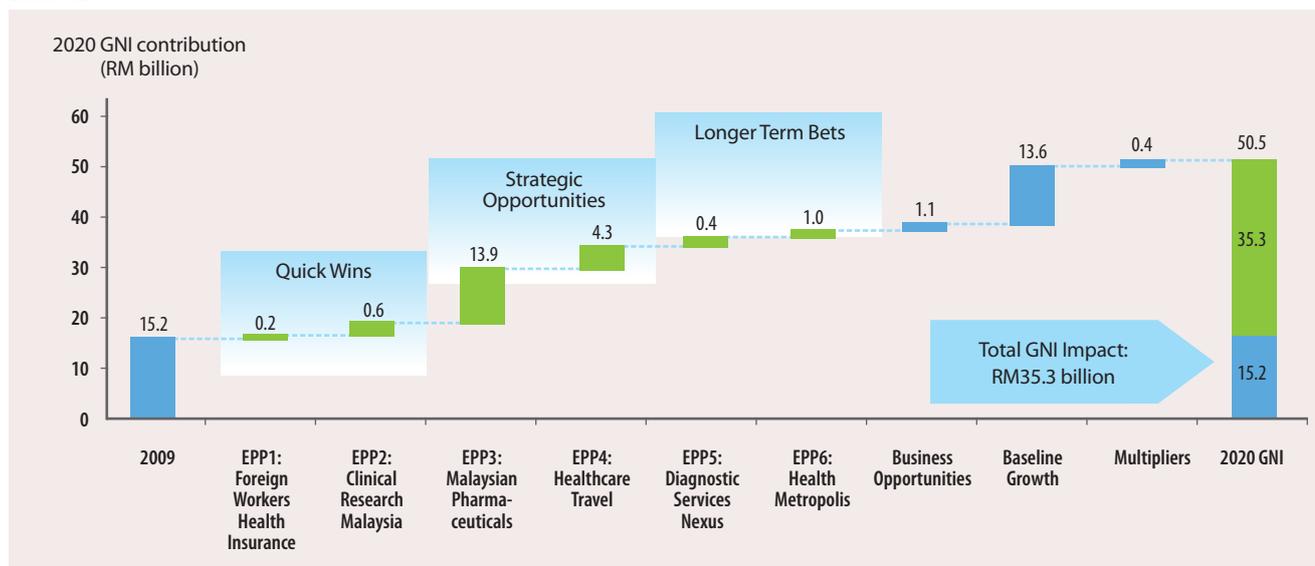
The 2010 Healthcare NKEA Lab resulted in six Entry Point Projects (EPPs) and two Business Opportunities (BOs), which combined,

are expected to generate RM35.3 billion incremental Gross National Impact (GNI) and 181,000 new jobs by the year 2020.

In July 2011, another lab was organized as an intensive effort to convert the Medical Devices BO into implementable EPPs. Sixty representatives from the public and private sectors participated in the four-week lab held in Penang. As a result of the lab, the BO has been expanded into seven new EPPs, increasing the Healthcare NKEA EPPs to a total of 13 with one remaining BO - Seniors Living.

Combined, the 13 EPPs under the Healthcare NKEA now represent an aggressive export campaign, an upgraded services platform, and a commitment to better healthcare for Malaysians.

Exhibit 12.1



## 2011 Key Performance Indicators

In 2011, a target of GNI RM14.2 million and the creation of 26,686 jobs were set with a weekly monitoring of each EPP's progress. The summary of the target is as follows:

Exhibit 12.2

NKEA Healthcare		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Percentage of foreign workers with health insurance	1,205,000	1,407,919	117%		100%		1.0	
EPP #2	Number of researches conducted	260	321	123%		100%		1.0	
EPP #3	Export growth of pharmaceutical products (RM mil)	15% (RM610 mil)	12% (594 mil)	80%		80%		0.5	
EPP #4	Revenue generated from healthcare travel (RM mil)	431	436 (*As of 30 Nov 2011)	110%		100%		1.0	
EPP #5	Survey on radiology services in MOH hospitals	All MOH hospitals with radiologists (39 hospitals)	39	100%		100%		1.0	
	Pilot project on outsourcing of radiology services	By July 2011 *(extended to Sept 30, 2011)	95%	95%		95%		0.5	
EPP #6	Construction of the Health Metropolis to begin in Q4 2011	Q4 2011 G	95%	95%		95%		0.5	
				<b>103%</b>		<b>96%</b>		<b>79%</b>	

**Method 1** provides a reflection of the actual KPI achievement. If a KPI surpasses its targets significantly, the final results will be presented as a large percentage, surpassing the 100 per cent limit.

**Method 2** has been formulated to accommodate for KPI achievements with significant quantitative results. Under this method, any achievement above 100 per cent is capped.

**Method 3** represents a simple reflection of the KPI achievement. KPI targets that were met or exceeded are graded 1, those achieving over half of their targets are graded 0.5, and those with less than half their targets are graded 0.

## Entry Point Projects

### EPP 1

## Mandating Private Health Insurance for All Foreign Workers and Improve Workmen's Compensation Coverage

There were over 1.3 million foreign workers in Malaysia in 2011, most being in the manufacturing, construction, and plantation industries. The majority of these workers are not covered by medical insurance. Most cannot afford inpatient medical services unless provided and paid for by employers.

### Achievements

On 19 January 2011, the Government made it compulsory for foreign workers to enrol in the Foreign Worker's Health

Insurance Protection Scheme (SPIKPA – Skim Perlindungan Insurans Kesihatan Pekerja Asing), with an annual premium of RM120. The scheme provides hospitalisation medical benefit to foreign workers with a total coverage of RM10,000 per annum for all injuries and sickness. The target for 2011 was to ensure a minimum of 1.2 million foreign workers are covered by this scheme.

As of December 2011, a total of 25 insurance companies and two Third Party

Claims Administrators (TPCA) have been registered for participation in this scheme. Out of the year's target, a total of 1,407,919 foreign workers have been covered under the scheme.

### Moving Forward

Discussions are currently underway to extend the scheme to other sectors and Sabah and Sarawak.

### EPP 2

## Creating a Supportive Ecosystem to Grow Clinical Research

This EPP aims to develop a supportive clinical research ecosystem that will allow for more efficient and quality clinical trials. The target is to achieve 1,000 clinical trials by 2020, out of which 260 trials would be registered by end of 2011.

### Achievements

In July 2011, the Minister of Health launched Clinical Research Malaysia (CRM), a unit under Clinical Research Centre (CRC), Ministry of Health (MOH) to drive this national agenda. To meet its objectives, CRM is tapping into the extensive network of MOH hospitals as well as the private and university hospitals.

Since the launch of CRM, 27 MOH CRCs including seven new ones were established in 2011. Of this, ten have been fully equipped with facilities and resources to be Centres of Research Excellence. Exhibit 12.3 depicts the MOH CRCs and nine private CRCs.

The MOH Medical Research Ethics Committee has increased its sitting to twice monthly and this has resulted in an improvement of its approval timeline.

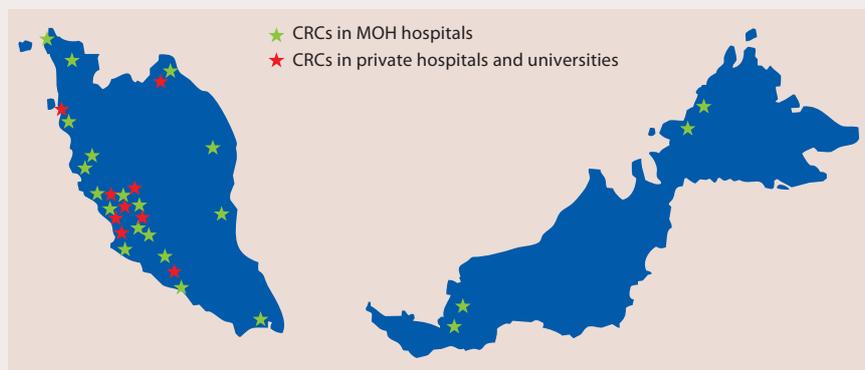
Of the 13 international Contract Research Organisations, three were newly established in 2011.

A total of 321 ongoing and new clinical trials have been achieved, surpassing the 2011 target of 260.

### Moving Forward

In 2012, the plan is to corporatise CRM to allow it to improve its operational efficiency and attract more clinical trials to the country.

Exhibit 12.3



**EPP 3**

# Leverage Patent Expiry by Pursuing Generic Opportunities

Over the next ten years, the world's best-selling drugs, worth about RM435 billion in annual sales, are set to go off-patent. Once the major blockbusters lose their patent protection, there are immense opportunities for local pharmaceutical companies to gain from the substantial slashes in costs.

Having positioned pharmaceuticals as a key strategic industry, MoH continues to be a critical driver to support the private sector efforts to generate business, particularly in Organisation of Islamic Countries (OIC). Similarly, the private sector should increase its involvement by rationalizing existing capacity, and increasing investments for expansions or new operations.

## Achievements

On 4 July 2011, the Economic Council approved the Pharmaceutical Off-Take Agreement-Government Procurement for New Local Manufactured Pharmaceuticals. The scheme allows the Government to procure locally manufactured products from qualified manufacturers for a set period of time. The manufacturers are required to register their products in another country before the contract to supply is extended for another set period of time. This will be a very important incentive for new pharmaceutical plants to expand or invest in producing new local manufactured products.

On 12 October 2011, MOH announced the revision of compulsory service for pharmacists from three years to one, with the option to extend service for an additional year. This allows for the availability of more pharmacists in the private sector.

The Prime Minister also announced two private sector initiatives in 2011:

### Project Hovid Objective Pharmaceutical Excellence (HOPE)

On 2 November 2010, Hovid and Winthrop Pharmaceutical (M) Sdn Bhd, a subsidiary of the Sanofi Aventis Group, entered into an agreement to develop generic drugs. Valued at approximately RM5 million for the first three years, the collaboration



There are immense opportunities for local pharmaceutical companies to gain from the patent expiry cliff

includes dossier development together with the manufacture and supply of pharmaceutical drugs.

The first phase of this agreement focusses on the supply of Metformin 850mg MR for the treatment of diabetes and the painkiller Tramadol 100mg SR.

In November 2011, Winthrop Pharmaceuticals extended its agreement with Hovid for the production of four new generic medicines in the areas of allergies, gastrointestinal disease, epilepsy, neuropathic pain and diabetes.



Metformin Winthrop 850mg MR



Painkiller Tramadol 100mg SR

## Biocon Facility at BioXcell, Iskandar

On 13 June 2011, Indian pharmaceutical giant Biocon Limited announced an investment of RM500 million towards the establishment of a state-of-the-art manufacturing facility at BioXcell, Iskandar. The first Biocon factory outside India, the facility will focus on developing and manufacturing biopharmaceutical products, including recombinant proteins, human insulin and insulin analogues, as well as other sterile drug products and their delivery devices. The facility is expected to be in full operation by 2014.



Photo courtesy of businesswireindia

## Moving Forward

In 2012, the focus will be to review and address issues relating to pharmaceutical patent law and policy in Malaysia. MoH will continue efforts to optimize utilization of local bioequivalence facilities. This will include upgrading local facilities and introducing incentives to encourage local manufacturers to opt for these facilities.

## EPP 4

## Re-invigoration of Healthcare Travel through a Seamless Customer Experience, Proactive Alliances and Niche Marketing

The Healthcare Travel EPP aims to create a differentiated position for Malaysia by broadening the customer base and increasing the margin of outpatient treatments. While the market remains small for Malaysia, there are plenty of opportunities for us to reposition ourselves as leaders in specific niches, driving a shift towards high quality and valuable experiences for healthcare tourists.

As the primary owner and driver of this EPP, the Malaysian Healthcare Travel Council (MHTC) has been focussed on developing impactful marketing campaigns, with core responsibilities that include promotion and marketing, business development, capacity building and eco-system facilitation. On the other hand, MOH and the Ministry of Tourism have been responsible for concerted efforts to develop better infrastructure and improve strategic bilateral relations.

### Achievements

To increase the number of medical specialists, beginning March 2011, foreign spouses of medical specialists working in Malaysia are automatically issued temporary employment passes.

In October 2011, the MHTC was corporatised under Section 24 of Companies Act 1965.

In November 2011, advertising guidelines were reviewed and hospitals are now allowed to publish patient testimonials in their marketing collateral.

With these efforts to boost the sector's development, private sector investments have increased. Last year, the Prime Minister announced commitments from Sime Darby Healthcare and Kumpulan Perubatan Johor (KPJ) to build new hospitals that will cater for increasing demands of the local population and higher expectations from health travellers.

### Sime Darby Medical Centre, Ara Damansara

Once completed in January 2012, the new 220-bed tertiary care private medical centre, located along Jalan Lapangan Terbang Subang, will contribute to Malaysia's growth as a world-class medical travel destination via three Centres of Excellence and expertise: a Brain Centre, a Heart Centre and a Spine and Joint Centre.



Sime Darby Medical Centre, Ara Damansara

### Sime Darby Medical Centre, Desa ParkCity

This new hospital will be positioned as a centre of excellence dedicated to comprehensive women's and children's healthcare with a focus on breast oncology, child development and the treatment of chronic illnesses. The 250-bed facility will be completed in 2013.



Artist's impression of Sime Darby Medical Centre, Desa ParkCity

### KPJ Hospitals

Over the next three years, KPJ Healthcare, one of Malaysia's leading private healthcare providers will build five different hospitals, offering a total of 822 beds.

The five hospitals are:

- Dato' Onn International Specialist Hospital, Iskandar Malaysia, Johor
- Pasir Gudang Specialist Hospital, Pasir Gudang, Johor
- Sabah Medical Centre, Kota Kinabalu, Sabah
- Bandar Baru Klang Specialist Hospital, Klang, Selangor
- Pahang Specialist Hospital, Kuantan, Pahang



Artist's impression of Dato' Onn International Specialist Hospital

### Moving Forward

MHTC together with other agencies such as the Ministry of Finance and the Malaysian Investment Development Authority (MIDA) is working on the drafts of investment tax incentives for qualifying local healthcare facilities registered under MHTC as health travel promoting facilities. The incentives are expected to be gazetted in early 2012 and will hopefully encourage local players to expand and upgrade their facilities to attract health travellers.

On top of this, MHTC will also develop and carry out a coordinated and intensive marketing programme to existing and new markets.

**EPP 5**

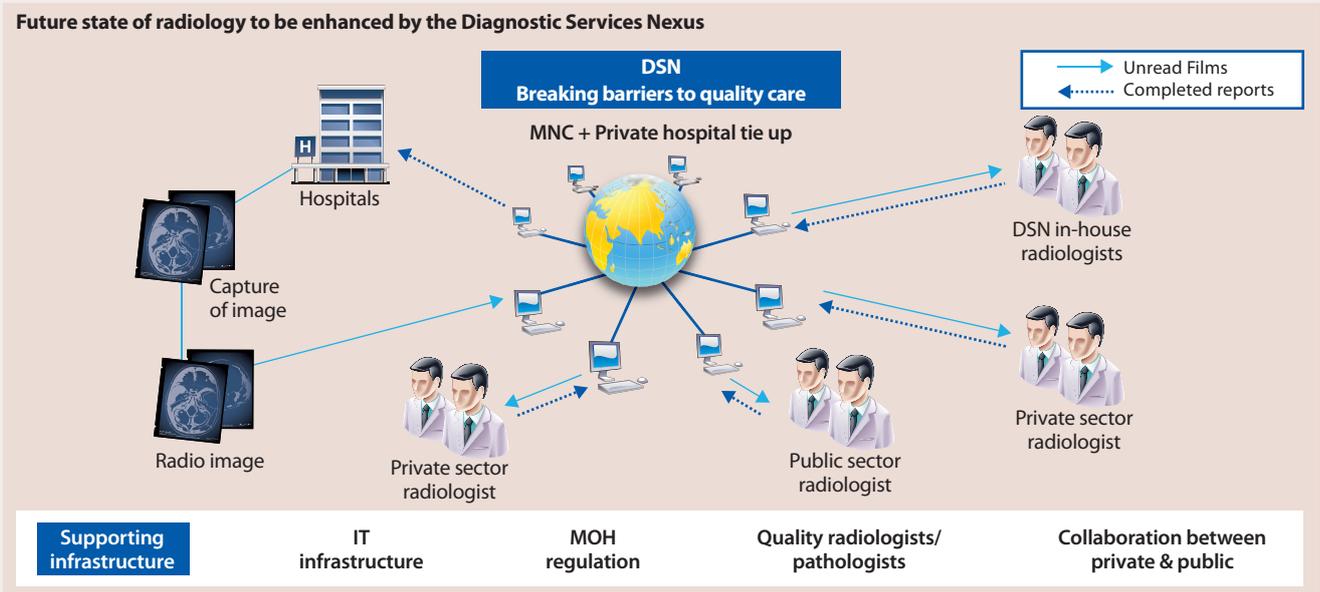
# Creating a Diagnostic Services Nexus to Achieve Scale in Telemedicine for Eventual International Outsourcing

The Diagnostic Services Nexus (DSN) aims at pursuing international diagnostic outsourcing opportunities via telemedicine and to establish a teleradiology hub in Malaysia.

The implementation of the DSN aspires to improve the radiology reporting services in the country. The public hospitals have been facing challenges to cope with increasing demand in radiology diagnostic services

The DSN will coordinate and distribute the increasing workload through existing resources available within both the public and private sector.

Exhibit 12.4



## Achievements

The DSN EPP was announced by the Prime Minister in March 2011, championed by General Electric (GE) Healthcare. By June 2011, a new entity, DSN Sdn Bhd was established to facilitate the many implementation phases of this EPP.

The initial test phase of the project kickstarted in September 2011 with two participating hospitals: Kuala Lumpur Hospital and Selayang Hospital. Infrastructure and connectivity for both hospitals were installed in September 2011. The DSN has also commenced training sessions for hospital personnel, while successfully undertaking a trial period of transmission of images and reports.

## Moving Forward

The second phase of the EPP is expected to begin in 2012. This involves the rolling out of the DSN technology to provide services to private healthcare providers and more public hospitals besides pursuing the ultimate goal of exporting teleradiology services to other countries.

Moving forward, the DSN will be focusing on building capacity and branding of the services by linking radiologists across the country, thus creating a sizeable pool of expertise to enable the parallel expansion of the services to the private healthcare providers and more public facilities in 2012. At the same time DSN will also seek in-sourcing services from other countries.

**EPP 6**

## A World-Class Campus for Healthcare and Bioscience

The University of Malaya (UM) Health Metropolis will be a world-class campus for healthcare and bioscience and has tremendous catalytic effect to the provision of education, research and healthcare services in Malaysia, with spillover effects that will benefit the region.

The Health Metropolis is expected to be fully operational by early 2016 and will potentially contribute RM986 million GNI in 2020 while creating an estimated 10,400 new jobs by 2020.

### Achievements

On 11 January, UM Holdings Sdn. Bhd. was identified as key owner to spearhead the development of the UM Health Metropolis as Malaysia's premier medical hub.

### Moving Forward

Construction works for the UM Health Metropolis are expected to start early next year. By the end of 2012, the earthworks should be completed, allowing the facility to be ready for operation by early 2016.



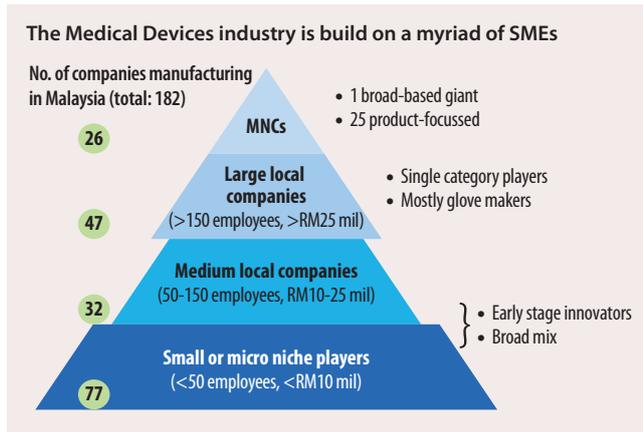
Artist's impression – UM Health Metropolis

# Business Opportunities

## Business Opportunity 1 Med Tech Manufacturing

In June, PEMANDU conducted a baseline study on the Medical Devices Industry in Malaysia. The study unveiled several interesting insights as demonstrated in Exhibit 12.5.

Exhibit 12.5



Note: Classification according to Malaysian definition of small, medium and large companies

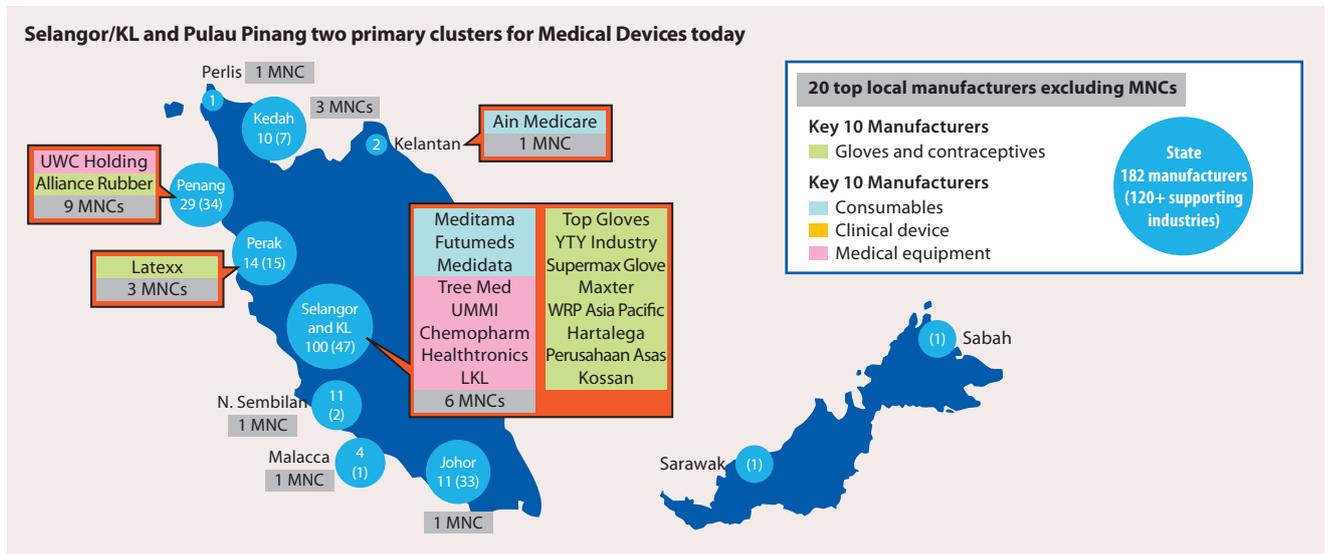
Source: Medical devices player database, BCG analysis

The medical devices industry in Malaysia has approximately 120 small and medium enterprises. Many of these companies are currently in the early stages of the company's lifecycle, and are focussed in product development. As for the larger local manufacturers, most are involved in the manufacturing of rubber-based medical products such as gloves and contraceptives.

