



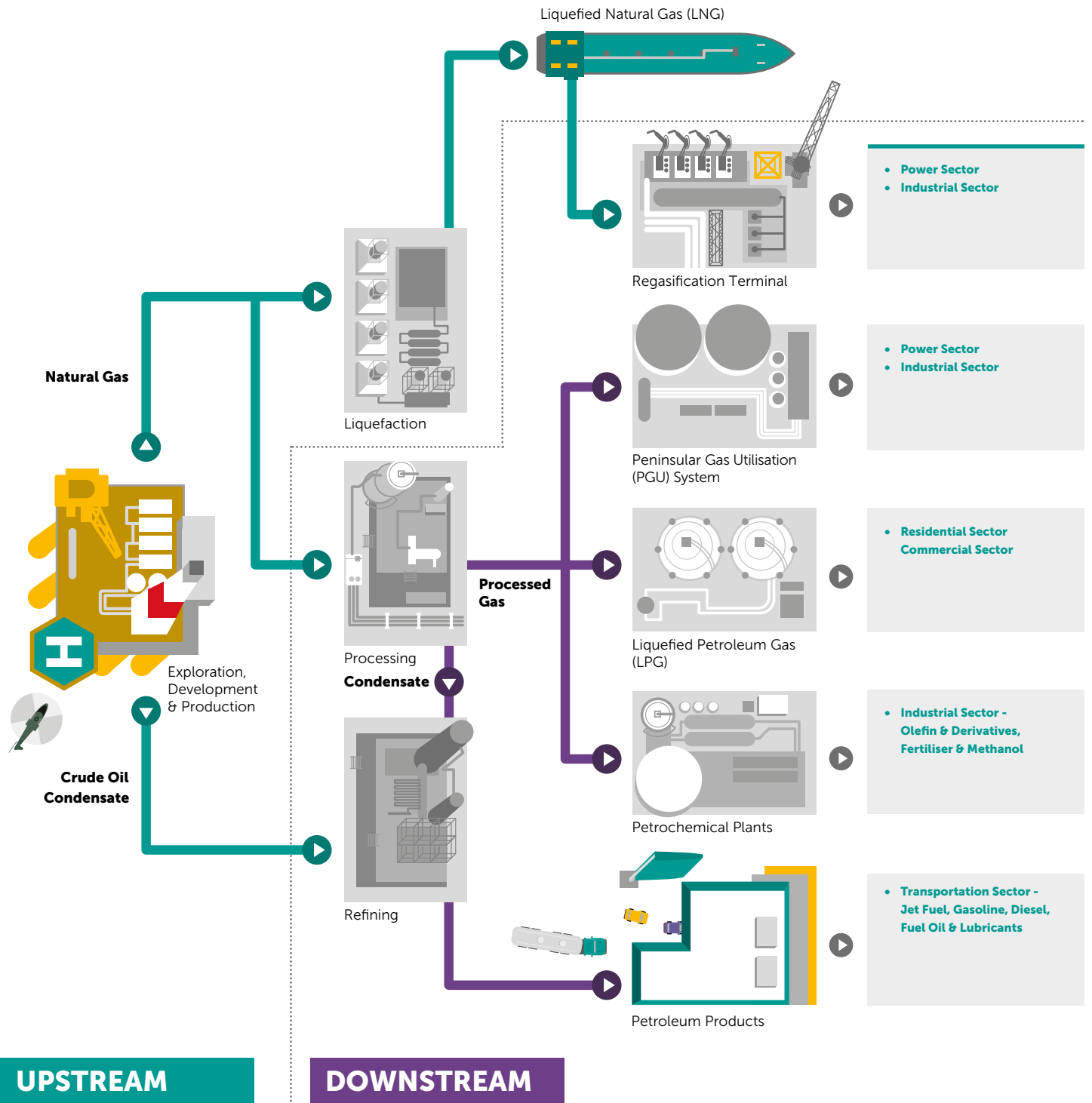
PETRONAS

**SUSTAINABILITY
REPORT 2014**

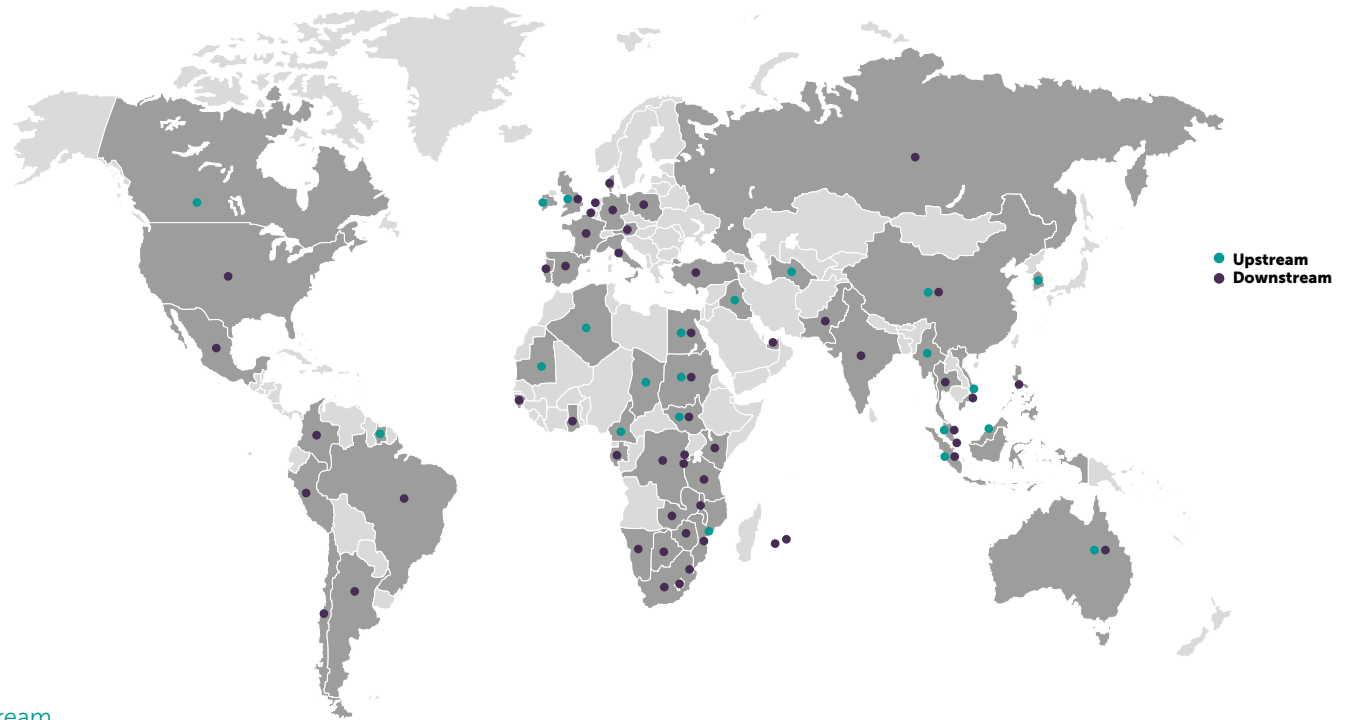
reimagining energy™



Our Business



Our Presence



Upstream

- Africa**
 - **Algeria** – Development
 - **Cameroon** – Development
 - **Egypt** – Exploration, Development, Production & LNG
 - **Mauritania** – Exploration, Development & Production
 - **Mozambique** – Exploration
 - **Republic of South Sudan** – Exploration, Development & Production
 - **Republic of Sudan** – Exploration, Development & Production
 - **Chad** – Development & Production
- Asia Pacific**
 - **Australia** – Exploration, Development, Production & LNG
 - **Brunei** – Exploration
 - **China** – Exploration & Development
 - **Indonesia** – Exploration, Development & Production
 - **Malaysia** – Exploration, Development, Production, LNG & Trading, Technology & Engineering Services
 - **Malaysia-Thailand Joint Development Area** – Development & Production, Technology & Engineering Services
 - **Myanmar** – Exploration, Development & Production
 - **South Korea** – Technology & Engineering Services
 - **Vietnam** – Exploration, Development & Production, Technology & Engineering Services
- Central Asia**
 - **Turkmenistan** – Exploration, Development & Production, Technology & Engineering Services
 - **Uzbekistan** – Production, Technology & Engineering Services
- Europe**
 - **Ireland** – Gas Storage
 - **United Kingdom** – Trading
- Latin America**
 - **Suriname** – Exploration
- Middle East**
 - **Iraq** – Development & Production, Technology & Engineering Services
- North America**
 - **Canada** – Development, Production & LNG, Technology & Engineering Services

Downstream

- Africa**
 - **Botswana** – Oil Business
 - **Burundi** – Oil Business
 - **Democratic Republic of the Congo** – Oil Business
 - **Egypt** – Lubricants
 - **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
 - **Republic of South Sudan** – Oil Business
 - **Republic of Sudan** – Lubricants & Oil Businesses
 - **Rwanda** – Oil Business
 - **Swaziland** – Oil Business
 - **South Africa** – Oil Businesses, Technology & Engineering Services
 - **Tanzania** – Oil Business
 - **Zambia** – Oil Business
 - **Zimbabwe** – Oil Business
- Asia Pacific**
 - **Australia** – Lubricants
 - **China** – Lubricants & Petrochemical Businesses, Infrastructure
 - **India** – Lubricants & Petrochemical Businesses
 - **Indonesia** – Lubricants, Oil & Petrochemical Businesses
 - **Malaysia** – Base Oil, Lubricants, Oil & Petrochemical Businesses, Technology & Engineering Services
 - **Pakistan** – Lubricants
 - **Philippines** – Lubricants, Oil & Petrochemical Businesses
 - **Singapore** – Power, Infrastructure
 - **Thailand** – Lubricants, Oil & Petrochemical Businesses, Technology & Engineering Services
 - **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 and Oil Business
- Latin America**
 - **Argentina** – Lubricants
 - **Brazil** – Lubricants
 - **Chile** – Lubricants
 - **Colombia** – Lubricants
 - **Peru** – Lubricants
- Middle East**
 - **United Arab Emirates** – Oil Business, Lubricants
- North America**
 - **Mexico** – Lubricants
 - **United States of America** – Lubricants

*Includes Engen subsidiaries and marketing and trading offices.

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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

Company Profile

Petroleum Nasional Berhad is Malaysia's National Petroleum Corporation wholly-owned by the Malaysian Government. Established in 1974, PETRONAS is now ranked among the largest companies in the world with a proven track record in integrated oil and gas operations spanning the entire hydrocarbon value chain.

PETRONAS' business activities include (i) the exploration, development and production of crude oil and natural gas in Malaysia and overseas; (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 manufacturing and selling of petrochemical products; (vi) the trading of crude oil, petroleum,

gas and LNG products and petrochemical products; and (vii) shipping and logistics relating to LNG, crude oil and petroleum products. Committed to ensuring business sustainability, PETRONAS also strives to responsibly manage natural resources in a way that contributes holistically to the well-being of the people and nations wherever it operates.

Upstream

PETRONAS' Upstream Business explores, develops, produces and monetises oil and gas resources both domestically and internationally. A fully-integrated business across the oil and gas value chain, the Upstream Business has a broad portfolio of resources and playtypes around the globe. Our capability and track record of successful onshore and offshore developments in oil and gas have earned us reputable operatorship in many ventures across the world.

As a resource owner and host authority in Malaysia, we are responsible for the effective management and sustainable development of the country's oil and gas resource base. Our successes in upstream efforts in Malaysia are realised through partnerships with oil and gas majors, through best-in-class production sharing contracts (PSCs) and innovative risk service contracts (RSCs).

Upstream Business comprises the two core segments of the Exploration & Production Business and the Global LNG Business.

Exploration & Production Business

Malaysia Petroleum Management (MPM), formerly known as the Petroleum Management Unit, is the resource owner and manager of the nation's domestic oil and gas assets. MPM is entrusted with the responsibility to ensure the optimal development of Malaysia's hydrocarbon resources and the vital security of energy supply for Malaysia.

The oil and gas operating arm of the Exploration & Production Business is managed by PETRONAS Carigali Sdn Bhd (PCSB), a hands-on operator with an established track record, working alongside global majors in Malaysia and internationally. PCSB operates in 23 countries through 63 ventures.

Global LNG Business

PETRONAS' Global LNG Business commands a significant market share of global liquefied natural gas (LNG) sales. Our PETRONAS LNG Complex in Bintulu, Sarawak and PETRONAS LNG Sdn Bhd are two key components in our stable as we continue to strengthen our market position

and preserve our reputation as a preferred LNG supplier. The PETRONAS LNG Complex in Bintulu is the world's largest LNG production facility in a single location with capacity of 25.7 million tonnes per annum (mtpa).

As the world's second largest exporter of LNG, PETRONAS has reliably delivered over 8,400 LNG cargoes over 30 years, supplying to our long term buyers in Asia as well as meeting demand across the world.



