



PETRONAS

**SUSTAINABILITY
REPORT 2013**
reimagining energy™

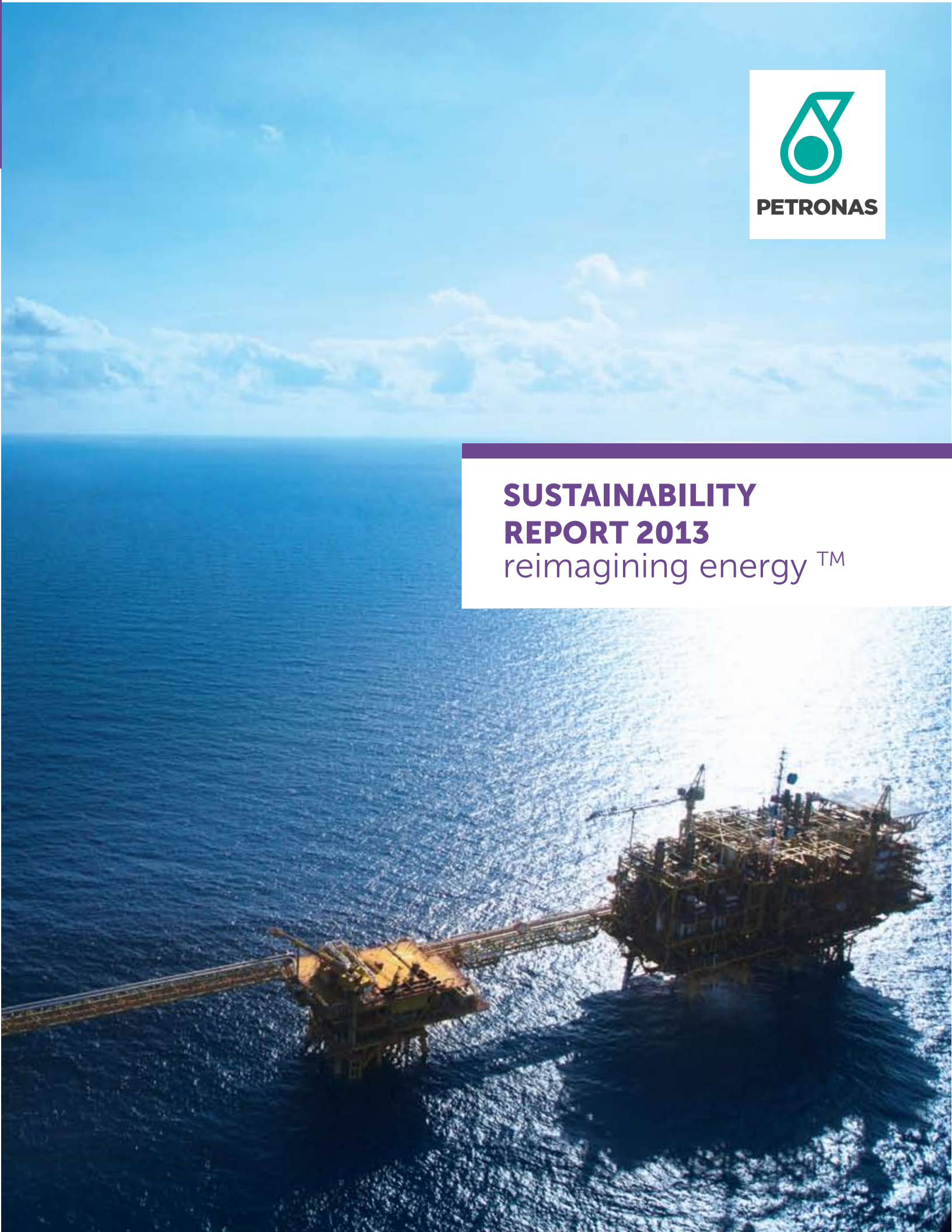
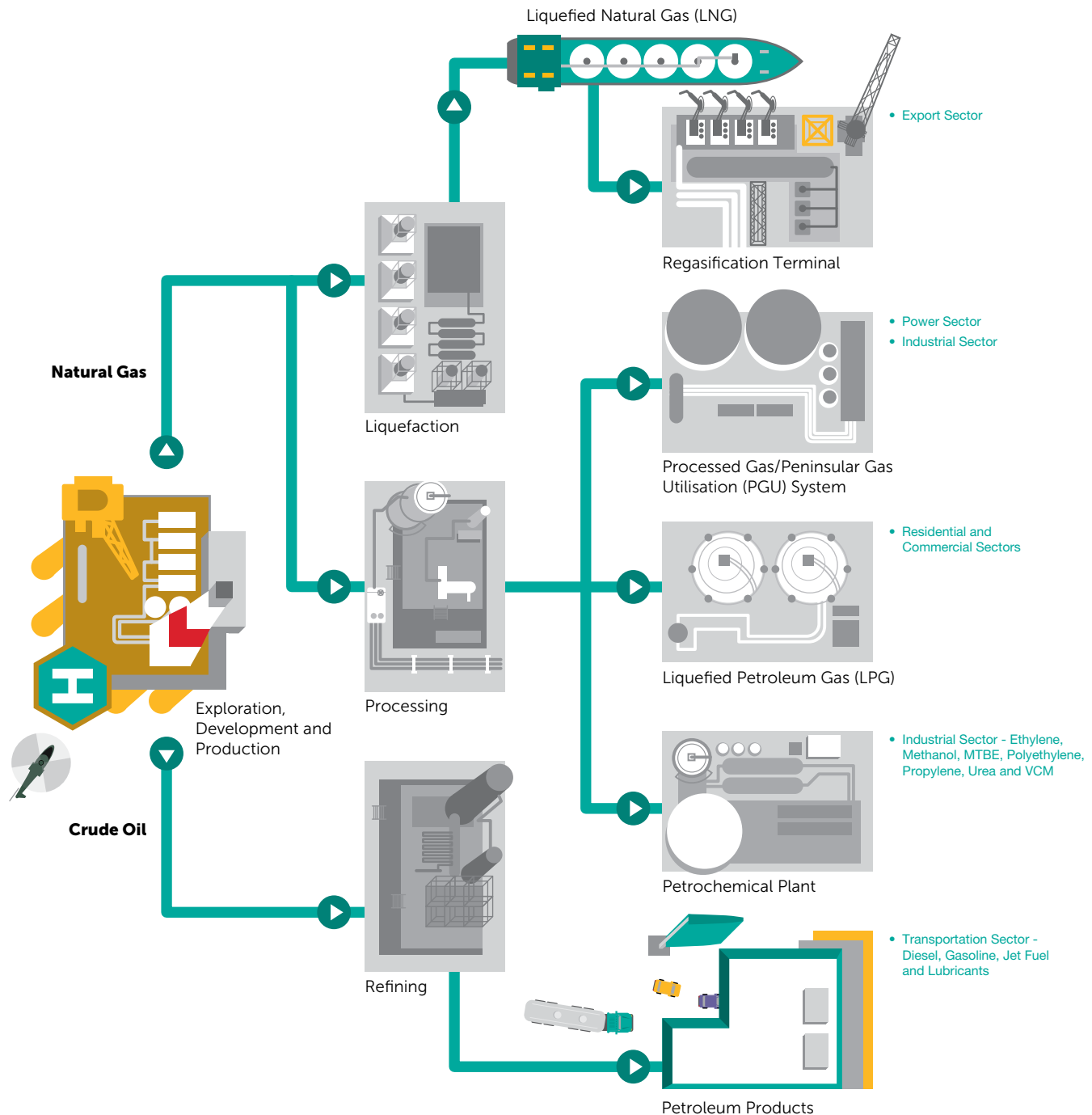


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Our Business



About PETRONAS

Petroleum Nasional Berhad (PETRONAS) is Malaysia's National Oil Company, and wholly-owned by the Government. Established in 1974, PETRONAS is ranked amongst the largest companies in the world with a proven track record in integrated oil and gas operations. Our business activities include (i) the exploration, development and production of crude oil and natural gas locally and abroad; (ii) the liquefaction, sale and transportation of Liquefied Natural Gas (LNG); (iii) the processing and transmission of natural gas, and the sale of natural gas products; (iv) the refining and marketing of petroleum products; (v) the manufacture and sale of petrochemical products; (vi) the trading of crude oil, natural gas, LNG, petroleum products and petrochemical products; and (vii) shipping and logistics relating to LNG, crude oil and petroleum products. Committed to ensuring long-term business sustainability, PETRONAS also strives to responsibly manage natural resources in a way that contributes holistically to the wellbeing of the people and nations where we operate.

For more information, please refer to the Corporate Profile in PETRONAS' Annual Report 2013, available at: www.petronas.com

Our Presence

Exploration & Production (E&P)

Africa

- **Algeria** – Development
- **Cameroon** – Development
- **Chad** – Development & Production
- **Egypt** – Exploration, Development & Production
- **Mauritania** – Exploration, Development & Production
- **Mozambique** – Exploration
- **Republic of South Sudan** – Exploration, Development & Production
- **Republic of Sudan** – Exploration, Development & Production

Asia Pacific

- **Australia** – Exploration, Development & Production
- **Brunei** – Exploration
- **Indonesia** – Exploration, Development & Production
- **Malaysia** – Exploration, Development & Production
- **Malaysia-Thailand Joint Development Area** – Development & Production
- **Myanmar** – Exploration, Development & Production
- **Vietnam** – Exploration, Development & Production

Central Asia

- **Turkmenistan** – Exploration, Development & Production
- **Uzbekistan** – Production

Latin America

- **Suriname** – Exploration

Middle East

- **Iraq** – Development & Production

North America

- **Canada** – Development & Production

Gas & Power

Africa

- **Egypt** – LNG

Asia Pacific

- **Australia** – LNG & Infrastructure
- **Indonesia** – Infrastructure
- **Malaysia** – LNG, Infrastructure, Utilities & Power, Trading
- **Singapore** – Power
- **Thailand** – Infrastructure

Central Asia

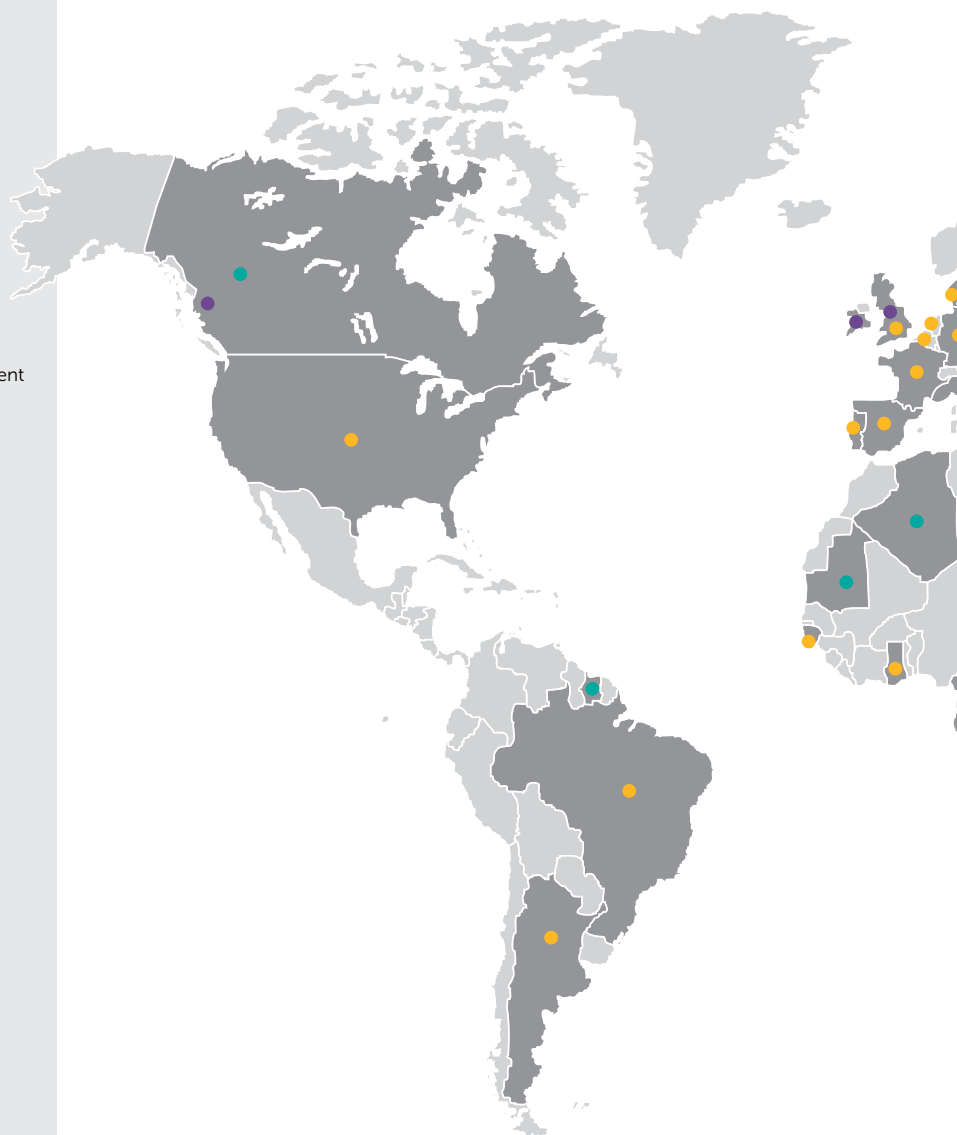
- **Uzbekistan** – Gas-to-Liquid

Europe

- **Ireland** – Infrastructure
- **United Kingdom** – Infrastructure, Utilities & Trading

North America

- **Canada** – LNG

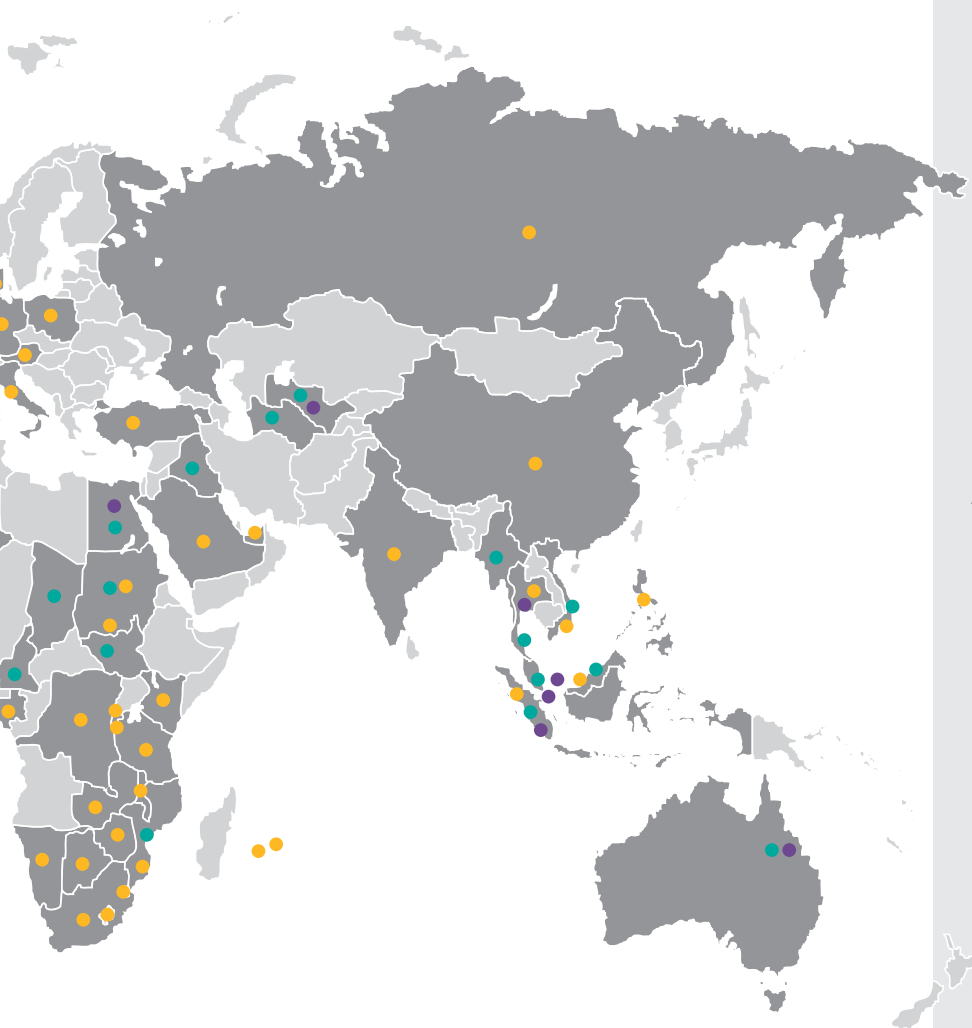


- E&P
- Gas & Power
- Downstream

*Includes Engen subsidiaries and marketing and trading offices.