In terms of international presence, currently, only five out of the top 25 global medical devices companies manufacture in Malaysia: St. Jude Medical, B. Braun, Fresenius, 3M and Mediquip (Covidien).

Exhibit 12.6 denotes the two key medical device clusters in Malaysia.

Exhibit 12.6



Source: Medical devices player database, BCG analysis

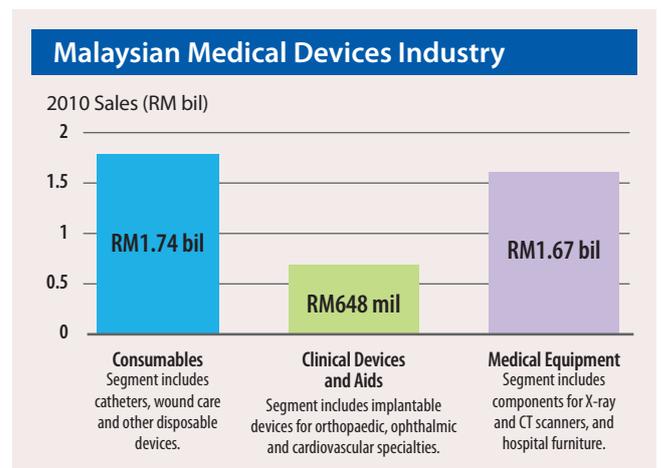
The study also reported that approximately 70 per cent of medical device manufacturers and supporting industries are located in Selangor/Kuala Lumpur or Penang. Out of the top ten local medical device manufacturers (excluding gloves), nine are located in these two areas.

From these, two lessons are apparent: the first is that Malaysia has very few local medical device champions other than glove manufacturers, and the other, that Selangor/Kuala Lumpur and Penang are industry preferred states.

The baseline study was followed by a four-week Medical Devices Lab in July to deliberate and develop the Med Tech Manufacturing, or, Medical Devices Business Opportunity. Sixty participants representing 40 public and private organizations participated in the lab, which culminated in seven new EPPs.

The lab has also identified three areas for the Malaysian medical devices industry as illustrated in Exhibit 12.7.

Exhibit 12.7



To fast-track growth in the medical devices industry, the lab has determined a three-prong strategy:

- Increase domestic market penetration of local players** through better marketing, distribution and implementation of pro-local product procurement policies;
- Increase exports in intravenous devices (IVDs)** for neglected diseases, novel Single Use Devices (SUDs), orthopaedics and medical equipment; and
- Move up the value chain** by moving into product design and offering a wider range of manufacturing capabilities, as well as nurture product innovation capabilities in focus categories by collaborating with research institutions.

### Achievements

On 29 September 2011, the Minister of Health Dato' Sri Liow Tiong Lai announced the inclusion of seven new EPPs representing the Medical Devices Industry. The new EPPs will contribute to RM11.4 billion in GNI by the year 2020 and create 86,000 new jobs. The brief description of each EPP is as follows:

#### EPP 7: Upscale Malaysia's IVD Industry

Malaysia hopes to tap into the RM1.4 billion global intravenous devices (IVD) industry by establishing an IVD solutions hub. The hub will focus on manufacturing IVDs for the treatment of infectious diseases such as tuberculosis, malaria, dengue, and cholera. To do this, we plan to upscale the industry in three phases:

Phase 1: Market innovation of existing technologies through spin-offs, licensing and joint ventures.

Phase 2: Improve the value chain by upgrading and creating support services and shared laboratory facilities.

Phase 3: Encourage innovative R&D, while securing licensing partnerships with multinational companies and establishing global partnerships with international bodies.

#### EPP 8: Create Next Generation of Core SUD Products

This EPP hopes to position Malaysia as the preferred supplier for high quality contract manufacturing of single-use devices (SUDs). The focus will be on safety devices, including catheters, woundcare and single-use components for instruments. Activities within this EPP are expected to generate RM2.3 billion in revenue by 2020.

#### EPP 9: Build Hub for High-Value Medical Device Contract Manufacturing

Malaysia is an ideal manufacturing hub for global medical device original equipment manufacturers (OEMs) due to our strong supporting industry bases in electronics and electrical sector, machinery and engineering, plastic manufacturing and packaging, and testing and sterilization. One of the key goals for this EPP is to build an orthopaedics medical device contract manufacturing hub in the northern region. By 2020, this EPP can expect to hit RM5.1 billion in revenue.

#### EPP 10: Create Malaysian Clinical Devices Champions

With the immense opportunities available in the global Medical Devices industry, the Government is encouraging local entrepreneurs to broaden their reach to Southeast Asia and beyond.

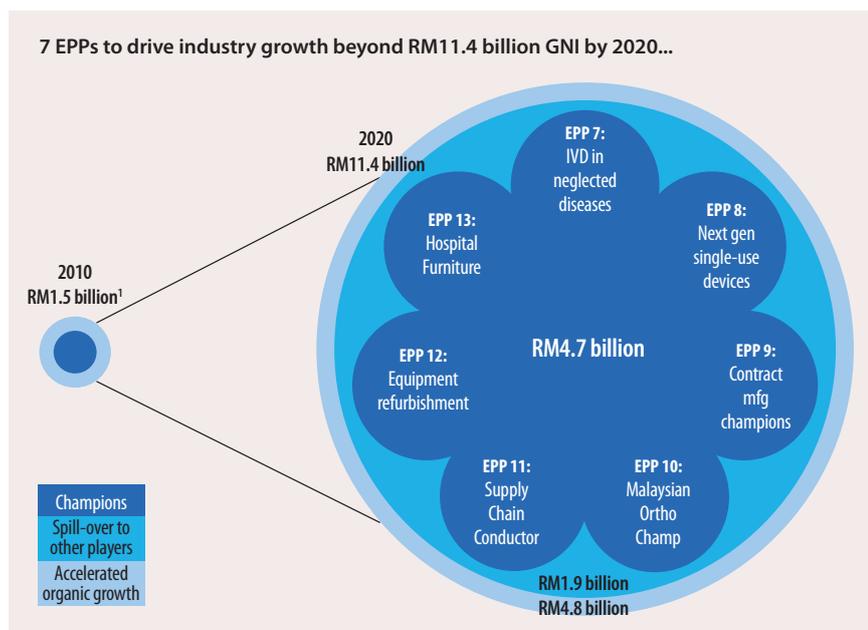
To do this Malaysian entrepreneurs need to start establishing a strong domestic presence while securing manufacturing and distributional partnerships in neighbouring countries. At the same time, they also need to invest in higher-value and more innovative research and development, as well as product development. There will also be increased activity to develop and/or establish centres of excellence in medical sectors such as orthopaedics.

#### EPP 11: Medical Equipment Supply Chain Orchestration

Recognizing the opportunity for Malaysia to become a turnkey medical device production orchestrator for multinational companies, the MoH will facilitate partnerships between global corporations and supply chain orchestrators, integrating across the value chain to provide end-to-end industry services.

Through efforts within this EPP, Malaysia's medical equipment exports are expected to grow by 15 per cent per annum, reaching RM2.3 billion by 2020.

Exhibit 12.8



<sup>1</sup> Estimate from revenue

### EPP 12: Medical equipment refurbishment hub

This EPP aims to attract global companies to establish authorised refurbishment facilities for sophisticated medical equipment, which may include CT scanners, MRI scanners and molecular imaging equipment.

To become a regional medical equipment refurbishment hub, two things must be done:

1. Attract multinational corporations to establish their refurbishment facilities in Malaysia
2. Grow the refurbishment business for domestic medical equipment service providers.

By 2020, the medical equipment refurbishment sector is estimated to generate RM840 million of revenue.

### EPP 13: Build medical hardware and furniture cluster

Malaysian companies are already exporting medical furniture to over 40 countries globally. To scale up, Malaysia will target to be a supplier of competitively priced, quality medical furniture to developed countries. These Made-in-Malaysia furniture products should offer comparable functionalities with global brands, but at substantially lower prices and excellent after-sales services. Revenue from this EPP alone is expected to hit RM1.2 billion by 2020.

#### Moving Forward

The creation of the Medical Device Authority and the implementation of the Medical Device Act will address the issue of low quality products. The Medical Device Authority is expected to be fully operational by May 2012, while the enforcement of the act will begin in October 2012.

“  
**The new Medical Devices EPPs will contribute to RM11.4 billion in GNI by the year 2020 and create 86,000 new jobs.**  
 ”

### Business Opportunity 2 Seniors Living

The NKEA has recognized opportunities in the growing need to address the outpatient and community-based care needs for the elderly. The Seniors Living BO will ideally bring about an ecosystem that offers the provision of short term and long term holistic care for the aged. During the 2010 Healthcare NKEA labs, this BO was projected to potentially deliver over 11,000 new jobs and RM1 billion GNI in 2020.

Similar to the development of the Med Tech Manufacturing BO, we hope to develop this BO into implementable EPPs through the lab approach.

## Summary of Healthcare NKEA

	2020 Target
Incremental GNI Impact	RM35.3 billion
Additional jobs	181,000

#### Critical targets for 2012

- Expansion of Foreign Workers Health Insurance to foreign workers in Sabah and Sarawak
- Corporatisation of Clinical Research Malaysia
- Incentives to encourage the establishment of more bioequivalence centres
- Implementation of Pharmaceutical Off-Take Agreement
- Amendment to Patent Act
- Increase in the expansion of hospitals and ambulatory centres
- Expansion of the Diagnostic Services Nexus (DSN) to more public and private hospitals
- Completion of earthworks for the construction of UM Health Metropolis
- Establishment of Medical Device Authority by May 2012
- Enforcement of National Regulations for Medical Device by October 2012
- Conversion of Seniors Living BO to EPPs

# Strategic Reform Initiatives

## Boosting the Nation's Competitiveness

On 5 July 2011, the Malaysian Government announced six Strategic Reform Initiatives (SRIs), the second critical component of the Economic Transformation Programme (ETP) in addition to the 12 National Key Economic Areas (NKEAs), to boost Malaysia's global competitiveness. The ETP was conceptualised with two key thrusts of focus, through the 12 NKEAs and competitiveness, to be delivered by the SRIs.

The six SRIs are Public Finance; Government's Role in Business; Human Capital Development; Public Service Delivery; Competition, Standards and Liberalisation; and Narrowing Disparity.

These six SRIs are based on 37 policy measures recommended by the National Economic Advisory Council (NEAC) from a total of 51 policy suggestions. The remaining measures are now part of the NKEAs and National Key Result Areas (NKRAs).

The SRIs are the result of six weeks of consultation held within six labs in 2011 that involved 500 persons representing the public and private sectors.



**Competitions, Standards  
and Liberalisation**



**Narrowing Disparity**



**Public Service  
Delivery**



**Public Finance**



**Human Capital  
Development**



**Government's Role  
in Business**

# Competition, Standards and Liberalisation

It is recognised that a healthy and competitive economy promotes performance and innovation and makes the economy operate more efficiently through lower pricing and choice. Enhanced economic performance encourages higher levels of private investment and job creation. To this end, the implementation of competition law is vital in fostering a competitive environment that deters market manipulation and cartel practices.

In tandem with being domestically and internationally competitive, Malaysian companies must also adopt international standards and best practices in terms of quality and sustainability so they can compete in the international arena with confidence. In addition, a managed services liberalisation programme will further assist companies to be globally competitive as well as attract inbound investment.



**Dato' Sri Mustapa Mohamad,  
Minister of International Trade and Industry**

The services sector is the largest contributor to Malaysia's economic growth, accounting for close to two-thirds of the economic expansion in 2011. In the current competitive and challenging economic environment, we see the need for the services sector to remain strong and resilient in order to drive overall economic expansion. The progressive liberalisation of the services sector is expected to allow the services sector to assume an even greater role in generating growth, broadening the economic base, and increasing contribution to services exports. To this end, it was announced in the 2012 Budget that the Government will further liberalise 17 services sub-sectors in stages. Steps, as appropriate, will be undertaken in 2012 to put these measures into legal effect.



**Datuk Seri Dr. Maximus Ongkili,  
Minister of Science, Technology and Innovation**

We recognise that a competitive domestic economy is foundational to our integration into the global supply chain and international market. Benchmarking against international best practices and adopting international standards will help us improve the quality of our goods and services that will facilitate our efforts to make inroads into new global markets. Standards also ensure that products comply with safety and environmental regulations undertaken by establishing a framework for compliance. We are currently looking at strategic sectors where international standards need to be adopted and developed quickly so that Malaysia's products are on par and are able to compete in the competitive global environment without compromising the safety of our consumers.



**Dato' Sri Ismail Sabri Yaakob,  
Minister of Domestic Trade, Co-operatives and Consumerism**

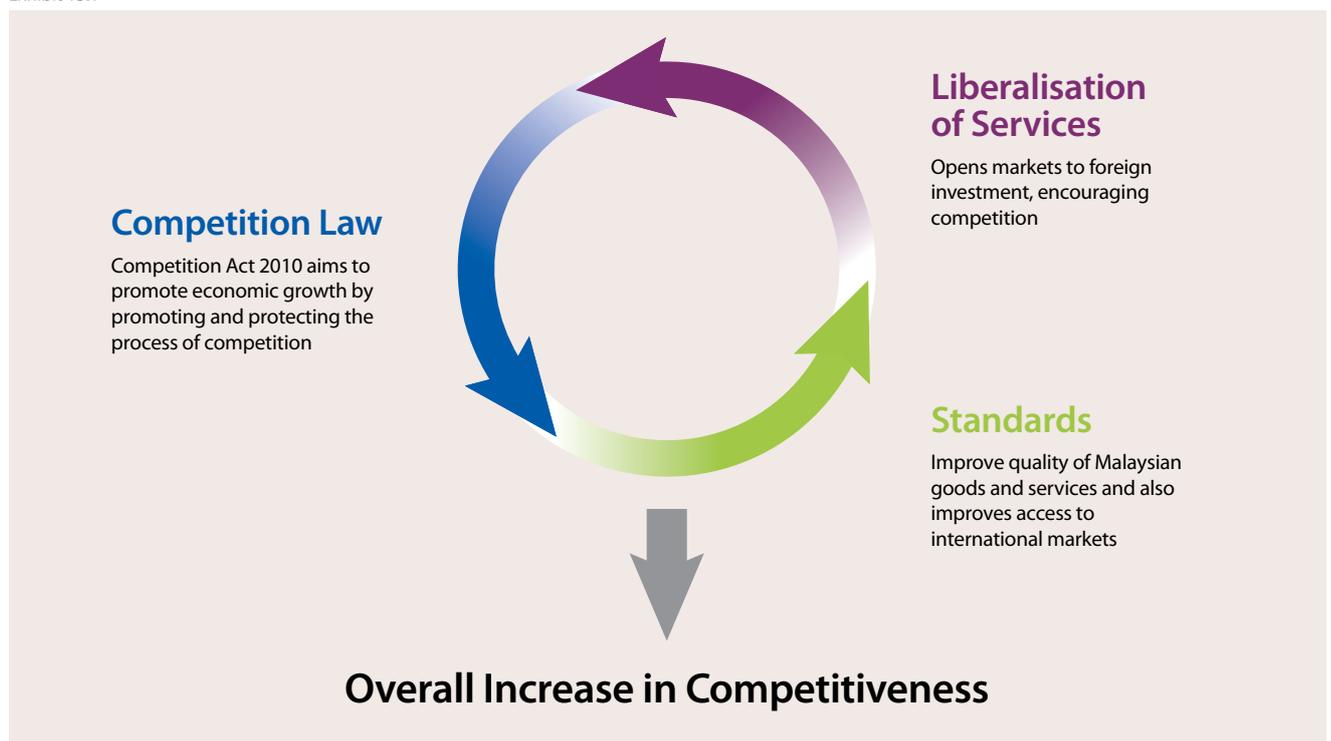
The Competition Act 2010 came into effect on 1 January 2012. The Act aims at ensuring a conducive and competitive business environment that will promote productivity and enhance innovation. Competitive markets will also lead to more efficient production and delivery of goods and services, increase consumers' access to cheaper and better quality products and ensure better allocation of resources. The Government is committed to the successful implementation and enforcement of this new law, which is applicable across industries and firms. It is therefore of high importance for firms to understand the benefits and challenges in respect of compliance with this law.

Formerly known as the International Standards and Liberalisation (ISL), this Strategic Reform Initiative (SRI) has been renamed as Competition, Standards and Liberalisation (CSL) to better reflect competition as a major component of the SRI. SRIs are enablers that facilitate economic growth through government actions such as policy and regulatory changes.

There are three components in the CSL, namely the swift implementation of competition law, adoption of international standards and best practices and the liberalisation of the services

sector. These are part of the key policy measures recommended under the New Economic Model (NEM) to create a competitive, sustainable and innovative environment towards a high-income nation. Three ministries are involved in overseeing the implementation of the initiatives under CSL, and these are the Ministry of Domestic Trade, Cooperatives and Consumerism for competition law, the Ministry of Science, Technology and Innovation (MOSTI) for standards and the Ministry of International Trade and Industry (MITI) for services.

Exhibit 13.1



## Competition Law

The Competition Act 2010 was gazetted on 10 June 2010 and came into force on 1 January 2012. The Act aims to promote economic development by fostering and protecting the process of competition that encourages efficiency, innovation and entrepreneurship. The Act which will govern all firms, including government-linked companies (GLCs), also provides a regulatory framework against market manipulation and cartel practices.

The Act seeks to prevent:

- Anti-competitive agreements such as price fixing, market sharing, bid rigging, limiting or controlling production
- Abuse of a dominant position or monopoly such as unfair pricing, tying/bundling, refusal to deal and predatory pricing

## Achievements

The Malaysian Competition Commission (MyCC) was set up in April 2011 to enforce the Competition Act 2010. Its main role is to protect the competitive process for the benefit of businesses, consumers and the economy. MyCC also has the power to issue guidelines in relation to the implementation and enforcement of the competition laws, act as advocate for competition matters, carry out general studies in relation to issues connected with competition in the Malaysian economy or particular sectors of the Malaysian economy, inform and educate the public regarding the ways in which competition may benefit consumers in, and the economy of Malaysia.

Various guidelines have been drawn up for the Competition Act 2010 on 'Complaints', 'Definition of Market', and 'Chapter 1 Infringements'. 35 advocacy programmes were undertaken in 2011 to promote the Act and to facilitate understanding relating to compliance with the Act.

## Moving Forward

MyCC will continue to strengthen its structure and add capacity as well continue advocacy programmes in 2012. It will also undertake market reviews as appropriate. In addition, a Competition Appeal Tribunal will be set up in accordance with the provisions under the Competition Act 2010.

## Standards

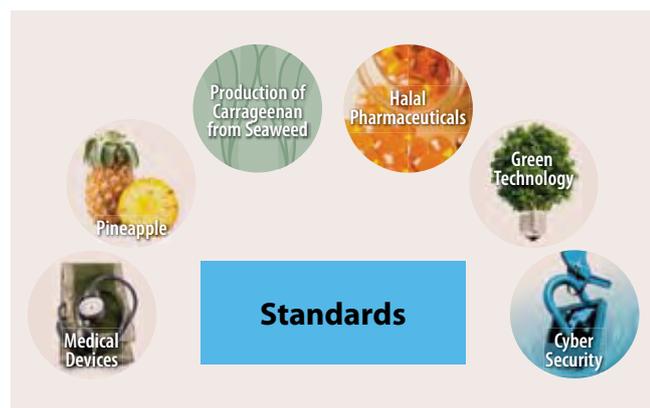
Benchmarking against international standards and best practices is important. This provides assurance of quality and safety that enhances market access for Malaysian products and services and contributes towards consumer protection and public welfare. As an export-oriented economy, Malaysia needs to develop and adopt standards that meet international requirements for its products and services. In addition to being internationally competitive, the establishment of a framework of compliance will also allow Malaysia to develop its own Malaysian brand that is globally recognised, which will lead to increased exports and economic performance.

## Achievements

Important recommendations from the SRI Lab included the need to adopt standards for products and services as well as to benchmark against international best practices for better governance and management.

Six industry sub-sectors were identified in the SRI Lab for standards development. These were selected based on competitive advantage and the potential to be a global leader in exports, namely Medical Devices, Pineapple, production of Carrageenan from Seaweed, Halal Pharmaceuticals, Green Technology and Cyber Security.

Exhibit 13.2



To further improve governance and management, amendments to the Standards of Malaysia Act 1996 were approved by Parliament in December 2011 to facilitate the acceleration of the standards development process. These amendments provide for the appointment of multiple Standard Development Agencies (SDAs), compared to the present situation of allowing only one SDA.

In addition, to shorten the time taken for the development of standards, an intensive mini-lab was conducted with the Department of Standards Malaysia (STANDARDS MALAYSIA) and SIRIM Berhad to review current timelines for standards development. The mini-lab reviewed and improved the process by defining time-frames for each stage of the standards development process. Based on this review, the adoption of international standards should not go beyond nine months, compared to the present one-year. In addition, the proposed timeline for the development of indigenous standards should be completed within one and a half years, compared with three years currently.

To further facilitate the standards development and compliance process, the SRI-CSL (Standards) Steering Committee chaired by the Minister of Science, Technology and Innovation endorsed the setting up of two focus groups and tasked the Coordinating Committee on the Implementation of Mandatory Standards under MOSTI to undertake the following activities:

- Focus Group on Standards Development and Adoption**  
 To identify standards for development that are correlated to sectors of strong economic growth such as the NKEA sectors. In addition, to recommend improvements to the standards development e-tracking process and to ensure adherence to the timelines for standards development as agreed at the mini-lab
- Focus Group on Usage and Compliance**  
 To develop programmes to enhance the usage of standards as well as assess the relevance of existing standards. To also undertake a review of existing technical infrastructure and its adequacy and recommend additional testing and other facilities as required
- Standards Coordinating Committee, MOSTI**  
 To review the current institutional structures and mechanisms for standards towards further improving standards development and implementation processes

## Sub-Sectors

### Cyber Security

The need to implement cyber security safety standards with a view towards mandatory compliance with international standards for Critical National Information Infrastructures (CNIIs) is under consideration. CNIIs are generally defined as the key systems, services, and functions which, when disrupted or destroyed, may compromise economic activities and commerce, and/or national security, public health and safety.

The need for mandatory compliance is to secure Malaysia's cyberspace, including its CNILs, by ensuring compliance with regulations that are based on international cyber security and related standards as well as to nurture and accelerate the growth of the local cyber security industry to provide the tools, technologies and support for compliance with the regulations.

MOSTI and the Ministry of Information, Communications and Culture will work towards identifying the appropriate mechanisms for the adoption of cyber security safety standards. In addition, CyberSecurity Malaysia will work with the Multimedia Development Corporation (MDeC) on a cyber security industry directory that will list companies, products and professionals involved in the cyber security industry.

### Pineapple

Two areas have been identified by the Department of Agriculture (DoA) for standards development/adoption. The selection of these two standards was based on the need of the pineapple industry to obtain a good supply of quality planting material to boost production and fulfil foreign markets' import requirements. The standards chosen are:

- Development of Malaysian Standard (MS) for the production of pineapple planting material;
- Development of MS on International Standards for Phytosanitary Measures (ISPM) No. 15 on Wood Packaging Material in International Trade for the prevention of the spread of diseases to plants.