Downstream

The Downstream Business plays a strategic role in enhancing the value of our petroleum resources, transforming it into high-quality, value-added products for domestic and international markets.

PETRONAS is involved in the full spectrum of downstream activities through our operations in refining; trading and marketing of crude oil and petroleum products; manufacturing and marketing of petrochemical products; gas processing and transportation; regasification; utilities marketing; power generation; as well as the provision of technical and engineering solutions for the PETRONAS Group. PETRONAS' Downstream Business is also involved in the development of the Pengerang Integrated Complex in Johor, which will be Malaysia's largest refinery and petrochemical development in a single complex.

Downstream Business includes the five key segments of Oil Business; Lubricants Business; Petrochemicals Business; Technology & Engineering; and Infrastructure & Utilities. With a vision to become a 'merit-based high performing business', Downstream Business is committed to delivering the details that matter to our customers, while ensuring that our operations are managed in a sustainable and safe manner.

Oil Business

The Oil Business segment comprises refining, trading and marketing of crude and petroleum products.

REFINING

PETRONAS owns and operates three refineries in Malaysia.

PETRONAS Penapisan (Melaka) Sdn Bhd (PP(M) SB) and the Malaysian Refining Company (MRC) are both wholly-owned by PETRONAS and are located in Melaka. The third refinery, PETRONAS Penapisan (Terengganu) Sdn Bhd (PP(T)SB), also wholly-owned by PETRONAS, is located in Terengganu.

Both PP(M)SB and PP(T)SB refine PETRONAS' indigenous crude oil from offshore Terengganu and Sarawak into high-value petroleum products for domestic and export markets. The refineries have a capacity of 130,000 and 124,000 barrels of crude oil per day, respectively. With a nameplate capacity of 170,000 barrels of crude oil per day, MRC's core business is to refine sour crude oil mainly from the Middle East into high value petroleum products for domestic and export markets.

Internationally, PETRONAS owns the Engen Refinery (Enref) in Durban, South Africa through a majority shareholding in Engen Petroleum Ltd. South Africa's second largest refinery, Enref, represents a large part of Engen's commitment

to help meet the fuel needs of the South African market. The refinery has a nominal capacity to refine 135,000 barrels of crude oil per day.

TRADING

PETRONAS Trading Corporation Sdn Bhd (PETCO) is PETRONAS' global marketing and trading arm for crude oil and petroleum products.

Also involved in trading of crude oil and petroleum products produced by affiliates and third parties, PETCO has trading operations in London, Jakarta and Dubai via its wholly-owned subsidiaries PETCO Trading UK Limited, PT PETRONAS Niaga Indonesia (PTPNI) and PETCO Trading DMCC, respectively. PETCO plays a critical role to sustain and strengthen existing markets, and to penetrate new markets for growth.

RETAIL

In Malaysia, PETRONAS Dagangan Berhad (PDB) is the principal domestic marketing arm of PETRONAS and Malaysia's leading retailer and marketer of downstream petroleum products. Internationally, PDB subsidiaries namely PETRONAS Energy Philippines Inc (PEPI) and Duta Inc; PETRONAS International Marketing (Thailand) Co Ltd (PIMTCL); and PETRONAS (Vietnam) Co Ltd (PVCL) manage the marketing and retailing activities for a wide range of petroleum products in the Philippines, Thailand and Vietnam, respectively.

PETRONAS Marketing Sudan Limited (PMSL) and PETRONAS Marketing Ventures Limited (PMVL) manage the petroleum production marketing and retailing in Sudan and South Sudan, respectively.

Committed to a growth agenda, PDB strives to continuously provide superior products and services in all of its four core businesses of Retail, Commercial, Liquefied Petroleum Gas (LPG) and Lubricants. Investments in Research and Development (R&D) ensure that PDB continues to offer a wide range of internationally-recognised, high-quality petroleum products including motor gasoline, aviation fuel, kerosene, diesel, fuel oil, bunker fuel, LPG cylinders and asphalt.

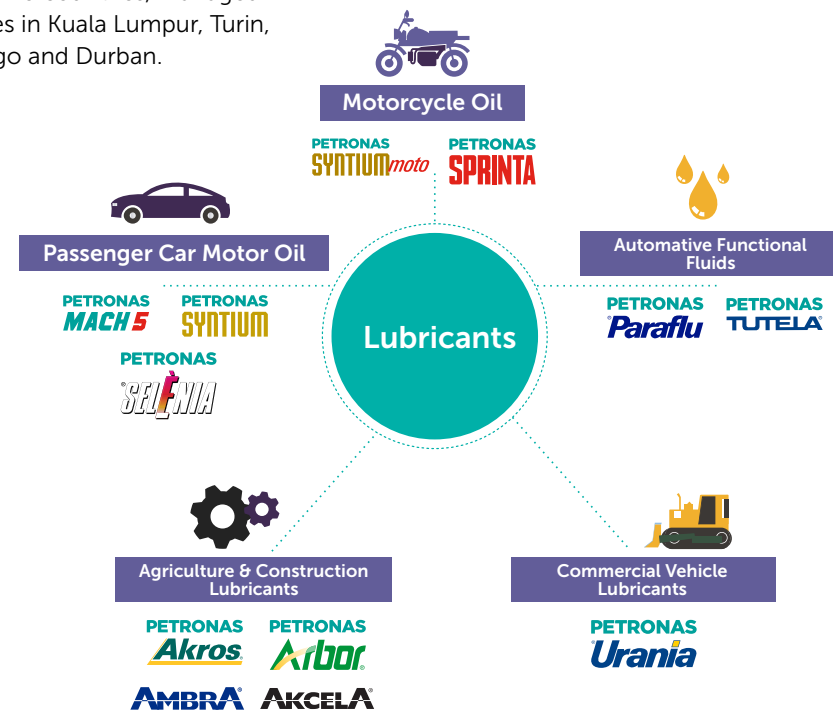
Engen Petroleum Ltd is our Africa-based energy company focusing on the downstream refined petroleum products market and related businesses. Engen's core functions are the refining of crude oil, the marketing of refined petroleum products and the provision of convenience services via an extensive retail network. With a presence in over 20 countries, Engen exports its products to over 30 more countries, mostly in Africa and the Indian Ocean Islands. The company also operates approximately 1,500 service stations across sub-Saharan Africa and Indian Ocean Islands, with convenience stores at approximately 600 Engen service stations.

Product Range

PETRONAS Fuel	Convenience Store (C-Store)	LPG
		

Lubricants Business

PETRONAS Lubricants International Sdn Bhd (PLISB) is the global lubricants manufacturing and marketing arm of PETRONAS. With a strong presence in more than 80 countries and five continents, the PLI product range includes high-quality lubricants and functional fluids for both the automotive and industrial markets, as well as a range of car care products. Flagship brands include PETRONAS Syntium for passenger vehicles, PETRONAS Sprinta for motorcycles, and PETRONAS Urania for commercial vehicles. Headquartered in Kuala Lumpur, PLI has over 30 marketing offices in 23 countries, managed through regional offices in Kuala Lumpur, Turin, Belo Horizonte, Chicago and Durban.



Base Oil



Group III
• Etro 4 & Etro 6

Group II
• M500

Petrochemicals Business

PETRONAS Chemicals Group Berhad (PCG) leads the growth of PETRONAS' Petrochemicals Business, an important segment of the petroleum industry which supports the manufacturing and fast-moving consumer goods (FMCG) sectors. The leading petrochemicals producer in Malaysia and one of the largest in South East Asia, PCG is involved primarily in the manufacturing, marketing and selling of a diverse range of petrochemical products including olefins, polymers, fertilisers, methanol and other basic chemicals and derivative products. Today, our integrated petrochemical complexes in Kertih, Terengganu and Gebeng, Pahang as well as our manufacturing complexes in Gurun, Kedah; Bintulu, Sarawak; and Labuan boasts a total production capacity of over 10 million metric tonnes per annum (mtpa).

1 Chemical Products

PCG comprises **25** companies producing a wide range of chemical products



2 Operating Business

2 major operating business segments:
-Olefins and Derivatives
-Fertilisers and Methanol

3 Petrochemical Complexes

2 integrated petrochemical complexes:
-Kertih, Terengganu
-Gebeng, Pahang

4 Manufacturing Complexes

3 manufacturing complexes that produce fertilisers and methanol:
-Gurun, Kedah
-Bintulu, Sarawak
-Federal Territory of Labuan

5 Production Capacity

10
million mtpa

6 Producer

4th
largest producer of methanol in the world



7 Sole Producer

of methanol, urea, paraxylene, methyl tertiary-butyl ether (MTBE), ethanolamines, ethoxylates, glycol ethers, butanol and butyl acetates in Malaysia

8 Joint-venture

partners include BASF, BP Chemicals, Idemitsu Kosan, Mitsubishi Corporation and Sasol Limited



9 Granular Urea

3rd
largest producer of granular urea and the fourth largest producer of urea in South East Asia

10 LDPE

3rd

largest producer of low-density polyethylene (LDPE) in South East Asia

Pengerang Integrated Complex

The Pengerang Integrated Complex (PIC) is PETRONAS' largest investment in Malaysia to date. Developed within a 6,242-acre (2,526 hectares) site in Pengerang, PIC forms part of the Johor State Government's ambitious Pengerang Integrated Petroleum Complex (PIPC), which falls under Malaysia's Economic Transformation Programme (ETP) for establishing new engines of growth for the country.

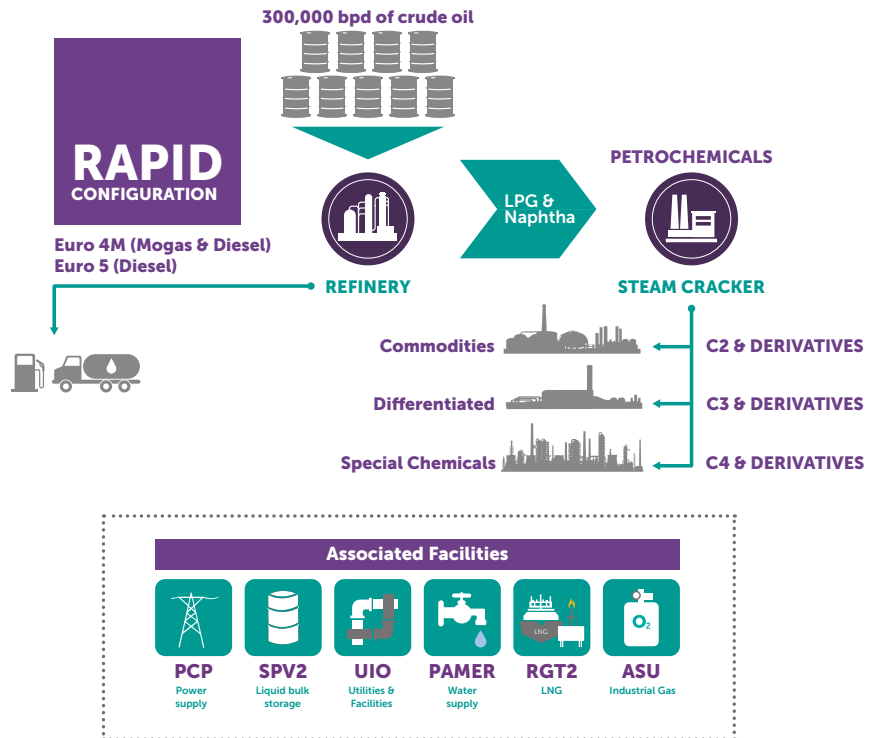
The PIC is designed to meet future energy requirements and strengthen PETRONAS' position as a key player in the Asian chemicals market, focusing on differentiated and specialty chemicals. Achieving Final Investment Decision (FID) on 3 April 2014, the PIC is poised for its refinery start-up by early 2019. The PIC will comprise the Refinery and Petrochemical Integrated Development (RAPID) complex and its associated facilities including the Pengerang Cogeneration Plant (PCP), LNG Regasification Terminal 2 (RGT2), Air Separation Unit (ASU), Raw Water Supply Project (PAMER), Liquid Bulk Terminal (SPV2) and the Centralised and Shared Utilities and Facilities (UF).

Technology & Engineering

With a good blend of research and engineering expertise, we strive for the strategic development and application of technologies to provide competitive advantage to PETRONAS businesses. The Technology & Engineering Division (T&E) is a Centre of Excellence for the development and delivery of cutting-edge technologies and engineering solutions, delivery of capital projects and category management for equipment and materials.

The division provides services in project management, procurement services for category management, as well as technical services and solutions. It is custodian of technical standards and the PETRONAS Project Management System (PPMS), and oversees technical capability management Groupwide. T&E also develops and deploys innovative technologies for

Supported by Ancillary Facilities



Adding Value to Businesses

Value Creation

RM **3.0** billion

in value creation was achieved in 2014 from cost savings, yield improvement and cost avoidance

Category Management

RM **3.7** billion

in total procurement value through category management provided cost savings of up to RM264 million

Standard Solutions

9 in-house

standard engineering solutions were adopted Groupwide to enhance asset integrity, operational performance and safety

PETRONAS businesses, undertakes Intellectual Property (IP) management and actively pursues commercialisation of technology products. All these efforts push PETRONAS' boundaries in technology and engineering to add value to the group while attaining production and operation excellence.