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Downstream*

Africa

- **Botswana** – Oil Business
- **Burundi** – Oil Business
- **Democratic Republic of the Congo** – Oil Business
- **Gabon** – Oil Business
- **Ghana** – Oil Business
- **Guinea Bissau** – Oil Business
- **Kenya** – Oil Business
- **Lesotho** – Oil Business
- **Malawi** – Oil Business
- **Mauritius** – Oil Business
- **Mozambique** – Oil Business
- **Namibia** – Oil Business
- **Réunion** – Oil Business
- **Rwanda** – Oil Business
- **Swaziland** – Oil Business
- **South Africa** – Lubricants & Oil Businesses
- **Republic of South Sudan** – Lubricants & Oil Businesses
- **Republic of Sudan** – Lubricants & Oil Businesses
- **Tanzania** – Oil Business
- **Zambia** – Oil Business
- **Zimbabwe** – Oil Business

Asia Pacific

- **China** – Lubricants & Petrochemical Businesses
- **India** – Lubricants & Petrochemical Businesses
- **Indonesia** – Lubricants, Oil & Petrochemical Businesses
- **Malaysia** – Lubricants, Oil & Petrochemical Businesses
- **Philippines** – Lubricants, Oil & Petrochemical Businesses
- **Thailand** – Lubricants, Oil & Petrochemical Businesses
- **Vietnam** – Lubricants, Oil & Petrochemical Businesses

Europe

- **Austria** – Lubricants
- **Belgium** – Lubricants
- **Denmark** – Lubricants
- **France** – Lubricants
- **Germany** – Lubricants
- **Italy** – Lubricants
- **Netherlands** – Lubricants
- **Poland** – Lubricants
- **Portugal** – Lubricants
- **Russia** – Lubricants
- **Spain** – Lubricants
- **Turkey** – Lubricants
- **United Kingdom** – Lubricants & Oil Business

Latin America

- **Argentina** – Lubricants
- **Brazil** – Lubricants

Middle East

- **Saudi Arabia** – Oil Business
- **UAE** – Oil Business

North America

- **United States of America** – Lubricants

Vision

TO BE A LEADING OIL AND GAS MULTINATIONAL OF CHOICE

Mission

We are a business entity

Petroleum is our core business

Our primary responsibility is to develop and add value to this national resource

Our objective is to contribute to the well-being of the people and the nation

Shared Values

Loyalty

Loyal to the nation and corporation

Integrity

Honest and upright

Professionalism

Committed, innovative and proactive and always striving for excellence

Cohesiveness

United in purpose and fellowship

Key Sustainability Indicators

	FY13	FY12
Lost Time Injury Frequency	0.24	0.39
▶ Refer to page 23		
	FY13	FY12
Fatal Accident Rate	1.23	3.91
▶ Refer to page 23		
	FY13	FY12
Loss of Primary Containment	15 Incidents	33 Incidents
▶ Refer to page 23		

PETRONAS Domestic Greenhouse Gas Emissions	FY13	FY12
	49.03 million tCO ₂ e	47.10 million tCO ₂ e
▶ Refer to page 34		
Percentage of Women Employees	FY13	FY12
	28%	27%
▶ Refer to page 52		
Dividend Payment to the Malaysian Government	FY13	FY12
	27 RM billion	28 RM billion

Five-Year Group Financial Highlights

PETRONAS' KEY FINANCIAL INDICATORS

In RM Billion

	FY2013	+/- (%)	FY2012*	CY2011**	PE2011***	FY2011*	FY2010
Revenue	317.3	9.0%	291.2	288.5	222.8	241.2	210.8
EBITDA	123.4	2.5%	120.4	123.0	95.7	107.9	83.3
Profit Before Taxation	94.3	5.1%	89.7	103.8	83.0	90.5	67.3
Profit After Taxation	65.6	10.3%	59.5	68.7	55.9	63.0	45.5
Net Profit Attributable to Shareholders	54.1	8.4%	49.9	59.7	49.1	54.8	40.3
Total Assets	528.7	8.1%	489.2	476.4	476.4	436.3	410.9
Equity Attributable to Shareholders	335.8	9.4%	307.0	289.6	289.6	262.3	242.9

Financial Ratios	FY2013	FY2012	PE2011	FY2011	FY2010
Return on Revenue	29.7%	30.8%	37.1%	37.5%	31.9%
Return on Total Assets ****	17.8%	18.3%	23.0%	20.7%	16.4%
Return on Average Capital Employed ****	19.0%	17.2%	21.9%	17.6%	15.9%
Debt/Assets Ratio	0.08x	0.08x	0.11x	0.11x	0.13x
Gearing Ratio	11.1%	11.7%	15.1%	15.4%	17.6%
Dividend Payout Ratio	49.9%	56.1%	61.3%	54.7%	74.4%
Overall Resource Replenishment Ratio (ORRR)*****	3.1x	2.0x	1.7x	2.5x	1.1x

* Certain financial information and its corresponding financial ratios have been restated due to adoption of Malaysian Financial Reporting Standards (MFRS)

** Calendar Year (CY) 2011 – unaudited twelve-month period from 1 January 2011 to 31 December 2011. Included for comparative purpose.

*** Audited nine-month period from 1 April 2011 to 31 December 2011. Certain financial information and its corresponding financial ratios have been restated due to adoption of MFRS

**** PE2011 was calculated based on annualised figures

***** ORRR FY2013 includes Progress Energy Canada Ltd

President & Group CEO's Message



TAN SRI DATO' SHAMSUL AZHAR ABBAS

President & Group CEO

Sustainability may be a relatively new term, but to PETRONAS, the concept of doing business dutifully is not. Established to safeguard and add value to the finite hydrocarbon resources, this proceeded to guide us in every undertaking to which we responsibly assess consequences of our every action.

As a business, we are driven by calculated interest and financial gains; but as an organisation, guided by clear conscience of existence, our conducts are anchored on integrity in pursuit of undisputed trust and reputation as a safe and reliable operator. Today, we could cluster our focus under three core themes: Safety & Health; Environment Stewardship; and Society.

Given the complexities and how technically challenging the oil & gas industry is, coupled with constantly changing global business landscape, sustainable development is at the core of our operation. As populations grow, urbanisations intensify and living standards rise, we believe that the test is not simply on our ability to deliver energy and meet demands; but to do so dependably, holistically, and carry lasting social and environmental benefits.

This is exactly what we have worked to strengthen in the past few years, and it is encouraging to note that the sum of parts from our intensified efforts have started to take shape to generate greater sum of whole. We have worked hard to reverse natural decline in production; elevate the integrity and reliability of our ageing assets; and commit to extensive CAPEX to build new ones and grow our portfolio. Beyond numbers and dollars and cents, we have enhanced transparency of our conduct; elevate our governance practices to international standards; and place deeper emphasis on integrity. We have further identified focus areas that would improve our competitiveness, which include carbon and water management, as well as social performance.

So there you have it: a story of our short distant past and focus for the immediate future, and our aim for sustainability. Whilst we don't claim to have all the answers, we assure you that we will not stop from building upon existing knowledge and experience, continue to develop capability, and push boundaries of excellence. The next pages relay our journey especially for the year 2013, and we hope to report even greater things in the coming years.

Let it be known that in the decades ahead, as we continue to deliver energy in different corners of the world, sustainability reporting will no longer be seen as an annual scorecard. Instead, it is an avenue to openly share our practices and efforts in addressing the needs and expectations of those who matter to us.

Thank You.



TAN SRI DATO' SHAMSUL AZHAR ABBAS
President and Group CEO

Sustainability Leadership



Dialogue with
Dato' Wee Yiau Hin
Chairman of PETRONAS' Corporate
Sustainability Council (CSC)

1 How has PETRONAS' CSC evolved since its formation in March 2010?

The CSC was established as a deliberative body to discuss issues related to sustainability in PETRONAS. It is responsible for and oversees the implementation of PETRONAS' sustainable development (SD) strategies across the Company. The Council's members thus explore opportunities on ways to align and integrate SD practices into the current business model. We also track our projects and operations to consistently improve our performance in the areas outlined by PETRONAS' Corporate Sustainability Framework.

The Council has indeed since grown, having conducted a Corporate Sustainability Study in 2011 which assessed where we were, versus where we wanted to be. The findings of this study and foresight of the Council resulted in the formation of PETRONAS' SD goals and strategies, namely, in the areas of climate change, natural resource use as well as social performance.

The concept of sustainability is part of our business philosophy as we contribute towards the wellbeing of people and nations by responsibly adding value to petroleum resources wherever we operate, as stated in our Mission statement.

2 How does the CSC's leadership fortify the implementation of SD in PETRONAS?

For an integrated Company like ours, various operations are interconnected and impact one another. The Council's representation comprising executive personnel possessing vast expertise and industry experience is an enabler to effectively embed SD considerations across our undertakings. It is also to ensure that our recommendations made to PETRONAS' Executive Committee (EXCO) are potentially the best having weighed our strengths and readily available resources. Over and above these, the involvement of PETRONAS' top management in upholding SD excellence sets an example for everyone else in the Company to follow suit.

3 How do PETRONAS' SD practices complement the Company's business growth strategies?

Our vision is to be a leading oil and gas multinational of choice. This accounts for an aggressive exploration, development and production strategy for increasing oil as well as natural gas reserves. At the same time, growing our portfolio in the downstream sector to maximise value creation. We see SD as a business imperative that complements our growth strategy by addressing economic, social, environmental and safety concerns of our various stakeholders, including local community members in Malaysia and internationally. Considering this, SD will enable PETRONAS to continually deliver reliable supply of energy by strategically managing our operational impacts.

In the interim period, we have identified carbon and water management as well as social performance as the immediate areas for action. This is to achieve optimum levels of operational sustainability, while improving our competitiveness to create lasting benefits.

4 What are some of the achievements and challenges in driving SD across PETRONAS?

SD is a growing area of interest in our part of the region and for PETRONAS, being a global energy player, which is relatively much younger than our peers, we have much to do in a short span of time. Currently, our efforts focus on creating awareness, including developing systems and processes for addressing environmental as well as social concerns. To-date, we have formalised Carbon Commitments for Groupwide implementation, aiming for zero continuous venting and flaring. Concurrently, we scrutinised PETRONAS' water management practices and expanded our realm to include social performance as a key component for facilitating future business advancement. Suffice to say, we are optimistic of the growth preposition SD holds for PETRONAS in meeting our stakeholders' expectations in the longer term.

5 What are the CSC's future plans to elevate SD practices in PETRONAS?

Building a solid foundation is the basis for success. PETRONAS is consistently strengthening our SD governance mechanisms for the realisation of our sustainability agenda. We are also developing required SD capabilities in areas such as operational footprint management and social performance. It is our hope that the Council will become a platform to contextualise sustainability oriented initiatives for meeting PETRONAS' aspirations in this area. Sustainability is a shared responsibility and we must work together, as a company, as an industry, as a host nation and as an operator to realise optimum benefits from SD oriented initiatives implemented across the business value chain.

About This Report

The PETRONAS Group Sustainability Report 2013 (SR2013) represents an ongoing commitment to voluntarily communicate how we conduct our business in a safe, responsible and ethical manner. This Report, our sixth edition since 2007, features PETRONAS' key sustainability initiatives and performance achieved over the financial year (FY) covering a period of 12 months, from 1 January to 31 December 2013. Where applicable, we made reference to efforts that began before or just after the period under review.

Stakeholders and Materiality

PETRONAS places strategic importance on understanding and responding to the interests, needs as well as expectations of our various stakeholders, wherever we operate. Formal and informal stakeholder engagements, as well as feedback channels, enable us to receive, analyse and address concerns which are reflected in this Report.

Our Stakeholders*	Engagement Platform	Our Aspiration
Business Partners, Suppliers and Service Providers	• Face-to-face meetings • Audits • Targeted forums • Monitoring of contractual provisions	Achieving Mutually Beneficial Relationships: ✓ Building trust and commitment ✓ Growing with nations and partners ✓ Ensuring stable and reliable supply of energy
Customers and Consumers	• Hotline • Email queries	
Employees and Trade Unions	• Townhall sessions • Surveys • Open dialogues among teams • Intranet portal	
Host Governments and Regulatory Authorities	• Face-to-face meetings • Regular reports • Participation in discussions	
International Associations and Non-Governmental Organisations	• Engagements through business partnerships	
Local Communities	• Face-to-face meetings • Various social events	
Media	• Media releases • Quarterly media briefings	
Shareholders, Financial Institutions and Investors	• Group annual report • Quarterly media briefings	

*Note: This is not an exhaustive list.