DoA and the Malaysian Pineapple Industry Board (MPIB) together with Standards Malaysia will prepare the final draft of the standards identified. These drafts will then be presented to the Industry Standards Committee (ISC A) for their final review by the end of 2012, the latter of which is the penultimate stage prior to being endorsed as an official Malaysian Standard (MS) by MOSTI.

### Seaweed

The draft Seaweed Cultivation Code of Practice has been completed by the Technical Committee of Seaweed under the Department of Fisheries. This Code of Practice aims to prescribe general guidelines for seaweed farmers to promote Good Aquaculture Practice for sustainable seaweed production.

The development of standards for Seaweed Cultivation, Drying and Manufacturing of Carrageenan (a species of seaweed) will commence in 2012. Amongst others, these standards will govern cultivation methods, harvesting and handling and manufacturing of Carrageenan.

### Medical Devices

The Medical Devices Act 2011 was approved by Parliament in December 2011. This Act has provisions on the registration and post-market monitoring of medical devices. The Act also provides for compliance with a view towards enforcing the standards required for product safety and performance as well as eradicating an influx of sub-standard products.

The Medical Devices Bureau (MDB) will undertake the drafting of regulations for the registration and conformity assessment processes for medical devices. This is expected to be completed by 2012. In line with the forthcoming registration of medical devices, the MDB will adopt 15 international standards in 2012.

### Halal Pharmaceuticals

Halal products are seen to have great export potential in the global markets. The Halal Industry Development Corporation (HDC) in collaboration with the Halal Pharmaceutical Research Institute (HPRI) has identified several products where standards should be developed as well as taking measures to facilitate the certification process for Halal products in order to better access the international market for Halal products.

HDC and HPRI will undertake further research work on standards for Halal products and promote Halal certification among SMEs.

### Green Technology

On 17 August 2011, the Cabinet approved the conversion of the SIRIM Eco-Label Scheme to the National Eco Labelling Scheme. The Ministry of Energy, Green Technology and Water (KeTTHA) will be the responsible ministry, while the Malaysian Green Technology Corporation (GreenTech Malaysia) will be the focal point. The objective of this scheme is to increase the awareness and encourage the widespread use of environmentally-preferred or eco-products and services among Malaysians.

KeTTHA in collaboration with GreenTech Malaysia is presently studying the modality for implementing the Malaysia Green Labelling Programme (MGLP). Under this programme, products and services that have received the Green Label certification or endorsement will be listed in the Malaysia Green Directory. This depository will assist consumers in procuring environmentally preferred products and services.

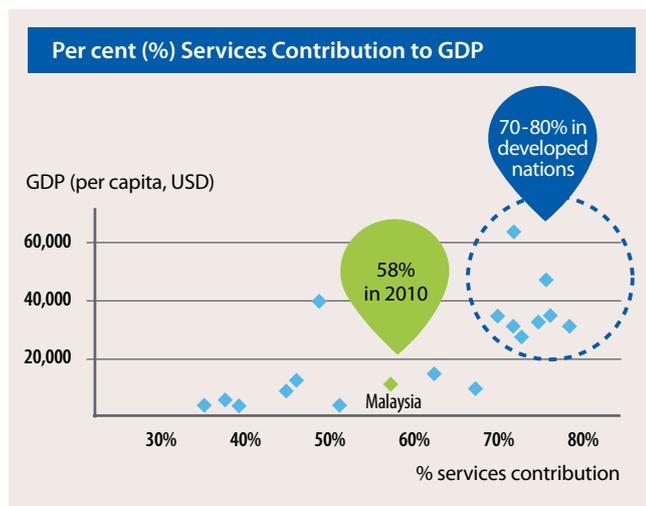
### Moving Forward

The focus groups under the guidance of the Standards Steering Committee will undertake measures aimed at ensuring greater usage of standards in NKEA sectors, improving availability of testing facilities and providing a better enabling environment for standards development and usage.

## Liberalisation of Services

The services sector is a significant contributor to the Malaysian economy, accounting for 58 per cent of our Gross Domestic Product (GDP) in 2010. This is reflective of the important role of the services sector as an economy becomes more advanced, with the share of services in developed economies reaching 70 to 80 per cent of GDP. Malaysia was the 29th largest exporter of commercial services in 2010, exporting close to RM100 billion worth of such services. This represented a 0.9 per cent share of global commercial services exports in 2010.

Exhibit 13.3



It is recognised that the services sector's future expansion and private investment potential can be enhanced by continuing the liberalisation programme – through removing restrictions on ownership, operations and cumbersome procedures that decrease the efficiency of doing business. These include relaxing or removing barriers to entry, streamlining and simplifying processes, reviewing the regulatory framework and capacity building.

The SRI Lab identified several key focus sectors that have the potential for growth and GNI contribution, such as Healthcare, Education, as well as Professional Services.

Exhibit 13.4

Healthcare	Education	Professional Services
<ul style="list-style-type: none"> <li>• Private hospitals</li> <li>• Healthcare professional services</li> </ul>	<ul style="list-style-type: none"> <li>• International schools</li> <li>• Vocational &amp; technical schools</li> <li>• Private higher education institutions</li> </ul>	<ul style="list-style-type: none"> <li>• Engineering services</li> <li>• Legal services</li> <li>• Architectural services</li> <li>• Accounting services</li> </ul>

## Achievements

It was announced in the 2012 Budget in October 2011 that 17 services sub-sectors will be further liberalised in phases in 2012, which include private hospital services, medical and dental specialist services, architectural, engineering, accounting and taxation, legal services, courier services, education and training services as well as telecommunications services, with up to 100% foreign equity allowed in selected sub-sectors.

## Moving Forward

Amendments to relevant legislation of the education, private higher education, legal profession, engineering and architectural sub-sectors will be undertaken in 2012 to give legal effect to the liberalisation measures.

The Government will continue to identify services sub-sectors for liberalisation towards improving the competitiveness and contribution to the economy. At the same time, regulatory measures will be reviewed to ensure the liberalisation process will be further facilitated.

# Public Finance

The Government has targeted to achieve a Federal Government budget deficit of about three per cent by 2015 and near budget neutral by 2020 as per the New Economic Model (NEM)'s objective which was introduced by the National Economic Advisory Council (NEAC).

Four fiscal policy recommendations were made by the NEAC in the concluding chapter of the New Economic Model to address the public finance reform issue. The measures are:

1. Adopt accrual accounting for prudent fiscal management
2. Implement efficient broad-based tax for revenue and fiscal stability

3. Strengthen expenditure control
4. Improve fiscal policy institution and processes

These policy measures were clustered under the Public Finance Reform Lab, and brought down to a three-foot, implementation-ready level.

A list of 21 initiatives under the Public Finance Reform Lab were proposed combined with two individual initiatives – the enabler accrual accounting system and replacing the current taxation system of sales tax and service tax with the introduction of broad based tax i.e. value-added tax. The list of the initiatives which will be implemented throughout 2011 to 2014 is as follows:

Exhibit 13.5

## List of Initiatives Proposed by the SRI Public Finance Reform Lab

<b>A. Improve Tax Compliance and Administration</b>	<b>C. Expenditure Control</b>
<ol style="list-style-type: none"> <li>1. Widen Field Audit and Investigation Coverage</li> <li>2. Widening the Tax Base</li> <li>3. Improving Efficiency in Tax Submission and Tax Collection</li> <li>4. Revise depreciation rate of gazetted value of imported used cars (downwards by 10 per cent)</li> <li>5. Audit-based control on exporters and importers of liquor and cigarette in duty free islands and Free Commercial Zone</li> <li>6. Enhanced Customs' enforcement/audit</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase cess for rubber replanting</li> <li>2. Cost effective funding mechanism (for public funded universities)</li> <li>3. Optimise asset utilisation (for public funded universities)</li> <li>4. Reduce Govt. travelling expenses by 15 per cent</li> </ol>
<b>B. Rationalisation of Corporate Tax Incentives</b>	<b>D. Transparent Procurement</b>
<ol style="list-style-type: none"> <li>1. 'Step-down' (From Full to Partial) Exemption for Shipping Income</li> <li>2. Review incentives in Promotion of Investments Act 1986</li> <li>3. Review Single Deduction, Further Deduction, Double Deduction</li> <li>4. 'Step-down' of Reinvestment Allowances</li> </ol>	<ol style="list-style-type: none"> <li>1. Widening E-bidding scope - reducing threshold value from RM200k to RM50k for the procurement of good &amp; services</li> <li>2. Enforce Procurement Plan</li> <li>3. Eliminate Incompetent Suppliers/Service Providers</li> <li>4. Capacity Building (Certified training course for procurement officers)</li> <li>5. Value Management (VM)</li> </ol>
	<b>E. Other Initiatives</b>
	<ol style="list-style-type: none"> <li>1. Broad-Based Tax (GST)</li> <li>2. Accrual Accounting</li> </ol>



### Dato' Seri Ahmad Husni Mohamad Hanadzlah, Second Finance Minister

The ETP and GTP will address the need to move up the economic value chain as well as strengthening public finance. The Strategic Reform Initiative (SRI) on public finance reform is one such initiative. I am confident that the SRI measures will contribute towards reining in the fiscal deficit to 4.7 per cent in 2012. Over the longer term, we are targeting a fiscal deficit of about three per cent by 2015 and a near balanced budget by 2020.

This list of initiatives will be constantly reviewed and enhanced periodically depending on the latest economic scenarios to achieve the best outcome and impact for the country.

## Achievements

Immediate results were shown with the implementation of Widening E-bidding. With the lab initiative, the E-bidding's original threshold value was reduced from RM200,000 to RM50,000 for the procurement of goods and services and implemented on 5 April 2011. As of 31 December 2011, a total of RM25.34 million was saved compared with the target of RM20 million, 26.7 per cent above target.

E-bidding is a more transparent procurement methodology where biddings are carried out online among qualified companies for:

1. Generic goods with a standard set of specification without the need to go through a complex and complicated technical evaluation
2. Goods and services which are managed under the panel system
3. Generic types of services with a common set of scope and specification

A capacity building programme for procurement officers is being developed as part of an on-going process at the Ministry of Finance. In addition, a new training program is being developed together with National Institute of Public Administration (INTAN)/ Public Service Department (JPA), Department of Works (JKR)/ Ministry of Works (KKR) and other core Ministries to further strengthen the capacity building of procurement officers. Through the new training program, all aspects of Government Procurement will be covered to ensure that procurement officers would be equipped with the necessary knowledge and skills. The new training programme will enable trained officers to implement "Value Management for Operating Expenditure Procurement" as part of the procurement planning initiative from 2012 onwards. The Ministry of Finance will monitor the execution of procurement plan by government agencies as stated in the Treasury's circulars.

In 2011, 53 awareness programmes were conducted to educate the public sector, business community and rakyat on the initiative to implement the Goods and Services Tax (GST) to replace the current sales tax and service tax. The programmes attracted an audience of 4,941 people, and feedback obtained has been taken under consideration by the relevant parties involved.

Exhibit 13.6

Target Group	No. of Programmes	No. of Attendees
Government	22	1,620
Industry	28	2,997
Consumer	3	324
<b>Total</b>	<b>53</b>	<b>4,941</b>

A broad-based consumption tax, GST will be levied on the 'value added activities' along the delivery chain. Most basic products and services such as rice, raw meat, fresh fish, vegetables, domestic public transportation and healthcare services will be exempted or zero-rated. The estimated additional revenue from implementing the GST in its first two years is between RM6-10 billion. This is dependant on the rate implemented, anticipated at four to five per cent.

The Inland Revenue Board (IRB) has completed the groundwork necessary to implement its initiatives to improve tax administration and compliance for direct tax collection from 2012. Amongst the initiatives is to widen field audit & investigation coverage. The IRB has implemented measures which include:

1. Redeployment of auditors from field audit to transfer pricing and specialised industries
2. Re-engineering of desk audit process
3. Enhancing usage of data warehouse in order to identify high-risk cases to be audited

Similar to the IRB, the Royal Malaysian Customs Department (RMCD) has also started implementing initiatives to improve tax administration and compliance for indirect tax collection. One such initiative, the enhancement of audits and enforcement was implemented in the second half of 2011. This has resulted in an additional collection of RM67.39 million, 81.2 per cent of the target of RM83 million. The enhanced enforcement came in the form of:

1. Informing businesses of new requirements in conducting audits:
  - Special audit (joint operation)
  - Periodic audit
2. Increasing audit coverage on registered licensees and importers:
  - Reviewing audit targets
  - Enhancing competency of audit officers through capacity building
3. Improving audit mechanisms:
  - Increasing the number of licenses of computer Assisted Audit Techniques (CAAT) software
  - Revising standard auditing procedures
  - Issuing internal guidelines on auditing
  - Enhancing e-Audit for audit report and risk assessment
  - Enhancing risk management system
  - Developing a networked system for information sharing.
  - Enhancing tax compliance
  - Developing a systematic and efficient debt management system.

New accounting policies have been drafted to change the current accounting system from modified cash basis to accrual basis. These include general accounting policies, policies on Consolidated Funds, Assets, Liabilities, Revenue and Expenses and have been endorsed by the Government Accounting Standards Advisory Board (GASAC). The Accountant-General's Department of Malaysia (JANM) has also carried out 36 awareness programmes to educate its officers and staff about accrual accounting for Government.

Other initiatives implemented include improvements in tax administration and compliance to increase tax collection as well as transparent procurement and expenditure control to reduce government spending.

## Moving Forward

Initiatives to improve tax administration and compliance will focus on increasing the tax base as well as enhancing audit and enforcement. These initiatives are expected to generate an additional RM1.94 billion in revenue in 2012.

The exercise on the review of the Promotion of Investments Act (PIA) 1986 is currently being carried out to review the variations and condition/criteria for incentives approved under the Act. The Ministry of International Trade and Industry is working together with the Ministry of Finance, the Malaysian Investment Development Authority (MIDA), Attorney-General's Chambers, and the Inland Revenue Board on the review and the amendments to the Act. It is targeted to be tabled to Parliament in the third quarter of 2012.

The enforcement of procurement planning and introduction of spend analysis for procurement activities will be implemented with pilot project on these ministries:

- Ministry of Defence
- Ministry of Education
- Ministry of Health
- Ministry of Home Affairs

The value management initiative will be incorporated in this initiative to further enhance government's expenditure control programme.

The proposed accounting policies which have been endorsed by GASAC will be tabled to the Accrual Accounting Steering Committee for approval in 2012. At the same time, the Malaysia Public Sector Accounting Standards (MPSAS) based on International Public Sector Accounting Standards will be drafted and approved in stages in 2012, 2013 and 2014. To enable the new computer software system design for accrual accounting, a review of the current business processes of all modules in the Government Financial Management and Accounting System (GFMAS) will be carried out and is expected to be completed by the end of 2012.

# Public Service Delivery

The focus of the Public Service Delivery (PSD) Strategic Reform Initiative (SRI) is two-pronged, the first is to accelerate the Government’s efforts to become leaner, more efficient and facilitative, and the second, to ensure transformation of the civil service into a high performing institution.

## Lean, Efficient and Facilitative Government

The Government is committed to reduce redundancies and overlaps, while adopting clear governance structures to ensure execution and compliance. Another priority is to improve the current governance processes by promoting efficiency, and ultimately, discourage rent-seeking behaviour. For high-level policy reviews, the Government intends to seek greater public involvement via the various available channels, allowing members of the public to provide their input and concerns.

## High Performing Civil Service

There are 1.3 million civil servants who form the backbone of the public service delivery and they are critical to every aspect of the nation. In our efforts to transform the civil service, several targeted initiatives have been identified. Greater career mobility and opportunities within the public service must also be enhanced to promote a motivated civil service.

Exhibit 13.1 describes the lists of initiatives under the Public Service Delivery SRI.

Exhibit 13.7

Initiatives	
<b>Lean, Efficient and Facilitative Government</b>	Business Process Reengineering (BPR) to expedite business licensing processes.
	Enhanced online licenses approval system, BLESS (Business Licensing Electronic Support System).
	Improved public service delivery through real time performance monitoring and counter rating system (e.g SMS rating system).
	Single online portal, integrating all business and general online services.
	Citizen Centred Public Service.
<b>High Performing Civil Service</b>	Portability of pension scheme to encourage mobility.
	Open recruitment from both private and public sector for top and mid-career level to increase talent pool.
	Joint Committee Service Commission and JPA, to institutionalise platform for Human Resource planning and setting up search committees to select specialist commissioners.



## Tan Sri Mohd Sidek Hassan, Chief Secretary to the Government

The Public Service Delivery under the SRI programme aims to ensure that we deliver a lean, efficient and facilitative government in both business and public related services as well as to create a high performing civil service. For Malaysia to enhance its global competitiveness, the public sector must transform, and excellence in public service can only be achieved when ideas and policies are well implemented. We need to enhance transparency, streamline processes and procedures and ensure that all public servants embrace the vision of “One Service, One Delivery, No Wrong Door” to reinvent Malaysia into a market-led, regionally-integrated, entrepreneurial, and innovative country.

## Achievements

Since the completion of the Public Service Delivery SRI lab in April, we have moved at tremendous speed. Implementation of all the initiatives has taken off.

### Business Process Reengineering (BPR) and Online Licenses Approval Programme

To improve the ease of doing business in Malaysia and enhance our economic competitiveness as a nation, the Malaysia Productivity Corporation (MPC), the Malaysia Administrative Modernization and Management Planning Unit (MAMPU) and the Implementation Coordination Unit (ICU) are working hand-in-hand to ensure that the current list of available business licenses are relevant and not burdensome to business owners and new applicants. Eventually, all business license applications and approvals will be automated into the Business Licensing Electronic Support System (BLESS).

A focus group under the wings of the Special Taskforce to Facilitate Business (PEMUDAH) works to monitor the progress of this initiative. As of December 2011, the initiative has resulted in 405 redundant licenses identified to be abolished, while 272 licenses will be simplified before they are incorporated into an online licenses approval system – the Business Licensing Electronic Support System (BLESS). Moving forward, the current myGovernment Portal (<http://www.malaysia.gov.my/>) will be enhanced to become the single online portal for all government related services. Developmental works have begun where a User Requirement Study Workshop has been conducted with ten pilot agencies. BLESS will eventually be incorporated into this single online portal to allow greater accessibility for the business community.

### Real-Time Performance Monitoring and Counter Rating System

To ensure continuous improvement of governance, promoting efficiency and reducing rent-seeking behavior, the Government will implement two new initiatives: real time performance monitoring and counter rating system.

The pilot for the real time performance monitoring system for five agencies is expected to be launched in the second quarter of 2012. The Government has already initiated the tender process in October 2011.

A pilot project for the counter service rating system was officially launched on 25 October 2011, and has been successfully implemented at 82 police stations in Selangor where the public may rate the counter services via Short Message Service (SMS) or through rating machines installed at the police station.

### Citizen Centered Public Service

In line with the Government aspiration to make the public service citizen centric, the Government has carried out environment scanning activities to gauge the level of involvement of the *Rakyat* in government policy decisions. Early findings indicate that in general, while government agencies claim that their existing planning and implementation work involves the engagement of the *rakyat*, non-government organizations (NGOs) and business associations generally feel that the engagement efforts are not effective and have room for improvement.

Moving forward, the Government seeks greater public involvement in high level policy reviews. Methods to engage with the *rakyat* may include focus groups, policy review open days and town hall meetings, providing various platforms and opportunities for the public to submit their input and voice concerns. In 2012, the Government will be issuing a circular to all government departments and agencies, outlining the detailed processes on how to engage the *rakyat* in implementing high impact policies.

### Ensuring Best Talent in Civil Service

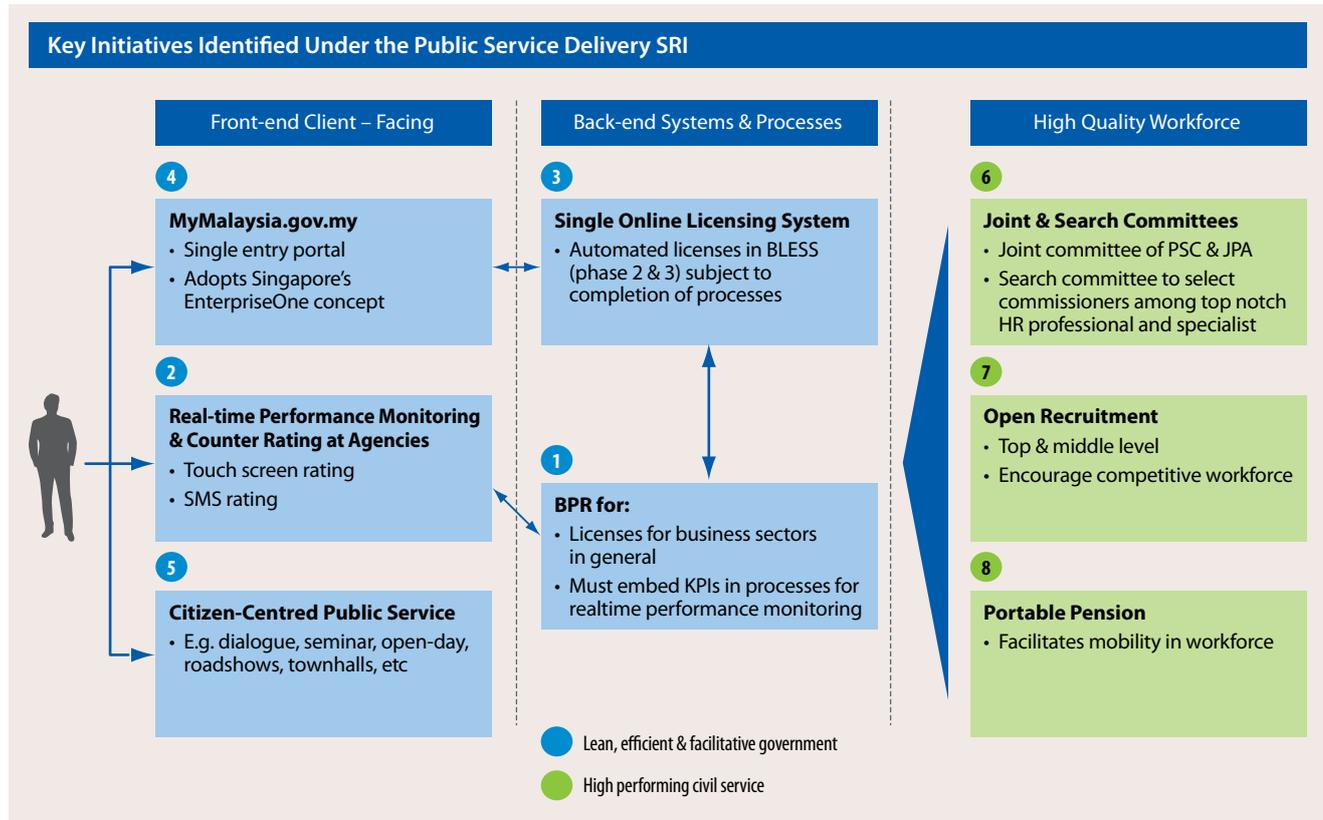
The Government has recognized the need to attract the right talent to be in public service. In order to ensure that the best talent is recruited, the Public Service Commission (PSC) as the agency that is responsible for recruitment needs to be further enhanced. One of the strategies is to appoint Human Resource (HR) subject matter experts to become commission members. Hence, in 2011, a Search Committee was formed to assist the government on the appointment of top-notch visionary HR professionals and specialists to become commission members. The Search Committee now consists of the Chairman of the PSC, the Secretary General of the Human Resource Ministry, the Deputy Director General of JPA and the President of Malaysia Employers Federation (MEF).