Infrastructure & Utilities

GAS INFRASTRUCTURE & UTILITIES

The Infrastructure & Utilities (I&U) Business focuses on ensuring the long-term security for gas supply in Malaysia as well as essential feedstock and utilities supply, including power, to our customers. I&U activities include the processing, transmission, regasification, marketing of utilities and power generation. Over the years, we have developed distinctive capabilities in our fully-integrated gas business and have built a strong reputation as a trusted partner and reliable supplier of gas in Malaysia and abroad.

Through our partly owned subsidiary PETRONAS Gas Berhad (PGB), PETRONAS owns and operates the Gas Processing Plants (GPP) and Peninsular Gas Utilisation (PGU) systems, delivering gas to power and non-power sectors in Peninsular Malaysia as well as the power industry in Singapore. PGB activities also include the extraction of feedstock such as ethane, propane, butane; and production of essential utilities such as power, steam and industrial gases for our customers. In this, PGB plays a critical role to supply feedstock and utilities to PETRONAS' petrochemical plants in Kertih, Terengganu and Gebeng, Pahang. Our venture into the LNG regasification business, notably Malaysia's first ever LNG regasification terminal (RGT) in Sungai Udang, Melaka, secures domestic gas supply and caters for future increases in gas demand.

POWER BUSINESS & OTHER VENTURES

The I&U Business is also developing its portfolio in the Power Business through its involvement in selected operations in Malaysia and Singapore, namely a 70% stake in the Voltage Renewables Sdn Bhd solar farm in Gebeng, Pahang and a 30% stake in Pacific Light Power Pvt Ltd in Singapore.

PETRONAS' Pengerang Integrated Complex (PIC) also sees the involvement of the I&U Business in the delivery of the Pengerang Cogeneration Plant (PCP), the LNG Regasification Terminal 2 (RGT2) and the Air Separation Unit (ASU).

The I&U Business is also involved in the Trans-Thai Malaysia (TTM) joint venture companies responsible for the transportation and processing of gas from the Malaysia-Thailand Joint Development Area (MTJDA) plant located in Songkhla, Southern Thailand. It also operates the Bekalan Air KIPC (BAKIPC) water treatment facility located in Dungun, Terengganu. PETRONAS' 35% stake in the investment holding company Transasia Pipeline Pvt Ltd, Indonesia provides control over 40% equity in PT Transportasi Gas Indonesia (TGI). TGI owns and operates approximately 1,003 km of onshore and offshore gas pipelines namely Grissik-Duri (GD) and Grissik-Singapore (GS).

QUICK FACTS



- PGB is recognised as one of the **Top 10 companies** listed on the Main Market of Bursa Malaysia, based on its market capitalisation of RM48 billion



- PETRONAS promotes the use of gas fuel for a cleaner environment and is the sole operator of **Natural Gas for Vehicles (NGV)** service stations in Malaysia



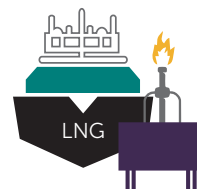
- PGB is Malaysia's **leading gas infrastructure** and utilities company



- PGB is operating more than **2,500 km of gas transmission pipeline**, with a gas **processing capacity** of more than **2,000 mmscfd**



- PGB established Malaysia's **first ever LNG Regasification Terminal** which started operations in the second quarter of 2013



Key Sustainability Indicators

Lost Time Injury Frequency	FY13 0.24	FY14 0.19	PETRONAS Group Greenhouse Gas Emissions	FY13 52.36 million tCO ₂ e	FY14 48.44 million tCO ₂ e
▶ Refer to page 39			▶ Refer to page 48		
Fatal Accident Rate	FY13 1.23	FY14 3.03	Percentage of Women Employees	FY13 28%	FY14 28%
▶ Refer to page 39			▶ Refer to page 62		
Tier 1 Process Safety Events	FY13 10 Incidents	FY14 7 Incidents	Dividend Payment to the Malaysian Government	FY13 27 RM billion	FY14 29 RM billion
▶ Refer to page 39					

Five-Year Group Financial Highlights

PETRONAS' Key Financial Indicators

In RM Billion

	FY2014	+/- (%)	FY2013	FY2012	CY2011*	PE2011**	FY2011
Revenue	329.1	3.7%	317.3	291.2	288.5	222.8	241.2
EBITDA	125.3	1.5%	123.4	120.4	123.0	95.7	107.9
Profit Before Taxation	77.7	-17.6%	94.3	89.7	103.8	83.0	90.5
Profit After Taxation	47.6	-27.4%	65.6	59.5	68.7	55.9	63.0
Net Profit Attributable to Shareholders	37.0	-31.6%	54.1	49.9	59.7	49.1	54.8
Total Assets	537.5	1.7%	528.7	489.2	476.4	476.4	436.3
Equity Attributable to Shareholders	354.7	5.6%	335.8	307.0	289.6	289.6	262.3
Financial Ratios	FY2014		FY2013	FY2012	PE2011**	FY2011	
Return on Revenue	23.6%		29.7%	30.8%	37.1%	37.5%	
Return on Total Assets***	14.5%		17.8%	18.3%	23.0%	20.7%	
Return on Average Capital Employed****	11.6%		17.0%	16.3%	21.3%	19.3%	
Debt/Assets Ratio	0.07x		0.08x	0.08x	0.11x	0.11x	
Gearing Ratio	9.4%		11.1%	11.7%	15.1%	15.4%	
Dividend Payout Ratio	78.4%		49.9%	56.1%	61.3%	54.7%	

* 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 to 31 December 2011.

*** PE2011 was calculated based on annualised figures.

**** Return on Average Capital Employed is now calculated based on annualised profit after taxation divided by average total equity and long-term debt. Comparative figures have been restated to conform to the revised method.

President & Group CEO's Message



TAN SRI DATO' SHAMSUL AZHAR ABBAS

President & Group CEO

For the oil and gas industry, year 2014 could not have ended on a wider contrast. Brent price that averaged at USD108 in January plunged to average at 40% lower by year end. The drastic drop within six short months has not only affected operations within the industry but has also severely impacted many economies of the world.

But as I have often said, where energy is concerned, the lead-time for change is long and our actions as well as inactions of today will have repercussions that go far into the future. No matter how tempting it is to put the brakes on amidst discouraging outlooks and internal difficulties, refusing to move forward is not an option.

It is based on this premise that PETRONAS' operation is anchored upon the foundation of building a sustainable business. The duty to safeguard the nation's hydrocarbon resources, coupled with the responsibility to deliver affordable energy to consumers wherever we operate is an obligation we intend to uphold to our highest ability and measure of integrity. Fiscal discipline, prudent capital management together with robust strategy and long-term development plans have been the backbone to the company's durability in weathering market temper tantrums throughout the 40 years of our existence.

We exist to deliver on our promises, and not just for creation of shareholder value. The oil and gas is a highly technical industry and the entire value chain of our business – from exploration and production of hydrocarbon, refining for petroleum products, gas processing and distribution, right to the handling of retail stations – require careful planning and meticulous execution in order to ensure our operations remain safe, and that any risks towards greater society and the environment are readily and properly mitigated.

With this in mind, we have been working hard to be more responsible in our conduct and greater transparency in our reporting. We view this as putting our commitment forth, and beginning 2007, we have been publishing sustainability reports to serve as an annual update to how we have been progressing. What we want is to declare how we are driving sustainability with respect to our business, environment and society.

PETRONAS' Carbon Commitment and Social Performance Framework that we instigated back in 2013 had enabled us to place stronger focus in exploring optimisation efforts within the Group. I am pleased to report that we have made notable progress in intensifying operational sustainability during the period under review. At a glimpse, offshore platforms in our Malaysia operations recorded 15% lowered greenhouse gas emissions. During the same period, better plant performance from our refineries and petrochemical plants boosted Overall Equipment Effectiveness (OEE) to 89.7%; a marked improvement from 83.2% in the previous year.

What we want is to declare how we are driving sustainability with respect to our business, environment and society.

The continuous pursuit of business excellence is a shared responsibility. Enhanced disclosure and reporting on the ways we address and mitigate our non-financial risks will ensure that we keep an open feedback loop and relationship with our stakeholders. In this regard, I am also delighted to report that 3 of PETRONAS' public listed entities are amongst the 24 that had qualified to be on Malaysia's inaugural Environmental, Social, Governance (ESG) Index, better known as the FTSE4Good Bursa Malaysia Index. This index is aimed to highlight companies that are demonstrating good ESG practices and disclosure, over and above their reputable financial performance.

In this regard, I am also delighted to report that 3 of PETRONAS' public listed entities are amongst the 24 that had qualified to be on Malaysia's inaugural Environmental, Social, Governance (ESG) Index, better known as the FTSE4Good Bursa Malaysia Index.

At PETRONAS, we are in the business of enriching lives, and there have been much to celebrate upon in the last 40 years of our existence. Although the days ahead look set to test our endurance and resilience, we believe that we have what it takes to remain steadfast in business – not only financially, but also in addressing the issues and needs of our employees, society, and the environment.

Thank You.



TAN SRI DATO' SHAMSUL AZHAR ABBAS
President & Group CEO

About This Report

The PETRONAS Group Sustainability Report 2014 (SR2014), which is produced voluntarily, demonstrates an ongoing commitment to carry out our business in a safe, responsible and ethical manner. This Report, our seventh edition since 2007, cites key sustainability initiatives carried out across the Environmental, Social and Governance spheres over a 12-month period, from 1 January to 31 December 2014.

The Sustainability Report 2014 is accessible at www.petronas.com

Scope and Data Collection

The scope of data covers entities where PETRONAS has operational control in our businesses of oil and gas production, unless otherwise stated, in Malaysia and internationally. Our sustainability data is collated through a centralised web-based system which is continually enhanced for improved accuracy.

Stakeholders and Materiality

We seek to understand and proactively address the interests, needs as well as expectations of our various stakeholders, wherever we operate. The underlying intent is to build and strengthen mutually beneficial relationships by:

- building trust and commitment;
- growing with nations and partners; and
- ensuring stable and reliable supply of energy.

Through formal as well as informal feedback channels, we receive, analyse and address concerns, as reflected in this Report.

Stakeholder Groups*	Engagement Platforms	Leading Areas of Interest
Business Partners, Suppliers & Service Providers	<ul style="list-style-type: none"> • Face-to-face meetings • Audits • Targeted forums • Monitoring of contractual provisions 	<ul style="list-style-type: none"> • Financial performance • Health & safety practices • Update on key investment projects • Partnerships & joint-ventures • Outreach & social development efforts
Customers & Consumers	<ul style="list-style-type: none"> • Hotline • Email queries 	
Employees & Trade Unions	<ul style="list-style-type: none"> • Townhall sessions • Open dialogues among teams • Intranet portal 	
Host Governments & Regulatory Authorities	<ul style="list-style-type: none"> • Face-to-face meetings • Regular reports • Participation in discussions 	
International Associations & Non-Governmental Organisations	<ul style="list-style-type: none"> • Engagements through business partnerships 	
Local Communities	<ul style="list-style-type: none"> • Face-to-face meetings • Various social events 	
Media	<ul style="list-style-type: none"> • Media releases • Quarterly media briefings 	
Shareholders, Financial Institutions, Bond Holders & Investors	<ul style="list-style-type: none"> • Group annual report • Quarterly media briefings • Email queries 	

*This not an exhaustive list.

Identifying our Materiality

This Report is divided into several themes, namely, Corporate Governance and Business Ethics; Safety and Health; Environmental Stewardship; and Society. Each section cites specific focus areas, as captured in the table below. These elements were identified as material by our stakeholders and the Company, including cross-referencing the seven key Result Areas of PETRONAS' Corporate Sustainability Framework.

The content of this Report was formalised following an internal assessment to identify the material issues and priorities, while simultaneously, taking into consideration the wider industry context.

This Report also features highlights on key undertakings, namely, PETRONAS in Sabah and The Pengerang Integrated Complex project.

Feedback

We welcome your comments and queries. Please direct your insights to:

PETRONAS Sustainability Reporting

Sustainable Development Department
Group Health, Safety and Environment
Petroleum Nasional Berhad (PETRONAS)
Level 45, Tower 1, PETRONAS Twin Towers
Kuala Lumpur City Centre
50088 Kuala Lumpur
Malaysia

Or email us at: sustainability@petronas.com.my

Corporate Governance & Business Ethics	Safety & Health	Environmental Stewardship	Society
Business Ethics & Compliance	Safety	Carbon Management & Climate Change	Social Performance
Operational Governance	Occupational Health & Industrial Hygiene	Water Management	Community Investments
	Product Stewardship	Spill Management	Our People
		Waste Management	Local Content
		Emissions Management	
		Biodiversity & Ecosystem Services	

Sustainable Development in PETRONAS

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.