The content of this report is driven by the Seven Result Areas of PETRONAS' Corporate Sustainability Framework, representing issues material to our stakeholders and the Company. The SR2013 centers on three (3) core themes; Safety and Health, Environmental Stewardship and Society. Each section also cites specific focus areas, which are identified as pertinent by our stakeholders and the Company.

An internal assessment was conducted to identify the material issues as well as priorities, while taking into consideration the wider industry context.

Scope, Data Collection and Reporting Standards

The scope of data covers outfits where PETRONAS has operational control in our Businesses of oil and gas production, unless otherwise stated, in Malaysia and internationally. The Company is continually improving our data accounting and information collection procedure to accurately reflect PETRONAS' sustainability performance. Our sustainability data is collated through a centralised web-based system.

The PETRONAS Group SR2013 was prepared in accordance with the International Petroleum Industry Environmental Conservation Association (IPIECA) and the Global Reporting Initiative (GRI) guidelines (GRI G3.1).

Contact

This Report is accessible at PETRONAS' corporate website: **www.petronas.com**

For further comments or queries, please write to us at: **sustainability@petronas.com.my** and/or

PETRONAS Sustainability Reporting

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50088 Kuala Lumpur
Malaysia

Sustainability & PETRONAS

Unlocking Value

PETRONAS, an experienced energy multinational, recognises our role to maximise resources for growth on the back of a strong track-record across the integrated oil and gas value chain. In the pursuit of ensuring energy security in a sustainable manner, we strive to actively address the following realities which depict the current landscape affecting the energy industry:

- **Finite resources**
New findings are increasingly made in challenging terrains with some reservoirs more tough than others.
- **Geographically, oil and gas reserves are located in complex settings**
Application of technologies, where feasible, to reduce or minimise social and environmental impacts.
- **Identified sites often lack basic infrastructure**
Building amenities to facilitate business operations and meet social needs i.e. roads for land access, sanitation and medical facilities.
- **Stringent regulations**
More requirements are put in place to improve environmental, social and governance performance.
- **Safeguarding business assets, including safety and health of people**
Tasks across the oil and gas operations require uncompromised discipline levels and strict adherence to established control mechanisms.
- **Growing need for technically competent individuals**
Aging workforce and limited availability of experienced personnel to explore in the newer frontiers.
- **Political unrest and security risks**
Protecting personnel and assets in conflict situations.
- **Macroeconomic stability and growth**
Improving quality of life in an equitable manner i.e. creating more job opportunities and honing local capabilities.

The changing external environment calls for new ways of doing business. At PETRONAS, we remain focused to achieve long term growth.

Our Approach to Sustainability

Sustainability to PETRONAS means carrying out our business in a socially responsible and holistic manner. This is to ensure continued growth as well as success for the benefit of present and future generations where we operate.

We aim to create lasting social benefits; safeguard the health and safety of employees, contractors and neighbours; minimise disruptions to the community; lower emissions; minimise impact on ecosystems and biodiversity; and use energy, water and other resources efficiently.

As a commercial entity, we seek competitive growth in all of our undertakings, whereas being a responsible industry player, we strive to remain a caring employer, a partner of choice and a dependable corporate citizen.

We recognise the potential and scale of our capital intensive industry in spurring holistic socioeconomic developments. When making business decisions, we take a farsighted view, one that considers, weighs and balances the requirements of a fast changing world.

Guiding us are responsible management and operational practices, policies, including procedures to accelerate business performance as well as delivery. This is to responsibly generate and return value by effectively managing financial and non-financial risks.

We remain committed to realise our sustainability agenda, in accordance with the following seven (7) key areas of the PETRONAS Corporate Sustainability Framework:

Shareholder Value Sustaining the Company's profitability through value creation, efficient extraction and manufacturing processes.

Natural Resource Use Promoting efficient use of hydrocarbons and water, and supporting the use of renewable energy.

Climate Change Limiting emissions of greenhouse gases into the atmosphere.

Biodiversity Ensuring projects and operations do not have significant effect on the diversity of animals and plants.

Health, Safety & Environment Preventing and eliminating injuries, health hazards and damage to property and communities, including conserving the environment.

Product Stewardship Ensuring that products conform to quality and HSE standards throughout the product lifecycle and meet the needs of society.

Societal Needs Safeguarding human rights within our sphere of influence, contributing to community needs, investing in training and education, promoting arts and sports and conducting our business in a transparent manner.

Our Sustainable Development Aspirations

Continuing from FY2012, PETRONAS is addressing current business needs by undertaking efforts in the areas below for achieving operational sustainability over the short to medium term:

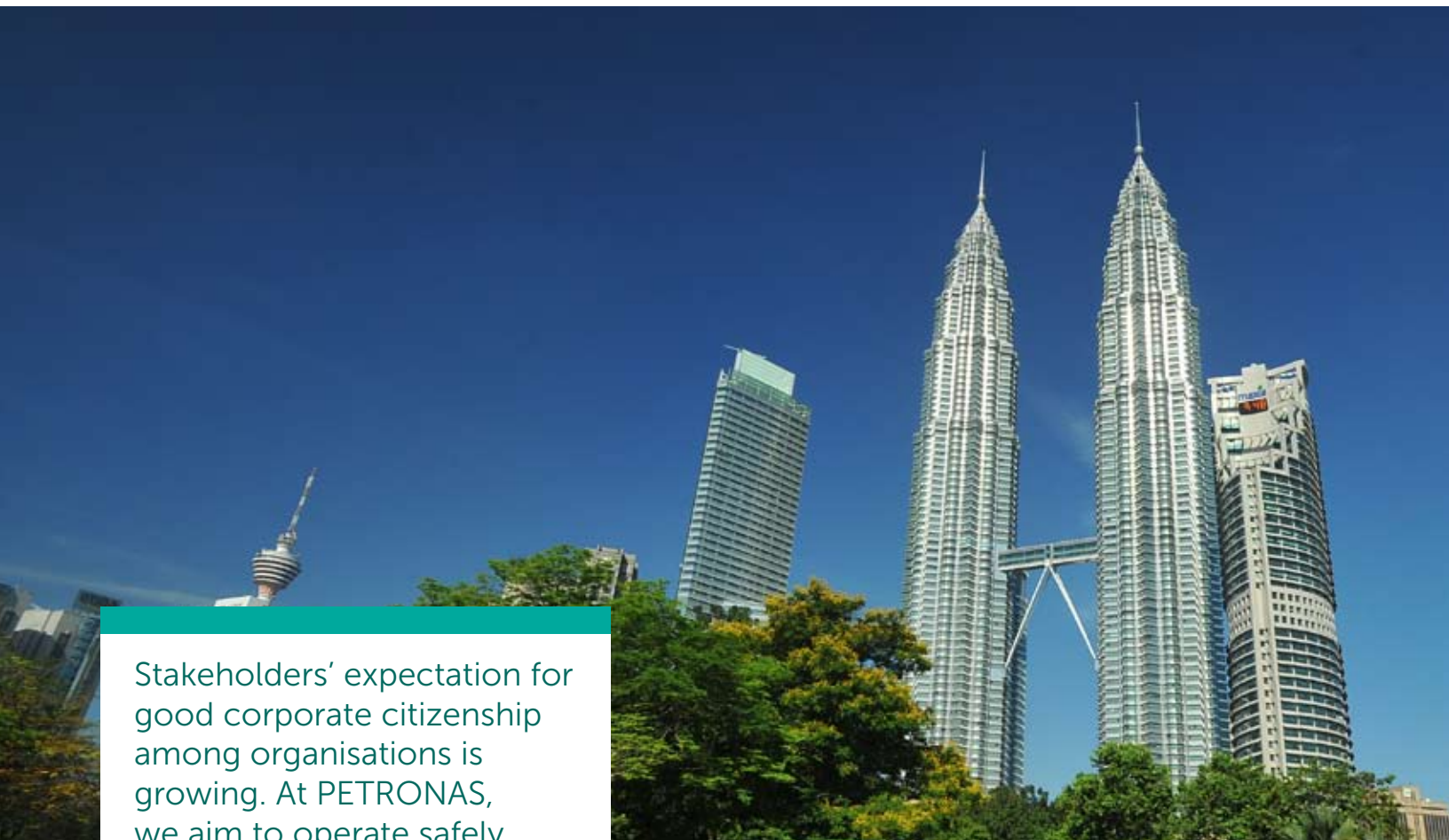
Our Focus	What We Did in FY2013
Energy and GHG Management	- Introduced the PETRONAS Carbon Commitments. - Developed systems and processes on greenhouse gas (GHG) management for key Businesses.
Water Management	- Streamlined the definition of fresh water withdrawal in line with international standards. - Conducted trainings and internal verification on fresh water accounting.
Social Performance	Established the PETRONAS Social Performance Framework.

Collectively Promoting Industry Growth

PETRONAS is a member of several international and regional industry associations that deliberate on best practices as well as experiences in technical disciplines, including SD to address business needs. This included the ASEAN Council on Petroleum (ASCOPE), the International Petroleum Industry Environmental Conservation Association (IPIECA), the International Association of Oil and Gas Producers (OGP) and the Society of Petroleum Engineers (SPE). Furthermore, we are an active member of the Petroleum Industry of Malaysia Mutual Aid Group (PIMMAG) and a Subscribing Member of the Oil Spill Response Limited (OSRL).

We also support events to encourage capability development within the oil and gas industry. This involved exploring opportunities to develop natural gas resources, among others. Highlights in FY2013 included our leading role to jointly organise and manage the Asia Oil and Gas Conference in Kuala Lumpur, Malaysia. In addition, PETRONAS participated in a premier global gas industry event, Liquefied Natural Gas 17 conference as well as exhibition, held at Houston in the United States of America.

Governance



Stakeholders' expectation for good corporate citizenship among organisations is growing. At PETRONAS, we aim to operate safely and reliably by proactively responding to business risks as well as opportunities across the integrated oil and gas value chain. Supporting our efforts to ensure long term business competitiveness, growth and sustainability are policies, standards, management systems as well as guidelines that conform with industry best practices.

Our Focus:

- Ethics and Integrity
- HSE and Sustainability Leadership
- HSE Governance

ETHICS AND INTEGRITY

PETRONAS is committed to the highest standards of integrity, openness and accountability throughout our businesses and operations. We adhere to all applicable laws, rules and regulations in countries of operations. We encourage greater transparency and open communication on what we do as well as how we do it, subject to overriding considerations of business confidentiality. In line with PETRONAS' zero tolerance policy against bribery and corruption, we are actively advocating for integrity as well as ethical business conduct on a local and global level. We participate on the basis of membership in various business networks and non-governmental organisations, among others. To-date, PETRONAS supports the World Economic Forum's Partnering against Corruption Initiative (PACI) and is a signatory to the Malaysian Corporate Integrity Pledge. We also work closely with Transparency International Malaysia. The PETRONAS No Gift Policy was introduced in FY2012 as part of our efforts, among others, to promote an ethical business culture across the Group.

Code of Conduct and Business Ethics

PETRONAS' pledge to uphold good corporate citizenship is reflected in our Code of Conduct and Business Ethics (CoBE). This requirement applies to all employees and directors, including third parties who represent or act for the Group. In FY2013, all new employees were required to attend face-to-face training on the CoBE, as part of PETRONAS' on-boarding programme. PETRONAS also conducted training on the CoBE for third parties who have business dealings with the Group such as contractors, sub-contractors, suppliers, agents and consultants. We regularly engage with associated third parties to ensure their compliance with PETRONAS' expectations, as set out in the Code.

A mandatory online training module on the CoBE is scheduled for roll-out to employees in 2014. As at 31 December 2013, 35,980 employees have undergone face-to-face training on the CoBE.

An online helpdesk was also made available for anyone to forward their enquiries on the CoBE or report breaches of the Code and/or any other matters relating to PETRONAS, anonymously if they wish to, at cobe@petronas.com.my

Anti-Bribery and Corruption Compliance Programme

In FY2013, we developed the PETRONAS Integrity Compliance Framework ("PICF"), benchmarked against international standards and best practices. The PICF acts as a point of reference for all PETRONAS Group employees and directors in managing issues related to bribery and corruption.

PETRONAS Anti-Bribery and Corruption Policy & Guidelines ("ABC Manual") was developed as one of the core components of the PICF to supplement the broad policy statements in the CoBE. The Manual contains detailed policies and procedures on how to deal with improper solicitation, bribery and other corrupt activities as well as ethical issues that may arise in the normal course of business. The ABC Manual which clearly states PETRONAS' zero tolerance policy against bribery and corruption is intended for global application. The Policy was rolled-out in phases, starting December 2013. The ABC Manual is available at www.petronas.com

Anti-Bribery and Corruption Awareness

As part of PETRONAS' Groupwide communications and roll-out of the ABC Manual in November 2013, approximately 222 employees in senior as well as middle management positions had undergone the ABC face-to-face training programme. Moving forward, all PETRONAS' employees will be required to attend periodic ABC training. This is to ensure that they understand and comply with the policies and procedures, including applicable anti-bribery as well as corruption laws wherever we operate. In addition, employees working in positions or job functions with a higher risk of exposure to bribery and corruption will be identified to attend a more in-depth training programme. Furthermore, new employees will be required to attend mandatory face-to-face training on the ABC Manual as part of the PETRONAS on-boarding programme.

A mandatory online ABC training module is scheduled for roll-out to employees sometime in 2014.

Whistleblowing

Following the implementation of our Whistleblowing Policy in FY2012, a dedicated Whistleblowing helpline was established to allow employees and stakeholders to raise their legal as well as ethical concerns related to PETRONAS' business and/or activities, including reporting of instances of potential non-compliance with our values and principles.

More information on the PETRONAS Whistleblowing Policy is available at www.petronas.com



Corporate Integrity Advocacy Programme

PETRONAS launched a comprehensive guide on *How to implement an Integrity Programme: a Guide for MD/CEOs, PETRONAS Group of Companies* for minimising risks of corruption and fraud in the Company. The Guide, an initiative spearheaded by PETRONAS' Chief Integrity Officer, advocates a standard approach for all businesses within the PETRONAS Group to implement a structured integrity programme. The Guide was launched during a forum themed 'Designing Corruption out of the Business Eco-System', which was among the initiatives pursued under PETRONAS' Corporate Integrity Advocacy Programme. The forum served as a platform for industry leaders, representatives from the private sector, government bodies and enforcement agencies to exchange insights on fighting corruption. During the event, PETRONAS also shared our best practices to combat bribery and misconduct within the Company.

Transparency

PETRONAS received recognition from Transparency International (TI) for ranking 5th out of 100 emerging companies in the 2013 report published by TI on 'Transparency in Corporate Reporting: Assessing Emerging Market Multinationals'. PETRONAS, the only Malaysian company to be identified for the study, also emerged as the highest scorer under the Best Unlisted Companies category.