In addition, a Joint Committee was established to institute a platform for Service Commissions and JPA to develop policies concerning human resource management and to ensure all parties are aligned for effective and efficient implementation of the said policies. This committee that meets every quarter consist of members of all the national Service Commissions and the Public Service Department is chaired by the Director General of the Public Service Department as the Head of Civil Service. This will support the shift from conventional HR management to strategic HR management.

In other efforts to increase the talent pool, the Government intends to implement open recruitment for senior and middle-management posts. This initiative will allow the Government to recruit high-performing candidates from both the private and public sector for top and mid-career levels, unlike current system where posts are filled through a rank-and-file based promotion exercise. The Public Service Commission is currently drafting the circular on the implementation of this policy of for implementation in 2012.

Apart from the initiative above, the portable characteristic will be enhanced in the existing pension scheme to facilitate cross mobility between the public-private sector and also within the public sector. In return this is expected to also increase talent pool. Previously, public service personnel who had resigned and later intends to re-enter the civil service will be in a disadvantaged position. He or she will lose the pension benefits from the tenure of public service. The new initiative now considers all years of services even though there are breaks between services, thus allowing multiple resignations. This is intended to encourage civil servants who wish to gain experience from the private sector to do so without the fear of losing their pension benefits. At the same time the civil service hopes to gain from the experience of these civil servants when they re-enter the civil service.

Exhibit 13.8



## Moving Forward

While public sector reforms have featured in the Government's agenda since the country's independence, the Public Service Delivery SRI's vision focuses on transforming the entire Government administration into an efficient engine that will complement the national agenda of transforming the nation into a high-income economy.

# Narrowing Disparity

## Moving Beyond the NEP

The New Economic Policy (NEP) and its successors over the years have succeeded in transforming the Bumiputera community in terms of reducing inter-ethnic income disparities, increasing participation in corporate equity, increasing the number of Bumiputera professionals and overall representation in management as well as eradicating poverty.

While there have been major achievements since the introduction of the NEP, there is still a significant need to address existing imbalances in income levels and ownership of economic assets. The Bumiputera share of the economy is still small in proportion to the Bumiputera population. There are significant opportunities to improve Bumiputera representation in high-value added occupations, management positions and high-income jobs. Bumiputera households make up 65 per cent of total households and also represent a higher proportion of households in the lower income groups. Bumiputera ownership of share capital (at par value) of limited companies remains at 21.9 per cent in 2008, which is still short of the 30 per cent target for corporate equity ownership set at the macro level.

The NEP has also led to unintended outcomes within the Bumiputera Commercial and Industrial Community (BCIC) such as the issue of quantity versus quality; small number of high calibre Bumiputera entrepreneurs and small number of regional or global Bumiputera players among others.

## NEM and Narrowing Disparity SRI

The New Economic Model (NEM) introduced by the National Economic Advisory Council (NEAC) builds on the work of previous policies such as the NEP, with an emphasis on developing Bumiputera Small and Medium Enterprises (SMEs) and accelerating the BCIC development. The NEM's recommendations – clustered in the Narrowing Disparities SRI – are intended to address existing imbalances in income levels and ownership of economic assets. This is done through two policy measures to establish specific programmes for Bumiputera SMEs and to focus on capacity building programmes.

In the first policy measure, the NEAC proposes that these programmes should be market friendly and transparent, and be granted on the basis of needs and merit. The Bumiputera SMEs that are products of these programmes should be self-sufficient and able to compete in a liberalised environment independently, making these Bumiputera SMEs more competitive.

The second policy measure proposes that capacity building programmes should be provided to Bumiputera as well as non-Bumiputera SMEs on the same market-friendly principles, with a focus on building talent, identifying new technologies and enhancing collaboration between Bumiputera and non-bumiputera firms, as well with government linked companies (GLCs) and multinational companies (MNCs). Bumiputera-support institutions such as Majlis Amanah Rakyat (MARA), Perbadanan Usahawan Nasional Berhad (PUNB), Permodalan Nasional Berhad (PNB) and others also play an important role in identifying possible opportunities for Bumiputera participation in the 12 National Key Economic Areas (NKEAs).



**Tan Sri Nor Mohamed Yakcop,**  
Minister in the Prime Minister's Department,  
Economic Planning Unit

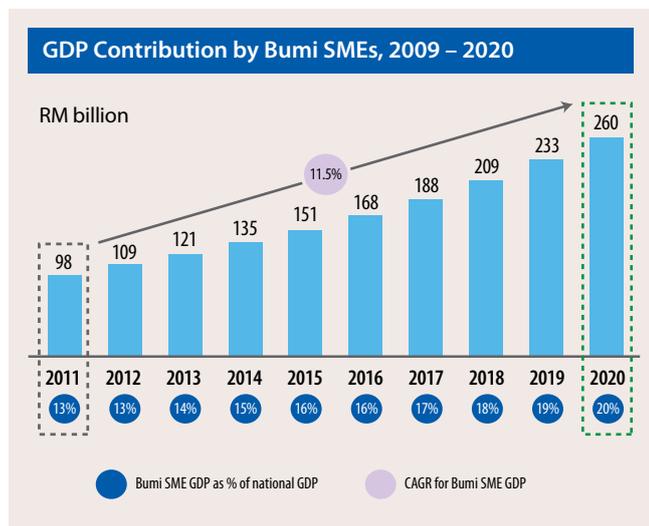
The New Economic Policy (NEP) and its successor policies over the years have succeeded in transforming the Bumiputera community in the aspects of equity, employment, household income and poverty. The income and wealth disparity has improved significantly throughout the last decade. The Government continues to improve the disparity gap for the bottom 40% through existing policies and national level initiative such as the Government Transformation Programme (GTP). At the same time we need to grow, develop and nurture the Bumiputera Small Medium Enterprises (SMEs) in order for them to compete globally. It is the Government's hope that these SMEs will be able to meet the target of 20 per cent contribution to the nation's gross domestic product by the year 2020. I am confident that Bumiputera SMEs will take up this challenge and identify ways of how we as the Government can facilitate and accelerate their growth.

Through centralised initiatives under the Government Transformation Programme (GTP), the bottom 40 per cent income group continues to be supported by various policy measures at the Federal and State levels to narrow the income disparity.

The focus of this SRI is to grow SMEs which are known to be the backbone of any economy. The SMEs in Malaysia contributed more than 30 per cent to the national GDP in 2010 with an average growth rate of 5.7 per cent.

In Malaysia, out of the 30 per cent total SME contribution, Bumiputera SMEs only contributed 13 per cent to the national GDP in 2010. There is a need to grow Bumiputera SMEs to match non-Bumiputera SME contribution to the GDP by year 2020 to at least a 50:50 ratio. As such, the target is to grow the Bumiputera SME contribution by 11.5 per cent year-on-year from 13 per cent GDP contribution in 2010 to 20 per cent GDP contribution by 2020.

Exhibit 13.9



## Achievements

### TERAJU

The two NEM policies form a small component of the bigger agenda – the Bumiputera Economic Transformation Programme (BETP). The BETP that is led by TERAJU, a unit in the Prime Minister’s Department that reports directly to the Prime Minister and the Majlis Tindakan Agenda Bumiputera (MTAB). TERAJU was set up to lead, coordinate and drive Bumiputera participation through new and existing initiatives, while acting as the Secretariat to MTAB and overseeing the Skim Jejak Jaya Bumiputera (SJJJ). The BETP was launched by the Prime Minister on 26 November 2011.

The initiatives under the BETP will be guided by the following four principles in line with the NEM:

- 1. Market friendly** – Resources will be optimally allocated and will not cause, contribute or perpetuate economic distortions

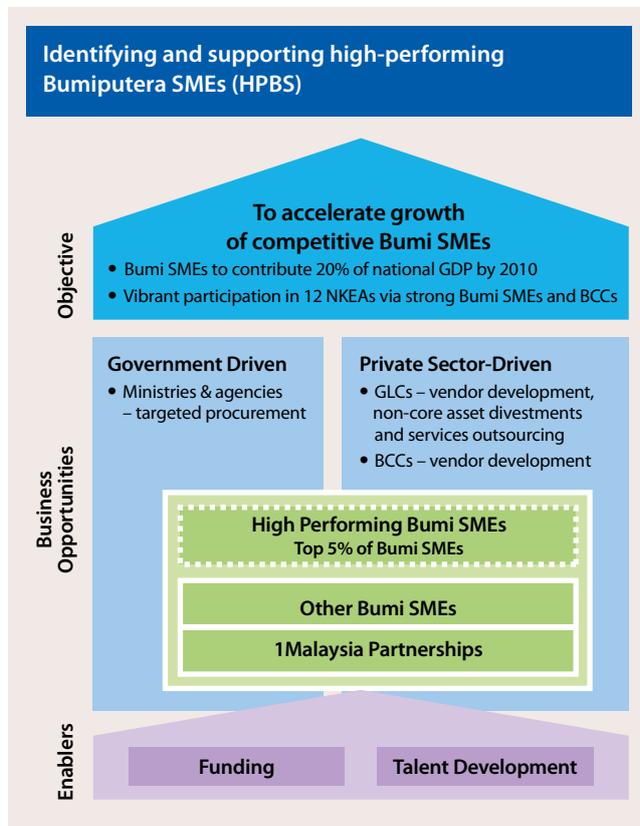
- 2. Needs-based** – Bottom 40 per cent households and disadvantaged groups with specific needs will be targeted
- 3. Merit-based** – Programmes will encourage competition and award opportunities to the most qualified individuals and businesses.
- 4. Transparent** – Policies, procedures and criteria will be made clear and public.

## TERAS

In order to achieve the objective of increasing Bumiputera SME’s GDP contribution to 20 per cent by 2020 and ensuring active participation of Bumiputera SMEs in the 12 NKEAs, TERAJU launched a programme called TERAS. TERAS aims to increase Bumiputera SMEs’ participation in the economy by enabling SMEs to scale up, accelerate their growth and compete in the open market, without heavy reliance on Government contracts. This programme will also place emphasis on developing quality Bumiputera SMEs that will in turn, trigger various business opportunities for themselves and other Bumiputera SMEs. This will be executed by identifying High Performing Bumiputera SMEs (HPBS) comprising the top 5 per cent of the overall Bumiputera SMEs.

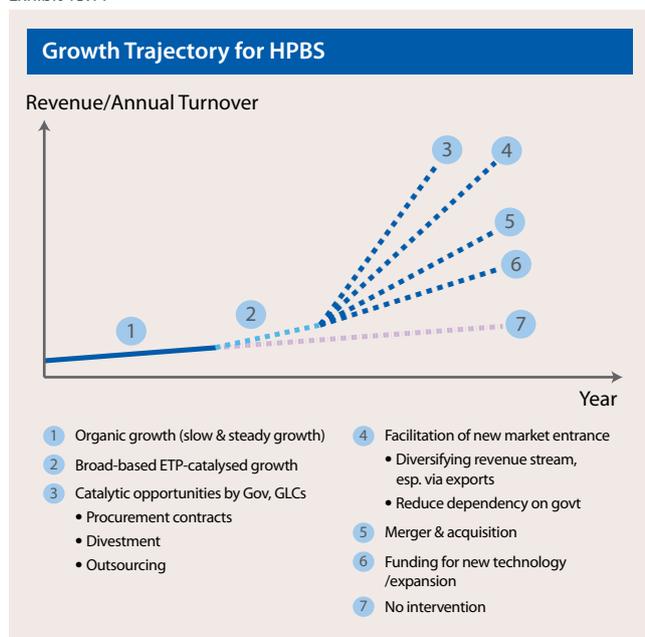
These companies will be given business opportunities via either government driven initiatives (i.e. through targeted procurement) or private sector driven initiatives (i.e. GLC Vendor Development Programme, Asset Divestments, Bumiputera Corporate Champions (BCC) Vendor Development).

Exhibit 13.10



From a business growth standpoint, these business opportunities are catalytic opportunities given by the Government and GLCs via procurement contracts, non-core asset divestment and or outsourcing of non-core GLC functions that can increase revenue or turnover. This will in turn cause the business to expand through other organic means such as mergers and acquisitions.

Exhibit 13.11



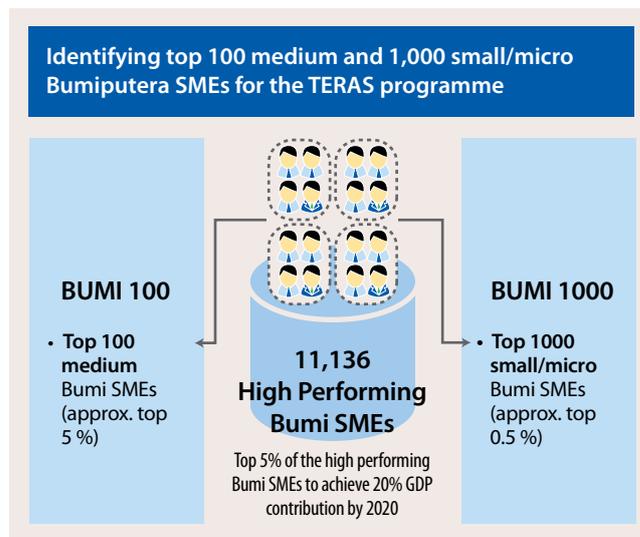
### Selection Process for High Performing Bumiputera SMEs

The selection of the High Performing Bumiputera SMEs will be done through a stringent programme based on selection criteria such as:

- Core business should preferably be in one of the 12 NKEAs
- Preferably has a minimum three star and above score rating by SME Corporation Malaysia (SME Corp)
- Preferably has a favourable Credit Bureau Malaysia rating (Probability of Default < 20 per cent)
- Profitable in the last two to five years

An independent selection panel comprising representatives from Ministry of Finance (MoF), Ministry of International Trade and Industry (MITI), SME Corp, Khazanah and industry experts will be evaluating the proposals and conduct background assessment of the companies. The selection panel will be chaired by TERAJU. The target is to identify top 100 medium and 1,000 small/micro Bumiputera SMEs to join the TERAS programme.

Exhibit 13.12



To ensure transparency and integrity of the selection process, an independent audit firm will be appointed to monitor the overall selection process. To ensure that these SMEs are eventually able to be independent, clear exit criteria have been identified. These companies will also have to meet key milestones to enable them to 'graduate' and become large companies within five years, failing which the companies will be dropped out of TERAS.

### Moving Forward

In the BTEP Roadmap, the prime objective is to enhance Bumiputera wealth creation through three key drivers:

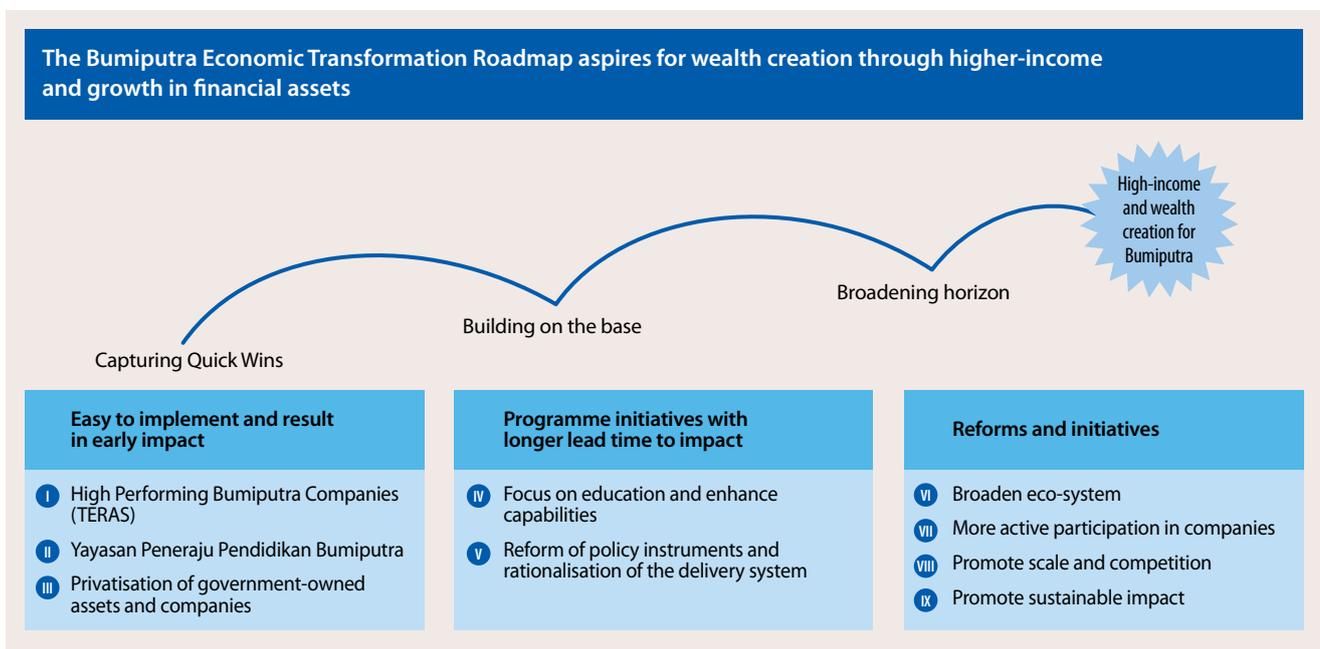
1. Building up Bumiputera capabilities through better employment;
2. Enhancing value of Bumiputera-owned assets such as financial assets (unit trusts, zakat), property (waqaf land) and corporate equity and;
3. Increasing Bumiputera corporate ownership and control.

Within each driver described above, specific and detailed initiatives are already in place. Initiatives set to be implemented in 2012 are:

- The High Performing Bumiputera Companies (TERAS)
  - 30 SMEs have been selected to undergo the TERAS Programme. These 30 companies have combined revenue of more than RM900 million, providing jobs to 3,000 people
  - 170 companies are currently being evaluated by the independent selection panel

- Yayasan Peneraju Pendidikan Bumiputera
  - A private education trust fund for specialised skills and training
  - Funding sources from corporate, private and individual donations. Currently 21 companies have pledged more than RM100 million to kick off this initiative
  - 12,000 scholarships will be made available
- Privatisation and or divestment of Government-owned assets and companies
  - The Government will continue to privatise some Government assets such as education and medical institutions as well as MOF incorporated companies
- Facilitation Funds
  - The Government has allocated a RM2 billion Facilitation Fund to be managed by the Public-Private Partnership Unit (UKAS) and TERAJU to encourage the implementation of Bumiputera private sector projects
  - The Fund aims to bridge the viability gap by increasing Bumiputera participation in high value projects with huge spill-over effects and enhancing the economic competitiveness of the nation
  - The Fund is offered in the form of grant on progressive reimbursable basis and it is limited at 15 per cent of the project cost or RM30 million (whichever is lower)

Exhibit 13.13



The TERAS programme aims to secure the participation of 1,100 qualified companies in 2012. In driving participation for the TERAS programme, TERAJU will focus on establishing five one-stop centres in five corridors to enable better reach and accessibility to the micro SMEs in the rural areas. These one-stop centres will be managed by TERAJU.

Further to that, five Development Financial Institutions have realigned their funds to provide financing packages specifically for SMEs, according to the 11 sectors and Entry Point Projects within the ETP. SME Bank was the first to launch this in December 2011.

SME Corp will set up and manage a central database system to ensure that the disbursements of funds for SMEs are better managed. The system will be able to give a bird's eye view on disbursement of various grants and loans to SMEs from various ministries and government agencies to prevent duplication of disbursement, fraud and better accountability to the respective recipient SMEs. The centralised database is expected to be completed by end of 2012.

Moving forward in 2012, the Narrowing Disparity SRI will continue its momentum through initiatives categorised under Building on the Base and Broadening the Horizon stage. TERAJU will see through the execution of TERAS programme accordingly and the BETP will kick-off its implementation in 2012. Some of the initiatives include policy reforms and enhancing education levels which will yield a longer term benefit for the Bumiputera community in general.

# Government's Role in Business

Five of the 51 policy recommendations made by the National Economic Advisory Council (NEAC) in the concluding part of the New Economic Model were clustered under the Government's Role in Business SRI. From the labs, five key outputs were identified that are strongly linked to these policies:

1. Separation of Regulatory from Business Roles
2. Situations for Government Involvement in Business
3. White Room to Cover Privatisation/ Divestment
4. Monitoring the Universe via a monitoring unit
5. Management of Divestment Proceeds

The government will rationalise its role in business with three key objectives: to avoid crowding out the private sector, to increase liquidity in capital markets, and to improve the government's fiscal position. The Government's Role in Business SRI lab focussed on three aspects: establishing the government's role in business, developing a clear divestment plan via a white room; and establishing governance for government- or state-owned companies.

Aside from four clearly defined key areas, the Government will move away from the role of investor and towards that of facilitator. The four areas are:

- When the private sector needs co-investment in projects that are gross national income-positive to the nation such as the regional corridor developments
- The business has to be owned domestically in the interest of national security, such as defence and rice-production industries
- The business involves large capital investment and require long gestation periods such as nano-technology

- National infrastructure projects such as renewable energy and public transport systems

For the divestment of listed companies, the government linked investment companies (GLICs) have identified a 'strike price' for each of the government linked companies (GLCs) to ensure that the Government is able to get the maximum value from its assets divestments. The divestment exercise will be triggered once the 'strike price' is hit.

The lab also determined a clear pathway to the divestment of government or state-owned assets. Where they are owned by GLCs, they will be subject to a turnaround programme to ensure commercial viability before being divested or sold to the private sector. Where assets are state- or ministry-owned, they will be maintained should they be strategic to national interests or public service delivery. Outside this, they will be transitioned to being GLC-owned and turned around before being divested or sold. The proceeds that the Government could potentially raise from divesting these assets will be channelled to the Federal Government Divestment Account or a state account to service the country's fiscal deficit or to be reinvested in existing funds to facilitate economic growth.