Sustainability and PETRONAS

At PETRONAS, we view Sustainability or Sustainable Development as a business imperative to deliver energy responsibly. This means looking beyond financial profitability by balancing economic, social and environmental considerations in making sound business decisions.

The concept of *doing it right* is a core belief of PETRONAS since 1974. PETRONAS has come far in the last four decades, growing from strength-to-strength into a globally renowned fully integrated oil and gas company. Moving forward, we remain committed to achieving greater milestones in the coming decades.

Foraying into newer and more complex frontiers in various parts of the world, we recognise that the changing operational landscape calls for more prudent management of non-technical and non-financial risks to uphold environmental as well as social stability.

Conscious that we co-exist in a larger ecosystem, we place importance on meeting the expectations of our stakeholders, including local communities, in Malaysia and internationally. Being a commercial entity, we seek competitive growth in all of our activities. Whereas as a responsible industry player, we strive to remain a caring employer, a partner of choice and a reliable corporate citizen.

Guiding us at present are responsible management and operational policies, including practices to accelerate business performance as well as delivery. In addition to compliance with regulatory requirements, we are working towards improving our governance mechanisms in-line with globally accepted best practices. The underlying aim is to responsibly generate and return value to all our stakeholders.

Growing Sustainability in PETRONAS

In 2014, efforts were ongoing Groupwide to strengthen the integration of Sustainable Development across our Upstream and Downstream Businesses.

Multidisciplinary teams were brought together to address the needs of our stakeholders, alongside business requirements.

The period under review brought about new realities, putting the oil and gas industry under greater scrutiny as market fundamentals changed drastically. The consequences exerted pressure not only on oil and gas companies, but also upon partners, service providers and shareholders. The road ahead is uncertain, but we believe that tougher times will make us more resilient.

The journey continues and we aspire to solidify our existing practices to maximise value creation by achieving optimal levels of operational sustainability as well as excellence, especially in focus areas depicted in the table below.

A Snapshot of What We Have Been Doing

Focus Areas - Short to Medium Term	2013	2014	
Carbon Management & Climate Change	<ul style="list-style-type: none"> Roll out of carbon commitments. Developed systems & processes. 	<ul style="list-style-type: none"> Reduced greenhouse gas emissions via process enhancements. Reinforced the Energy & Loss Management System. Rolled out best practices on energy management. 	Accelerated capability development efforts Groupwide.
Water Management	<ul style="list-style-type: none"> Streamlined definition of fresh water withdrawal. Internal verification on accounting. Capability development. 	<ul style="list-style-type: none"> Completed groundwork to develop a Water Management Guide. Pursued internal fresh water assessments. Carried out situational analysis for the development of commitments on fresh water withdrawal. 	
Social Performance	<ul style="list-style-type: none"> Established Social Performance Framework. 	<ul style="list-style-type: none"> Conducted Social Risk Assessments. Held strategic engagements with local communities. 	

Meeting the Energy Challenge

The need for oil and gas resources is rising with the increase in global population and urbanisation. While crude oil and natural gas form a significant portion of the global energy mix, the move towards a low carbon economy is gaining momentum. In view of this, PETRONAS aims for greater operational excellence as we explore conventional and unconventional sources of energy. Formalisation of PETRONAS' Carbon Commitments support our efforts to achieve zero continuous flaring from new as well as aging facilities, where feasible. Processes are also being enhanced to improve productivity and efficiency in our operations. Adding to this is a stronger focus on prudent use of water while extracting and monetising energy resources.

Appetite for Sustainable Development in Current Times

PETRONAS will continue to embed Sustainable Development practices across our operations in Malaysia and internationally. The present economic landscape calls for us to be more prudent in managing our investments. Nevertheless, business expansion entails venturing into newer markets, undertaking complex projects, developing innovative products and leveraging on partnerships for shared synergy.

PETRONAS upholds the concept of responsible profits, taking a longer-term view in all that we do. We seek to remain versatile, relevant and competitive in addressing change by embodying the spirit of PETRONAS – reimagining energy™.

To date, PETRONAS has revised our business structure and transformed our management strategies. Collectively, these were means to elevate our business competitiveness in managing volatilities facing the oil and gas industry.

While we strive to rise above the current challenges facing the oil and gas industry at large, we do not lose sight in ensuring the safety of our operations. The underlying intent is to achieve sustainable HSE performance, while providing affordable access to energy.

Evolution of Sustainable Development in Malaysia

The concept of Sustainable Development has matured in some countries, whereas in others, it is fast developing. Presently, policies are being reviewed in view of strengthening environmental, social and governance (ESG) elements, guided by an extensive growth in sustainability-centric knowledge. Closer to home, sustainability leaped forward with the launch of the FTSE4Good Bursa Malaysia Index in 2014, leading to a stronger interest in areas such as corporate governance, climate change, as well as diversity and inclusion. Despite the recent evolution, PETRONAS has long embraced a holistic approach to managing risks and begun to voluntarily disclose our non-financial performance since 2007.

For PETRONAS, discharging our role as a responsible corporate citizen goes back to 1974, guided by our Vision, Mission and Shared Values. Supporting these was PETRONAS' Corporate Sustainability Framework established in 2001. Subsequently, the PETRONAS Code of Business Conduct (CoBE) was fortified in 2012 to ensure its relevance with the changing global environment. Among the enhancements was a stipulation on Sustainable Development. The CoBE is applicable to all PETRONAS staff and Directors Groupwide, including third-party personnel serving and/performing works on our behalf. While it is incumbent upon our businesses to realise PETRONAS' Sustainable Development aspirations, our suppliers, contractors and sub-contractors are also required to ensure their deliverables conform with our requirement standards.

PETRONAS Corporate Sustainability Framework

Shareholder Value

Sustaining the Company's profitability through value creation, efficient extraction & manufacturing processes.

Natural Resource Use

Promoting efficient use of hydrocarbons & water, & supporting the use of renewable energy.

Climate Change

Limiting emissions of greenhouse gases into the atmosphere.

Biodiversity

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

Health, Safety & Environment

Preventing & eliminating injuries, health hazards and damage to property & communities, including protecting the environment.

Product Stewardship

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

Societal Needs

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

Future Plans

PETRONAS is taking a structured and measured approach to strengthen the foothold of Sustainable Development in PETRONAS. Having rolled-out specific commitments for carbon, we are now developing commitments on water management, while formalising our position on Human Rights. Concurrently, we are enhancing our Sustainable Development governance mechanisms, aiming for continuous improvements.

Promoting Industry Growth

PETRONAS is a member of several industry associations which deliberate on best practices and emerging trends in response to business needs. This includes the IPIECA, The Institution of Chemical Engineers (IChemE), International Association of Oil and Gas Production (IOGP), the International Council of Chemical Associations (ICCA), International Gas Union (IGU), Malaysian Gas Association (MGA), Malaysia Oil and Gas Services Council (MOGSC) and Petroleum Industry of Malaysia Mutual Aid Group (PIMMAG). We are also a Subscribing Member of Oil Spill Response Limited (OSRL).

In addition, we support events to spur knowledge development among members of the oil and gas fraternity. Highlights in 2014 included our leading role in organising the Asia Oil and Gas Conference in Kuala Lumpur, Malaysia, a platform for key industry players to strategically address growth opportunities and challenges facing the industry at large.

Sustainability Performance Data

Safety	2012	2013	2014
NO OF FATALITIES			
Employees	5	0	3
Contractors	7	4	7
FATAL ACCIDENT RATE Reportable Fatalities per 100 million man hours	3.91	1.23	3.03
LOST TIME INJURY FREQUENCY (LTIF) No of cases per one million man hours	0.39	0.24	0.19
TOTAL REPORTABLE CASE FREQUENCY (TRCF) No of cases per one million man hours	0.68	0.40	0.64
NO OF TIER 1 PROCESS SAFETY EVENTS	22	10	7

Environmental Stewardship	2012	2013	2014
TOTAL GREENHOUSE GAS EMISSIONS (millions tCO ₂ e)			
Upstream	28.9	31.83	29.54
Downstream	15.09	15.17	14.32
MISC	5.49	5.36	4.58
TOTAL FRESH WATER WITHDRAWAL (million cubic metres per year)			
Upstream	2.23	2.17	2.93
Downstream	45.81	44.47	46.32
TOTAL AMOUNT OF ENERGY GENERATED FROM SOLAR PV INSTALLATIONS IN MALAYSIA (megawatt-hours)	830	1,662	14,782
NO OF HYDROCARBON SPILLS TO THE ENVIRONMENT OVER ONE BARREL (BBL) (one bbl is equivalent to 159 litres)	-	-	25
TOTAL SULPHUR OXIDES EMISSIONS (metric tonnes)	-	-	61,698
TOTAL NITROGEN OXIDES EMISSIONS (metric tonnes)	-	-	100,915
DISCHARGES TO WATER (metric tonnes of hydrocarbon)	-	-	992
TOTAL HAZARDOUS WASTE DISPOSED (metric tonnes)	-	-	26,974

*Note: Efforts are ongoing to achieve higher accuracy in data accounting.

Our Workforce	2012	2013	2014
TOTAL NUMBER OF EMPLOYEES	46,145	49,193	50,949
BREAKDOWN OF EMPLOYEES			
Malaysian	79%	78%	79%
Non-Malaysian	21%	22%	21%
CONTRACT TYPE			
Permanent	84%	82%	85%
Contract	16%	18%	15%
GENDER DISTRIBUTION			
Male	73%	72%	72%
Female	27%	28%	28%
EMPLOYEES ABOVE AND BELOW AGE OF 35			
Above 35	48%	44%	46%
Below 35	52%	56%	54%
NO OF NEW HIRES (core businesses in Malaysia)	5,428	3,699	3,541
Malaysian	4,864	3,380	3,198
Other Nationals	564	319	343
NUMBER OF STAFF UNDER COLLECTIVE BARGAINING AGREEMENTS	10,260	10,684	8,954

TOTAL NO OF MALAYSIAN & HOST COUNTRY NATIONALS (HCN) IN SELECTED COUNTRIES - 2014

Country	No of Employees	HCN	Malaysians	Other Nationalities
Egypt	24	9	15	-
Indonesian	337	315	21	1
Myanmar	268	225	43	-
Sudan	596	566	27	3
Turkmenistan	554	416	105	33

Society	2012	2013	2014
**RECRUITMENT OF PETRONAS SCHOLARS	563	432	250
Recruited by PETRONAS	62.9%	74.5%	47%
Recruited by Others	37.1%	25.5%	53%
NO OF SCHOLARSHIPS AWARDED TO MALAYSIANS	318	329	337
International Universities	25%	41%	44%
Malaysian Universities	75%	59%	56%
NO OF SCHOLARSHIPS AWARDED TO NON-MALAYSIANS			
Universiti Teknologi PETRONAS (UTP), Malaysia	59	64	43

*Note: Efforts are ongoing to achieve higher accuracy in data accounting.

** Majority of PETRONAS sponsored students who graduated in September 2014 are recruited by the Company in 2015.

Corporate Governance and Business Ethics



We carry out our business responsibly, safely and reliably, in a manner which is consistent with our Shared Values of Loyalty, Professionalism, Integrity as well as Cohesiveness. This entails a proactive approach in responding to business risks and opportunities for managing our stakeholders' expectations. Supporting our quest for sustainable performance and

long-term business competitiveness are policies, management systems, standards as well as guidelines that conform to internationally accepted standards and industry best practices. Subject to overriding considerations for business confidentiality, we seek to uphold transparency in our actions and disclosures, wherever we operate.

We place importance on:

- 27 Business Ethics and Compliance
- 31 Operational Governance

Business Ethics and Compliance

Good governance enables PETRONAS to function efficiently, effectively, and more importantly, responsibly, by providing clarity on acceptable as well as expected standards of behaviour. In carrying out our business activities, we are guided by the PETRONAS Shared Values to uphold integrity in fulfilling our obligations in an ethical, responsible and transparent manner. This is supported by our strict conformance with the respective laws, rules and regulations in countries where we operate.

The PETRONAS Code of Conduct and Business Ethics (CoBE) sets out general policy statements on the standards of behaviour as well as ethical conduct expected of our employees and directors across the PETRONAS Group. We also expect contractors, sub-contractors, consultants, agents, representatives and others performing work or services on our behalf to comply with the relevant parts of the CoBE. The CoBE, including other policies and procedures, are rolled out to our stakeholders through various training as well as communication programmes.

Furthermore, various board committees such as the Governance and Risk Committee as well as the Audit Committee were established by PETRONAS to ensure Groupwide compliance with applicable laws and regulations, internal policies and procedures. Collectively, these pave the way for us to continuously elevate the standards of accountability and integrity in PETRONAS.