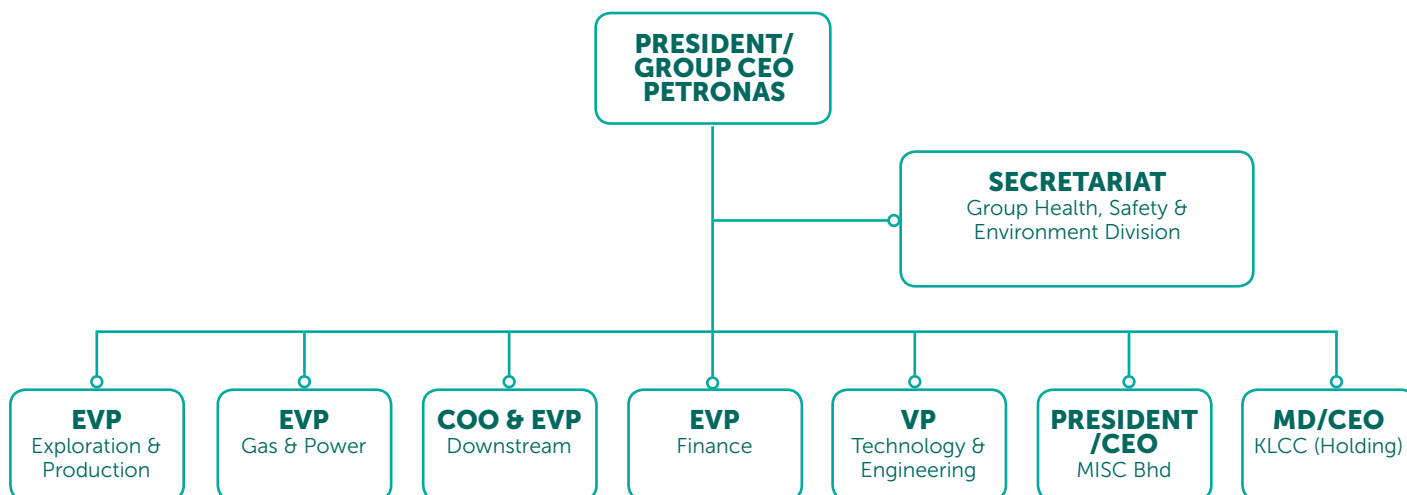
TI sampled top 100 emerging companies comprising private, public and state owned enterprises which were identified by Boston Consulting Group as the 100 global challengers for 2012. The 100 companies' corporate reporting was evaluated in the following three (3) areas, namely; reporting on anti-corruption programmes, organisational transparency and country-by-country reporting.

HSE & SUSTAINABILITY LEADERSHIP

PETRONAS endeavours to strategically embed sustainability considerations in everyday business decision making. This is to effectively address risks and explore opportunities in the wider context of managing our environmental as well as social impacts. PETRONAS' senior management personnel through relevant Councils guide and closely monitor the realisation of the Company's HSE and Sustainable Development (SD) aspirations.

HSE Executive Council

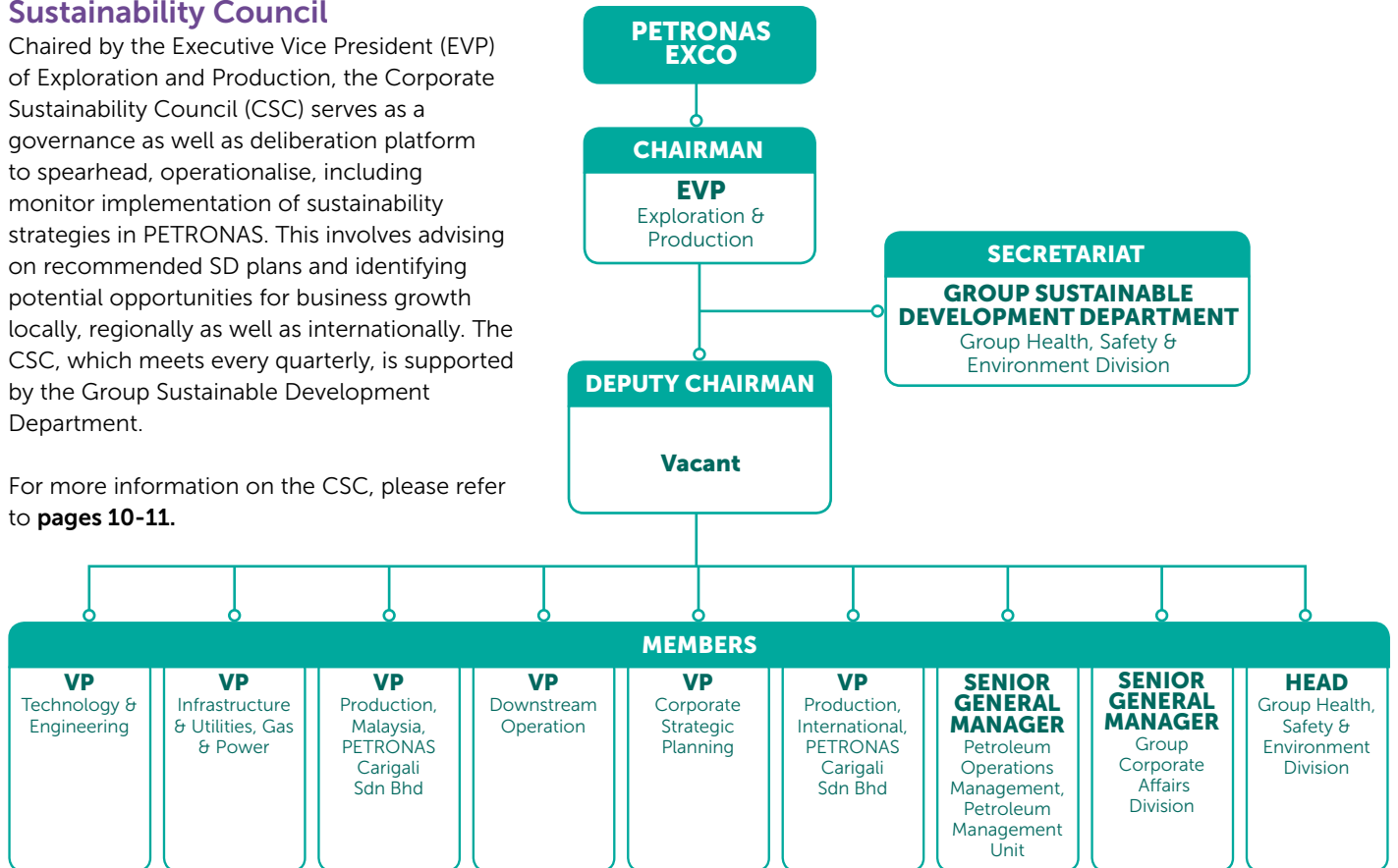
Chaired by PETRONAS' President/Group Chief Executive Officer (CEO), the Health, Safety and Environment (HSE) Executive Council provides leadership on HSE governance and approves strategies as well as initiatives for Groupwide implementation. The Council, depicted below, meets at least twice a year and it is supported by the Group HSE Division.



PETRONAS Corporate Sustainability Council

Chaired by the Executive Vice President (EVP) of Exploration and Production, the Corporate Sustainability Council (CSC) serves as a governance as well as deliberation platform to spearhead, operationalise, including monitor implementation of sustainability strategies in PETRONAS. This involves advising on recommended SD plans and identifying potential opportunities for business growth locally, regionally as well as internationally. The CSC, which meets every quarterly, is supported by the Group Sustainable Development Department.

For more information on the CSC, please refer to **pages 10-11**.



Collectively, the leadership, direction as well as oversight of the HSE Executive Council and CSC have contributed towards the execution of relevant sustainability oriented initiatives Groupwide.

The involvement of PETRONAS' top management also raises the bar for our employees as well as business alliances to uphold HSE and SD excellence in all that we do.

HSE GOVERNANCE

PETRONAS adopts relevant processes in our day-to-day operations to deliver sustainable health, safety and environment (HSE) performance. Our efforts are guided by PETRONAS' HSE Policy which is operationalised through the PETRONAS HSE Management System. The latter was reinforced following the roll out of PETRONAS' HSE Mandatory Control Framework in FY2012. Supporting our operations are the standards and operating practices outlined in PETRONAS' Technical Standards as well as the Zero Tolerance Rules, among others.



New Policies

In the period under review, the following policies were formalised for Groupwide implementation:

- 1. Substance Misuse:** Promoted awareness on hazards associated with substance abuse. The intent is to provide a safe as well as conducive workplace which is free of drugs, alcohol and other illicit substances.
- 2. HIV/ AIDS:** Committed to ensure that no individual is unfairly discriminated against or stigmatised for their HIV status.
- 3. Sexual Harassment:** Adopted a 3R concept of Realise, Reveal and Respect to equip staff with a broader understanding of sexual harassment at the workplace. Employees, irrespective of status and position, shall be treated with dignity and be free from harassment, humiliation and intimidation of sexual nature.

Safety & Health



Safeguarding people, the environment and business assets is fundamental to PETRONAS as a responsible as well as reliable operator. We provide conducive working conditions, adopt industry best practices and ensure strict compliance with Malaysian, including international regulatory requirements.

Our Focus:

- Safety and Health Performance
- Safety
- Occupational Health and Industrial Hygiene
- Product Stewardship

SAFETY AND HEALTH PERFORMANCE

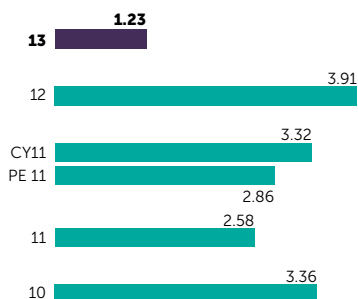
In FY2013, we recorded reductions in the following, compared with FY2012:

- Fatality Accident Rate (FAR) by 69%.
- Lost Time Injury Frequency (LTIF) by 38%.
- Loss of Primary Containment (LOPC) by more than 50%.

These achievements were the result of rigorous safety measures implemented throughout our businesses, for example, interventions to prevent fires as well as strengthening of PETRONAS' safety culture and capabilities. Regretfully, we recorded four (4) fatalities in our downstream business attributed to occupational safety related incidents. Risk mitigation measures are ongoing to address identified gaps.

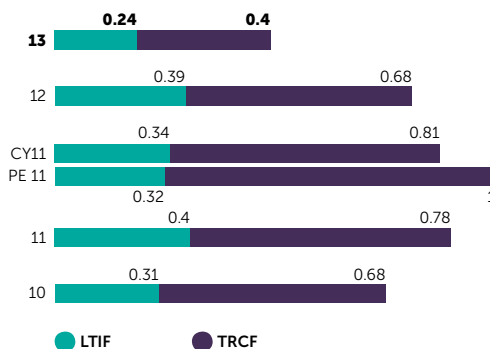
Fatal Accident Rate

Reportable fatalities per 100 million man hours



LTIF and TRCF for the Group

No of cases per one million man hours



Major LOPCs and Fire Incidents for the Group	10	11	PE 11	12	13
LOPCs	46	38	23	33	15
Fires	12	7	6	7	6

Note:

PE2011 covers a period of nine (9) months from 1 April 2011 to 31 December 2011. Whereas, 2011 covers a period of 12 months from 1 April 2010 to 31 March 2011.



SAFETY

PETRONAS stipulates stringent safety requirements in all our activities for reducing risks to a level as low as reasonably practicable (ALARP). We are guided by the PETRONAS HSE Policy, HSE Management System, HSE Mandatory Control Framework, Technical Standards and regulatory requirements, among others. Adequate safety barriers to elevate operational integrity were developed for mitigating and reducing potential risks arising from processes as well as equipment. This involved critical assessment of design and engineering applications in early project phases to proactively identify as well as address potential HSE risks. Concurrently, PETRONAS is fortifying our safety culture and leadership across all levels through several programmes, one of which is the application of early detection and prevention principles, such as monitoring leading Key Performance Indicators, recognising early warning signs, including enhancing barrier management.

Contractor and Project HSE Management

We have fortified contractor and project HSE management by embedding stringent HSE clauses as well as specifications into PETRONAS' Invitation-to-Bid requirements. In addition, the contractor screening and selection processes were tightened, with clearer delineation of roles established for owners as well as contractors. HSE critical procedures for project execution, incentive/disincentive schemes and Permit-to-Work specifications for Greenfield projects were also introduced. At the same time, the Contractor Performance Evaluation was strengthened for better screening and selection of contractors.

PETRONAS continuously monitors and reports the HSE performance of contractors working at our various sites to assess their level of competency. Simultaneously, we seek to increase our contractors' focus on critical HSE aspects for improving their safety performance.

Process Safety and Asset Integrity

We adopt a lifecycle approach for managing our operational integrity and risks. This approach is applied in the management of safety critical elements (SCE) to ensure the soundness of critical barriers in preventing process safety incidents. At the design stage, SCEs are identified and a preventive maintenance plan is put in place for implementation during the operation phase.

Concurrently, we enhanced the integrity and reliability of upstream assets in Malaysia as well as internationally through the Technical Integrity Process Safety (TIPS) programme and Independent Asset Integrity Review (i-AIR). The TIPS programme focuses on monitoring the integrity of wells, facilities, terminals and pipelines to prevent loss of containment incidents.

The i-AIR ensures that assets are designed, constructed, operated and maintained in accordance with applicable standards.

Ongoing efforts include the application of PETRONAS' established pipeline integrity solutions, ranging from risk assessment and inspection to rehabilitation works for our extensive network of pipeline systems spanning over 10,000 kilometres across Malaysia.

In addition, PETRONAS developed an Offshore Self-Regulation Management System (OSR-MS), in collaboration with Malaysia's Department of Safety and Health (DOSH). The structured system sees to the management, safe operations and integrity of all offshore assets as well as facilities in the country.

Frequent management walkabouts were also held to increase engagements with site personnel and contractors to raise awareness on process safety culture. While providing a platform for timely feedback, the sessions also enabled proactive dialogue on concerns raised by staff and contractors.

Human Factor

In the period under review, we adopted a more strategic approach for addressing human factors (HF) issues throughout our businesses. We expanded our focus to cover factors such as design and construction, alertness and fatigue as well as competence to improve overall HSE performance. A HF Working Group was also formed and frequent engagements were held with key stakeholders such as staff and contractors to discuss ways for improving human efficiency. Subsequently, two (2) HF training modules were introduced; Operations and Maintenance as well as Design and Construction. These aim to raise awareness on HF related risks due to growing technical complexities.

Furthermore, HF related causes as well as considerations are also assessed during incident investigation, job hazard analysis and fatigue management. In FY2013, HF requirements were incorporated in the design phase of new projects such as the Refinery and Petrochemical Integrated Development (RAPID) in Pengerang, Johor, Malaysia to ensure that HF related risks are identified and adequately addressed in the design phase.