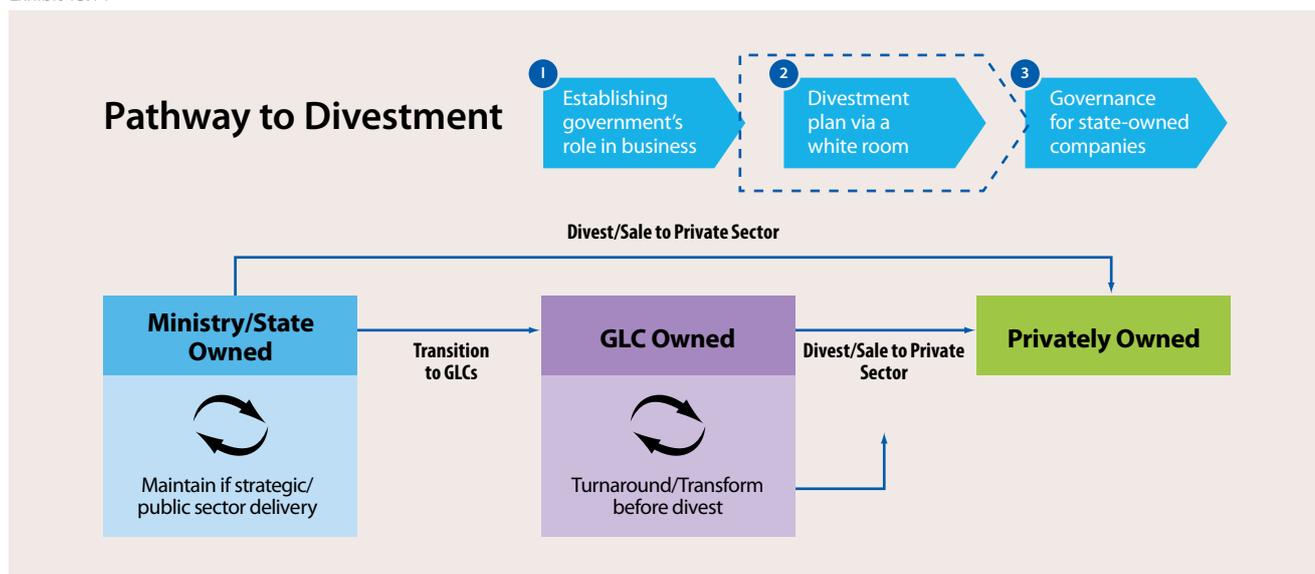
White room discussions were held between the GLCs, GLICs and relevant ministries. This was done to balance the need to inform all stakeholders of the divestment exercise with the market-sensitive nature of the information.



**Dato' Sri Mohd Najib Bin Tun Abdul Razak,  
Prime Minister of Malaysia**

**In recent years, the private sector's role has receded, and this trend must be reversed if the private sector is to be the engine of growth to high income status. The substance of the Strategic Reform Initiative in relation to the Government's Role in Business is that in sectors where the private sector is operating effectively, GLCs should be privatised. GLCs will be required to operate on a commercial basis free of government interference and without government preferential treatment. Reduced direct participation of government in the economy would minimise the crowding out of the private sector. This outcome would be positive for turning Malaysian companies into regional and global champions.**

Exhibit 13.14



## Achievements

Outside these four areas, 33 companies under six GLICs have been identified as ready for divestment either through a listing, pare-down or outright sale. Under the plan to rationalise the portfolio of GLCs, five have been identified for stake pare-downs, seven for public-listing and 21 for outright sale. For the year of 2011 - 2012, 24 companies have been identified for the Government's divestment exercise.

Amongst key divestment programmes is Khazanah Nasional Bhd's sale of its strategic 32.21 per cent stake in Pos Malaysia Bhd to DRB-Hicom Bhd in April 2011. Pos Malaysia's stake divestment had a two-stage process, with the first stage addressing regulatory aspects such as the increase in postage tariff rates and rise in salaries and allowances for most of Pos Malaysia's staff, while stage two involved the drawing up of an open bidding and evaluation process to select a new shareholder.

In May 2011, Khazanah has also divested its 10 per cent stake in EON Capital to Hong Leong Bhd.

In March 2011, Employees Provident Fund (EPF) has announced that it would trim its stake in RHB Capital Bhd (RHB Cap) to 45 per cent by the end of 2011 from the 57 per cent it held.

On 28 June 2011, the Federal Land Development Authority's (Felda) MSM Malaysia Holdings Bhd was listed on Bursa Malaysia. It incorporates five of the seven companies identified for listing under the GLC divestment programme.

In July 2011, it was announced that Boustead Holdings Bhd will undertake a series of corporate exercises to pare down its 97.81 per cent stake in Pharmaniaga Bhd to 55 per cent, in compliance with Bursa Malaysia's listing rules for listed companies to divest at least 25 per cent of its shares to the public.

In October 2011 it was announced that Felda Global Ventures Holdings (FGVH) would be listed on Bursa Malaysia in 2012. With

this listing, it will be the world's largest listed plantation entity. Under the listing proposal, settlers will swap their 51 per cent stake in Felda Holdings for a 61 per cent stake in FGVH.

In November 2011, Khazanah accepted a joint offer from UEM Group Berhad and EPF for PLUS divestment. The divestment was done through a closed tender system with some careful design and proper execution, given the large scale of the company and the sensitivities surrounding it. Through the co-investment, PLUS is 51 per cent owned by UEM Group with the remaining 49 per cent owned by EPF.

## Moving Forward

Under the oversight of the Putrajaya Committee on GLC High Performance (PCG) that was formed in January 2005, Khazanah's GLC transformation efforts to follow through and catalyse the GLC Transformation Programme are already showing results through the sustained improvement in the G20's performance trajectory. Focus in 2012 will be to expand these efforts to all GLCs, ministry-owned companies and state-owned companies.

FGVH's initial public offering is on track for listing in April 2012, and the government will work closely with the remaining 24 companies (out of the 33 companies) to be sold/divested.

The state of Johor has been identified to be the pilot state for the State-Owned companies' divestment programme. Several preliminary discussions were held between PEMANDU and Johor Corporation (JCorp) that talked about streamlining JCorp's core businesses. To date, as part of the overall JCorp rationalisation programme for its various divisions to focus on their core businesses, there have been several key corporate movements by JCorp such as making KFC and QSR private, exiting Kulim from the food retail business and focusing it on plantations, and considering selling some of its hotel assets and reinvesting the money to drive earnings from its hospitality business. JCorp now wants to focus on only a few areas of business, namely palm oil plantations, healthcare, property and the food industry.

# Human Capital Development

The Human Capital Development SRI was a result of the New Economic Model (NEM) policy recommendations launched by the Prime Minister in January 2011. Implementation began after a series of SRI labs were conducted during February to April 2011.

The Human Capital Development SRI is a critical enabler to help transformation of the workforce and workplace. This involves the implementation of strategic programmes parked under six key policy areas:

1. Modernise labour legislation
2. Focus on upskilling and upgrading the workforce
3. Strengthen human resource management
4. Leverage on women's talent to increase productivity
5. Undertake a labour market forecast and survey programme
6. Enhance labour safety net by introducing unemployment insurance

The Human Capital Development SRI cuts across all 12 National Key Economic Areas (NKEAs) and functions as an enabler in supporting the implementation of the NKEAs besides ensuring competitiveness in its execution.

## Modernising Labour Legislation

Modernising labour legislation is crucial to ensure laws unsuited for a modern economy and impedes our progress and global competitiveness are reviewed and updated holistically. In doing so, the approach taken ensures that amendments to the laws are not fragmented and reactive. The proposed amendments focus on the dual objectives of reducing cost to business of labour management and ensuring effective worker protection.

These proposed amendments pertain to the following acts:

- Employment Act 1955
- Industrial Relations Act 1967
- Trade Unions Act 1959
- Foreign workers and other legislation



**Datuk Seri Dr. S. Subramaniam,**  
Minister of Human Resources

Our people are the engines of our economy. The Human Capital Development (HCD) SRI enables us to lay the foundations in place that will allow us to maximize the human talent, this country so richly possesses. It is a critical enabler for us to transform the workplace as well as the workforce. The initiatives under HCD aim to resolve challenges in labour legislation by providing effective workers' protection whilst easing cost of doing business for employers. In line with the Government's aspiration to be a developed nation, minimum wage will be announced to provide additional workers' protection.

The HCD SRI also looks at up-skilling and upgrading the skills and competencies of the critical mass of the workforce and increasing women's participation to ensure we can meet the talent demands of a high income nation. The Government is confident that these initiatives will provide Malaysia with a highly skilled talent pool that will be able to compete in an increasingly globalised environment.

The implementation targets for the proposed amendments are presented in Exhibit 13.15.

Exhibit 13.15



These amendments serve to provide clarity, ensure the appropriate level of enforcement in order to provide fair treatment of workers without protecting obsolete jobs whilst reducing the cost of labour management in business. The Government has had a series of syndications with relevant parties across the spectrum and believe that alignment is critical for us to move forward. Besides the amendments covered in the labs, minimum wage is a key reform initiative which is currently being addressed by the Ministry of Human Resource (MOHR), with an announcement expected to be made in the first half of 2012.

## Achievements

### Employment Act 1955

The 1st phase of amendments to the Employment Act 1955 had been passed in the Parliament (Lower House) in December 2011. The amendments, among others include:

1. Section 2 (Amendments to definition of contractor for labour)
2. Section 19 (Time of payment of wages)
3. Section 22 (Advancement of wages)
4. Section 25 (Payment of wages through bank account)
5. Section 37 (Entitlement of maternity leave and maternity allowance)
6. Section 60D (Malaysia Day as a mandatory gazetted public holiday)
7. Section 60K (Duty to inform Department of Labour on the termination of service of foreign employees)

New provisions include:

1. Section 2 (Definition of foreign domestic servant)
2. Section 33A (Registration of contractor for labour with the Department of Labour)
3. Section 44A (Maternity leave)
4. Section 57A and 57B (Registration of domestic servant with the Department of Labour)
5. Part XVA (Sexual Harassment)

### Minimum Wage

Minimum wage was not directly covered in the SRI labs but as a key reform initiative, the MOHR has started work on minimum wage since 2010. The National Wage Consultative Council (NWCC) was set up in September 2011 pursuant to the National Wage Consultative Council Bill which was passed in Parliament in July 2011. The NWCC is tasked to recommend the minimum wage taking into account various sectors, regions and jobs. The council consists of economists, academicians and industry experts and will present its recommendations on the definition of minimum wage to the Cabinet in first half of 2012, followed by an announcement to the public. A comprehensive minimum wage is important to ensure workers' rights to a fair wage system are protected whilst also minimising cost of doing business for employers.

### Minimum Retirement Age

To increase productivity and retain knowledge workers in Malaysia, it has been proposed that a minimum retirement age is set for the private sector at 60 years, in line with a similar move in the public sector. Hence, the Minimum Retirement Age Bill will be tabled in Parliament in 2012.

## Focus on Upskilling and Upgrading the Workforce

In order to make a transformative impact on an entire NKEA sector, skills and competitiveness of the critical mass of the workforce needs to be addressed. Therefore, the interventions that will be proposed for implementation will address the workforce who are working post SPM, technical and vocational schools, tertiary and continuing life-long education.

Five NKEA sectors have been identified as Quick Wins i.e. some of these are initiatives were implemented in 2011 with the rest expected to be implemented in 2012. These sectors are Oil, Gas and Energy, Tourism, Electronics and Electrical, Communications Content and Infrastructure and Business Services-Outsourcing and Data Centres. To ensure sustainability in implementation, the labs also addressed short-medium term and long term interventions. The short-medium term interventions require collaboration of various industry players, educational institutions and government to address the 12 National Key Economic Areas (NKEAs). Longer term interventions aim to develop sustainable sector-led approach to address NKEA skills needs. These measures are taken to ensure Malaysia will be equipped with a more skilled workforce to meet the target of a high-income economy in 2020.

Exhibit 13.16

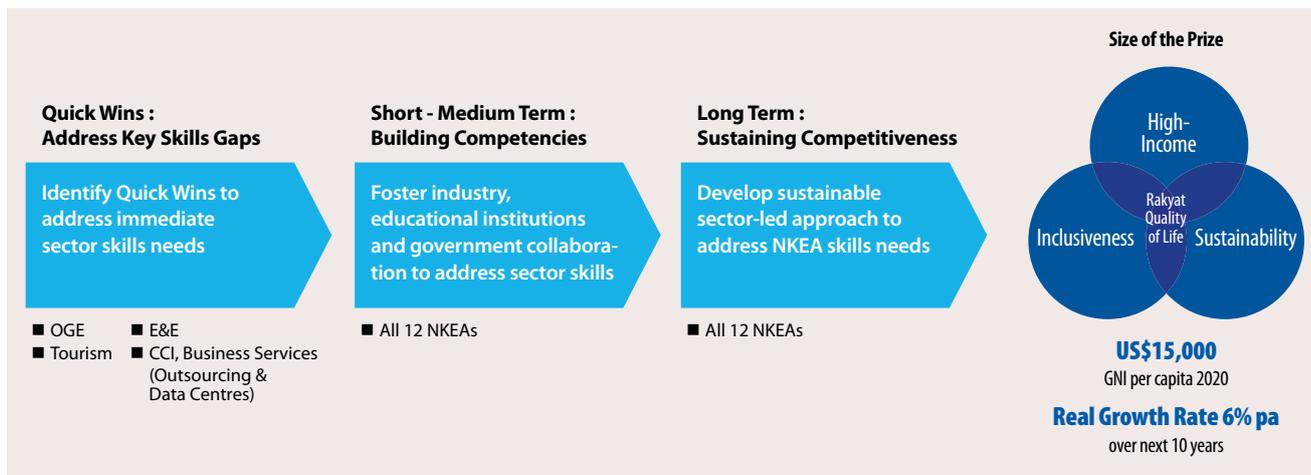
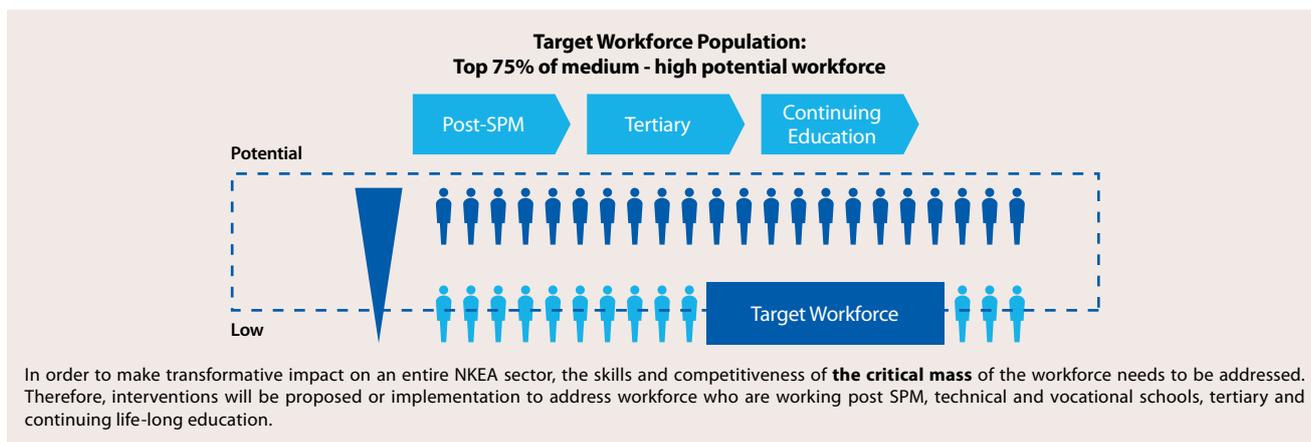


Exhibit 13.17



## Achievements

### Oil, Gas and Energy – O&G National Occupational Skills Standards (NOSS) for Technical Education and Vocational Training (TEVT) Curriculum

This project involves the development of NOSS for the oil and gas sector to ensure that curriculum developed for technical-vocational training centres are up-to-date and industry relevant. 12 NOSS on oil and gas have been identified and approved by the industry lead body to be developed. This project is already on track with the assistance of PETRONAS to fast-track the development process. The development of NOSS will enable skills training institutes to deliver technical and vocational training to meet projected high demand.

### Oil, Gas and Energy – Train-the-Trainer on Solar Installation

In ensuring a good energy mix for the country, diversification of energy resources by shifting towards alternative sources is crucial. For solar energy, demand for installations is expected to increase following the introduction of the feed-in-tariff (FiT). Hence, capacity building in this area is crucial to ensure enough trainers and courses to meet the rising demand. The Sustainable Energy Development Authority (SEDA) is working closely with the German Renewables Academy (RENAC) to train competent trainers for photo voltaic installation. A government-to-government initiative between Malaysia and Germany will be signed in 2012 to ensure services include expansion to other renewable subjects, assessment of local training centres and identification of needs and expansion areas.

## Tourism – Enhancing Eco-Nature Tour Guide Curriculum

The talent issue is prevalent across the tourism sector. This programme is designed to support EPP 4: Global Biodiversity Hub under the Tourism NKEA.

In December 2011, PEMANDU and the Ministry of Tourism jointly organized a mini-lab to enhance the eco-nature tour guide curriculum. The objective of this mini-lab was to:

- Enhance the eco-nature curriculum structure and the programme content outline
- Agree on assessment system, harmonise and align nationwide; policy review (if needed)
- Identify training delivery mechanism
- Develop implementation timeframe and pilot locations

To gauge the current standards of existing eco-nature guides, the Ministry of Tourism has conducted a pilot batch of eco-nature guide training programmes in October 2011. The feedback from this pilot project together with input from the industry players, government agencies and the eco-nature guides were discussed in the mini-lab and all recommendations to enhance as well as standardise the eco-nature guide curriculum will be announced and implemented in 2012.

## Across NKEAs – National Talent Enhancement Programme (NTEP)

NTEP is a skills-bridging programme to upskill and reskill graduates in the engineering or technical/vocational field to equip them with industry relevant skills sets so that they are job ready. It is aimed at accelerating the development of skilled workforce through partnership with industry. Graduates must meet certain eligibility criteria to qualify for NTEP. This is a 12-month attachment programme whereby students will have on-the-job training, technical and soft skills training, a monthly appraisal and quarterly progress report and given a monthly allowance. Students will be employable with the right competencies upon completion of the programme. NTEP was recently launched in September and will expand to seven regions with 650 placements across Malaysia.

As of 31 October 2011, 12 companies have been endorsed to host NTEP with 121 confirmed places offered to eligible trainees and a total number of 72 trainees are already on board.

## E&E – PSDC FasTrack

PSDC FasTrack is a bridging programme to upskill high-achieving engineering graduates (minimum CGPA 3.0) for high-technology engineering via training and apprenticeship. The rationale is to equip fresh graduates with technical and soft skills so they are industry ready. Students will enroll in a 12 month training and apprenticeship programme which involves formal training at Penang Skills Development Centre and industrial immersion at the host company. Since its inception, the programme has attracted 104 apprentices with 101 of them recruited:

Exhibit 13.18

No	Company	Cluster/Program Investment	Number of Apprentices Committed	Number of Apprentices Recruited
1	Agilent Technologies	Test & Measurement Electronic System Design	10	9
		Test & Measurement Electronic System Design	10	11
2	Altera Corporations	Embedded Systems	10	10
3	Intel Technology	Embedded Systems	11	11
4	Motorola Solutions	Radio Frequency - Electrical Engineering	25	24
		Radio Frequency - Mechanical Engineering	8	8
		Radio Frequency - Software Development	12	10
5	Silterra	Wafer Technology	18	18
Total			104	101

## CCI and Business Services (Outsourcing, Data Centre) – MyProCert Programme

MyProCert is a catalytic programme with aims to upskill Malaysians to international/global certification standards. The trained and certified Malaysians will be part of the critical supply for talent sourcing and development for industry players and potential foreign investors. This programme covers professional certifications from leading companies and institutions such as SAP, Oracle, Huawei, Apple and IAOP. The programme had a soft launch on 11 October 2011 and targets to produce 5000 new certified professionals to meet local and global industry demands by 2014.

## CCI and Business Services (Outsourcing, Data Centre) – MyUniAlliance Programme

MyUniAlliance programme aims to add value to the ICT undergraduates by offering industry relevant syllabus to enhance their employability. The pilot MyUniAlliance-SAP leg already has six institutions of higher learning as participants: INTI International University (INTI), Asia Pacific University College of Technology and Innovation (UCTI), International Islamic University Malaysia (IIUM), Multimedia University (MMU), Universiti Tunku Abdul Rahman (UTAR) and Open University Malaysia (OUM). MyUniAlliance programme will aim to upskill at least 12,000 undergraduates by 2015.

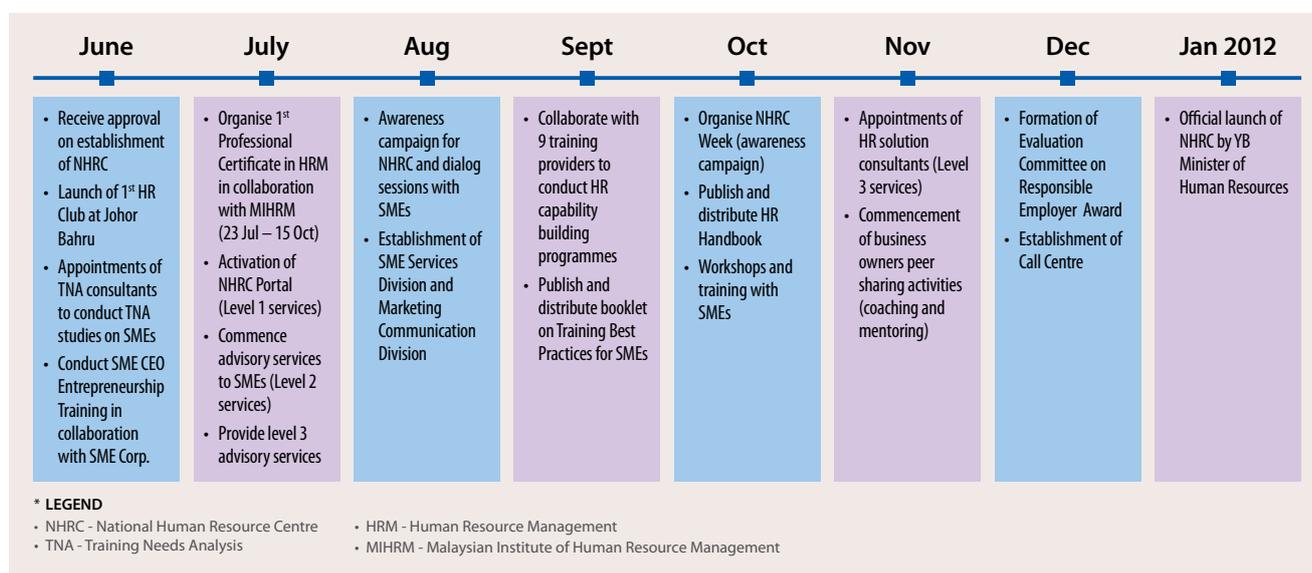
## Strengthen Human Resource (HR) Management

Small and medium enterprises (SMEs) have been the backbone of economic growth in Malaysia due to their sheer numbers, size and nature of operations. In order for Malaysia to achieve a developed nation and high income status, SMEs are expected to be an important driver of growth as they make up about 99 per cent of total business establishments and employ 56 per cent of country's workforce. Hence this initiative focusses on providing HR management solutions and upskilling services for SMEs to enhance their human resources quality and productivity.