PETRONAS engages at the local and global level with various business networks and non-governmental organisations on a variety of issues such as integrity, transparency, environmental and social performance. This includes the World Economic Forum's Partnering against Corruption Initiative (PACI), Transparency International Malaysia and the IPIECA. PETRONAS is also a signatory to the Malaysian Corporate Integrity Pledge.

Code of Conduct and Business Ethics

Benchmarked against international standards, the PETRONAS Code of Conduct and Business Ethics (CoBE), alongside our Shared Values, underline our commitment to uphold the highest standards of ethics, integrity and accountability in our business conduct, wherever we operate.

Officially launched for Groupwide implementation in April 2012, the CoBE, applicable in Malaysia and internationally, is accompanied by:

- Country Supplements containing specific provisions in accordance with local laws and regulations.
- CoBE Guide, a user friendly manual to illustrate the application of the CoBE in practice.

To date, Country Supplements for Argentina, Australia, Brazil, China, Egypt, Japan, Malaysia, Italy, the United Kingdom and South Africa have been rolled out in their respective jurisdictions. Similar supplements are also being developed for other international countries of operations.

The CoBE is disseminated to key stakeholders, including staff, through a series of training and communication programmes, including Train-the-Trainer workshops. Since 2013, all new hires are required to attend mandatory training on the CoBE, as part of PETRONAS' on-boarding programme for new executives. Furthermore, an online helpdesk was established in 2012 for employees and third parties to forward their enquiries, seek greater clarification and/or report breaches of the CoBE or any matters relating to PETRONAS at cobe@petronas.com.my.

As at 31 December 2014, 37,588 employees had undergone face-to-face training on the CoBE. Moving forward, periodic refresher training will be conducted to ensure ongoing compliance with the CoBE by directors and employees of the PETRONAS Group. A compulsory CoBE online training programme is scheduled to be rolled out in phases starting 2015, commencing with PETRONAS Group employees in Malaysia.

The CoBE, Country Supplements and CoBE Guide are available at <http://www.petronas.com.my/about-us/governance/Pages/governance/code-of-conduct-business-ethics.aspx>.

Anti-Bribery and Corruption Compliance Programme

PETRONAS has zero tolerance for all forms of bribery as well as corruption and has implemented a *No Gift Policy* since 1 April 2012. In upholding this commitment, the PETRONAS Integrity Compliance Framework (PICF) was developed to inculcate a stronger culture of ethics and integrity within the Company, complementing the CoBE.

The PICF comprises three core components:

- Policies and Procedures
- Systems and Processes
- People and Culture

As one of the core components under the PICF, the Anti-Bribery and Corruption (ABC) Manual was developed to supplement the general policy statements set out in the CoBE on fighting corruption and unethical practices. The ABC Manual, applicable across the PETRONAS Group, contains detailed procedures on dealing with improper solicitation, bribery and corruption, including addressing ethical issues in sensitive situations. Some of the topics covered include dealing with

gifts, entertainment and corporate hospitality; facilitation payments; dealing with third parties; including promoting PETRONAS' whistleblowing channels to all employees as well as third parties.

As at 31 December 2014, 27,740 employees had undergone face-to-face training on the ABC Manual. Furthermore, 161 employees were trained as trainers to roll-out the ABC Manual to all employees within their respective business units and/or operating units. In addition, personnel working in positions or job functions exposed to a higher risk of bribery and corruption have been identified to attend a more in-depth training programme. A mandatory online ABC training programme for all employees is targeted for roll out in 2015, commencing with the PETRONAS Group employees in Malaysia.

The ABC Manual is available at <http://www.petronas.com.my/about-us/governance/Pages/default.aspx>.

PETRONAS Integrity Compliance Framework or PICF

Policy & Procedures	Systems & Processes	People & Culture
<p>ABC Manual which covers:</p> <ul style="list-style-type: none"> • PETRONAS' No Gift Policy • Entertainment & Corporate Hospitality • Dealing with Public Officials • CSR, Sponsorships & Donations • Political Contributions • Facilitation Payment • Money Laundering • Dealing with Third Parties • Recruitment • Whistleblowing Policy & Procedures 	<ul style="list-style-type: none"> • CoBE hotline • Whistleblowing channels • PETRONAS' Compliance Desktop <ul style="list-style-type: none"> - Gifts & Entertainment Register - Conflict of Interest Register • Enhanced Third Party Due Diligence • Integrity elements embedded in human resources processes • Integrity compliance audit 	<ul style="list-style-type: none"> • Specific key performance indicators on compliance will be embedded into Business Scorecards • Appointment of Compliance Officers at the respective business units &/or operational units • Business units &/or operational units to conduct risk assessment, implement internal controls & provide assurance to Chief Executive Officers &/or Managing Directors • Employee Education & Awareness Programmes <ul style="list-style-type: none"> - onboarding programme for new executives - in-depth training for high risk groups - online training & certification for all employees • Directors' Training Programme • Third Party Compliance Training & Certification

Managing Risks

We have identified the following as potential high risk portfolios in PETRONAS. Efforts are ongoing to ensure stricter compliance with the CoBE, ABC Manual, including applicable anti-bribery & corruption laws in these segments:

- Procurement & Supply Chain
- Suppliers & Contractors
- Consultants & Agents & Intermediaries
- Customs & Logistics
- Joint Venture Partners

Combating Corruption by Third Parties

Third parties working for or on behalf of the PETRONAS Group, such as our contractors, sub-contractors, consultants, agents, representatives and others are required to comply with the relevant parts of the CoBE and ABC Manual. A provision for third parties to comply with the CoBE and/or other applicable policies, has been included as part of PETRONAS' standard contractual terms in all our agreements.

PETRONAS conducts training and continuously engages with third parties to ensure their compliance with PETRONAS' expectation as set out by the CoBE and ABC Manual. The trainings aim to drive the message that non-compliance will have severe consequences such as termination of contract and disqualification from participating in PETRONAS' tender exercise. A total of 273 companies participated in PETRONAS' Vendor Integrity Programme (PVIP) held in 2014.

We strive to ensure that the values and principles important to us are embedded in all aspects of our procurement and supply chain activities. We are currently enhancing our third party due diligence process to ensure external vendors meet our standards of integrity. An online third party due diligence compliance screening is scheduled for roll-out in 2015.

Fortifying Compliance & Integrity

A series of regional engagements themed *Instilling a Compliance Culture by Setting the Tone at the Top* involving PETRONAS' senior & middle management were conducted locally & internationally. The programme emphasised the need for leaders to internalise & demonstrate ethical behaviour in setting an example for others within their sphere of influence.

We also jointly organised a seminar with Transparency International – Malaysia in 2014 where more than 30 participants from 18 selected companies from the country's corporate sector shared their best practices in establishing and managing an integrity compliance system. During the event, PETRONAS talked about our Whistleblowing Policy & Procedures, including process for conducting internal investigations.

Competition Law Compliance Programme

PETRONAS launched our Competition Law Guidelines in 2012. Subsequently, in 2014, efforts were accelerated to ensure its practical understanding among our internal and external stakeholders. The Guidelines, which serve as a key reference point for our employees and third-parties, complement the specific provisions on anti-competitive practices outlined in the CoBE.

As at 31 December 2014, we conducted four (4) competition law engagement sessions across the Group, and educated 175 key employees as well as directors on the basic concepts of antitrust/competition laws. A series of training programmes will also be conducted in 2015 to raise ongoing awareness on competition law. In addition, a mandatory online training module for all employees on competition law compliance is scheduled to be rolled-out in 2015.

The PETRONAS Competition Law Compliance Guidelines is available at <http://www.petronas.com.my/about-us/governance/Pages/default.aspx>.

International Economic Sanctions and Export Control Compliance Programme

PETRONAS seeks to ensure strict compliance with international economic sanctions and export-control regulations. Given our ongoing expansion efforts globally, we are working towards developing an effective sanctions and export-control compliance framework, to be implemented in 2015.

We conduct regular engagement sessions with international trade law experts from several associations, while working closely alongside governmental agencies overseeing matters on international economic sanctions and export control. Since 2010, PETRONAS has established a task force across relevant Divisions in the Group to oversee Groupwide compliance with Malaysia's Strategic Trade Act 2010.

Whistleblowing Policy and Procedures

PETRONAS' Whistleblowing Policy encourages our employees and members of the public to notify the Company of any improper conduct such as criminal offence and/or malpractices. The whistleblower is assured confidentiality of identity, to the extent reasonably practicable, even post completion of investigation, so long as the disclosure is made in good faith. Whistleblowers are also kept updated on outcomes of the disclosure made, adhering to procedures in place.

The PETRONAS Whistleblowing Committee was set up to deliberate upon the disclosures made, determine next course of action and monitor progress until case closure. The Committee meets at least once a month and provides updates to the Internal Audit Management Committee as well as Board Audit Committee.

Our Whistleblowing Policy is available at <http://www.petronas.com.my/about-us/governance/Pages/governance/Whistleblowing-eForm.aspx>.



PETRONAS

Make a Difference Blow the Whistle

PETRONAS aspires to achieve the highest standards of integrity in the conduct of our businesses and operations.

If you know or are aware of any improper conduct (misconduct or criminal offence) committed or is about to be committed within PETRONAS, report it to:



whistle@petronas.com.my



online submission via e-form

<http://www.petronas.com.my/about-us/governance/Pages/governance/Whistleblowing-eForm.aspx>



Head of HR Business / Operating Units



P.O. Box No. 11646



03-2331 9000 / 03-2051 9000

**All disclosures will be treated in the strictest confidence*

For more information, kindly refer to PETRONAS Whistleblowing Policy and PETRONAS Code of Conduct and Business Ethics (CoBE).

www.petronas.com

Transparency

The tenets of transparency and openness are fundamental elements of good governance. At PETRONAS, we strive to ensure our stakeholders are kept abreast of the Company's financial and non-financial performance as well as efforts in managing impacts arising from our operations. To date, we continue to make public PETRONAS' annual and quarterly financial results on our corporate website at www.petronas.com. Concurrently, we are working towards improving our non-financial disclosure by providing greater insights on key sustainability practices and performance, through the annual Group Sustainability Report.

Commendably, in 2014, three of our listed entities, namely, PETRONAS Chemicals Group Berhad, PETRONAS Gas Berhad and MISC Berhad were among the 24 companies selected to make-up the inaugural FTSE4Good Bursa Malaysia Index. The Index's constituents were selected from a pool comprising top 200 Malaysian stocks listed on the Malaysian Stock Exchange in terms of market capitalisation and liquidity, among others. These companies were rigorously screened for the practices adopted in disclosing performance as well as risk management practices surpassing the financial sphere, covering the Environmental, Social and Governance dimensions.

Notably, our Group Sustainability Report 2013 was shortlisted for the ACCA Malaysia Sustainability Reporting Awards (MaSRA) 2014. PETRONAS was applauded for our ongoing efforts to provide adequate insights on initiatives pursued in addressing environmental and social impacts arising across our business value chain.

Operational Governance

We strive to achieve sustainable health, safety and environment (HSE) performance across all our businesses as well as operations.

We drive standardised HSE practices Groupwide by ensuring our employees, including contractors, suppliers and joint venture partners, adhere to PETRONAS' HSE Policy, which is supported by the HSE Management System (HSE MS), and reinforced via our HSE Mandatory Control Framework (HSE MCF). The latter, which contains 10 elements, prescribes clear requirements for effective and consistent implementation of the HSE MS. The elements include: Capability, Health, Environment, Safety and Transportation, Process Safety and Asset Integrity, Management of Change, Safe Operations, Contractor HSE Management, Design, Engineering and Construction as well as Incident Management and Emergency Response.

The HSE MS and HSE MCF are supported by PETRONAS' Technical Standards, including various other guidelines as well as processes which provide comprehensive guidance on critical HSE aspects.

Simultaneously, we embed sustainability considerations in everyday business decision-making to responsibly, effectively and efficiently monetise hydrocarbon molecules in the wider context of addressing environmental as well as social risks. This includes carrying out Environmental Impact Assessment (EIA), Environmental Social Health Impact Assessment (ESHIA), and Social Risk Assessment, among others, to identify and develop mitigation plans for potential business risks in a timely as well as orderly manner.

The leadership of our senior management personnel also contributes significantly towards the realisation of our HSE and Sustainable Development aspirations. The HSE Executive Committee and Corporate Sustainability Council were established as a formal body to spearhead this commitment. Endorsement from the top essentially plays an important role in motivating our staff, including those working on our behalf to uphold HSE and Sustainable Development excellence in PETRONAS.