Emergency Response

A total of 46 onshore and offshore emergency response exercises were conducted in Malaysia to continually enhance our preparedness in managing operational emergencies. Similar trainings were also held at our international operational sites such as in Iraq, where we performed an Emergency Preparedness Drill covering areas such as Fire and Emergency, Rescue in Confined Space, Gas Release, Fuel Gas System Leak and Evacuation. The exercises executed alongside our contractors, partners, local authorities and communities improved the team's overall coordination as well as communication in managing emergencies.

An Integrated Business Continuity Simulation Exercise was conducted at the PETRONAS Twin Towers in Kuala Lumpur, Malaysia to assess our plans, processes as well as procedures for addressing prolonged business disruptions. The exercise which involved tenants and PETRONAS' staff in Tower 2, including some of our businesses and operating units' representatives in Tower 1, was part of the Company's continuous efforts to ensure the preparedness in facing any emergency situation at the Towers. Relevant authorities, namely, the Fire and Rescue Department, Royal Malaysia Police and Malaysian Civil Defence Department also participated in this initiative.



Inculcating HSE Capability and Culture

As we continue to expand our businesses, we recognise that sustainable HSE performance relies on solid HSE competencies. HSE fundamentals are thus incorporated in all of PETRONAS' technical training modules and targeted capability development programmes are put in place to ensure competent HSE practitioners as well as line managers lead our global operations. In FY2013, PETRONAS embarked on a five-year seeding programme for fresh graduates to hone credible technical talent through a structured capability development plan. The programme was designed to expose young HSE engineers to a wide range of areas covering process engineering as well as project, operations and HSE management. The underlying intent is to inculcate HSE leadership, culture and mindset among our young executives.

In addition, relevant efforts were rolled out at selected upstream and downstream businesses in Malaysian as well as internationally to enhance process safety leadership among our people. For example, a HSE awareness session was held at the Gway Cho Base camp in Myanmar for increasing participants' understanding on ways to effectively mitigate hazards arising at the workplace.

Developing HSE Capacity in Malaysia

The *Institut Teknologi Petroleum PETRONAS* (INSTEP) embarked on HSE training programme to equip the future talents with necessary skills and capabilities for serving in Malaysia's oil and gas sector. A Memorandum of Understanding was inked between PETRONAS and the country's Ministry of Youth and Sports in August 2012 to spearhead this initiative. This programme, designed and developed by INSTEP for the *Institut Kemahiran Belia Negara's* (IKBN) *Bandar Penawar* campus in Johor, is expected to hone HSE knowledge of students from IKBN's campuses nationwide, including industry workers.

INSTEP also conducted Training-of-Trainers programme for identified tutors from IKBN at INSTEP in Batu Rakit, Terengganu, Malaysia, which involved practical training at PETRONAS' operational facilities in the country.

OCCUPATIONAL HEALTH AND INDUSTRIAL HYGIENE

PETRONAS provides a safe and healthy environment for all our personnel working at offshore and onshore plants, including corporate offices in Malaysia and internationally. In the larger context, this involves identifying, assessing as well as controlling our personnel's exposures to chemical, physical, biological, psychosocial and ergonomics related hazards. This also entails monitoring and managing occupational related illnesses such as musculoskeletal, infectious and non-communicable diseases. Targeted mitigation plans and awareness building initiatives are carried out in striving to ensure the optimal health levels of our people. We abide by internal as well as globally accepted Occupational Health (OH) and Industrial Hygiene (IH) standards, guidelines and requirements. These include Health Risk Assessment (HRA), Chemical Exposure Monitoring, Noise Exposure Monitoring, Health Surveillance, Fitness to Work (FTW) Assessment, Substance Misuse, Management of Fatigue, Ergonomics and Wellness Programmes.

Health Risk Assessment (HRA)

Relevant control mechanisms are established for identified health risks to ensure PETRONAS' working environment conform to stringent regulatory and industry standards. Several HRA exercises carried out in FY2013 identified presence of the following exposures at our domestic and international process facilities, namely; chemicals, noise and ergonomics.

Internationally, we performed the inaugural HRA for Iraq operations covering the First Commercial Production (FCP) site, adjoining wells, including the Garraf Base Camp encompassing a warehouse, offices and living quarters. Efforts are ongoing to address as well as control immediate risks, namely; noise and chemical exposure management.

A HRA program was also carried out at the PETRONAS Twin Towers in Kuala Lumpur, Malaysia to assess prevalence of risks such as ergonomics in the office space.

Furthermore, HRA was initiated as early as in the design phase of new projects to proactively identify and adequately address potential health hazards. The findings of a HRA executed during the FEED stage of RAPID project categorised manual material handling, awkward postures, noise control and direct chemical handling as areas for improvement.

Workplace Enhancements

The mitigation measures listed below were put in place to address findings of the HRAs:

- Organised an office ergonomics day to improve our people's understanding on workstation design, adequate positioning of equipment and posture management. Discussions were also held with suppliers to improve the design of office equipment.
- Pursued chemical exposure monitoring exercises at several operating units in Malaysia during routine and non-routine activities such as plant turnaround. Quantitative risk estimates resulted in the development of specific technical standards on chronic exposures such as mercury, benzene and asbestos. We are working towards achieving an asbestos risk-free workplace by 2015.
- Introduced a low noise policy for new projects and revised noise exposure limits from 90 to 85 decibel (A), in line with internationally accepted best practices. This resulted in changes to the design and engineering of facilities as well as noise equipment for meeting the revised requirements.

Fitness to Work

PETRONAS uses a systematic approach for planning, implementing and monitoring our employees' physical as well as mental fitness, which is assessed against one's job responsibilities, including work environment. In FY2013, we continued to ensure our Emergency Response Team (ERT) comprising field operators as well as identified staff across all businesses were fit to effectively address safety and occupational health emergencies at the workplace.

Management of Fatigue

We scrutinise day-to-day operations and issues reported for identifying potential causes of fatigue, with specific corrective plans developed by operating units, respectively. In FY2013, we also expanded the reach of our fatigue management programmes for employees and contractors at non-process facilities across PETRONAS, with training sessions led by the Group HSE Division.





LET'S TALK Optimist

We are Friends who Offer
Personal Help Through
Intense and Meaningful
Interchange, built on
Support and Trust

Professional and Confidential

Management of Non-Communicable Diseases

We emphasised on addressing behavioral risk factors associated with substance misuse, physical inactivity, as well as stress and lifestyle management. In the period under review, we promoted awareness on mental wellbeing through stress management workshops which were held at operational and non-operational facilities in Malaysia as well as internationally. Employees were also advised to seek services offered by PETRONAS' in-house counselling services (OPTIMIST), if required. In addition, a psychosocial motivation innervation programme was held for the Garraf project team members in Iraq. The session deliberated on approaches for managing stress arising in challenging working environment. In Malaysia, our subsidiary PETRONAS Dagangan Berhad organised stress assessment initiatives for its employees serving in varying regions across Malaysia.



Community Health

PETRONAS pursues programmes to inculcate awareness on prevention of diseases among local community members, including students, in Malaysia and internationally. Our efforts range from health awareness to education camps and screenings, some of which are carried out in collaboration with relevant associations as well as government agencies.

In FY2013, PETRONAS held the First Aider in Every Home (FAiEH) programme to elevate the health management skills of local community members. The jointly organised effort intended to produce a minimum of one (1) first aider in families residing in proximity to selected PETRONAS operational sites within Malaysia. Primarily, FAiEH equipped local community members with knowledge on basic first aid skills. Some of the areas covered included treating injuries such as wounds, bleeding, fractures and burns, as well as performing cardio pulmonary resuscitation (CPR).

In Myanmar, we equipped two (2) mobile units owned by the Emergency Ambulance Foundation with upgraded medical equipment such as automated external defibrillator and emergency portable ventilator. Six (6) selected doctors from the foundation were also sent to Singapore for a period of six (6) months to enhance their capabilities in emergency medical response. In addition, 13 selected schools, in the vicinity of our pipeline operating area in Kanbauk, were equipped with improved sanitation system and fly proof toilets, among others.



PRODUCT STEWARDSHIP

PETRONAS adopts a holistic approach to manage HSE impacts across the various phases of our product's lifecycle. This entails enhancing internal practices and processes for compliance with Malaysian as well as internationally accepted regulatory requirements on sound chemical management. Concurrently, research and development activities are ongoing to constantly upgrade the quality of our petrochemical products.

Product Risk Assessment

In FY2013, we conducted preliminary product risk assessments to identify high risk products within our chemicals portfolio. This exercise, involving all polymers and chemical products, enabled us to identify as well as prioritise several product offerings for a more comprehensive product risk assessment scheduled in 2014. This also supports the Responsible Care® voluntary initiative which aims to drive continual improvement in HSE management of chemical products through effective risk management. A key improvement in the period under review was the implementation of a requirement mandating all new customers and distributors of chemical products to undergo a Product Stewardship Baseline Assessment.

Product Safety

We further reviewed and upgraded our Safety Data Sheet (SDS) for products and waste, in line with the Globally Harmonised System of Classification and Labelling of Chemicals (GHS). Involvement of subject matter experts throughout the SDS review process assured robustness of the information made available for our customers.

Moving forward, we are working towards developing a systematic SDS database to increase efficiency in data capturing, communication and record keeping.

Product Regulatory Compliance

In FY2013, PETRONAS registered our Ethylene (C_2) under the European Union's (EU) Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). PETRONAS' other products that have been previously registered under REACH are Monethylene Glycol (MEG) and Diethylene Glycol (DEG).

In upholding greater transparency, we disclosed the mandated product information on Triethanolamine and Ucarsol, as required by the Strategic Trade Act 2010 and Chemical Weapons Convention. This involved making data available on sales volume, export and import permit, export control policy as well as procedures on internal compliance.

We are also making efforts to ensure full adherence with Malaysia's Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013, or known as CLASS Regulations 2013, which will take effect in 2015. The enactment of the more stringent regulations, enforced in late-FY2013, replaced the Occupational Safety and Health (Classification, Packaging and Labeling of Hazardous Chemical) Regulations 1997.

External Certification

We obtained Halal recognition, a voluntary endorsement, for the chemical products; Glycol and Derivatives in FY2013. Our plastic resin used in the food and consumer industries has also received a similar certification.

Product Communication

We held sessions on hazard communication with our employees and customers, in Malaysia and internationally, to address concerns on the use of Environmentally Hazardous Substance, particularly in plastics.

We also engaged with marketing suppliers in Philippines and Thailand, covering topics such as chemical safety handling guidelines as well as product safety procedures.

Ongoing Capability Development

We are consistently enhancing internal capabilities in areas such as product life cycle analysis and risk assessment for managing impacts associated to our wide range of chemical offerings.

In FY2013, we also offered industrial training opportunities to selected university students in the niche discipline of product stewardship.

Environmental Stewardship

A large offshore oil platform with yellow structural elements and multiple levels of piping, situated in the ocean. The sun is low on the horizon to the left, creating a bright glow and reflecting on the water's surface. The sky is a mix of blue and orange from the sunset.

PETRONAS takes proactive steps towards protecting the environment and using natural resources more efficiently. We plan, design, construct and operate our facilities with the aim to continually reduce carbon footprint through better operational excellence. This includes striving to improve management of impacts on the ecosystem. Concurrently, we are strengthening our systems and processes to prevent spills as well as minimise waste.

Our Focus:

- Climate Change
- Water Management
- Spills
- Waste Minimisation

CLIMATE CHANGE

Energy demand is expected to rise in the coming years, with carbon emission likely to increase in tandem. As divergence towards a lower carbon economy receives global interest, affordability, availability and accessibility are among the key considerations influencing this shift. PETRONAS is committed to lower environmental footprint across our global operations, while working to provide reliable supply of energy. Guiding us are internal principles such as the PETRONAS Health, Safety and Environment (HSE) Management System and Carbon Commitments to lower greenhouse gas (GHG) emissions as well as improve energy efficiency in the coming years.



PETRONAS' Carbon Commitments

The following Carbon Commitments were rolled out in FY2013 for Groupwide implementation:

- Zero continuous venting and flaring to be incorporated in the design of new facilities by 2013.
- Zero continuous venting for all existing assets with more than 20 years remaining life for upstream operations by 2017.
- Reduce flaring for all facilities where operationally and economically feasible.
- All Gas and Power and Downstream assets to meet and sustain design or best achieved Energy Index by 2017.

Regular engagement sessions were conducted to create awareness among staff, citing the expectations of all businesses in drafting relevant strategies, systems and processes for achieving the Group's aspirations by 2017. Training sessions are ongoing to build capability and capacity in the discipline of carbon management.

While supporting our business growth, the roll-out of PETRONAS' Carbon Commitments in Malaysia will also contribute towards realising the country's target to reduce GHG intensity (tonnes of carbon dioxide equivalent (CO₂e) per Gross Domestic Product) by 40 per cent by 2020, against the baseline level of 2005.

GHG Performance

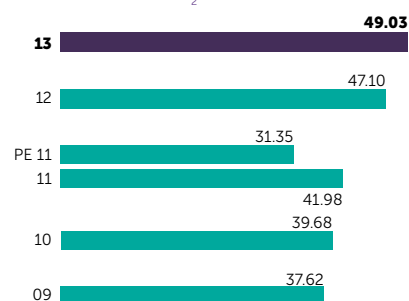
PETRONAS' carbon footprint for Malaysian operations stood at 49.03 million tonnes of CO₂e in FY2013, citing a four percent (4%) rise from the level recorded in FY2012, primarily, due to increased oil and gas production in the Exploration and Production (E&P) business.

Internationally, total emissions from PETRONAS Carigali Operated blocks (COBs) in Myanmar, Mauritania, Turkmenistan and Vietnam stood at 3.11 million tonnes of CO₂e.

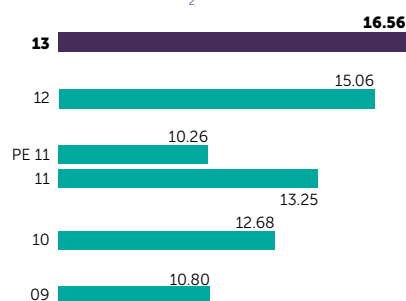
Moving forward, the realisation of PETRONAS' Carbon Commitments will be fundamental to gradually improve the Company's overall GHG emissions over the medium to long term.