There are three types of solutions and services provided which include:

1. HR solutions for basic and enhanced HR solutions package (Levels 1-2) and more advanced HR solutions (Level 3) via onsite advisory
2. Services provided also include HR capability building programmes to educate SME business owners on HRM, enhance HR knowledge and skills and provide HR certification
3. Peer sharing of HR practices amongst business owners is also encouraged via a pool of volunteer mentors on HR practices and SME HR Clubs

Exhibit 13.19



## Leverage on Women's Talent to Increase Productivity

In the journey towards becoming a high income nation, policies and programmes to increase female labour force participation should be given attention to ensure women's talents are leveraged on to increase productivity. The SRI labs have identified a few measures to help promote the participation of women in the workforce:

1. Provision of professional and affordable childcare support
2. Work-life balance: extending current flexi work regulations to provide a structured mechanism for the implementation of flexi work arrangements.
3. Upskilling and reskilling of women into the workforce
4. Ensuring 30 per cent women in decision making positions, especially in the private sector (the public sector has achieved 33 per cent at decision making levels)
5. Legislate a stand-alone Sexual Harassment Act

Initiatives and programmes to support these measures are currently undergoing implementation. For the year 2012, the initiatives and targets are as follows:

- For provision of childcare support, the target is to legalise and set-up 800 childcare centres and train up to 4000 childcare minders who are well-qualified.
- In the interest of up-skilling and re-skilling women, the target is to re-train 280 women who wish to re-enter the workforce with a grant provided by the government and an end in mind for these women to be employed.
- To ensure that the country meets the target of 30 per cent women in decision making positions by 2016 as announced by the Prime Minister in 2011, there will be 200 corporate women who will be trained in 2012 to be ready for promotion into Board of Directors level. The list of eligible women has been finalised following various syndications with the Companies Commission of Malaysia (CCM), Bursa Malaysia, Bank Negara, etc.

All these initiatives are expected to encourage more women's participation in the workforce.

## Enhance Labour Safety Net by Introducing an Unemployment Insurance Scheme (UIS)

A sound framework for unemployment benefits, will act as a safety net for individuals who are in the process of applying for jobs and provide supportive income to them during this process.

MOHR has appointed the International Labour Organisation to undertake a comprehensive study and to propose recommendation on the design of the UIS which is practical, sustainable and appropriate to be implemented in Malaysia as well as creating a favourable environment for the business and flexible labour market.

The study conducted will facilitate and support the design of UIS in Malaysia through:

- Production of research (international comparative and benchmarking study and Malaysian labour market analysis)
- Development of capacities of workers, employers and the government
- Facilitation of dialogue (tripartite workshop) on the best suitable model for Malaysia
- Technical assistance for the design of the system (actuarial, legal, institutional set up and linkages with employment services and vocational training)
- Facilitation of a tripartite forum to discuss the proposed design before the report is finalized and submitted to the Malaysian government

The study is expected to be completed by the end of 2012. The UIS is targeted to be implemented by 2013.

## Undertake a Labour Market Forecast and Survey Programme

The Institute of Labour Market Information and Analysis (ILMIA) is set-up to provide comprehensive and timely labour market information, as a key-decision making tool for workforce planning and skills development, in industries, especially the NKEA sectors. ILMIA is tasked to:

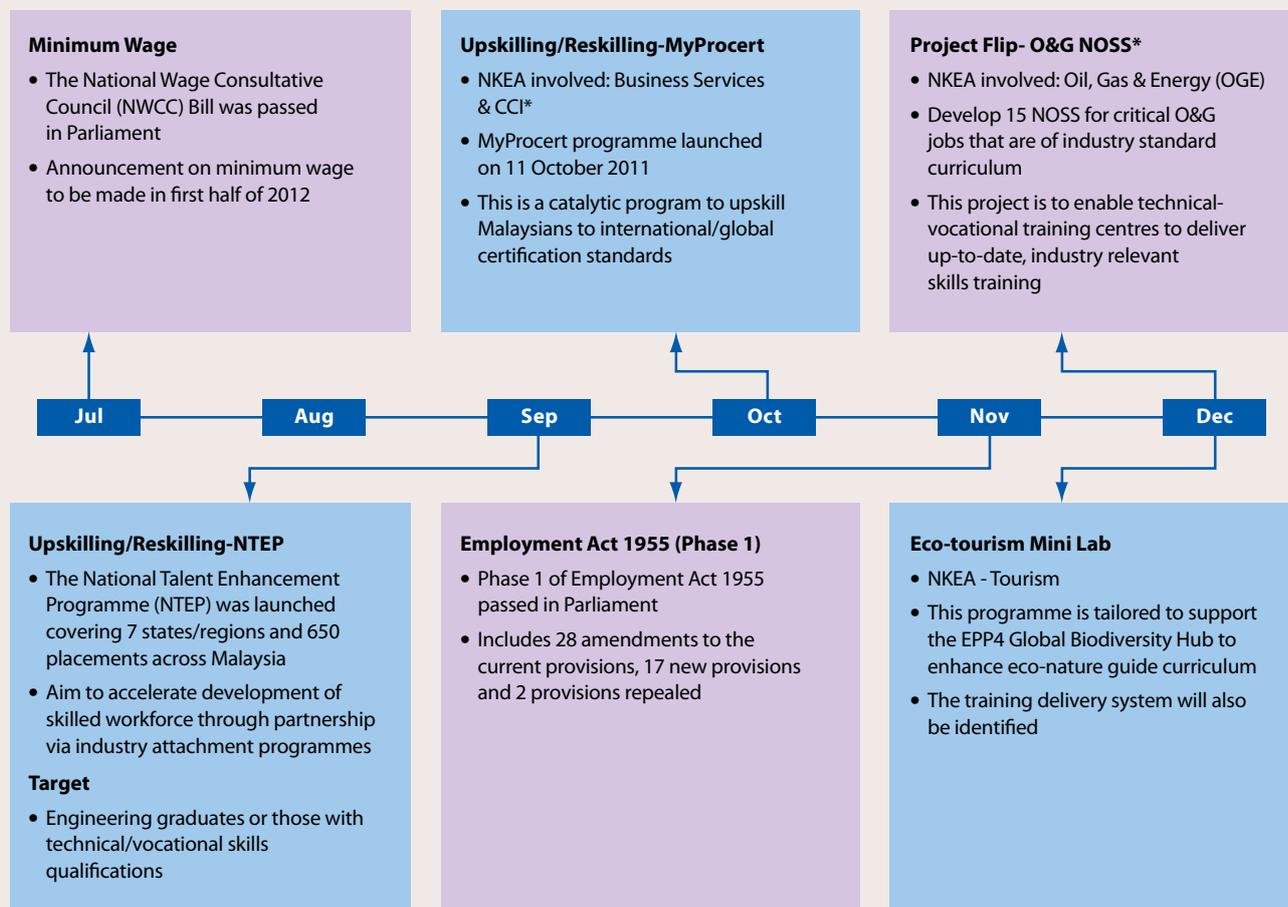
- Provide a centralised and interactive database as a basis for in-depth analysis on the labour market to support formulation of policies and decision making
- Correct the information gap currently existing in relation to labour market information
- Form the basis for a thorough analysis and forecast of workforce demands and supply for each industry sub-sector
- ILMIA output to feed into education system and worker training schemes to generate quality workforce with the right training skills

ILMIA will replace the current National Institute of Human Resource and is undergoing a structural reform to ensure greater effectiveness and efficiency in its existing and new functions.

ILMIA has commissioned for work to begin on labour market analysis reports for two NKEA sectors i.e. E&E and OGE. The reports are scheduled to be completed by the first quarter of 2012.

Exhibit 13.20

**Progress of SRI HCD 2011**



\* **LEGEND**

- NTEP - National Talent Enhancement Programme
- CCI - Communications & Content Infrastructure
- NOSS - National Occupational Skills Standards

# International Performance Review

## The external perspective towards securing a rigorous process

Core to the Economic Transformation Programme (ETP) has been that of consultation and collaboration, and this practice has been applied throughout the ETP's existence. From its inception in the 1000-Person Workshop, to the National Key Economic Areas (NKEA) Labs, the Open Days, Townhalls, Progress Updates and monthly Steering Committees, we have sought to ensure that relevant parties have the opportunity to contribute, and that we obtain an external perspective to ensure we remain grounded and reflective in our efforts.

Seven globally-respected experts were selected as panellists of the International Performance Review (IPR) to examine the scope, effort as well as results of the ETP and to provide an independent and unbiased external evaluation. These individuals were chosen for the diversity of their backgrounds, representing global institutions, national governments, non-government organisations and think tanks. Another pre-requisite was deep experience in their respective fields of study, as well as global exposure. Their international nature and seniority in their organisations ensured a robust discussion leading to a full critique of our first year results.



IPR panellists in discussion

The panellists were given a comprehensive briefing on the ETP process, from inception to implementation, with emphasis on the six NKEAs as they had earlier selected: Education; Greater Kuala Lumpur/Klang Valley; Financial Services; Oil, Gas and Energy; Healthcare and Tourism. These sectors were presented by their respective Directors, and supported by representatives from the implementing ministries and agencies.



Ministers at the Cabinet Away Day

## The role of the IPR panellists and process

The role of the IPR panellists is to objectively assess the performance of the ETP in 2011 in terms of providing an overall perspective of the programme in 2011; highlighting the positive aspects of the ETP; and sharing insights on areas for improvement as well as best practices from other countries, if any.

From 7 to 8 February 2012, the panellists went through a full two-day review of ETP and Government Transformation Programme (GTP) efforts. During the course of these two days, the panellists were taken through detailed presentations of each NKEA and National Key Result Area (NKRA) (including the work done during the labs) and the outcomes to date. The panellists were also furnished with presentations, materials, data and evidence that supported the results. As was the case in 2010, the Directors of each NKEA and NKRA were on hand to deliver



Sharing information with the Prime Minister at the Cabinet Away Day



Hershman and Huang at the full two-day review

detailed presentations of their respective NKEAs and NKRAs and field questions from IPR panellists in an open and transparent manner.

Each panellist had plenty of opportunities to ask questions and critique all aspects of the ETP and GTP. They were also given time to deliberate among themselves and prepare their feedback which was then shared with the Prime Minister, the Cabinet and the PEMANDU Secretariat. In the interest of public disclosure, the ETP findings have been published in this Annual Report. Together with the report on

the Agreed-upon Procedure (AUP) exercise undertaken by PricewaterhouseCoopers (PwC), the ETP's data have been verified and confirmed. The consensus is that the ETP achievements presented here are indeed real, tangible and can be accounted for.

We also present here, the feedback as delivered by the IPR panellists to the Cabinet as well as their additional individual input in challenging some of our key arguments, addressing areas for improvement and encouraging continued efforts in meeting our objectives.

## IPR Panellists



**Michael Hershman**

Fairfax Group,  
President and co-founder,  
Transparency International

**Michael Hershman** is an internationally recognised expert on matters relating to transparency, accountability, governance, litigation and security. The Fairfax Group, founded in 1983, has been retained by governments, corporations, law firms and international financial institutions to assist on matters relating to the conduct of senior-level officials and/or the entities with which they do business.

In 1993, along with Peter Eigen, Mr. Hershman co-founded Transparency International, the largest independent, not-for-profit coalition promoting transparency and accountability in business and in government. For the past six years he has served Interpol as a member of the International Group of Experts on Corruption, and for the past 12 years, he has sat on the Board of the International Anti-Corruption Conference Committee.

Mr. Hershman is a member of the Board of Directors of the U.S. Chamber of Commerce Foundation, and advises the Chamber on corporate compliance issues. Since 2007, Mr. Hershman has been a member of the Board of Directors and the executive committee of the Centre for International Private Enterprise.

For the past 12 years, he has been a member of Interpol's International Group of Experts on Corruption and now serves as its Vice Chairman. He is also on the Board of the International Anti-Corruption Conference Committee.

**Dr. Balakrishnan** is currently the Resident Representative of the International Monetary Fund based in Singapore.

Dr. Balakrishnan started his career at the Bank of England and Bank of Spain, before joining the IMF in 2001. Since then, he has worked on various countries, including Bolivia and the United States, as well as on the World Economic Outlook, before taking up his current position. As Resident Representative, he has been actively involved in the Fund's work on Malaysia and Singapore, on capital flows to the region, and on inclusive growth.

More generally, his policy and research interests are on labour and job dynamics, inflation dynamics, exchange rate dynamics and capital flows, as well as capital markets and financial systems. His research has been published in several professional journals.

Dr. Balakrishnan holds an M.Sc. and a PhD in Economics from the London School of Economics (LSE) and a BA Honours from Churchill College, Cambridge University.



**Dr. Ravi Balakrishnan**

International Monetary Fund,  
Resident Representative



**Stephen Sedgwick**

Australian Government,  
Public Service Commissioner

**Mr Sedgwick** has had a long and distinguished career in the public sector, having served in a number of departments beginning in 1972. He was Secretary to the Commonwealth Departments of Finance, Employment and Education between 1992 and 2002, and was a member of the Board of the Asian Development Bank for five years until 2007.

He became Australian Public Service Commissioner in December 2009 after a period as Professor and Director of the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne.

Mr Sedgwick graduated with Honours in Economics from the University of Sydney and holds a Master's Degree from the University of London (LSE).

He is currently a member of the Board of the Sir Roland Wilson Foundation, the Advisory Council of the ANU Crawford School of Economics and Government, the Advisory Board for the Australian National Institute for Public Policy, the Board of Directors of the Commonwealth Association for Public Administration and Management, the Advisory Group for the Australian Human Rights Commission Male Champions of Change Research Project, and the ACT Government's Learning Capital Council.

**Yukon Huang** is a Senior Associate at the Carnegie Endowment in Washington DC and formerly the World Bank's Country Director for China. He was a member of the National Economic Advisory Council to the Prime Minister of Malaysia. Prior to this, he was the World Bank's Director for Russia and the former Soviet Union and earlier Lead Economist for Asia. He has also held positions at the U.S. Treasury and professorships at various universities in the United States and abroad. He is currently an adviser to the World Bank and the Asian Development Bank, as well as various governments and corporations.

Dr. Huang has published widely on development issues in professional journals and popular media. He is an A-List contributor to the Financial Times and his writings are frequently seen in outlets such as the Wall Street Journal and Bloomberg. He has a PhD in economics from Princeton University and a BA from Yale.



**Dr. Yukon Huang**

Carnegie Asia Program,  
Senior Advisor



**Dr. Homi J Kharas**

Global Economy and Development Programme, Brookings Institution, Senior Fellow and Deputy Director

**Homi Kharas** is a Senior Fellow and Deputy Director in the Global Economy and Development programme at the Brookings Institution in Washington D.C. He was formerly Chief Economist for the World Bank's East Asia and Pacific region and Director for Poverty Reduction and Economic Management, Finance and Private Sector Development, responsible for the Bank's advice on structural and economic policies, fiscal issues, debt, trade, governance and financial markets.

He has recently served as a Non-Resident Fellow of the OECD Development Centre and a member of the National Economic Advisory Council to the Malaysian Prime Minister. He was a member of the Working Group for the Commission on Growth and Development, chaired by Professor A. Michael Spence. Previously in 1990-91, he was appointed Senior Partner with Jeff Sachs and Associates, advising governments in Eastern Europe and the Soviet Union on transition. His research interests are now focussed on global trends and the middle class, East Asia growth and development, and international aid for the poorest countries. He holds a PhD in economics from Harvard University.

As the PPP Adviser, **Mr Yong** provides advisory and capacity-building support on PPP to the 54-member countries in the Commonwealth.

Mr Yong has more than 30 years' experience advising public and private sectors on Public-Private Partnerships (PPP), privatisation, project financing and strategic planning.

Mr Yong holds a B.Eng (Hons) in Civil and Structural Engineering (UK), an MBA (UK), a Diploma in Corporate Treasury (UK), and a Postgraduate Diploma in Islamic Studies from ISTAC, International Islamic University, Malaysia. Mr Yong qualified as a Chartered Accountant (England and Wales) with Deloitte, Haskins and Sells, UK. He has published widely on issues in PPP and edited the book, 'Public-Private Partnerships Policy and Practice – a Reference Guide'. His views expressed here are his own.



**Yong Hee Kong**

Commonwealth Secretariat Fund, Adviser – Public-Private Partnerships



**H.E. Seung Jun Kwak**

Presidential Council for Future and Vision of the Republic of Korea, Chairman

**His Excellency Seung-Jun Kwak** is the Chairman of the Presidential Council for Future & Vision (PCFV), established in April 2008 as an advisory body to President Lee Myung-bak. Despite its short history, the Council has already positioned itself as a key national organisation in the formulation of future strategies.

Prior to his work with the PCFV, Chairman Kwak served as a member of the 17th Presidential Transition Committee and later as Senior Secretary to the President for State Affairs Planning. He has also been an Economics Professor of Korea University College of Political Science and Economics (1995 – present). He holds degrees in Economics from Korea University and MD and PhD in Economics from Vanderbilt University in the United States.

## Feedback from the Panellists

We were impressed by the way the ETP is taking a “whole-of-a-government approach”. Indeed, the notion of having agencies work together to remove roadblocks and solve problems across all levels is critical to the ETP. The engagement of the private sector on specific and strategic investments through the 12 NKEAs is another crucial part, as are the six cross-cutting SRIs.

Like the GTP, we welcomed having measurable results independently verified by PricewaterhouseCoopers (PwC). It is important to note, however, that PwC actually found significant differences in the impact of some of the projects in terms of GNI in 2020. This is indicative of the difficulty in the approach of the ETP in trying to aggregate from individual projects into something that looks at the state of the overall economy.

The ETP, like the GTP, has had some significant successes in terms of the speed of implementation. We noted that the programme on Greater Kuala Lumpur/Klang Valley had been rolled out into other corridors and cities across the country. There was also a real intensification in converting some of the business opportunities identified in the labs to actual EPPs.

Just like the GTP again, the transparency of reporting and results is a very important feature of the ETP. An enormous effort is required in trying to compile the statistics in order to come up with an aggregate picture, which is clearly harder to do for the ETP than the GTP. Given this, we were impressed with the effort PEMANDU has put into pulling the numbers together in a coherent way.



Deputy Prime Minister at the Cabinet Away Day

## Observations:

Private investment has started to recover, although much of this appears to be driven by the start of a few megaprojects. There are, however, 72 EPPs which are being implemented, and we saw significant progress in various sectors, such as reducing red tape in starting a business and other regulatory issues. Most important is the emphasis of shifting growth to the private sector, especially in new areas such as education where the private sector has started to play a bigger role. The commencement of the Competition Law is also an important new development, and there are signs that new dynamic industries are starting to emerge (e.g. medical tourism and medical devices).

We noted that global indices are recognising Malaysia's progress (e.g. the World Economic Forum Index and World Bank Doing Business Index).

## Issues:

As always, there are areas for improvement.

First, to enhance credibility and increase recognition, a way of clearly linking the NKEA targets and EPP contributions to GNI and jobs to public data on investment and employment is needed. Admittedly this is not an easy process — there are difficult technical issues in translating what businesses consider to be investments into gross fixed capital formation in the national income accounts — but it is a very important one. Related to this, a clearer presentation of the actual contribution of the ETP to actual investment in the year under consideration, along with the split between public, private and Government-Linked Companies (GLC) investments, would be desirable. Specifically regarding Petronas projects, they should be considered public investments given Petronas is 100 percent owned by the Government.

Second, transformation doesn't happen overnight, and so ensuring the sustainability of the ETP is essential. In this regard:

- Moving forward with the Strategic Reform Initiatives (SRI) is critical. Indeed, we wonder whether the balance of focus between the EPPs and the SRIs is the right one. We had much more discussion on the EPPs than regarding the SRIs. Looking ahead, it will be important that the SRIs are given a much higher profile
- Ensuring that incentives to enhance investment do not undermine fiscal and debt sustainability should not be overlooked. We did see in several sectoral areas an emphasis on using tax incentives to increase investment. Given current debt levels in Malaysia and mixed international experience on the use of tax incentives, we would strongly encourage a disciplined approach to the use of such instruments, with clear and transparent rules
- Institutionalising the ETP will also be important, and so getting the civil service to buy into it will be key

Third, we did also observe some tensions between the sectoral and the spatial approaches. Greater clarity is needed on how the numbers under the Greater KL/KV NKEA relate to the numbers under the other NKEAs. Moreover, focusing on Greater KL raises the question of why not other cities in the country? There was also a tendency to take some national issues such as intellectually property and Talent Corp and classify them under the Greater KL/KV NKEA.



IPR panellists presenting their findings to the Ministers at the Cabinet Away Day



Sedgwick and Hershman reviewing notes taken from the discussion

Fourth, we think that the GTP and ETP need to be better integrated. For example, both education and public service delivery appear in the GTP and ETP but with slightly different emphasis. Subsidy reform comes under the ETP but is also crucial to the NKRA under the GTP to increase use of public transport.

Overall, however, these areas for improvement should not take away from the impressive start the ETP has made. Looking ahead, the focus should be on sustaining it, which implies moving on the SRIs, and institutionalising both the ETP and GTP.

## Individual comments from panellists

### Michael Hershman

Branding a country like Malaysia is a long term process. The best way to establish a Malaysia brand to is have people around the world get to know a Malaysian. Because, to know a Malaysian is to love a Malaysian. People around the world do not know much about Malaysian and the country, in many respects, it is because Malaysia has somewhat taken a low profile and that is not all bad. It is a peaceful and safe country; it is a country without a lot of controversy. But branding has to be proactive, coordinated with strong messages overseas, this is an issue educating the public about the strength of Malaysia, the

fact that the country is a multi-national country which has learned to live together in harmony — not too many countries can claim that.

The importance of civil society cannot be understated, you must include them in every level of discussion, I know this is not easy due to the natural mistrust between NGOs and government. You must work hard to overcome that.

Perceptions and criticisms of Malaysia from abroad often are based on the belief that Malaysia is unwilling to address difficult policy issues, for example campaign finance reform, freedom of information and freedom of the press.

To be sure, there are others outside of Malaysia, who have credibility, who recognise that Malaysia has made progress in many key areas. It is important that their views be captured through appropriate surveys as well as domestic feedback from the Malaysian citizens.

The work that Malaysia has done to establish a strong anti-corruption infrastructure in the country is beginning to be recognised as a strong indicator of Malaysia's willingness to battle corruption. However, this current effort is only the beginning as corruption is always changing in nature and scope. Your anti-corruption efforts must be flexible enough to keep up with these changes.

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**The work that Malaysia has done to establish a strong anti-corruption infrastructure in the country is beginning to be recognised as a strong indicator of Malaysia's willingness to battle corruption.**

”

**Michael Hershman**  
Fairfax Group, President  
and co-founder,  
Transparency International

On a practical level, the new whistleblower programme can only succeed if those wanting to cooperate learn to trust the governmental institutions which must guarantee the confidentiality and safety of those coming forward. Citizens must be able to trust the Malaysian Anti-Corruption Commission to be fair and objective in dealing with their complaints. This is a process which will not happen overnight. It is a cultural issue in many respects as people are not used to picking up the telephone or going on email and filing a complaint against someone they know or someone they had dealings with.

Malaysia has started a new programme — the Corporate Integrity Pledge which allows companies to agree to a standard of practise on integrity issues. This is a very positive step to ensure the transparency and accountability of the procurement process. In the case of the MRT, an Integrity Pact has been initiated and this positive programme should be extended to all major infrastructure projects.

### Dr. Ravi Balakrishnan

Overall, the ETP has made a good start in its first year. The coordinated problem solving approach across ministries and the transparent reporting of results is impressive.