HSE Risk Management

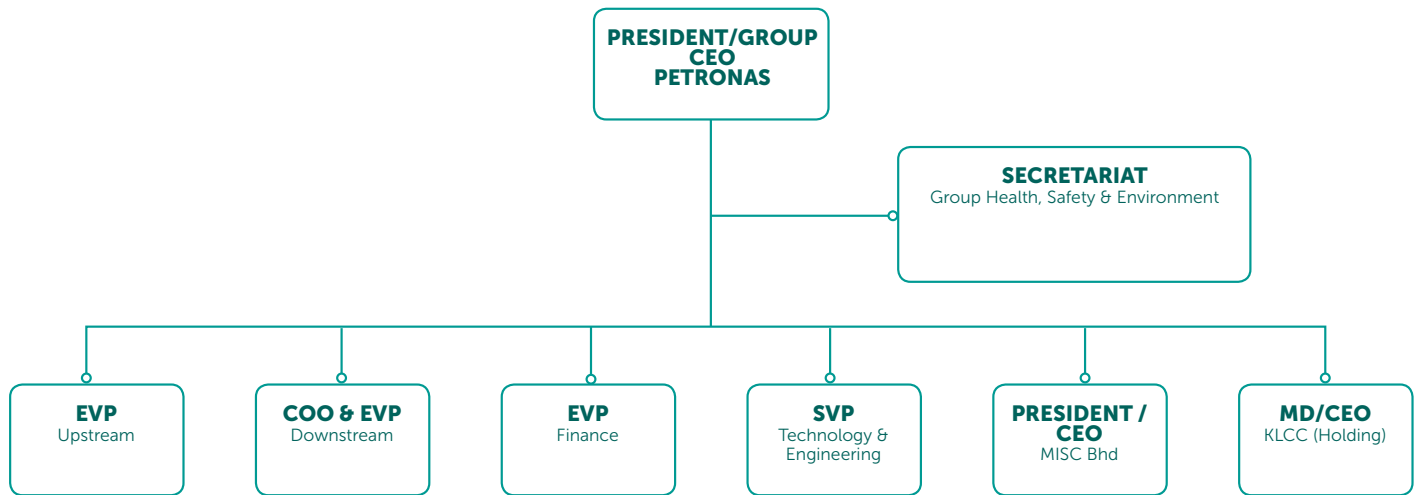
Guided by the PETRONAS Risk Management Policy, while being supported by the Hazard and Effects Management Process (HEMP), we assess risks associated with identified hazards and its impacts to people, the environment, assets as well as our reputation. The underlying intent is to make our work place as safe as reasonably practicable by putting in place relevant preventive and mitigation control measures.

In 2014, we tightened our HSE governance through the development of business-specific hazards and effects registers (HER) for five of our operating units, with similar execution expected for other business units. Collectively, this allowed for more robust Job Hazard Analysis, Management of Change and Pre-Incident Planning.

Furthermore, to audit the effectiveness of our governance mechanisms, a total of 16 extensive Tier-3 Assurance exercises were carried out in 2014, covering our Malaysian and international operations. The findings were deliberated by the PETRONAS Board Audit Committee for further actions.

HSE Executive Committee

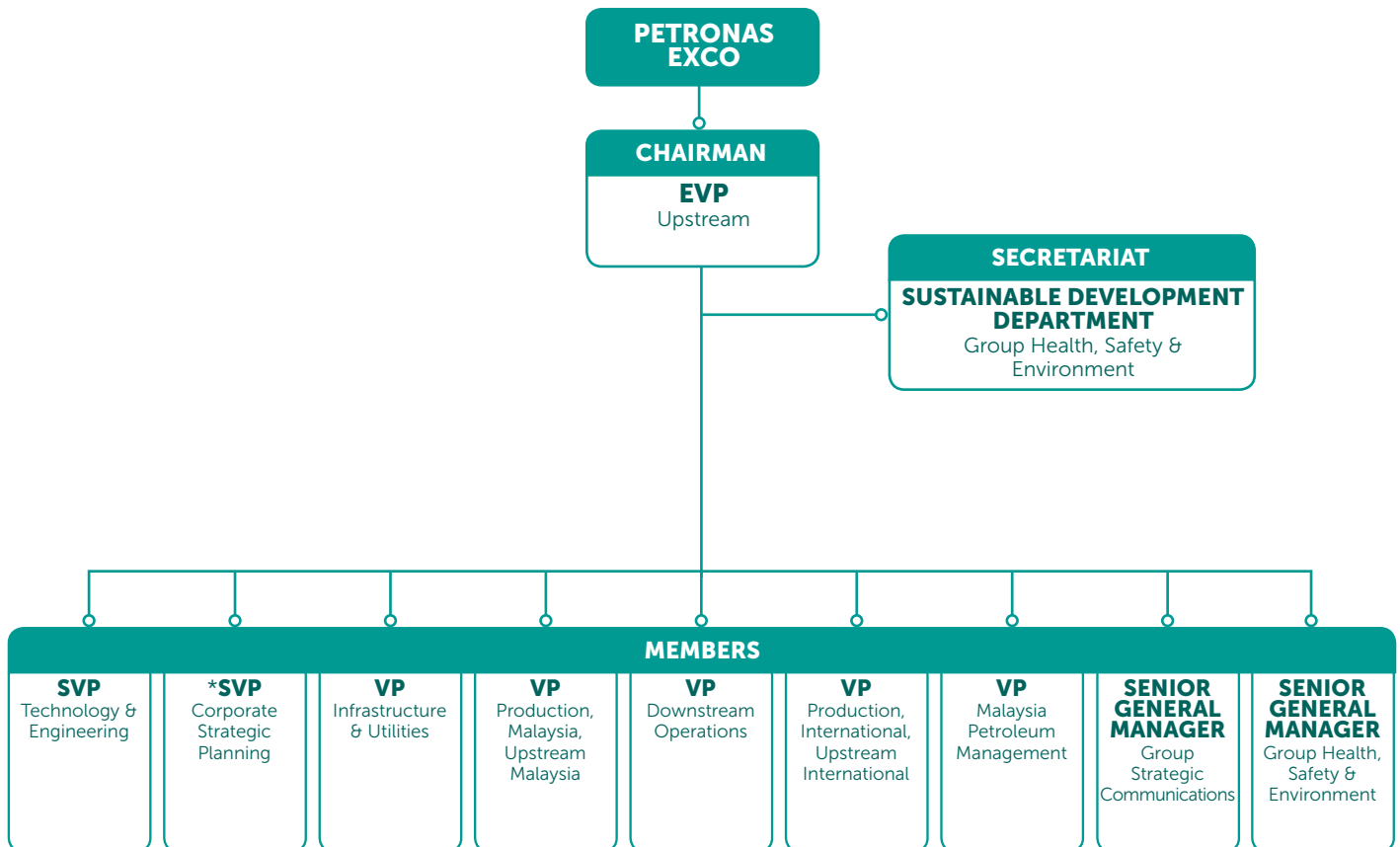
This Council which is chaired by PETRONAS' President/Group Chief Executive Officer (CEO), meets at least twice a year to discuss strategies, challenges and opportunities on HSE-related matters for the Group. In addition, it provides leadership and guidance to strengthen existing governance measures in managing operational risks. The HSE Executive Council is supported by the Group HSE.



Sustainability Leadership

The PETRONAS Corporate Sustainability Council (CSC) is an advisory body responsible for overseeing the implementation of PETRONAS' Sustainable Development strategies Groupwide. Chaired by the Executive Vice President (EVP) of Upstream, the CSC meets every quarter and is supported by the Sustainable Development Department of Group Health, Safety and Environment. In addition to playing the role of an advisor, our CSC serves as a governance body that monitors the progress of Sustainable Development in PETRONAS, namely, in priority areas such as carbon management and climate change, social performance as well as natural resource use.

Collectively, the relevant bodies solidify HSE and Sustainable Development excellence in PETRONAS. This includes mandating our employees and business alliances to collectively achieve as well as uphold good HSE performance and operational sustainability Groupwide.



* Alternate Chairman.

Safety and Health



We view the integration of Health, Safety and Environment (HSE) practices as a prerequisite for sustainable operational excellence and integrity. We mandate strict adherence to PETRONAS' HSE Policy across our businesses in preventing harm to people, the environment and assets.

Application of industry best practices, alongside compliance with regulatory requirements collectively demonstrate our commitment towards improving Groupwide HSE performance and efficiency, while accelerating business competitiveness, wherever we operate.

We place importance on:

- 35 Safety
- 42 Occupational Health & Industrial Hygiene
- 44 Product Stewardship

Safety

Delivering energy responsibly entails a single minded focus to manage occupational as well as process safety across the oil and gas value chain. At PETRONAS, we are committed to meeting the need for energy in a safe, reliable and efficient manner. In doing so, we work hard to safeguard our workforce, third party personnel and the community living around our operational facilities, by reducing risks to a level as low as reasonably practicable.

The PETRONAS HSE Policy, HSE Management System, HSE Mandatory Control Framework and PETRONAS Technical Standards, among others, are governance mechanisms established to elevate our HSE performance. All of our employees, and third party personnel serving at our facilities are mandated to comply with PETRONAS' standards and rules on HSE.

This entails ensuring that all our facilities in Malaysia and internationally are designed, operated and maintained in accordance with standards aligned to industry best practices. The adequacy of our control barriers are also reviewed by assessing the design, technical and operational integrity of our facilities.

In addition, regular drills and exercises are conducted to test our preparedness as well as enhance our response capabilities in minimising impacts arising from any emergency. Gaps identified are addressed by strengthening existing HSE procedures and controls, striving for continual improvements. This involves learning from previous internal and external incidents to prevent recurrence.

The industry we operate in calls for a stronger HSE culture, mindset and operational discipline to be embedded in all that we do, more importantly, internalised by our people. Leadership by example through regular management walkabouts as well as engagements, including dialogue sessions with internal and external stakeholders foster greater commitment towards HSE excellence. This instills better understanding of our expectations and allows us to effectively address HSE matters.

The changing operating landscape such as foraying into complex frontiers intensifies the need for more competent and well rounded HSE talents, in tandem with attaining superior performing assets. Nurturing knowledgeable HSE practitioners to manage emerging issues is thus vital for sustainable HSE performance. In view of this, we continuously hone the knowledge and experience of our personnel in the respective HSE disciplines via accelerated capability development programmes.

Process Safety

We work towards sustaining the asset integrity of our upstream and downstream facilities to prevent loss of primary containment (LOPC). Our focus is to enhance the design, technical and operational integrity of our assets by deploying engineering solutions based on internationally-accepted codes and standards. This involves the application of technologies to review real-time integrity of our offshore and onshore assets to proactively mitigate any risk and/or major accident.

Strategic efforts bolstered the reliability as well as integrity of our operational facilities in Malaysia and internationally. For example, our Upstream Business carried out an Independent Asset Integrity Review (i-AIR) to assess and validate the physical conditions of our offshore facilities' Safety Critical Elements (SCE), including develop an effective maintenance plan. The i-AIR ensured that our operating facilities' SCEs were designed, constructed, operated and maintained adequately to maintain optimum levels of integrity throughout the assets' lifecycle. Other ongoing efforts include implementation of the Technical Integrity Process Safety (TIPS) programme to oversee the integrity of wells, operating facilities, terminals and pipelines.

Similarly, our Downstream Business strengthened efforts in reducing LOPC incidents through improved preventative measures, reinforcing operational discipline, and enhancing our inspection and maintenance programmes.

In 2014, we also fortified our Design, Engineering and Construction practices by tightening specific requirements stipulated in the PETRONAS HSE Mandatory Control Framework.

Managing Aging Facilities in Malaysia via Pipeline Solutions

PETRONAS undertakes efforts to maintain the integrity of our pipeline network spanning over 10,000 km. This involved developing and deploying a holistic range of solutions as part of the Pipeline Integrity Management System (PIMS) which encompasses:

- The Pipeline Integrity Performance Monitoring System or PIPeM™ to assess real-time health status of our pipelines.
- A range of risk assessment engineering solutions to prevent potential leaks & loss of containment.
- Aqua MTM®, a tool for inspecting subsea & buried pipelines.
- A multi-disciplinary integrity assessment evaluation to determine if a pipeline is fit for service.
- Strengthening, repair & rehabilitation technologies such as the ProAssure™ Wrap, ProAssure™ Wrap Extreme as well as ProAssure™ Clamp applied across the onshore as well as offshore facilities protected our pipelines against corrosion, even in extreme environments.

Contractor Management

The technical capabilities of third party personnel and/or contractors serving at our facilities is critical for the safe and reliable execution of outsourced activities. The involvement of external service providers generally varies in different phases of projects and operations. However, it is prevalent throughout the project lifecycle, including during day-to-day operations. In view of this, we take action to ensure third party personnel are adequately aware of PETRONAS' HSE standards and meet our requirements when executing tasks for and/or on behalf of the Company.

PETRONAS has enhanced the overall contracting management processes such as tightening of mandatory HSE requirements and undertaking more extensive screening of contractor competencies in line with PETRONAS' expectations. This extends to involve rigorous assessments to ensure HSE risks are mitigated effectively. We adopt a centralised system which is accessible across PETRONAS to capture our contractors' project delivery and HSE performance.

Regular engagement sessions are held with third party personnel to discuss concerns and share insights on PETRONAS' expectations to better manage risks associated with contractors' activities. Structured training programmes are also provided to improve contractors' understanding and competency in managing operational and process safety.