MALAYSIAN OPERATIONS

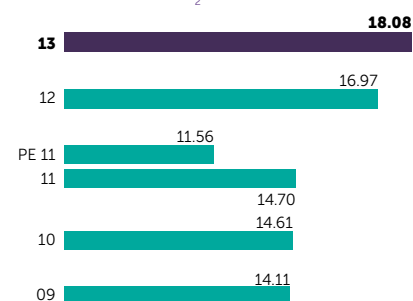
PETRONAS Total GHG Emissions
million tonnes of CO₂e



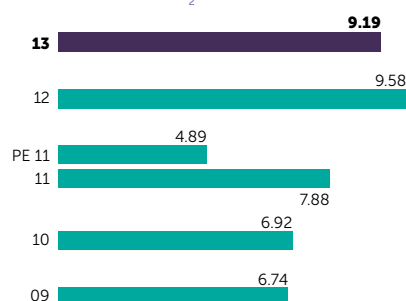
E&P Total GHG Emissions
million tonnes of CO₂e



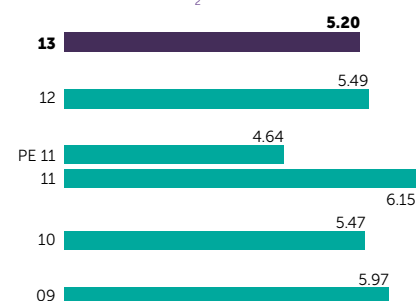
Gas & Power Total GHG Emissions
million tonnes of CO₂e



Downstream Total GHG Emissions
million tonnes of CO₂e



MISC Total GHG Emissions
million tonnes of CO₂e



* Covers refining and petrochemicals business

Notes:

1. PETRONAS selected FY2012 as the base year following the change from financial year to calendar year which was effective in FY2012.
2. PE2011 covers a period of nine (9) months from 1 April 2011 to 31 December 2011. Whereas, 2011 covers a period of 12 months from 1 April 2010 to 31 March 2011.
3. For the Downstream Business, FY2012 was adjusted from 8.05 million tonnes of CO₂e to 9.58 million tonnes of CO₂e due to ongoing efforts to achieve higher accuracy in GHG data accounting. Data prior to FY2012 was not adjusted as PETRONAS has set FY2012 as the base year. Retail and international businesses were excluded from the GHG emissions calculations from FY2009 to FY2013.
4. MISC's GHG figures were revised from FY2009 as it had adopted industry specific emission factors from International Maritime Organisation to improve data robustness. FY2012 was adjusted from 3.92 million tonnes of CO₂e to 5.49 million tonnes of CO₂e.

GHG Management in PETRONAS

We have and will continue to strive for higher asset reliability as well as cost efficiency at our process facilities by implementing the integrated Plant Operations Capability System (iPOCS), among others.

In addition, PETRONAS' E&P business made the following enhancements to internal systems as well as processes for fortifying governance on climate change practices and mitigation activities:

- Integrated carbon considerations in project decision making as well as risk and footprint management.
- Introduced guidelines and clearer work instructions for upstream operations in Malaysia.
- Included zero continuous flaring as well as venting target into the revised PETRONAS Procedures and Guidelines for Upstream Activities.

An increase recorded in the E&P business' GHG emissions in FY2013, compared to FY2012, was negated by approximately 0.8 million tonnes of CO₂e reductions having:

- Converted vent to flare at a platform in Sarawak, East Malaysia.
- Improved operational excellence (OE) practices at a number of oil fields in Malaysia, which enhanced compressor performance and reduced equipment breakdown.

Our Gas and Power (G&P) Business recorded improvement in Plant Thermal Efficiency through ongoing efforts on sustenance of flare reduction and recovery. Energy saving measures at the PETRONAS LNG Complex's selected trains in Bintulu, Sarawak, Malaysia enabled total fuel gas reductions worth RM39.21 million. This lowered total GHG emissions by 173.49 Ktonne of CO₂e.

Works for operationalising a Flare Gas Recovery Unit Project at a selected Gas Processing Plant in Peninsular Malaysia are currently ongoing.

Upskilling Capabilities in Carbon Management

Internationally, PETRONAS is a member of IPIECA's Climate Change Working Group and locally, we continuously support the Malaysian government agencies' initiatives on carbon management through feedback shared during dialogue sessions. This involved providing input for the development of Malaysia's carbon emission strategies and proposed measurement technique. Furthermore, we participated in the launch of Malaysia's National Corporate GHG Reporting Programme (also known as MYCarbon) intended to encourage a more robust and streamlined carbon accounting as well as reporting approach for measuring the country's progress in meeting its emissions reduction target.

Solar IPP Plant

PETRONAS continued exploring the feasibility of renewable energy with the commissioning of a Solar Independent Power Producer (IPP) project in Gebeng, Kuantan, Malaysia. The Solar IPP project which came on-stream in late FY2013 uses photovoltaic (PV) technology to convert solar energy into electricity. The capacity of the solar power plant, built and operated by PETRONAS, is 10 megawatt peak (MWp). It is capable of generating energy capacity of up to 12 gigawatt hour (GWh) annually, which is sufficient to run up to 4,500 households and reduces emissions by approximately 8,000 tonnes of CO₂ equivalent per year. Power generated from the renewable resource is connected to the national power grid and sold as a cleaner source of energy for domestic use. To-date, this joint venture project marks PETRONAS' largest renewable energy undertaking following the Solar PV Demonstration Project at the rooftops of Suria KLCC and PETRONAS' first-of-its-kind twin stations in Peninsular Malaysia, the estimated performance of which is indicated in the table below.

Total Amount of Energy Generated from Solar PV Installations in Malaysia
megawatt-hours

	Suria KLCC, PETRONAS Solaris Putra and PETRONAS Solaris Serdang	Total CO ₂ Reduction (tonnes)
FY13	860	510

WATER MANAGEMENT

Water availability and conservation concerns are gaining more importance, especially in regions facing scarcity of the natural resource. Some of the key issues include water demand, availability, quality and pollution. In the energy industry, fresh water is used extensively for extraction, processing and refining purposes. PETRONAS closely monitors water usage in our business activities. Concurrently, efforts are ongoing to reduce fresh water consumption via reuse and recycling efforts to lower potential economic as well as social risks.

PETRONAS' processing plants are designed with wastewater treatment systems which adopt industry best practices such as segregation at source and maximising reuse.

Fresh Water Withdrawal and Accounting

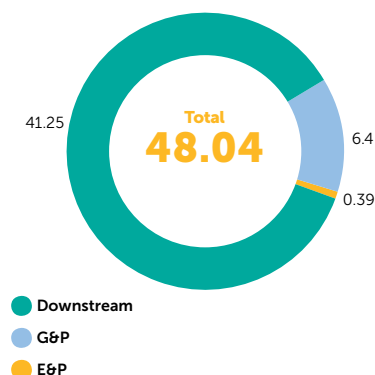
In FY2012, we revised our definition from fresh water consumption to fresh water withdrawal. Subsequently in FY2013, we standardised water calculation methodology across our various operating units in Malaysia and internationally. Internal verification exercises were conducted at selected sites in Malaysia to assess fresh water

withdrawal tracking, collection, and accounting processes. Water pinch analysis was also carried out at selected facilities for identifying potential areas to reduce water consumption and wastewater generation.

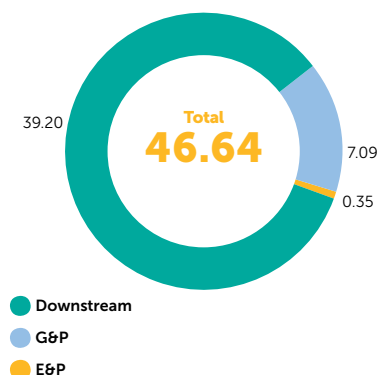
In FY2013, the total fresh water withdrawn by PETRONAS was approximately 46.64 million m³, covering domestic and international operations (COBs and our subsidiary, Engen Petroleum Ltd, in South Africa). The reduction in water withdrawal compared with FY2012 was due to the decommissioning of a petrochemical facility and lower plant utilisation in our downstream business.

Efforts are ongoing to optimise the use of fresh water at our facilities through the adoption of water 3R (Reduce, Reuse and Recycle) best practices, where feasible. For example, a reduction initiative was implemented at our utilities plant in Terengganu, previously known as Centralised Utilities Facilities Kertih, to improve the performance of its Main Reverse Osmosis (MRO) and Brine Reverse Osmosis (BRO) systems. The systems' recovery rate of up to 80% reduced water losses was equivalent to approximately 75 to 100 cubic meters per hour.

Total Fresh Water Withdrawal by Business for FY2012
million cubic metres (m³) per year



Total Fresh Water Withdrawal by Business for FY2013
million cubic metres (m³) per year



Note: The FY2012 fresh water withdrawal baseline was adjusted to 48.04 million m³ following ongoing efforts to achieve higher accuracy in data accounting.

SPILLS

PETRONAS has clear requirements, programmes and controls to prevent, detect as well as contain oil and chemical spills. In FY2013, there were a total of nine (9) spills to soil or water that were over seven (7) barrels; a notable decrease from the 19 spills in FY2012. Eight (8) out of the nine (9) spills were recorded at our international operational sites. The estimated total volume spilled to soil or water was about 1,122 barrels in FY2013.

Lessons learnt from pollution incidents are incorporated in the Company's technical standards and guidelines to prevent as well as reduce spills. In Malaysia, PETRONAS has undertaken oil spill response risk and capability assessment, including scenario planning exercises involving quantitative risk analysis. In the period under review, we completed oil spill response capability assessments for a total of 21 ports, terminals and depots in Malaysia to improve overall operational integrity.

In FY2013, we continued to upskill our personnel's capabilities in oil spill prevention, control and response. Training sessions were held for enhancing response management practices to effectively and efficiently minimise impacts arising from the release of hydrocarbons.

Note: One (1) barrel is equivalent to 159 litres.

WASTE MINIMISATION

PETRONAS is continually improving our efforts in waste reduction, recycling and recovery through strict compliance with regulations as well as internal procedures. Simultaneously, we seek to minimise waste generation at the front-end design and engineering stages.

Managing Waste

The success of our waste minimisation efforts is reflected in PETRONAS Chemicals Olefins, Glycols and Derivatives Sdn Bhd's (PCOGD) facility in Terengganu, Malaysia. PCOGD launched its waste minimisation programme in 2010 which was centered on:

- (i) Recovery/reclamation at licensed waste recovery facility; and
- (ii) Developing by-products which meet customer's specifications.

PCOGD's efforts in waste minimisation continued through FY2013 and resulted in significant reduction of total hazardous waste generated such as spent catalyst being sent to recovery/reclamation facilities.



Tan Jen Sze, 49, who grew up in a home partly built over the Kertih River: *"My family was not rich. Our livelihood depended on the natural resources available here. Public awareness and education about the importance of mangroves were not widespread then. We just need to survive and with time and development, we moved on to other businesses. Laws and regulations were also not as stringent as it is today. But now, with the environmental education that I have, I know how important it is to save the wetlands. Personally, my experience in ecoCare has been humbling, broadening, challenging and easily the most incredible environmental experience I have ever had. I have had my hands dirty, yet gotten a sense of fulfilment. Our life used to be about making a living using what we had (the mangrove trees). So, now we give a part of our life back to see it flourish again."*

BIODIVERSITY

PETRONAS recognises and promotes the importance of conserving biodiversity. We partner with others, where feasible, on efforts that protect as well as create awareness pertaining to the importance of biodiversity management in areas of our operations for benefiting present and future generations.

ecoCare Environmental Education Centre

PETRONAS Chemicals Group Berhad (PCG) has been actively raising awareness on mangrove conservation through the ecoCare programme since 2005. Since its establishment, more than 7,000 mangroves seedlings have been planted along degraded patches thereby rehabilitating an area of 11,000 square meters along the Kertih River. In FY2013, the ecoCare effort received a further boost with the launch of an Environmental Education Centre (EEC) in Kertih, Terengganu, Malaysia. Established in collaboration with the Malaysian Nature Society (MNS), this centre is the first-of-its-kind in the East Coast of Peninsular Malaysia which educates the public on mangrove protection and conservation.

The unique appeal of EEC rests in its capacity to cater to the local community, tourists and students as an integrated environmental education avenue that showcases the distinctive coastal terrain as well as biodiversity of Kertih River.

Biodiversity, Environmental and Conservation (BEACON) Project

PETRONAS' subsidiary, Malaysia LNG Group of Companies (MLNG), collaborated with the Sarawak Forestry Corp Sdn Bhd to launch a signature programme, BEACON Project, for conserving and regenerating marine biodiversity located offshore Bintulu in Sarawak, Malaysia. The BEACON Project, which consists two (2) components, will span over a period of seven (7) years, starting FY2013:

- Deployment of 1,500 artificial reef balls off the coast of Similajau National Park over a period of three (3) years starting mid-FY2013, entailing investments of about RM4.6 million.
- Conservation, Education, Promotion and Awareness (CEPA) programmes.

Under the CEPA Programme, aerial and boat surveys were conducted in FY2013 to obtain baseline data for formulating relevant cetacean (marine mammal) conservation and management strategies.

Other initiatives included the 'Friends of Nature' environmental camp which was conducted to foster greater appreciation for nature and its offerings among school children. In addition, trainings were conducted to certify MLNG's staff who had volunteered as divers for overseeing the deployment and monitoring of reef balls.



Reliable Water Supply

The Reforestation Campaign in Myanmar was a joint effort undertaken by PETRONAS to maintain water levels of the lake in Hlawga National Park. This lake serves as the primary source of water for Yangon City's population of approximately seven (7) million people. Ensuring the availability of adequate water supply is critical to meet local communities' needs, particularly during the summer. PETRONAS also planted 4,350 tree seedlings over 10 acres of land around the Hlawga Lake's water shed area to function as a natural habitat for protecting endangered species.

Furthermore, we installed two (2) reverse osmosis water stations to provide clean water access to approximately 5000 local community members from the villages; Al-Ibrahim and Al-Dehla located in Garraf, Iraq, including several schools nearby.



Society



PETRONAS' efforts in balancing business and societal value creation since 1974 bears testament to our long standing commitment for generating responsible growth. We invest in initiatives which support nation building and result in lasting long term benefits for our various stakeholders. People are at the heart of our business. The continuous development of a progressive and diverse workforce is yet another area of importance through which we offer distinctiveness in thought, experience as well as knowledge.

Our Focus:

- Social Performance
- Community Investments
- Talent Management
- Capability Development and Local Content

SOCIAL PERFORMANCE

Social Performance (SP) is a key consideration in business and project decision making. Benchmarked against international standards and best practices, SP in PETRONAS is defined as, managing impacts arising from areas of business while contributing to the society in a responsible manner. In a nutshell, we aspire for our business presence to positively benefit local communities by conforming with the unique social standards in countries of operations.

PETRONAS SP Framework

In FY2013, the PETRONAS SP Framework was developed to focus on five (5) key areas, namely; Health, Safety, Environment (HSE), Socio-economic and cultural, as well as Security. The Framework is a structured approach offering greater clarity and guidance to PETRONAS for conducting our business activities as a socially-responsible corporate citizen. Moving forward, we strive to institutionalise SP considerations in all business decision making. This includes elevating the current level of our SP practices aiming for continual improvements, while spearheading Groupwide capability building efforts in this discipline.