Like the GTP, however, the ETP is a marathon not a sprint, with transformation requiring sustained efforts over many years. And whether investment is increasing markedly outside of the commodity related, infrastructure, and real estate sectors, will be a key barometer of the level of transformation. Essential to this will be moving on the SRIs. It is also important to make sure the ETP and GTP are well aligned and anchored in a credible medium-term budget envelope, with clear and transparent rules for the provision of investment incentives and government guarantees.

### Stephen Sedgwick

By definition, the government is always making choices; it needs to take action at times that may challenge the direct interest of one group in order to improve the outcome for the nation overall. The communication task for the government in that context is to show that what it proposes to do is fair, and is in the best interests of the country. In those circumstances the government needs to communicate that it has a vision that is relevant to meeting the most pressing needs of society, and that the steps that the government is taking are consistent with improving outcomes for the country. There may be some inconvenience along the way for particular groups, but in the end, the country will be better off.

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**The ETP is a marathon not a sprint, with transformation requiring sustained efforts over many years.**

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**Dr. Ravi Balakrishnan**  
International Monetary Fund,  
Resident Representative

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**The government is always making choices; it needs to take action here that would challenge the interest of one group in order to improve the national outcome.**

”

**Stephen Sedgwick**  
Australian Government,  
Public Service Commissioner



IPR panellists collating their findings in preparation for the presentation to the Cabinet

The value of the KPIs is to keep people focussed on the outcomes. However there is a risk if a KPI becomes seen as just a compliance issue. Part of the key to achieving long term change is to use KPIs not just to get a focus on immediate improvements, but also to use them to bring about a culture change. This requires the government, the public service and the people to start questioning the status quo, and then start changing.

The kinds of issues the GTP is trying to address are very similar to ones that every government I know is trying to address; where citizens demand that their government work with them to identify the road blocks, work across silos, and ultimately make the lives of people better and different – and to do so quickly. Perceptions of government will be formed not just by what a government says but by what it does: whether the ‘lived experience’ of citizens, business people and foreigners dealing with the government are consistent with the government’s rhetoric and good practice.

The GTP and the ETP need to become better integrated. This is not a difficult issue. It is mainly a question of looking at the overlaps. For example, everything you see on education in the GTP is about building the skills and knowledge base of your society. It is about having a better educated society because the educated are usually healthier, live longer, and get higher paying jobs. The ETP is about upgrading the skills and productivity of your workforce. There is therefore, consistency in the education goals of the ETP and the GTP, which should be better articulated. A lot that has been done in the GTP is about enabling what you want to do in the ETP, whether the focus is on high growth, inclusiveness or sustainability. This would be assisted if the comments the Panel have made about improving the focus and internal consistency of some elements of the ETP and GTP are acted upon.

### Dr. Yukon Huang

I think that (Malaysia’s) transformation programmes are unique and very innovative because they combine what I call the change in the policy environment in Malaysia with the investment and real activities that need to be affected through government policies. Another aspect which I find very unique is that this process creates the link between the top, the Prime Minister and getting the Cabinet, civil services, people and private sector all involved in what I would call the transformation process.

Once you get to a certain stage of development, the system has to evolve in a different way, and you inevitably need to break it somehow. The GTP and ETP is essentially a way to break out of the past and do something quite different. I think it has been a very positive step.

What is important to realise is that a successful transformation programme is one that looks a little different each time – it is a living document. Most people often think that success means you keep on with the same indicators and methods and that if you have a change, it is bad. In fact, a change is actually quite good. The danger with transformation programmes is when we do not realise that the most important part is the actual process of change.

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**What is important to realise is that a successful transformation programme is one that looks a little different each time – it is a living document.**

”

**Dr. Yukon Huang**  
Carnegie Asia Programme,  
Senior Advisor

## Dr. Homi Kharas

If I look at ETP we can already see ways it has started to have an impact. First and most significantly, the private sector is starting to play a more dynamic role in the economy. Historically, Malaysia has had significant contribution from government-linked companies and it is really the true private sector which is driving the economy forward in many new areas such as medical diagnostics and devices, and new techniques for oil and gas extraction. New processes, new techniques and new technologies are what the private sectors can bring to the table and which can be applied to Malaysia. The ETP puts the private sector in the driver's seat and as such, into new areas where the private sectors can bring in innovations and competitiveness to benefit all Malaysians.



Dr. Kharas

The biggest issues are how one can take some of the cross-cutting issues that were identified in the SRIs and also make progress with them at the same pace. I think the key word here is sequencing and I'll give you a couple of examples. It is very difficult for Malaysia to achieve the target share of public transport in overall transport while the current structure for the subsidy of petroleum continues to exist. What needs to be recognised is that, subsidy to any one sector is a tax on other sectors. So every time when Malaysia provides a subsidy, it has to understand that it is taxing all the other sectors.

Much of the innovation we heard about in the ETP is about bringing new sectors into the export mix. It does so in a different way, for example, bringing foreign students to Malaysia is a way of exporting Malaysia's education services. Medical tourism is a way of exporting Malaysia's new strengths with the healthcare. These strengths are built on the back of the domestic economy. Malaysia's education and healthcare sectors have become strong because they take care of the needs of the domestic economy. But they can only rise to new heights when they become globally competitive and start to export.

## Yong Hee Kong

Transformation is never easy. It requires a fundamental change in culture and the way things are done. But it is necessary for Malaysia. The approach taken by Malaysia via the four strategic thrusts of 1Malaysia, GTP, ETP and the 10th Malaysia Plan is radical and unique.

In my work in many of the Commonwealth countries, I have yet to see an approach that is so detailed in both conceptualisation and implementation. The use of Labs, the 30,000-foot and three-foot implementation plans, the detailed monitoring-and-evaluation tracking system has ensured the approach is robust and practicable. It is unique and more importantly, the Public-Private Partnership approach is radical. It mobilises and harnesses the key strengths of the public and private sectors.

One has to bear in mind that any transformation programme takes time and the ETP approach is a unique and disciplined approach to produce the big fast results. The building blocks are all there. The more important thing is that, we see that the public sector providing the leadership and playing the very important enabling and catalytic role to facilitate greater private sector participation.

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**Bringing foreign students to Malaysia is a way of exporting Malaysia's education services. Medical tourism is a way of exporting Malaysia's new strengths with the healthcare. These strengths are built on the back of the domestic economy. Malaysia's education and healthcare sectors have become strong because they take care of the needs of the domestic economy. But they can only rise to new heights when they become globally competitive and start to export.**

”

**Dr. Homi Kharas**  
Global Economy and Development Programme, Brookings Institution, Senior Fellow and Deputy Director

“

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”

**HK Yong**  
Commonwealth Secretariat Fund, Adviser – Public-Private Partnerships



Huang sharing his thoughts at the review session

The ETP is driven largely through private sector investments in various forms of Public-Private Partnerships. The ETP is work-in-progress, and revisions based on feedbacks are necessary. I believe Malaysia will see bigger and faster results in 2012 as the key ETP initiatives gain further traction. The key challenges are to remain focussed and to maintain the momentum in a challenging political economy environment.

### H.E. Sueng Jun Kwak

The achievements Malaysia has made so far are remarkable. Based on the 2011 annual report, results for all 12 NKEAs were quite impressive. However, the ETP is in its early stage, so most of the targets are quantitative and relatively easy to achieve. Therefore, in order to make qualitative progress and achieve targets in the long run, more attention needs to be focussed on supplementing the key performance index and relating the index to the objectives of the ETP.

The global economic uncertainty is expected to have negative impact also on emerging countries. However, there are always opportunities amid the crises. Although the ETP is going in the right direction with practical programmes so far, it may need some flexible revision in tune with its long-term goals.

I believe that the six Strategic Reform Initiatives are a step in the right direction. It is important to reform regulation so that domestic companies are not disadvantaged when competing with global companies. The privatisation of public companies is necessary for efficient management and enhanced competitiveness. However, corporate social responsibility and market's function of public benefit need to be emphasised as private companies become more influential than the government.

Continued investment in Human Capital Development (HCD) SRI to ensure matching between supply and demand of talent is crucial. Since education is also included in the GTP and ETP, the HCD SRI needs to be interlinked with the two Programmes.

In the areas of competitive market, human capital development, narrowing disparities, the concept of business ecosystem needs to be considered so that large companies and SMEs can work and grow together in the key industries. For example, Apple's competitiveness comes from the competitiveness of Silicon Valley's business ecosystem.

Overall, I would commend the effort of the Prime Minister and PEMANDU for the significant progress made in the Economic Transformation Programme (ETP) and the Government Transformation Programme (GTP).

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**I believe that the six Strategic Reform Initiatives are a step in the right direction. It is important to reform regulation so that domestic companies are not disadvantaged when competing with global companies. The privatisation of public companies is necessary for efficient management and enhanced competitiveness.**

”

**H.E. Sueng Jun Kwak**  
Presidential Council for Future  
and Vision of the Republic of  
Korea, Chairman

# Agreed-Upon Procedure Report by PwC

## 2011 ETP RESULTS

### Verification by Independent Third Parties

A core tenet of the ETP has always been transparency and accountability and this is reflected in our Annual Report. The ETP Roadmap was published in October 2010 detailing out the measures in our transformation programme. In this report, the 2011 key performance indicators for each National Key Economic Area have been published in full, listing out the achievements compared with targets.\*

We have endeavoured to make the scoring system as transparent as possible. Extensive time and rigour has been put into ensuring collection of data as well as computations and tabulations of statistics and scores are accurate. This includes the appointment of an independent third party to ensure consistency and accuracy in our methods of data collection and calculations reported in the annual report.

To this end, PEMANDU engaged PricewaterhouseCoopers (PwC), an independent third party, to conduct a series of agreed-upon procedures. This work includes agreeing the information and data inputs used in the determination of selected reported KPIs and the 2020 GNI, investments and 2020 jobs created statistics, to information provided by the EPP sponsors and Project Owners. The respective selected KPIs and statistics calculations were also checked to the guidelines and formulae originally developed in the NKEA labs and prescribed by PEMANDU.

These agreed-upon procedures were applied to selected samples across each NKEA based on the 110 projects announced under the ETP Progress Updates. Over the course of this exercise, PwC's findings highlighted a number of exceptions, which have been subsequently addressed and reflected in the Annual Report. The PEMANDU team has since applied these procedures to the remainder of the projects to ensure that the appropriate rigour and discipline is used in determining the ETP's results in 2011.

PwC confirmed that the results of the samples selected and reported in the Annual Report have been validated according to the agreed-upon procedures. PwC also identified opportunities to improve processes and the quality of information. PEMANDU, together with the relevant Ministries and private sector stakeholders, will be taking positive prescriptive actions to effect these improvements over the next 12 months.

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Extensive time and rigour has been put into ensuring collection of data as well as computations and tabulations of statistics and scores is accurate.

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\* Exceptions were made where targets featured market-sensitive data. In such instances, this information was kept confidential at the request of parties involved.

# List of Entry Point Projects

No	Entry Point Projects
<b>Greater Kuala Lumpur/Klang Valley</b>	
1	Attracting 100 of the World's Most Dynamic Firms within Priority Sectors
2	Attracting the Right Mix of Internal and External Talent
3	Connecting to Singapore via a High Speed Rail System
4	Building an Integrated Urban Mass Rapid Transit System
5	Revitalising the Klang River into a Heritage and Commercial Centre for Greater KL/KV
6	Greening Greater KL/KV to Ensure Every Resident Enjoys Sufficient Green Space
7	Creating Iconic Places and Attractions
8	Creating a Comprehensive Pedestrian Network
9	Developing an Efficient Solid Waste Management Ecosystem
<b>Oil, Gas and Energy</b>	
1	Rejuvenating Existing Fields Through Enhanced Oil Recovery
2	Developing Small Fields through Innovative Solutions
3	Intensifying Exploration Activities
4	Building Regional Oil Storage and Trading Hub
5	Unlocking Latent Gas Demand
6	Attracting Multinational Companies to Bring a Sizeable Share of their Global Operations to Malaysia
7	Consolidating Domestic Fabricators
8	Developing Capabilities and Capacity through Strategic Partnerships and Joint Ventures
9	Improving Energy Efficiency
10	Building Up Renewable Energy and Solar Power Capacity
11	Deploying Nuclear Energy for Power Generation
12	Tapping Malaysia's Hydroelectricity Potential
<b>Financial Services</b>	
1	Revitalising Malaysia's Equity Markets
2	Deepening and Broadening Bond Markets
3	Transforming or Rationalising Development Financial Institutions (DFIs)
4	Creating an Integrated Payment Ecosystem
5	Insuring Most, If Not All Our Population
6	Accelerating the Growth of the Private Pension Industry
7	Spurring the Growth of the Nascent Wealth Management Industry
8	Accelerating and Sustaining a Significant Asset Management Industry
9	Developing Regional Bank Champions
10	Becoming the Indisputable Global Hub for Islamic Finance

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No	Entry Point Projects		
<b>Wholesale and Retail</b>			
1	Increasing the Number of Large Format Stores		
2	Modernising via the Small Retailer Transformation Programme (TUKAR)		
3	Developing <i>Pasar Komuniti</i>		
4	Transforming Automotive Workshops		
5	Developing Makan Bazaars		
6	Developing 1Malaysia Malls		
7	Developing a Virtual Mall		
8	Facilitating Local Businesses to Acquire Stakes in Foreign Retail Businesses		
9	Making Malaysia Duty Free		
10	Setting Up Wellness Resorts		
11	Organising Unified Malaysia Sales		
12	Transforming KLIA into a Retail Hub		
13	Developing Big Box Boulevards		
<b>Palm Oil</b>			<b>Rubber</b>
1	Accelerating the Replanting and New Planting of Oil Palm	1	Increasing Average National Rubber Productivity to 2,000 kg/ha/year by 2020
2	Improving Fresh Fruit Bunch (FBB) Yield;		
3	Improving Worker Productivity	2	Ensuring Sustainability of the Upstream Rubber Industry
4	Increasing the Oil Extraction Rate (OER)	3	Increase World Market Share of Latex Gloves to 65 per cent by 2020
5	Developing Biogas at Palm Oil Mills		
6	Developing Oleo Derivatives	4	Commercialise Ekoprena and Pureprena (Green Rubber)
7	Commercialising Second-Generation Biofuels		
8	Expediting Growth in Food and Health-based Downstream Segments		
<b>Tourism</b>			
1	Positioning Malaysia as a Duty Free Shopping Destination		
2	Designating the Bukit Bintang-Kuala Lumpur City Centre Area as a Vibrant Shopping Precinct		
3	Establishing Premium Outlets in Malaysia		
4	Establishing Malaysia as a Global Biodiversity Hub		
5	Developing an Eco-Nature Integrated Resort in Sabah		
6	Creating a Straits Riviera		
7	Targeting more International Events		
8	Establishing Dedicated Entertainment Zones		
9a	Developing Local Expertise and Better Regulating the Spa Industry		
9b	Golf Tourism		
10	Establishing Malaysia as a Leading Business Tourism Destination		
11	Enhancing Connectivity to Priority Medium-Haul Markets		
12	Improving Rates, Mix and Quality of Hotels		

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No	Entry Point Projects
<b>Electrical and Electronics</b>	
1	Executing a Smart Follower Strategy for Mature Technology Fabrication
2	Developing Assembly and Test Using Advanced Packaging Technology
3	Developing Integrated Circuit Design Firms
4	Supporting the Growth of Substrate Manufacturers and Related Industries
5	Increasing the Number of Silicon Producers
6	Growing Wafer and Cell Producers
7	Increasing Solar Module Producers
8	Developing LED Front-end Operations
9	Expanding LED Packaging and Equipment
10	Creating Local Solid State Lighting Champions
11	Building a Test and Measurement Hub
12	Expanding Wireless Communication and Radio Frequency Identification (RFID)
13	Growing Automation Equipment Manufacturing
14	Building Transmission and Distribution Companies
15	Building an Electrical Home Appliance Manufacturing Hub and International Distribution Network
<b>Business Services</b>	
1	Growing Aviation Maintenance, Repair and Overhaul Services
2	Building Globally Competitive Outsourcers
3	Positioning Malaysia as a World-Class Data Centre Hub
4	Jump-starting a Vibrant Green Technology Industry
5	Growing Large Pure Play Engineering Services
6	Developing Malaysia as a Global Islamic Finance KPO Hub
<b>Communications Content and Infrastructure</b>	
1	Nurturing Malaysia's Creative Content Industry
2	Track and Trace
3	Connecting 1Malaysia
4	Establishing e-Learning for Students and Professional Training
5	Launching e-Healthcare
6	Deepening e-Government
7	Ensuring Broadband for All
8	Extending Reach
9	Offering a Smart Network
10	Extending the Regional Network
<b>Education</b>	
1	Scaling Up Early Child Care and Education Centres (ECCE)
2	Improving Early Child Care and Education (ECCE) Training
3	Scaling Up International Schools

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No	Entry Point Projects
<b>Education</b>	
4	Expanding Private Teacher Training
5	Scaling Up Private Skills Training
6	International Expansion of Distance Learning
7	Building an Islamic Finance and Business Education Discipline Cluster
8	Building a Health Sciences Education Discipline Cluster
9	Building an Advanced Engineering, Science and Innovation Discipline Cluster
10	Building a Hospitality and Tourism Discipline Cluster
11	Launching Educity@Iskandar
12	Championing Malaysia's International Education Brand
13	Introducing Public-Private Partnerships in Basic Education
14	UCSI Premium Health Education Cluster
<b>Agriculture</b>	
1	High-value Herbal Products
2	Edible Bird's Nest Swiftlet Farming
3	Mini Estate Farming for Seaweed
4	Integrated Cage Farming
5	Cattle Integration in Oil Palm Estates
6	Replicating Integrated Zone for Aquaculture Model (IZAQs) to Tap Market for Premium Shrimp
7	Premium Fruits and Vegetables
8	Food Park
9	Fragrant Rice Varieties in Non-Irrigated Areas
10	Strengthening Productivity of Paddy Farming in MADA
11	Strengthening Productivity of Paddy Farming in Other Granaries
12	Expansion of Cattle in Feedlots
13	Dairy Clusters
14	Seed Industry Development
15	Participation of MNCs
16	Overseas Acquisition/JV of Cattle Farms
<b>Healthcare</b>	
1	Mandating Private Health Insurance for All Foreign Workers and Improve Workmen's Compensation Coverage
2	Creating a Supportive Ecosystem to Grow Clinical Research
3	Leverage Patent Expiry by Pursuing Generic Opportunities
4	Re-invigoration of Healthcare Travel through a Seamless Customer Experience, Proactive Alliances and Niche Marketing
5	Creating a Diagnostic Services Nexus to Achieve Scale in Telemedicine for Eventual International Outsourcing
6	A World-Class Campus for Healthcare and Bioscience

# List of Business Opportunities

No	Business Opportunities
<b>Greater Kuala Lumpur/Klang Valley</b>	
1	Vitalising Putrajaya
2	Housing
3	Basic Water and Sewerage Services
<b>Oil, Gas and Energy</b>	
1	Process Improvements
2	Economic Growth
3	Project RAPID (Refinery And Petrochemical Integrated Development)
4	Project SAMUR (Sabah Ammonia Urea)
<b>Financial Services</b>	
1	Commercial Banking
2	Investment Banking
3	Islamic Banking
4	Insurance and Takaful
5	Asset Management and Wealth Management
6	Other Segments Including DFIs
<b>Wholesale and Retail</b>	
1	Organic Growth
<b>Palm Oil and Rubber</b>	
1	Expansion of Existing Upstream Activities
2	Development of Existing Downstream Activities
3	Development of National Biodiesel Activities
<b>Tourism</b>	
1	Food and Beverage Outlets
2	Local Transportation
3	Tour Operator Segment
<b>Electrical and Electronics</b>	
1	Semiconductors
2	Solar
3	Light Emitting Diodes
4	Industrial Electronics

(more on next page)

*(continued from previous page)*

No	Business Opportunities
	<b>Business Services</b>
1	Multi-Disciplinary Practice Construction
2	Accounting Sector
3	Creative Multimedia Content Industry
	<b>Communications Content and Infrastructure</b>
1	Fixed Services
2	Mobile Services
3	Courier, Post and Broadcast
4	Regional Operations
	<b>Education</b>
1	Discipline Clusters to Support NKEAs
2	Centre for Excellence in Language Learning
	<b>Agriculture</b>
1	Nutraceutical Products
2	Foreign Distributor
3	Ornamental Fish Farming
4	Aquaculture Feed Mill
5	Aquaculture Export Centre
6	Snacks Industry
7	Free-range chicken rearing
8	Button mushroom farming
9	Packaged fruit production such as jackfruit
10	Foreign Direct Investment in Herbal Products
11	Snack Food Industry (SFI)/County Food Facilities
	<b>Healthcare</b>
1	Med Tech Manufacturing
2	Seniors Living