Crisis Management and Emergency Preparedness

In 2014, we continued carrying out emergency exercises at our operating facilities, including administrative sites, in Malaysia as well as internationally. These activities are embedded in our crisis management programmes with the objective of improving our preparedness and response capabilities, such as the ability to respond to major fires, hazardous material (HAZMAT) and oil spills. More importantly, for minimising harm to the local communities residing around our operating facilities.

Additionally, one major simulation exercise integrating the critical aspects of crisis management and business continuity was carried out at the PETRONAS Twin Towers in Kuala Lumpur, Malaysia. The exercise involving our top management personnel assessed our readiness in managing multiple crisis scenarios and complex technicalities occurring simultaneously across the Upstream as well as Downstream Businesses. This exercise also tested the adequacy of our crisis communication plans and procedures.

We also leveraged on strategic partnerships with relevant authorities and organisations to share resources for initiating faster response and improving vigilance against potential crises. Continuous training and engagement sessions were conducted with stakeholders such as Government agencies, host country authorities, joint-venture partners, contractors and local community members. While improving communication among multiple parties, this also fostered better understanding of shared roles as well as responsibilities to efficiently and effectively respond to emergencies as well as crisis situations.

OE Academy

The PETRONAS Operational Excellence (OE) Academy was launched in 2014 as part of our efforts to institutionalise plant leadership capabilities across the Group. The underlying objective is to equip plant leaders with cross-functional technical skills for achieving best-in-class plant performance through exposure to real time scenarios via on-the-job stint at our operating facilities.

Human Factors Engineering

The effective interaction between people, machinery and work environment contribute significantly towards keeping our workforce safe. This entails a thorough review of potential factors which may influence human reliability and efficiency at our various work sites. In 2014, we focused on rectifying design-induced risks in the Upstream Business. This involved better integration of human factors as part of operational discipline in re-designing tasks, activities and workplaces to optimise human performance.

An internal exercise was also held to review incidents which had occurred over the last five years to identify leading human factor-related causes and issues. The results validated our existing risk management practices, measured against past, current and emerging trends.

Emphasis on safety is regularly communicated via various platforms, including direct engagement sessions, to share as well as seek feedback from our employees, including contractors, on PETRONAS' practices to manage human factors across our operations.

HSE Capability Development

We adopt a structured capacity building plan to inculcate stronger HSE leadership, culture and mindset among our personnel via holistic competency development programmes. This entails consolidating formal technical training modules with on-the-job exposure at our various operating facilities to develop well-rounded and technically-proficient HSE personnel as well as line managers for manning our businesses globally.

Taking a more strategic approach, in 2014, we formalised a requirement where all technical groups had to develop and execute a dedicated training module on HSE fundamentals, aligned to respective business needs. Largely, the HSE capacity building efforts were led by our operating units in Malaysia and internationally. The training programmes differed based on staff's levels of proficiency and job requirements.

For example, we carried out a total of 150 training sessions in Myanmar for our staff and contractors, covering technical and HSE disciplines, on topics such as Industrial Process Control and Incident Command System. In addition, 12 selected personnel from Myanmar underwent a customised Petroleum Technology Program at the PETRONAS Institute for Technical Training (INSTEP) in Kuala Terengganu, Malaysia.

Technical Expertise

We are guided by the following internal programmes to develop a pool of young and reliable technical experts:

- Accelerated Capability Development (ACD) for technical executives.
- Technical Professional Career Progression (TPCP) for Technical Professionals (TP).
- PETRONAS Competency Assessment System (PECAS) for technical non-executives.
- Technical Trade Specialist (TTS) for skilled technicians and operators.

	2012	2013	2014
Technical Capability Building			
Technical Authorities (TAs)	160	195	276
Technical Professionals (TPs)	613	673	736
Technical Trade Specialists (TTS)	114	126	144

Commendably, our Process and Operations Skill Group's capability development programmes were recently endorsed by the Institution of Chemical Engineers (IChemE), making PETRONAS the first Malaysian company to qualify under IChemE's Accredited Company Training Scheme. In 2014, seven of our personnel were certified as Chartered Chemical Engineers (CEng).

Collaborative Research

We also pursued strategic partnerships with renowned academic institutions to undertake relevant research programmes. Parallel to this, 2014 marked the first of a three-year agreement between PETRONAS Research Sdn Bhd (PRSB) and an internationally renowned academic institution to pursue collaborative research in four areas, namely, Process Scale-Up and Mathematical Modelling, Flow Assurance Chemicals, Advanced Materials as well as development of education programmes.

State-of-the-Art Oil and Gas Training Facility

PETRONAS launched an Integrated Oil and Gas Training Centre (IIOGTC), located at INSTEP in the period under review. The training facility which replicates an actual plant creates a real workplace environment for giving students practical hands-on and differentiated experience, while exposing trainees to HSE practices in a highly complex industry. The Upstream-Downstream Training Plant features units such as centralised control, well testing, gas compression and dehydration, crude distillation, hydrocarbon treatment, and also emergency response plan.

The IIOGTC entailed investments of approximately RM250 million, representing PETRONAS' commitment to position INSTEP as a premier training centre for developing highly skilled and

qualified technical professionals who meet the needs of the evolving energy sector.

INSTEP is the first Offshore Petroleum Industry Training Organisation (OPITO) approved oil and gas technical qualification Centre. To-date, some of INSTEP's capacity building efforts are also carried out in collaboration with OPITO. This includes establishing technical and safety standards in accordance with industry requirements. PETRONAS also participated in the OPITO Safety & Competence Conference in 2014. PETRONAS was conferred the OPITO Chairman's Award at the event for our stellar leadership in developing safety & technical competencies.

The IIOGTC is open to INSTEP's trainees, PETRONAS' workforce as well as members of the oil and gas fraternity at large.

World Class Training Facility
by the shores of Peninsular Malaysia's East Coast

Over 30 years of oil and gas technical training experience

More than 10,000 technical professionals trained since 1981

Serving clients from over 15 countries

Training Capacity 1,700 trainees per year

Integrated upstream and downstream training facility

Real-world training environment to produce job-ready technicians

Industry-driven development programmes for engineers

Petroleum Technology Programme comprising courses in the fields of Exploration & Production, Electrical, Instrumentation, Process & Analytical, and Mechanical

80.9 hectares

Upstream-Downstream Training Plant

- Downstream
- Common Utility
- Upstream B
- Upstream A
- Control Room
- Drilling Simulator
- Emergency Response Suite
- Workshop
- Plant Workshop

Drilling Rig

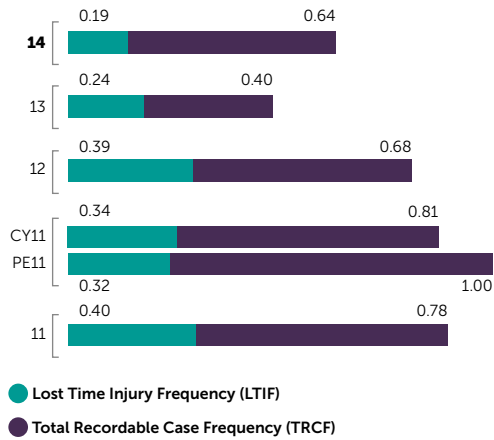
INSTEP IOGTC

www.instep.my

Safety Performance in 2014

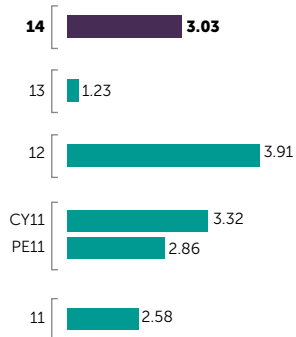
LTIF and TRCF for the Group

No of cases per million man hours



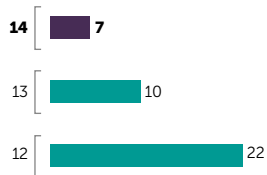
Fatal Accident Rate (FAR)

Recordable fatalities per 100 million man hours



Tier 1 Process Safety

Number of events



We strive to sustain good safety performance in PETRONAS. In 2014, we recorded the following reductions compared to 2013:

- Lost Time Injury Frequency (LTIF) by 21%.
- Tier 1 Process Safety Events by 30%.

We are deeply saddened by the 10 fatalities in 2014, largely resulting from occupational safety related incidents, including road mishaps when commuting to the workplace.

A total of six casualties took place in Downstream Business and three in Upstream Business, while one was recorded by our partly-owned Shipping Business. Such unfortunate occurrences are a constant reminder for us to review and enhance our safety standards as well as practices in addressing the underlying causes of these incidents.



Strengthening Occupational Safety in PETRONAS

Specific safety programmes were undertaken in 2014, taking into consideration findings obtained from an internal major incident analysis exercise. Interventions such as campaigns on Road Safety and Working at Height (WAH) targeting our employees and third party personnel were carried out to strengthen control measures for identified high-risk activities.

We also work closely with contractors as well as sub-contractors, encouraging shared ownership and accountability via clearer delineation of roles to facilitate better project delivery and HSE performance.

In addition, a new Technical Standard on Forklift Safety is scheduled for launch in 2015.

Land Transportation Safety

PETRONAS' Zero Tolerance Rules or ZeTo Rules prescribe 10 mandatory principles of behaviour, one of which prohibits the use of mobile phone and/or other devices when driving, as well as mandates adherence to speed limits, and the wearing of seat belts. Zeto Rules are applicable to our employees and third party personnel when carrying out PETRONAS' business activities, travelling for business, working at our premises and/or using the Company's mode of transportation. Vehicles delivering PETRONAS' products and services, as well as shuttling Company personnel, are also required to adhere by the ZeTo Rules.

Over the last four years, *loss of control over moving vehicles* was the major contributor of road casualties. Several intervention plans have been implemented to reduce the number of road facilities. Among other initiatives, we have implemented the *SMITH Defensive Driving System* in heavy goods vehicles and incorporated *in vehicle video monitors* across our fleet of road tankers. Collectively, these instilled stronger road discipline among drivers and subsequently reduced vehicle collision. At the same time, it reduced potential spills and collision risk involving other road users.

In 2014, we also started a three-year project to upgrade tar roads in selected villages around our operations in Kanbauk, Myanmar to provide safer transportation infrastructure for our personnel and the local community.

Awareness on Road Safety

We consolidated all of our community road safety programmes under the tagline *Safety Gets You There* in 2014, aiming for greater reach and impact. Essentially, the programmes sought to educate the masses on road safety issues prevalent in Malaysia, such as basic road safety protocol and procedures. Initiatives were also introduced to promote proper usage of safety devices such as seatbelts and helmets in an educational, yet interactive manner in our new *Helmet Hero* campaign.

Concurrently, we continued to execute our signature programmes like the PETRONAS Coffee Break campaigns which encouraged drivers to break long-distance journeys with a rest at a PETRONAS service station, and the PETRONAS Street Smart road safety education programme for school students.

Working at Height

An upward trend in the number of Working at Height (WAH) related incidents was recorded between 2012 and 2014. In response to this, we reinforced our safety values and best practices on WAH. This involved revising our Technical Standard on WAH and executing a campaign themed *Prevent a Fall, It's your Call*. Launched in February 2014, the campaign was supported by an extensive awareness programme spanning over a 12-week period, carried out throughout the year at various operating facilities.



The training modules implemented stressed on the criticality of adequate work planning, control barriers, regular audits and good decision making to curb WAH-related incidents. Overall, the awareness programme fortified the need for committed participation from all levels of management, staff, including contractors to promote sustainable safe working practices and behaviours.

HSE Engagements

In 2014, our Upstream Business took the lead in engaging our contractors, including service providers, to strengthen HSE management in everyday operations.

The sessions, held in Malaysia and internationally such as in Turkmenistan, stressed on internalising the tenets of *Respect for Life, Comply to Rules and Intervene*. In a nutshell, the programmes emphasised on upholding good HSE leadership and nurturing strong HSE culture as well as behaviour. This encompasses ensuring the availability of relevant systems and tools, including adherence to Permit-to-Work procedures, ZeTo Rules and Stop Work policy.

Similarly, the event replicated in Turkmenistan imparted vital insights on HSE best practices, challenges and interventions among participants comprising our staff as well as key stakeholders such as representatives from the country's local ministries. Topics discussed centered on industrial hygiene as well as Turkmenistan's Labour Code laws and regulations. The session also saw recognition of staff and contractors who demonstrated exemplary HSE performance throughout 2014.



Maritime Security

PETRONAS organises an annual seminar for our stakeholders to discuss current as well as emerging security risks which may impact the oil and gas industry. The underlying intent is to learn from and exchange ideas with external thought leaders as well as subject-matter experts. In 2014, the event was themed *Unveiling the Threats, Securing Our Assets*, focusing on maritime security in Malaysia.

Emerging issues affecting the seas and maritime logistics include piracy, terrorism, criminal activities, geopolitical hostility, risk of collisions, groundings and oil spills. Often, offshore installations and vessels are potential targets, due to their strategic and economic importance.