Stakeholder Engagements

Stakeholder inclusivity is an integral aspect for successful project execution. PETRONAS encourages dialogues with affected and interested parties to discuss concerns and expectations, as well as manage issues in an open and consultative manner. For the proposed Pacific NorthWest LNG (PNW LNG) development in British Columbia, Canada, four (4) open houses and numerous engagements were held to provide stakeholders with opportunities to engage with the Company's personnel. Consistent and transparent consultation with local community members enabled PNW LNG to effectively address stakeholders' priorities.

Elevating SP Practices in PETRONAS

PETRONAS established a Social Performance Working Group (SPWG) to develop institutional capability and enable sharing of expertise across the Company. The SPWG is represented by personnel from selected corporate units and businesses to ensure streamlined understanding of SP practices across the Group. Initiatives are ongoing to enhance our existing systems, processes and structure to develop desired leadership in SP. Presently, PETRONAS is an active member of the IPIECA's Social Responsibility Working Group (SRWG) as well as shares insights and experiences in contributing towards the development of SP in the wider context of the energy industry. In the period under review, PETRONAS hosted the SRWG's meeting in Kuala Lumpur, Malaysia.



COMMUNITY INVESTMENTS

Empowering individuals with the right knowledge and skills is fundamental for realising one's potential. PETRONAS views education sponsorships and capability development as an effective enabler for people to leverage on their inherent strengths. Parallel to this, we pursue strategic social, environmental and community outreach programmes in Malaysia as well as internationally aiming to promote lasting socioeconomic benefits.

PETRONAS also promotes the concept of volunteerism among our workforce by encouraging staff to lead social and capability building efforts. This is demonstrated through the inclusion of a community outreach module in PETRONAS' induction, leadership and management programmes, among others.

Program Sentuhan Ilmu PETRONAS (PSIP)

PETRONAS introduced the PSIP in FY2013 by integrating the PETRONAS Minor Scholarship Programme and Program Bakti Pendidikan PETRONAS (PBPP) for more impactful results. The PSIP's reach was also enhanced to include students from Lower Primary up to Higher Secondary (ages 8-17), prioritising underprivileged students who live in the vicinity of our operational sites throughout Malaysia.

PSIP provided monetary and non-monetary assistance such as educational support programmes. PETRONAS staff collectively led the capability development activities held at the participating schools nationwide. Selected teachers were also appointed at the adopted schools to provide free tuitions in subjects such as Science, Mathematics and English. More than 34,000 individuals in Malaysia have benefited from PSIP, with most of them recording commendable improvement in their overall academic performance programme, as at 31 December 2013:

- Secondary: Over 14,000 students since 1975.
- Primary: Over 20,000 students since 2002.



"The programme provides good opportunity for our children to gain confidence. The field trips and camps offered through the PSIP programme allow our students to mix with individuals from other schools, discover many new things and most important of all, they become more confident."

- Yeoh Phaik Chin, PSIP Teacher

PETRONAS Education Sponsorship Programme (PESP)

The PESP, our long standing major scholarship programme, demonstrates PETRONAS' continuous commitment in developing human capital by providing tertiary education sponsorships opportunities to deserving students from Malaysia and host countries. In FY2013, PETRONAS awarded scholarships to a total of 329 students to continue their undergraduate studies in established local and foreign universities. Out of the 329 recipients, 134 pursued overseas degree programmes, while the remaining 195 were enrolled in Malaysian Universities such as the *Universiti Teknologi PETRONAS* (UTP) at Bandar Seri Iskandar in Tronoh, Perak. Since its inception in 1975, over 20,000 Malaysians have benefited from the PESP, as at 31 December 2013.

"When I was in high school, when I was asked: what do you want to be when you grow up? It was natural for me to say 'mechanical engineer'. In my eyes, besides giving me wider career options, a mechanical engineer is able to positively contribute to the community at large; which is a life-long dream."

**- Prasad Madhavan,
Mechanical Engineering, UTP**



Sentuhan Harapan

PETRONAS' *Program Sentuhan Harapan* is a two-year long poverty eradication programme which provides essential food aid to families with a household income of less than RM1,000 per month or RM250 per capita. This effort is carried out throughout Malaysia and also involves local communities residing around our areas of operations. As at 31 December 2013, this programme had benefited 13,500 households nationwide since its launch in 2010, surpassing the initial target of 5,000. In the period under review, the programme was enhanced to promote knowledge development as means for generating sustainable income. This enabled 1,179 families to receive skills training and mentoring in areas such as entrepreneurship, financial literacy as well as health management for a period of three (3) months.



Volunteerism 360

In FY2013, PETRONAS strengthened collaborations with our Young Professionals' Clubs, among others, for extending the reach of the Company's signature effort, *Program Sentuhan Kasih* to encourage the participation of more staff in social activities held during key festivals in Malaysia. For example, more than 500 individuals collectively spread goodwill and cheer, including food aid as well as essential home appliances during the *Eid* edition of this programme, which was held across varying locations in Malaysia.

Embodying the spirit of volunteerism, the Association of Employees' Spouses and Female Employees of PETRONAS (PETRONITA) also complements PETRONAS' efforts by spearheading efforts in the areas of education, sports, social and welfare. In FY2013, PETRONITA raised over RM0.6 million for undertaking efforts such as supporting children suffering from Cleft Lip and Palate facial deformity, including upgrading orphanages as well as old folks' homes.

Other highlights in FY2013 included establishment of the PETRONITA Activity Centre (PACE) in Selangor, Malaysia for conducting free tuition classes for children residing at the Lembah Subang low cost accommodation. Another notable initiative included PETRONITA's support towards a Breast Cancer Campaign which involved illumination of the PETRONAS Twin Towers in pink.

Disaster Relief

In December 2013, several towns and villages in Pahang and Terengganu, located within Peninsular Malaysia, were inundated due to severe flooding. In response to this, PETRONAS through collaborative efforts provided donations in kind, namely, Liquefied Petroleum Gas cylinders as well as basic sanitation and food items to selected flood relief centres in the East Coast Region. In addition, our staff volunteers cleaned a school in Pasir Gajah at Kemaman, Terengganu which was badly hit by the floods. Internationally, we contributed food aid to natural disaster victims in Gresik, East Java, Indonesia.

International Corporate Social Investment (CSI)

PETRONAS' social investment activities outside Malaysia encompass refurbishment works, provision of educational scholarships as well as school supplies, including programmes targeted at improving health and safety of local community members. In FY2013, Egypt, Indonesia, Mauritania, Myanmar, the Republic of South Sudan and Turkmenistan were among the countries where we undertook these programmes. These efforts varied from country to country, in line with the needs of individuals in the different geographical locations.

In Canada, we embarked on efforts to protect the diverse marine life as well as habitats in British Columbia following our discussions with the First Nations, local community members and leaders. We worked alongside the marine community and regulators to determine local best practices for operating Liquefied Natural Gas carriers in Prince Rupert, namely, focusing on safety precautions and navigational aids. In addition, we participated in Transport Canada's shipping and navigational risk assessment review, with ongoing environmental surveys as well as studies. Through these efforts, we aim to obtain a comprehensive understanding of the local marine environment and identify potentially sensitive areas.



TALENT MANAGEMENT

Reliable human capital is essential for long term business viability. PETRONAS adopts multiple strategies to develop our staff on the principles of competency, merit and performance. Our talent management model promotes the concept of equality, diversity and inclusion to encourage professional career development. Superior performance is rewarded via competitive remuneration packages that are benchmarked against industry best practices.

Guiding our actions are human resources policies which uphold labour rights and non-discrimination, observing laws and regulations of countries where we operate. We respect employees' right for freedom of association and choice of representative to engage in collective bargaining, consistent with applicable laws. In the period under review, PETRONAS renewed our Collective Agreement (CA) for the period 2013-2015 with the *Kesatuan Kakitangan Petroliaam Nasional Berhad* (KAPENAS), incorporating revisions to the employment terms and conditions.

Developing Leaders

We equip our personnel with the rightful capabilities and skills to build, retain as well as grow a competitive pool of leaders for undertaking future expansion of the energy industry. In FY2013, PETRONAS' Leadership Development Programme involved improving the existing Leadership Development Framework by emphasising on:

- Holistic growth of top talent.
- Enhancing leadership philosophy and competency model.
- Strengthening capability building efforts for leadership development.
- Fortifying effectiveness of Leadership Development interventions.

We also adopted the Leaders Develop Leaders (LDL) methodology to encourage sharing of personal and professional experiences for resolving business challenges.



Collaborative Learning Series

Internationally, a learning series, 'Ownership in Me, Communication in Action and Achieving High Performing Team', was conducted by the PETRONAS Leadership Centre (PLC) for our non-executive staff serving at PETRONAS' office in Mauritania. The strategic sessions held, in line with the 'Mauritanisation Programme', focused on the enhancement of performance and delivery through improved ownership as well as accountability.

Diversity and Mobility

PETRONAS' Global Talent Strategy aims to cultivate and nurture a deeper passion for performance excellence, innovation as well as agility among our diverse workforce. This is to produce a pipeline of resilient and talented personnel who share the same aspirations, values as well as inspirations as the Company. In view of this, we aligned our people management philosophies, HR infrastructures and programmes by taking a three-pronged approach:

- **Right Talent** – ensuring availability of capable individuals to drive global growth.
- **Right Environment** – creating a functional organisation which promotes diversity and inclusion.
- **Right Leaders** – advancing performance excellence to achieve superior results.

Remuneration and Promotion Policy

PETRONAS' fair salary structure rewards employees based on job dimension, performance and experience. Employees are assured of differentiated remuneration based on job performance and delivery in line with the principle of meritocracy.

PETRONAS' promotion policy is premised on a New Grading Structure (NGS) to prioritise performance and delivery. The NGS will reinforce the tenets of differentiation, following which individuals and positions will be remunerated based on accountability, capability as well as contributions.





International Human Capital Summit 2013

The need for highly-skilled manpower intensifies as the oil and gas industry grapples with a growing demand for energy, amidst the changing business landscape. PETRONAS held the inaugural International Human Capital Summit in FY2013 (PIHCS 2013) to strategically address the issue of talent crunch by emphasising on industry-wide collaboration. The event featured discussions by renowned speakers on topics such as dual career management, talent diversity, social capital, women in the workforce as well as innovation, citing that talent pinching is an expensive and short-term option. PIHCS 2013 represented the inaugural HR conference championed by PETRONAS for the international oil and gas industry in South East Asia.

Workforce Engagements

We conducted the PETRONAS Organisational Culture Survey (POCS) in FY2013 to evaluate our progress in realising a High Performing Culture. A total of 44,228 or 71% of our employees participated in the survey which measured staff's understanding of PETRONAS' organisational culture. The survey results will be deliberated in FY2014, with relevant interventions to follow suit.

Other platforms to facilitate staff engagement was the annual President townhall session where top management personnel collectively engaged with employees from across the Group. Business and operational growth, future direction as well as staff concerns were among items discussed at the session. Business-specific gatherings were subsequently hosted to further deliberate on topics ranging from operational to performance indicators and manpower strategies.

CAPABILITY DEVELOPMENT AND LOCAL CONTENT

PETRONAS' human capital development framework is based on the principle of continuous learning to equip our people with strong business acumen, leadership and management skills. We nurture a competent workforce by providing staff with strategic learning, leadership and education opportunities to hone distinctive functional, including technical capabilities in Malaysia as well as internationally. This involves formal in-house and external trainings, regular mentoring as well as coaching of employees.

Human capital is immeasurably important to PETRONAS, our partners and host governments. Sharing this mutual aspiration, we support local talent development efforts by building institutional capability to spur socioeconomic growth by providing employment opportunities, among others. This is also to hone a pool of empowered individuals for PETRONAS, our partners, host nations and communities where we operate.

Workforce Development

All PETRONAS' employees undergo annual performance assessments to ensure comprehensive staff development. The introduction of an Employee Performance Management (EPM) system further empowered staff to collectively participate in monitoring, tracking and planning their career growth. The EPM system encourages a more meaningful two-way communication to boost employees' job satisfaction and allows for better management of an individual's career path.

An Internal Employee Potential (EP) Assessment tool was also developed and implemented Groupwide to proactively identify employees' inherent strengths for the strategic development of leaders.

Staff Training

We offer enriching learning opportunities for our people through institutional pillars such as the PLC, *Institut Teknologi Petroleum PETRONAS (INSTEP)*, *Universiti Teknologi PETRONAS (UTP)* and *Akademi Laut Malaysia (ALAM)*. Where feasible, we partner with international universities and renowned multinationals for knowledge transfer in critical disciplines. This includes staff exchange and attachment opportunities to promote job enrichment, job rotation as well as on-the-job training.

In FY2013, significant investments were made in training programmes intended for our staff, external personnel and local community members. This was to develop the technical, managerial and leadership skills of our people. Where applicable, we were guided by structured internal programmes such as:

- Accelerated Capability Development (ACD) for junior technical executives
- Technical Professional Career Progression (TPCP) for technical professionals (TP)
- PETRONAS Competency Assessment System (PECAS)
- Technical Trade Specialist (TTS)

In the period under review, we obtained ISO 9001:2008 Quality Management System certification for the administration of selected programmes such as TPCP, ACD and TTS.

Local Content Development

PETRONAS offers internship, including on-the-job opportunities for citizens of host nations to develop local capability as well as capacity in the oil and gas industry. For example, we provided six (6) months industrial training placement for South Sudanese students from UTP as well as job attachments for selected individuals from the country's Ministry of Petroleum and Mining (MPM), covering a one (1) month stint at our operational sites located in the Republic of South Sudan and Malaysia.

In addition, more than 100 South Sudanese from the MPM, Nile Petroleum Corporation (NILEPET) and Joint Operating Companies had collectively benefitted from the technical as well as legal trainings organised by PETRONAS in Juba. Topics covered included Reservoir Management Surveillance, Petroleum Geology as well as several modules on Legal Regime Framework for the Upstream Petroleum Industry.

Legal practitioners from the MPM and NILEPET had also undergone on-the-job attachment for a period of one (1) month at PETRONAS and Joint Operating Companies' offices in the Republic of South Sudan.

Currently, UTP's Structured Students Industrial Internship programme has received recognition from Talent Corporation Malaysia (TalentCorp).

Technical Capability Building

Number of staff (To date)	No
Technical Authorities	163
Technical Trade Specialists	142
Technical Professionals	929

Local Talent

PETRONAS provides guidance in areas such as local procurement to ensure we hone a reliable supplier base who meets our rigorous business standards for quality.

A notable achievement in FY2013 was the Signing Ceremony of Agreed Terms and Conditions between PETRONAS Carigali Sdn Bhd and 27 of its major contractors. This signified an active effort to improve contract and contractor's management, especially the tender evaluation process over the next five (5) years. Moving forward, PETRONAS will ink similar agreements with more contractors in the upstream business.