# Glossary of Terms

<b>1MMPP</b>	1Malaysia Micro Protection Plan	<b>DESB</b>	DreamEdge Sdn Bhd
<b>3R</b>	Reduce, Reuse, Recycle	<b>DEZ</b>	Dedicated Entertainment Zones
<b>AAIM</b>	Automotive After-sales Industry Malaysia	<b>DIKN</b>	Dasar Industri Kreatif Nagara
<b>AAM</b>	Automobile Association of Malaysia	<b>DMO</b>	Delivery Management Office
<b>ACD</b>	Asia Cooperation Dialogue	<b>DoA</b>	Department of Agriculture
<b>AeU</b>	Asian e-Learning University	<b>DSN</b>	Diagnostic Services Nexus
<b>AMWM</b>	Asset Management and Wealth Management	<b>DVS</b>	Department of Veterinary Services
<b>ANM</b>	Arkib Negara Malaysia	<b>DWDM</b>	Dense Wavelength Division Multiplexing
<b>ASB</b>	Amanah Saham Bumiputra	<b>E&amp;E</b>	Electrical and Electronics
<b>ATOM</b>	Automotive Modernisation	<b>E&amp;P</b>	Exploration and Production
<b>ATOM</b>	Automotive Workshop Modernisation	<b>EASA</b>	European Aviation Safety Authority
<b>BB</b>	Bukit Bintang	<b>EBN</b>	Edible Bird's Nest
<b>BBB</b>	Big Box Boulevards	<b>ECCE</b>	Early Child Care and Education
<b>BCC</b>	Bumiputera Corporate Champions	<b>ECERDC</b>	East Coast Economic Regional Development Council
<b>BCIC</b>	Bumiputera Commercial and Industrial Community	<b>EHA</b>	Electrical Home Appliances
<b>BDM</b>	Batam Dumai Melaka Cable System	<b>EOR</b>	Enhanced Oil Recovery
<b>BETP</b>	Bumiputera Economic Transformation Programme	<b>EP</b>	Employment Pass
<b>BLESS</b>	Business Licensing Electronic Support System	<b>EPF</b>	Employees Provident Fund
<b>BMI</b>	Business Monitor International	<b>EPMS</b>	Energy Performance Management System
<b>BOs</b>	Business Opportunities	<b>EPPs</b>	Entry Point Projects
<b>BPO</b>	Business Process Outsourcing	<b>EPU</b>	Economic Planning Unit
<b>BPR</b>	Business Process Reengineering	<b>ESB Artha</b>	ESB Artha Global Management Sdn Bhd
<b>C&amp;D</b>	Construction and Demolition	<b>ETF</b>	Exchange Traded Funds
<b>CAAT</b>	Computer Assisted Audit Techniques	<b>ETP</b>	Economic Transformation Programme
<b>CAGR</b>	Compounded Annual Growth Rate	<b>EXIM Bank</b>	Export and Import Bank of Malaysia Bhd
<b>CBCs</b>	Community Broadband Centres	<b>F&amp;B</b>	Food and Beverage
<b>CCI</b>	Communications Content and Infrastructure	<b>F&amp;N</b>	Fraser and Neave
<b>CCIG</b>	Creative Content Industry Guild	<b>F1</b>	Formula 1
<b>CCM</b>	Companies Commission of Malaysia	<b>FAMA</b>	Federal Agriculture Marketing Authority
<b>CDCEs</b>	Certified Data Centre Experts	<b>FCPO</b>	Crude Palm Oil Futures
<b>CGI</b>	Computer-Generated Imagery	<b>FDI</b>	Foreign Direct Investment
<b>CIF</b>	Cost, Insurance and Freight	<b>Felda</b>	Federal Land Development Authority
<b>CIMBSI</b>	CIMB Securities International Pte Ltd	<b>FFBs</b>	Fresh Fruit Bunches
<b>CMDV</b>	Centre for Marker Discovery & Validation	<b>FGVH</b>	Felda Global Ventures Holdings
<b>CME</b>	Chicago Mercantile Exchange	<b>FINAS</b>	Filem Negara Malaysia
<b>CMSA</b>	Capital Markets and Services Act 2007	<b>FiT</b>	Feed-in Tariff
<b>CNIIs</b>	Critical National Information Infrastructures	<b>FNM</b>	Filem Negara Malaysia
<b>COE</b>	Centre of Excellence	<b>FRIM</b>	Forest Research Institute of Malaysia
<b>CRA</b>	Credit Rating Agencies	<b>FRISB</b>	Felda Rubber Industries Sdn Bhd
<b>CRB</b>	Cypark Resources Berhad	<b>FTA's</b>	Free Trade Agreements
<b>CRC</b>	Clinical Research Centre	<b>FTK</b>	Full Turnkey
<b>CRM</b>	Clinical Research Malaysia	<b>FTZ</b>	Free Trade Zones
<b>CRS1</b>	Carrier Routing System 1	<b>GAP</b>	Good Agriculture Practices
<b>CSL</b>	Competition, Standards and Liberalisation	<b>GASAC</b>	Government Accounting Standards Advisory Board
<b>CTRE</b>	Continuing Tourism-Related Education	<b>GBI</b>	Green Building Index
<b>DBKL</b>	Dewan Bandaraya Kuala Lumpur	<b>GDP</b>	Gross Domestic Product
<b>DBKL</b>	Kuala Lumpur City Hall	<b>GDV</b>	Gross Development Value
<b>DCA</b>	Department of Civil Aviation	<b>GE</b>	General Electric
		<b>GFMAS</b>	Government Financial Management and Accounting System

<b>GHG</b>	Greenhouse Gas	<b>ISCA</b>	Industry Standard Committee
<b>GHIAL</b>	GMR Hyderabad International Airport Limited	<b>ISL</b>	International Standards and Liberalisation
<b>GI</b>	Glcemic Index	<b>ISPM</b>	International Standards for Phytosanitary Measures
<b>GIFT</b>	Global Incentives For Trading	<b>IT</b>	Information Technology
<b>GLC</b>	Government Linked Company	<b>IVDs</b>	Intravenous Devices
<b>GLIC's</b>	Government Linked Investment Companies	<b>IWG</b>	Industry Working Group
<b>GMP</b>	Good Manufacturing Practices	<b>IZAqs</b>	Integrated Zone for Aquaculture Models
<b>GNI</b>	Gross National Income	<b>JANM</b>	Jabatan Akauntan Negara Malaysia
<b>Greater KL/KV</b>	Greater Kuala Lumpur/Klang Valley	<b>JANM</b>	Accountant-General's Department of Malaysia
<b>GreenTech Malaysia</b>	Green Technology Corporation	<b>Jcorp</b>	Johor Corporation
<b>GST</b>	Goods and Service Tax	<b>JETC</b>	Joint Economic Trade Committee
<b>GTFS</b>	Green Technology Funding Scheme	<b>JKR</b>	Department of Works
<b>GTP</b>	Government Transformation Programme	<b>JPA</b>	Public Service Commission
<b>GW</b>	Gigawatts	<b>JPA</b>	Public Service Department
<b>HCD</b>	Human Capital Development	<b>JUCN</b>	Japan-US Cable Network
<b>HDC</b>	Halal Industry Development Corporation	<b>JV</b>	Joint Venture
<b>HDO</b>	Herbal Development Office	<b>KeTTHA</b>	Ministry of Energy, Green Technology and Water
<b>HLMG</b>	Hong Leong Manufacturing Group	<b>KKR</b>	Ministry of Works
<b>HOPE</b>	Project Hovid Objective Pharmaceutical Excellence	<b>KLCC</b>	Kuala Lumpur City Centre
<b>HPBS</b>	High Performing Bumiputera SMEs	<b>KLIUC</b>	Kuala Lumpur Infrastructure University College
<b>HPRI</b>	Halal Pharmaceutical Research Institute	<b>KLK</b>	KL Kepong
<b>HR</b>	Human Resources	<b>KLRCA</b>	Kuala Lumpur Regional Centre of Arbitration
<b>IAGTO</b>	International Association of Golf Tour Operators	<b>KPI</b>	Key Performance Index/Indicator
<b>IAOP</b>	International Association of Outsourcing Professionals	<b>KPJ</b>	Kumpulan Perubatan Johor
<b>IAS</b>	International Aids Society	<b>KPKK</b>	Ministry of Information, Communication and Culture
<b>IBFIM</b>	Islamic Banking and Finance Institute Malaysia	<b>KPKT</b>	Kementerian Perumahan dan Kerajaan Tempatan
<b>IC</b>	Integrated Complex	<b>KPO</b>	Knowledge Process Outsourcing
<b>ICE</b>	Independent Checking Engineer	<b>KRS</b>	Konsortium Rangkaian Serantau Sdn Bhd
<b>ICON2</b>	Integrated Content Development 2	<b>KVMRT</b>	Klang Valley Mass Rapid Transit
<b>ICs</b>	Integrated Circuits	<b>kWh</b>	Kilowatt-hour
<b>ICT</b>	Information Communications Technology	<b>KWSP</b>	Kumpulan Wang Simpanan Pekerja
<b>ICU</b>	Implementation Coordination Unit	<b>LED</b>	Light Emitting Diode
<b>ID</b>	Identification	<b>LPG</b>	Liquified Petroleum Gas
<b>I-FACS</b>	Islamic Finance Advisory and Consulting Services	<b>LTE</b>	Long Term Evolution
<b>IIEU</b>	International Event Unit	<b>MADA</b>	Muda Agricultural Development Authority
<b>IILM</b>	International Islamic Liquidity Management Corporation	<b>MAE</b>	MAS Aerospace Engineering
<b>IUM</b>	International Islamic University	<b>MAEPS</b>	Malaysian Agricultural Exposition Park Serdang
<b>IUM</b>	International Islamic University Malaysia	<b>MAHB</b>	Malaysia Airport Holdings Bhd
<b>ILMIA</b>	Institute of Labour Market Information and Analysis	<b>MAMPU</b>	Malaysian Administrative Modernisation and Management Planning Unit
<b>IMT</b>	Independent Management Team	<b>MAPCU</b>	Malaysian Association of Private Colleges and Universities
<b>INTAN</b>	National Institute of Public Administration	<b>MARA</b>	Majlis Amanah Rakyat
<b>INTI</b>	INTI International University	<b>MARDI</b>	Malaysia Agricultural Research and Development Institute
<b>IP</b>	Intellectual Property	<b>MAS</b>	Marked-Assisted Selection
<b>IP</b>	Internet Protocol	<b>MAS</b>	Malaysia Airlines
<b>IPO</b>	Initial Public Offering	<b>MATRADE</b>	Malaysia External Trade Development Corporation
<b>IRB</b>	Inland Revenue Board		
<b>IRDA</b>	Iskandar Regional Development Authority		

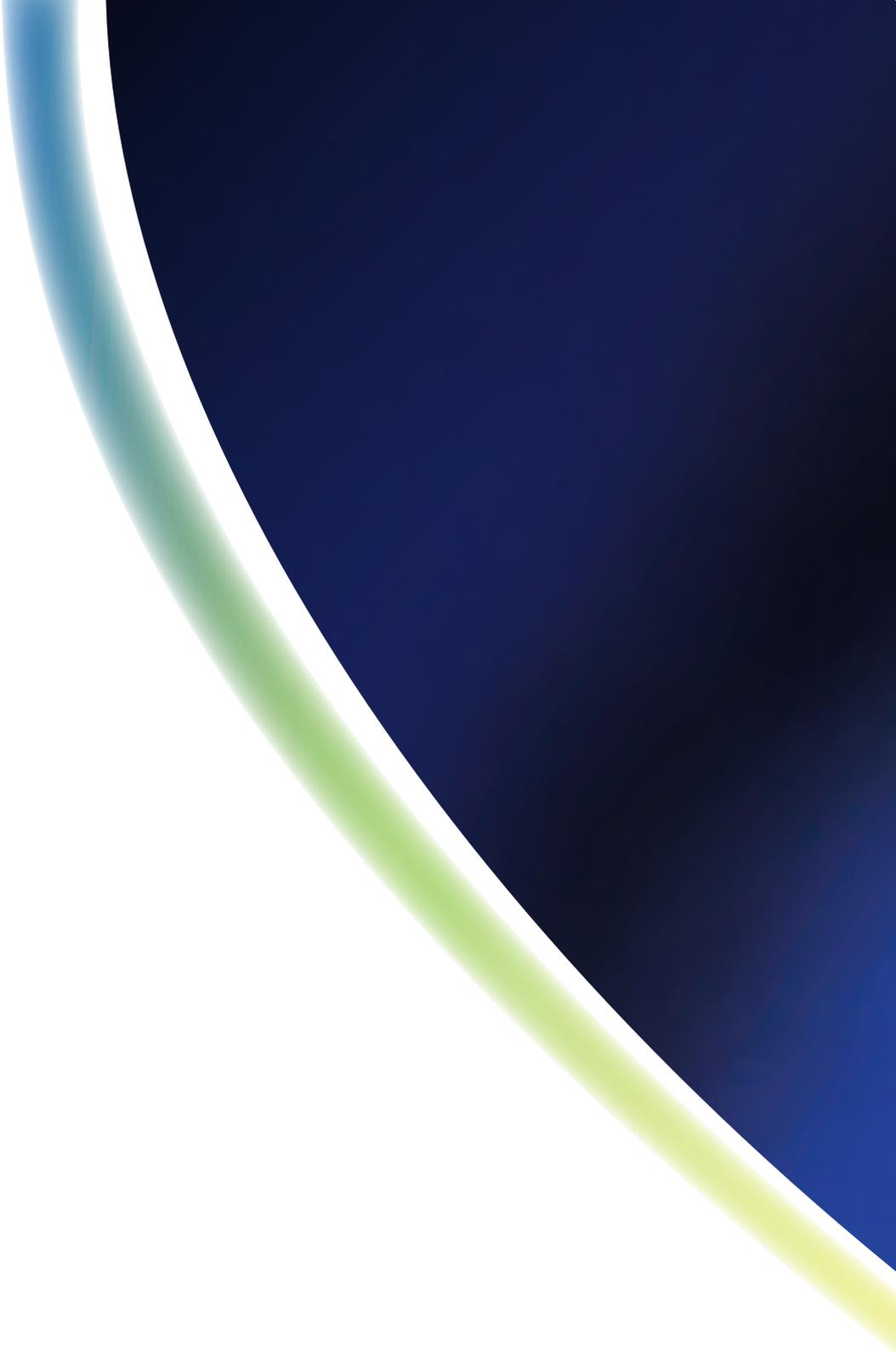
<b>MATRADS</b>	Malaysian Association of Tyres Retreaders and Dealers Societies	<b>mtpa</b>	Million Tonnes Per Annum
<b>Mbps</b>	Megabits-per-second	<b>mtpd</b>	Metric Tonnes Per Day
<b>MCMC</b>	Malaysian Communications and Multimedia Commission	<b>MyCC</b>	Malaysian Competition Commission
<b>MCT</b>	Medium Chain Triglyceride	<b>MyCCAP</b>	Malaysia Centre for Clinical Attachment and Placement
<b>MDB</b>	Medical Devices Bureau	<b>MyCEB</b>	Malaysian Convention and Exhibition Bureau
<b>MDeC</b>	Multimedia Development Corporation	<b>MyCenTHE</b>	Malaysia Centre of Tourism and Hospitality Education
<b>MDTCC</b>	Ministry of Domestic Trade, Co-operative and Consumerism	<b>MyClear</b>	Malaysia Electronic Clearing Corporation Sdn Bhd
<b>MEF</b>	Malaysia Employers Federation	<b>MyQuest</b>	Malaysia Quality Evaluation System
<b>MEPS</b>	Malaysian Electronic Payment System Sdn Bhd	<b>NAPEI</b>	National Association of Private Educational Institutions
<b>MGLP</b>	Malaysian Green Labelling Programme	<b>NAV</b>	Net Asset Value
<b>MGTA</b>	Malaysian Golf Tourism Association	<b>NCIA</b>	Northern Corridor Implementation Authority
<b>MGTC</b>	Malaysia Green Tech Corporation	<b>NCIA</b>	Northern Corridor Investment Authority
<b>MHTC</b>	Malaysian Healthcare Travel Council	<b>NEAC</b>	National Economic Advisory Council
<b>MIA</b>	Malaysian Institute of Accountants	<b>NEM</b>	New Economic Model
<b>MICE</b>	Meetings, Incentives, Conventions and Exhibitions	<b>NEP</b>	New Economic Policy
<b>MIDA</b>	Malaysian Investment Development Authority	<b>NGO</b>	Non-government organisations
<b>MIFC</b>	Malaysia International Islamic Financial Centre	<b>NKEA</b>	National Key Economic Area
<b>MIM</b>	Malaysian Insurance Institute	<b>NKRA</b>	National Key Results Area
<b>MITI</b>	Minister of International Trade and Industry	<b>NMIT</b>	Netherlands Maritime Institute of Technology
<b>MMBH</b>	Malaysia Mega Biodiversity Hub	<b>NOSS</b>	National Occupational Skills Standard
<b>MMHE</b>	Malaysia Marine and Heavy Engineering Holdings Berhad	<b>NTDC</b>	NCIA Technology Design Centre
<b>mmscfd</b>	Million Standard Cubic Feet Per Day	<b>NTEP</b>	National Talent Enhancement Programme
<b>mmstb</b>	Million Barrels	<b>NTTCom</b>	NTT Communications Corporation
<b>MMU</b>	Multimedia University	<b>NUMed</b>	Newcastle University Medicine Malaysia
<b>MNC</b>	Multinational Company	<b>NWCC</b>	National Wage Consultative Council
<b>MNPC</b>	Malaysia Nuclear Power Corporation	<b>ODM</b>	Original Design Manufacturing
<b>MoA</b>	Ministry of Agriculture	<b>OEM</b>	Original Equipment Manufacturing
<b>MoF</b>	Ministry of Finance	<b>OER</b>	Oil Extraction Rate
<b>MOH</b>	Ministry of Health	<b>OFSE</b>	Oil Field Services and Equipment
<b>MoHE</b>	Ministry of Higher Education	<b>OGE</b>	Oil, Gas and Energy
<b>MOHR</b>	Ministry of Human Resource	<b>OIC</b>	Organisation of Islamic Countries
<b>MoICC</b>	Ministry of Information, Communications and Culture	<b>OUM</b>	Open University Malaysia
<b>MOSTI</b>	Ministry of Science, Technology and Innovation	<b>PAKAR</b>	Pasar Komuniti and Pasar Kavarán
<b>MoU</b>	Memorandum of Understanding	<b>PBT</b>	Projek Perumahan Rakyat, Local Authorities
<b>MPAJ</b>	Majlis Perbandaran Ampang Jaya	<b>PCG</b>	Petronas Chemical Group Berhad
<b>MPC</b>	Malaysia Productivity Corporation	<b>PCG</b>	GLG High Performance
<b>MPIB</b>	Malaysian Pineapple Industry Board	<b>PDP</b>	Project Delivery Partner
<b>MPOB</b>	Malaysian Palm Oil Board	<b>PDS</b>	Private Debt Securities
<b>MPRC</b>	Malaysia Petroleum Resources Corporation	<b>PDTs</b>	Proprietary Day Traders
<b>MPS</b>	Majlis Perbandaran Selayang	<b>PEMUDAH</b>	Special Taskforce to Facilitate Business
<b>MPSAS</b>	Malaysia Public Sector Accounting Standards	<b>PIA</b>	Promotion of Investments Act
<b>MRB</b>	Malaysian Rubber Board	<b>PITA</b>	Petroleum Income Tax Act
<b>MRO</b>	Maintenance, Repair and Overhaul	<b>PNB</b>	Permodalan Nasional Berhad
<b>MRT Corp</b>	MRT Corporation Sdn Bhd	<b>POC</b>	Proof-of-Concept
<b>MS</b>	PT Mitra Samaya	<b>POIC</b>	Palm Oil Industrial Cluster
<b>MS</b>	Development of Malaysian Standard	<b>POME</b>	Palm Oil Mill Effluent
<b>MTAB</b>	Majlis Tindakan Agenda Bumiputera	<b>POS</b>	Point of Sale
<b>MTAC</b>	Malaysia Truly Asia Centre		

<b>PPIBM</b>	Persatuan Pengusaha Industri-industri Bengkel Malaysia	<b>SPAD</b>	Suruhanjaya Pengangkutan Awam Darat
<b>PPNJ</b>	Pertubuhan Peladang Negeri Johor	<b>SPAD</b>	Land Public Transport Commission
<b>PPP</b>	Public-private Partnership	<b>SPIKPA</b>	Foreign Worker's Health Insurance Protection Scheme
<b>PRS</b>	Private Retirement Scheme	<b>SRI</b>	Strategic Reform Initiative
<b>PSC</b>	Production Sharing Contract	<b>SSL</b>	Solid State Lighting
<b>PSC</b>	Public Service Commission	<b>STANDARD MALAYSIA</b>	Department of Standard Malaysia
<b>PSD</b>	Public Service Delivery	<b>STAR</b>	Scholarship Talent Attraction and Retention
<b>PSDC</b>	Penang Skills Development Centre's	<b>STPs</b>	Sewerage Treatment Plants
<b>PTPK</b>	Perbadanan Tabung Pembangunan Kemahiran	<b>SUDs</b>	Single Use Devices
<b>PTPTN</b>	National Higher Education Fund Corporation	<b>TalentCorp</b>	Talent Corporation
<b>PUNB</b>	Perbadanan Usahawan Nasional Berhad	<b>TAPS</b>	Talent Acceleration in Public Service
<b>PUSPAL</b>	Application of Filming and Foreign Artists	<b>TASBMS</b>	Tanjong Agas Supply Base and Marine Services Sdn Bhd
<b>QAV</b>	QAV Technologies Sdn Bhd	<b>Tbps</b>	Terabits-per-second
<b>R&amp;D</b>	Research and Development	<b>TDA</b>	Tioman Development Authority
<b>RAPID</b>	Refinery and Petrochemical Integrated Development	<b>TERAS</b>	High Performing Bumiputera Companies
<b>RE</b>	Renewable Energy	<b>TEVT</b>	Technical Education and Vocational Training
<b>RECODA</b>	Regional Corridor Development Authority	<b>TNB</b>	Tenaga Nasional Berhad
<b>REITs</b>	Real Estate Investment Trust	<b>TPCA</b>	Third Party Claims Administrators
<b>RENAC</b>	German Renewables Academy	<b>TPE</b>	Trans Pacific Express
<b>REP</b>	Returning Expert Programme	<b>TPM</b>	Technology Park Malaysia Corporation
<b>RFID</b>	Radio Frequency Identification	<b>TPP</b>	Trans-Pacific Partnership
<b>RFP</b>	Request for Proposal	<b>TS</b>	PT Tozy Sentosa
<b>RHB Cap</b>	RHB Capital Bhd	<b>tscf</b>	Trillion Standard Cubic Feet
<b>RMCD</b>	Royal Malaysian Customs Department	<b>TTDA</b>	Toshiba Transmission and Distribution Systems Asia
<b>RoL</b>	River of Life	<b>TUKAR</b>	Small Retailer Transformation Programme
<b>RP</b>	Resident Pass	<b>TUNAS</b>	Tunjuk, Ajar dan Nasihat
<b>RTM</b>	Radio Televisyen Malaysia	<b>UCSI</b>	University College Sedaya International
<b>SAM</b>	Strand Aerospace Malaysia	<b>UCTI</b>	Asia Pacific University College of Technology and Innovation
<b>SAMUR</b>	Sabah Ammonia Urea	<b>UIS</b>	Unemployment Insurance Scheme
<b>SC</b>	Securities Commission	<b>UKAS</b>	Public-Private Partnership Unit
<b>SDAs</b>	Standard Development Agencies	<b>UM</b>	University of Malaya
<b>SEDA</b>	Sustainable Energy Development Authority	<b>UMS</b>	University Malaysia Sabah
<b>SEDC</b>	State Economic Development Corporations	<b>UN</b>	United Nations
<b>SFI</b>	Snack Food Industry	<b>UniSZA</b>	University Sultan Zainal Abidin
<b>SHRDC</b>	Selangor Human Resource Develop Centre	<b>UNITEN</b>	University Tenaga Nasional
<b>SIC</b>	Sepang International Circuit	<b>USIM</b>	University Sains Islam Malaysia
<b>SIRIM</b>	Standard and Industrial Research Institute of Malaysia	<b>USP</b>	Universal Service Provision
<b>SIRs</b>	Senior International Representatives	<b>UTAR</b>	University Tun Abdul Razak
<b>SJJB</b>	Skim Jejak Jaya Bumiputera	<b>UTAR</b>	University Tunku Abdul Rahman
<b>SKM</b>	Co-operative Commission of Malaysia	<b>UUM</b>	University Utara Malaysia
<b>SME</b>	Small and Medium Enterprises	<b>VFS</b>	Visa Facilitation Service
<b>SME Corp</b>	SME Corporation Malaysia	<b>WMAM</b>	Waste Management Association of Malaysia
<b>SME</b>	Small Medium Enterprise	<b>WPPC</b>	Western Geco Penang Product Centre
<b>SMS</b>	Short Message Service	<b>WSN</b>	Wireless Sensor Networks
<b>SOGIP</b>	Sipitang Oil and Gas Industrial Park		
<b>SOHO</b>	Small Office Home Office		
<b>SOWACO</b>	Solid Waste Contractors		

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