Vocational Training in Sabah

The Kimanis Petroleum Training Centre (KTC) in Sabah, Malaysia, despite pending full completion, continues to equip the State's youths with necessary skills as well as knowledge to spur development of its domestic oil and gas industry. Thus far, three (3) batches of students have enrolled in a two-year Instrumentation certificate programme at the temporary campus in Membakut.

Contractor Engagements and Recognition

PETRONAS hosted several sharing sessions to enable two-way communication with our contractors. For example, in FY2013, PETRONAS Carigali Berhad (PCSB) conferred the annual Outstanding Vendor Award (OVA) to deserving contractors for their efforts in upholding good HSE performance. The award ceremony was also a platform for PCSB to address HSE related concerns and share E&P's business expectations by engaging its partner contractors. Aligning expectations as well as forging a mutually-beneficial business relationship with contractors would help to ensure the availability of third-party personnel with proven capacity and technical capability.

The OVA is a culmination of the Contractor Performance Evaluation exercise which focuses on performance and delivery, anchoring on the principles of HSE, reliability, responsiveness as well as respectability. The OVA comprises 10 categories based on HSE, work scope, best-in-country and global performance.



Awareness and Education on Science, Technology, Engineering as well as Mathematics

The Discover PETRONAS Centre at UTP was established to heighten interest among budding talents in UTP and other institutions to seek a career in the energy industry. This Centre provides insights on the oil and gas value chain, products developed as well as technologies deployed to elevate students' understanding of PETRONAS' integrated business operations.

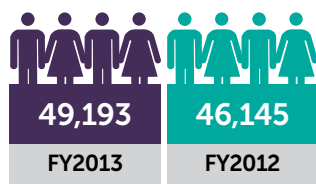
In developing visionary leaders to helm future growth of the energy industry, the Master of Business Administration with specialisation in Energy Management (MBA-EM) programme was also developed and offered at UTP. This programme comprises nine (9) business core modules and five (5) energy management specialisation modules. Some of key subjects encompass Energy Value Chain, Energy Management, Energy Technology and Innovation, Low Carbon Economy and Sustainability as well as Energy Regulation and Policies. The programme also incorporates modules on business research methodology and consultancy, including a capstone project.

PETRONAS has constructed an Integrated Oil and Gas Training Centre at INSTEP in Kuala Terengganu, Malaysia. The integrated plant comprises an Upstream-Downstream Training Plant and a Training Rig for drilling operations, among others. The first-of-its-kind centre in South East Asia intends to develop talented individuals for effectively addressing technicalities facing the energy sector through simulated real-world experience.

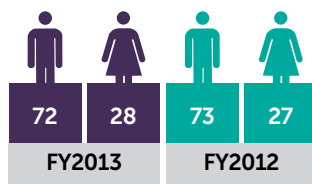


PETRONAS also provided support to selected technical institutions in Malaysia which equip local communities in areas of our operations with basic mechanical skills and capabilities. Our sponsorships were in the form of equipment and consumables to facilitate programmes such as welding, building maintenance and pipe fitting. As at 31 December 2013, more than 5,000 individuals have benefitted from this effort.

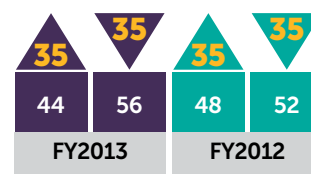
OUR WORKFORCE



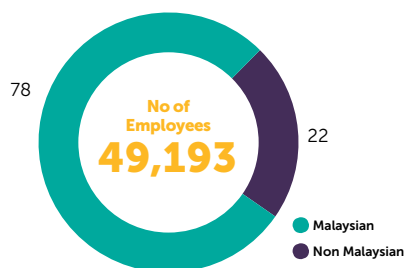
Total Number of Employees - Groupwide



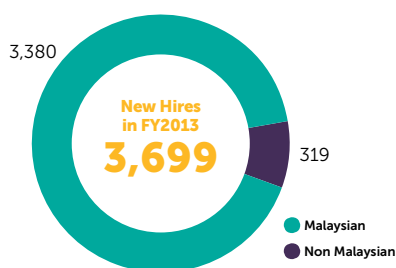
Gender Distribution - Groupwide (Percentage)



Employees Above and Below Age of 35 - Groupwide (Percentage)



Malaysian and Non Malaysian Employees - Groupwide (Percentage)



Permanent & Contract Hires for Core Businesses in Malaysia

Number of Staff Under Collective Bargaining in FY2013:

10,684

Percentage (%) of Malaysian & Host Country Nationals (HCN) in Selected Countries

Country	No of Employees	HCN (%)	Malaysians (%)	Other Nationalities (%)
Egypt	32	53.1	46.9	0.0
Indonesia	161	85.7	14.3	0.0
Malaysia	39,120	95.4	0.0	4.6
Myanmar	297	77.4	13.8	8.8
Sudan	133	14.3	80.5	5.3
Turkmenistan	617	73.1	21.2	5.7

HUMAN CAPITAL DEVELOPMENT

Scholarships Awarded

Year	No of Scholarships	International Universities (%)	Malaysian Universities (%)
FY12	318	25	75
FY13	329	41	59

Recruitment of PETRONAS Scholars

Year	No of Scholars	Recruited by PETRONAS (%)	Recruited by Others (%)
FY12	563	62.9	37.1
FY13	432	74.5	25.5

Awards & Recognitions

PETRONAS Group was recognised for its accomplishments and continuous pursuit of excellence with numerous awards and recognitions received in FY2013.



Prime Minister's Hibiscus Award FY2012/2013

Notable Achievement Award

- BASF PETRONAS Chemicals Sdn Bhd
- PETRONAS Carigali Sdn Bhd, Sabah Operations (SBO)
- PETRONAS Chemicals Derivatives Sdn Bhd
- PETRONAS Penapisan (Melaka) Sdn Bhd
- PETRONAS Penapisan (Terengganu) Sdn Bhd

Terengganu State Award

- PETRONAS Penapisan (Terengganu) Sdn Bhd

Certificate of Participation

- PETRONAS Carigali Sdn Bhd, Peninsular Malaysia Operations (PMO)
- PETRONAS Gas Berhad



Malaysia Institute Of Chemistry Laboratory Excellence Awards

Area of Testing

Aromatics – Benzene and p-Xylene

- PETRONAS Penapisan (Terengganu) Sdn Bhd

Catalyst

- PETRONAS Chemicals MTBE (M) Sdn Bhd/
Polypropylene (M) Sdn Bhd

Drinking Water, Formation Water, Sea Water

- PETRONAS Research Sdn Bhd

Ethylene

- PETRONAS Chemicals Group Centralised Laboratory Services

Environmental Samples

- PETRONAS Chemicals Methanol Sdn Bhd

Gas

- PETRONAS Chemicals Methanol Sdn Bhd
- PETRONAS Gas Berhad
- PETRONAS Gas Berhad Laboratory GPPA
- PETRONAS Gas Berhad Laboratory GPPB
- PETRONAS Penapisan (Terengganu) Sdn Bhd

Methanol

- PETRONAS Chemicals Methanol Sdn Bhd

MTBE and Propylene

- PETRONAS Chemicals MTBE (M) Sdn Bhd/
Polypropylene (M) Sdn Bhd

Natural Gas

- PETRONAS Research Sdn Bhd

Polyethylene

- PETRONAS Chemicals Group Centralised Laboratory Services

Polypropylene

- PETRONAS Chemicals MTBE (M) Sdn Bhd/
Polypropylene (M) Sdn Bhd

Petroleum

- PETRONAS Penapisan (Melaka) Sdn Bhd
- PETRONAS Penapisan (Terengganu) Sdn Bhd

Petroleum Products

- PETRONAS Penapisan (Terengganu) Sdn Bhd
- PETRONAS Research Sdn Bhd

Utilities (Water)

- PETRONAS Penapisan (Terengganu) Sdn Bhd

Water

- PETRONAS Chemicals MTBE (M) Sdn Bhd/
Polypropylene (M) Sdn Bhd
- PETRONAS Chemicals Group - Centralised Laboratory Services
- PETRONAS Gas Berhad
- PETRONAS Gas Berhad Laboratory GPPA
- PETRONAS Gas Berhad Laboratory GPPB
- PETRONAS Chemicals Methanol Sdn Bhd
- PETRONAS Penapisan (Melaka) Sdn Bhd
- PETRONAS Research Sdn Bhd

Wastewater

- PETRONAS Chemicals Group - Centralised Laboratory Services
- PETRONAS Gas Berhad
- PETRONAS Gas Berhad Laboratory GPPA
- PETRONAS Gas Berhad Laboratory GPPB
- PETRONAS Penapisan (Terengganu) Sdn Bhd
- PETRONAS Research Sdn Bhd



Chemical Industries Council of Malaysia (CICM) Responsible Care Awards

Corporate Awards for the Six Codes of Management Practices:

Category: Petrochemicals Gold

Community Awareness & Emergency Response Code

- PETRONAS Chemicals LDPE Sdn Bhd

Distribution Code

- PETRONAS Chemicals LDPE Sdn Bhd

Employee Health and Safety Code

- BP PETRONAS Acetyls Sdn Bhd

Pollution Prevention Code

- PETRONAS Chemicals LDPE Sdn Bhd

Process Safety Code

- PETRONAS Chemicals Fertiliser Kedah Sdn Bhd

Silver

Community Awareness & Emergency Response Code

- PETRONAS Chemicals Ethylene/Polyethylene Sdn Bhd

Distribution Code

- BASF PETRONAS Chemicals Sdn Bhd

Employee Health and Safety Code

- BASF PETRONAS Chemicals Sdn Bhd

Pollution Prevention Code

- PETRONAS Penapisan (Melaka) Sdn Bhd

Process Safety Code

- PETRONAS Chemicals LDPE Sdn Bhd

Merit

Community Awareness & Emergency Response Code

- PETRONAS Penapisan (Melaka) Sdn Bhd
- PETRONAS Chemicals Fertiliser Kedah Sdn Bhd

Distribution Code

- BP PETRONAS Acetyls Sdn Bhd

Employee Health and Safety Code

- PETRONAS Penapisan (Melaka) Sdn Bhd
- PETRONAS Chemicals Fertiliser Kedah Sdn Bhd
- PETRONAS Penapisan (Terengganu) Sdn Bhd
- PETRONAS Chemicals Derivatives Sdn Bhd

Pollution Prevention Code

- PETRONAS Chemicals Ethylene/Polyethylene Sdn Bhd
- PETRONAS Chemicals Fertiliser Kedah Sdn Bhd
- PETRONAS Penapisan (Terengganu) Sdn Bhd

Process Safety Code

- PETRONAS Penapisan (Melaka) Sdn Bhd
- PETRONAS Penapisan (Terengganu) Sdn Bhd



Malaysian Society for Occupational Safety and Health (MSOSH) Awards

Result 2012

Grand Award

- PETRONAS Gas Berhad - Centralised Utility Facilities (CUF) Kertih
- PETRONAS Carigali Sdn Bhd, Peninsular Malaysia Operations (PMO) - Onshore Gas Terminal (OGT)

Gold Merit

- BP PETRONAS Acetyls Sdn Bhd
- PETRONAS Carigali Sdn Bhd, Sabah Operations (SBO) - Sabah Gas Terminal (SBGAST)
- PETRONAS Chemicals Ammonia Sdn Bhd
- PETRONAS Gas Berhad - Pasir Gudang Regional Office
- PETRONAS Gas Berhad - Pusat Operasi Penyaluran Gas & Segamat Regional Office
- PETRONAS Gas Berhad - Export Terminal
- PETRONAS Gas Berhad GPPB

Gold Class I

- BASF PETRONAS Chemicals Sdn Bhd - OXO Complex
- BASF PETRONAS Chemicals Sdn Bhd - Port Tank Farm
- PETRONAS Carigali Sdn Bhd, Sabah Operations (SBO) - Labuan Gas Terminal (LGAST)

- PETRONAS Carigali Sdn Bhd, Peninsular Malaysia Operations (PMO) - Terengganu Crude Oil Terminal (TCOT)
- PETRONAS Carigali Sdn Bhd, Terminal Gas Dan Cecair (OSC)
- PETRONAS Chemicals MTBE (M) Sdn Bhd
- PETRONAS Gas Berhad - Gurun Regional Office
- PETRONAS Malaysia LNG Sdn Bhd (MLNG)

Gold Class II

- PETRONAS Gas Berhad - Technical & Facilities Development Division

Result 2013

Gold Class 1 Award

- PETRONAS Carigali Sdn Bhd, Sabah Operations (SBO)

Gold Merit Award

- PETRONAS Carigali Sdn Bhd, Sabah Operations (SBO)

ROSPA Award

PETRONAS Chemicals Ammonia Sdn Bhd was Highly Commended in the Chemical Industry Sector in 2013

ICChemE Awards 2013

- Young Chemical Engineer of the Year
- Sustainable Technology
- Innovator of the Year

Excellence Awards for Occupational Safety and Health (OSH) 2013

PETRONAS Malaysia LNG Sdn Bhd (MLNG) for the Mentor-Mentee Award category

PETRONAS Receives Commendation for Environmental Efforts

PETRONAS was bestowed with an inaugural award by the Malaysian Department of Environment (DOE) for its involvement in the following projects:

- Eco Care
- Imbak Canyon Conservation Area (ICCA)
- KLCC Park
- Putrajaya Wetlands

Brand Finance Global 500

PETRONAS was ranked 145th in the global top 500 most valuable brands in 2013.

ENGEN Corporate Awards

- Mail & Guardian newspaper's Top Company Reputation Index
- Sunday Times Top Brands survey
- Sunday Times Generation Next Awards
- Standard Bank People's Wheels Awards

Hay Group

PETRONAS is ranked fifth in Asia's Best Companies for Leadership

Malaysia's Most Popular Graduate Employer

Malaysia's Most Popular Graduate Employer in Energy/Oil & Gas/Utilities for two consecutive years

SL1M Programme

PETRONAS is recognised as *Syarikat Contoh* for participation in SL1M Programme (*Program Skim Latihan 1 Malaysia*); via SL1M-GEES PETRONAS or Graduate Employability Enhancement Scheme

Our Approach To Reporting

Our sustainability reporting is guided by the International Petroleum Industry Environmental Conservation Association/American Petroleum Institute (IPIECA/API) Oil and Gas Industry Guidance on Voluntary Sustainability Reporting 2nd Edition, 2010. This index is also cross-referenced with the Global Reporting Initiative (GRI) indicators defined in the Sustainability Reporting Guidelines, Version 3.1.

PETRONAS SUSTAINABILITY REPORT: IPIECA/API AND GRI INDEX

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