PETRONAS is growing our presence in offshore exploration and production activities, including expanding maritime logistics. We operate some 320 platforms and floaters, with about 30 rigs in the Malaysian waters, as well as more than 7,000 kilometres of subsea pipelines. Furthermore, our fleet of 29 liquefied natural gas vessels and 76 petroleum tankers ply the global maritime routes which are vulnerable to security risks.

PETRONAS invests substantially in building our maritime security systems and infrastructure. We monitor and assess the prevalent situations for developing mitigation measures to ensure the safety of our staff as well as minimise impact to our operations.

Eminent speakers led the first-hand sharing sessions on megatrends, challenges and impact of maritime security threats to our industry, as well as best practices in handling these risks. Overall, the seminar provided us with an avenue to re-assess our strategic risks and adopt a more exhaustive security management approach. This includes expediting recovery and business continuity in the event of any untoward incidents.

Occupational Health and Industrial Hygiene

Our underlying intent is to sustain optimal health levels of people towards achieving PETRONAS' business aspirations, with focus on our employees and contractors wherever we operate. This involves adopting and implementing PETRONAS Occupational Health (OH) and Industrial Hygiene (IH) standards, including industry best practices. Our approach mirrors the global practice of anticipating, recognising, evaluating and controlling exposure to perilous factors arising across our operations in preventing occupational health illnesses.

We carry out Health Risk Assessments (HRAs) for evaluating health effects that may arise following exposure to physical, chemical, biological, psychosocial and ergonomic-related substances. The HRA is a mandatory requirement for all new and existing operations. Where local legislation exists, we adhere to respective requirements as stipulated, over and above our HRA practices.

In addition, we carry out Fitness to Work (FTW) assessment to reduce risks of injuries and illness caused by mismatch of mental as well as physical fitness in meeting job demands. Supplementing the HRA and FTW are the Chemical Exposure Monitoring as well as Health Surveillance. Typically, relevant findings from the numerous assessments are used to develop holistic intervention plans.

Complementing these are timely health advisories, which include recommendations for dealing with epidemics such as the Ebola outbreak, atmospheric haze and floods. We are also fortifying our response preparedness in responding to medical emergencies.

Efforts to spur a healthy culture in PETRONAS are ongoing, emphasising on creating awareness to prevent musculoskeletal, communicable and non-communicable diseases. The priority areas include nurturing mental health awareness as well as managing diabetes, heart disease and high blood pressure.

Health Performance

In 2014, the number of Total Recordable Occupational Incident (TROI) cases involving PETRONAS staff saw a 80% improvement compared to 2013, following a reduction in the number of cases, from 64 to 13.

The cases ranged from occupational noise induced hearing loss to food poisoning and ergonomics-related problems, including skin irritation. Interventions were developed in line with the PETRONAS Mandatory Control Framework (MCF), such as on Hearing Conservation, Management of Fatigue, Communicable Diseases as well as Food and Water Safety.

Communicable Diseases

We regularly identify and evaluate potential contagious diseases (CD) which may impact the wellbeing of our people while at our work sites, including when travelling on business trips. This is done by implementing new and strengthening existing control measures.

Particularly in 2014, a higher emphasis was placed on managing CD in several international operating facilities. This involved addressing the spread of diseases such as malaria, dengue and tuberculosis (TB) through a variety of programmes which ranged from health talks to medical check-ups and eliminating possible vectors which transmit CD, such as:

- In Myanmar, we vaccinated 190 PETRONAS staff and contractors against seasonal flu at work sites.
- In the Philippines, we carried out fogging of the compound around our pipeline operations centre once a week to eradicate malaria as well as dengue mosquitos.
- We conducted health talks for offshore staff and contractors on tuberculosis.

Noise and Hearing Conservation

Risk of noise induced hearing loss is reduced by establishing and implementing relevant audiometry conservation programmes. To date, programmes are being conducted across PETRONAS' businesses to strengthen our practices to prevent hearing disability due to noise exposure at the workplace. Audiometric testing and analysis are regularly carried out for identified employees, and where necessary, these personnel undergo further treatment, with their progress being closely monitored by our occupational health practitioners.

In 2014, our Downstream Business led by our partly-owned subsidiary, PETRONAS Gas Berhad, implemented relevant corrective measures such as revamping the design of selected equipment at identified operating facilities. The works are being carried out in phases, alongside ongoing hazard communication programme for our workforce, including third party personnel via trainings, awareness and health promotion initiatives.

Health Promotion

Various occupational health wellness initiatives were implemented Groupwide to empower our employees, including third party contractors for collectively being accountable for their personal well-being. The activities implemented varied based on needs of the respective businesses. Some themes which were versatile and applicable at most of our operational facilities included weight reduction programmes, talks on healthy eating as well as stress management workshops.

The Health Is Wealth – Valuing Your Wellbeing programme was held at the PETRONAS Twin Towers, Malaysia. The event raised awareness on numerous topics, namely, the importance of a healthy lifestyle as well as advantages of spending quality time with dear ones in curbing social ills. Talks were also delivered on topics such as nurturing mental health and personal well-being.



Community Health

Prevention of diseases among local community members in Malaysia and internationally is pursued through efforts which aim to increase levels of understanding on basic health management practices. This includes health awareness promotions and screenings.

In 2014, we continued the PETRONAS First Aider in Every Home (FAiEH) programme to elevate knowledge and understanding on first aid care among local community members. In the period under review, FAiEH equipped about 155 local community members from Peninsular Malaysia, Sabah and Sarawak with knowledge on basic first aid skills. Overall, encouraging feedback was received where 75% of the participants rated the programme as good, namely, information on treating injuries such as wounds, bleeding, fractures, burns, as well as performing Cardio Pulmonary Resuscitation (CPR), as relevant and helpful. The jointly organised effort which was in its second year intended to produce a minimum of one first aider in each family residing at selected areas surrounding PETRONAS' operating facilities.

Product Stewardship

We adopt an integrated approach to ensure the chemicals we produce as well as utilise across our operations are safe for people and the environment. This entails implementing prudent product safety practices across our Upstream and Downstream Businesses for managing HSE risks and improving product performance throughout its lifecycle. Our activities in this aspect range from identifying, evaluating as well as addressing HSE impacts, to undertaking rigorous product risk management, and developing robust toxicology testing plan. Concurrently, we communicate measures for the safe-handling of chemicals and transportation of dangerous goods, prioritising on products with higher risk classification. Collectively, these efforts pave the way towards achieving sustainable sound chemical management in PETRONAS, essentially, meeting stakeholders' expectations for safer products, while adhering to stringent global regulations.

Our efforts also encompass delivering products which meet our customer's desire for quality and innovation. Research and development activities are ongoing to upgrade the superiority of our petrochemical products, fuels and lubricants, many of which are marketed globally.

Product Safety

The completion of Product Risk Assessment (PRAs) for all our chemical products enabled accurate characterisation and rating of safety risks for products such as polymers and chemicals such as methanol as well as fertiliser. Subsequently, a Global Product Safety Summary sheet will be developed for products with a higher risk element, such as that produced for Ammonia in 2014.

Product Hazard Communication

Findings of the PRAs led to the execution of product hazard communication sessions with our stakeholders in Malaysia and internationally on ways to safely handle products which fall under the high risk category. Some of the topics covered addressed the environmental, safety and health concerns pertaining to use of plastic.

Similarly, we engaged with our marketing customers in Indonesia on bootleg methanol. Meanwhile in China, we shed light on guidelines for safe handling of chemicals as well as product safety procedures.

Regulatory Compliance

In 2014, we enhanced our product Safety Data Sheets (SDS) in compliance with Malaysia's Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013, or better known as CLASS Regulations 2013. The SDS provides information on product composition, labelling for containers and transport, safe handling and storage, incident management as well as compliance to Regulations. The SDS, available in both Bahasa Malaysia and English, are accessible on the PETRONAS SDS Search Portal at <https://sds.petronas.com.my/> for public viewing, including on our partly-owned subsidiary, PETRONAS Chemicals Group Berhad's (PCG) corporate website. The dedicated portal is a database of all chemical products produced by PETRONAS.

PETRONAS also purchases chemicals from external suppliers. In ensuring the chemicals we obtain externally are in compliance with the CLASS Regulations 2013, we carried out several engagement sessions nationwide with our chemical suppliers and in-house purchasing personnel. Participating in these sessions were also representatives from Malaysia's Department of Occupational Safety and Health who shed light on requirements of the revised Regulations. In addition, PETRONAS' representatives deliberated upon the Company's expectations and implementation plan for meeting the CLASS Regulations 2013. Queries raised during the sessions focused predominantly on the Regulations itself and the role of suppliers in meeting the more stringent requirements.

Responsible Care Initiative

In addition, PETRONAS, via PCG is also a signatory to the Chemical Industries Council of Malaysia's (CICM) Responsible Care (RC) initiative. In 2014, we were accorded eight gold awards by CICM, attesting to our commitment to uphold sound chemical management practices in PETRONAS.

Internationally, we fortified our chemicals' conformance levels with stringent regulations such as:

- The Strategic Trade Act 2010 (STA) Chemical Weapons Convention (CWC).
- The European Union's Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). We are also working to meet requirements of emerging conventions such as the K-REACH and Taiwan-REACH.

Commendably, no incidents of product and/or chemical non-compliance were recorded in 2014.

Product Quality

In Malaysia, a selected range of our products, namely chemicals such as polymers and methanol, have been accorded the HALAL certification. Works are ongoing to obtain the HALAL accreditation for a wider range of our chemical products. In facilitating this, we established an Internal HALAL committee and Halal Assurance Management System (HAMS), with the latter being in accordance with the Malaysian Halal Hub or *Jabatan Kemajuan Islam Malaysia's* standard guidelines. Implementation of the HAMS will also be enforced upon our suppliers and transportation providers in due time.

Globally, our Fluid Technology Solutions is a trademark innovation used for the development of fuels as well as lubricants in Malaysia and internationally. This is supported by our involvement in Formula One racing. This provides us with a testing ground for formulating products, namely, fuel and lubricants, which meet the highest of specifications as well as deliver benefits in terms of efficiency, durability, improved performance, and cost savings for the consumer.

Product Sustainability

We embarked on a pilot Product Lifecycle Inventory Analysis (LCIA) study to analyse the carbon footprint of selected chemical products. This proactive initiative will involve assessment of six products, to identify the carbon footprint in terms of carbon dioxide equivalent (CO₂e) per kg of product.

Ongoing Capability Development

In 2014, our partly-owned subsidiary, PETRONAS Chemicals Group Berhad (PCG) formed a Product Regulatory Section, which reports directly to the Chief Innovation Technology Officer. The dedicated portfolio is tasked to holistically spearhead Product Stewardship initiatives in PCG.

Furthermore, we are consistently enhancing people's skills and know-how in the areas of product stewardship, such as product lifecycle analysis and product risk assessment. In 2014, identified employees underwent several training programmes, alongside exposure via hands-on experience.

Externally, starting mid-2014, PETRONAS helmed a lead role in IPIECA's Fuels and Products Working Group. This entailed active participation to collectively spur thought leadership by analysing opportunities and assessing potential challenges for the future development of Product Stewardship practices, globally.

SHIELD – Integrated Risk Management

A Stewardship, Health, Information and Environment Linked Database (SHIELD) was developed to pave the way for well-grounded, holistic as well as systematic assessment of current and potential HSE risks. SHIELD is a mechanism to continuously elevate PETRONAS' HSE practices by ensuring the availability of effective and efficient control barriers. It acts as a compendium of comprehensive information which cuts across various dimensions of HSE. Overall, SHIELD also significantly reduces turnaround time and assures improved accuracy in comprehending data collated from various risk assessments.

The roll out of SHIELD is divided into several waves, spanning over a period of five years. SHIELD Wave 1 comprised three modules, namely, Occupational Health (OH), Industrial Hygiene (IH) as well as Product Safety and Stewardship (PSS). As at 31 December 2014, the modules have been implemented at five operating units (OPUs) in Malaysia. Other upcoming activities entail developing a Measurement Module for IH, an e-Health Assessment System for OH, as well as improving the current Safety Data Sheet (SDS) to incorporate additional information on Labelling and Waste Card for PSS.

Environmental Stewardship



PETRONAS adopts a holistic approach to enhance operational sustainability across our businesses in Malaysia and internationally.

The underlying intent being to solidify existing systems and processes, including reliability as well as operational excellence of our facilities throughout its lifecycle.

We seek to continually improve our environmental footprint and utilise natural resources efficiently, which entails prudent use of energy as well as water. Concurrently, we are strengthening our practices on effluent, emissions and waste management.

Collectively, these allow us to better manage our impact on the ecosystem.

We place importance on:

- 47 Carbon Management & Climate Change
- 49 Water Management
- 50 Spill Management
- 51 Waste Management
- 51 Emissions Management
- 51 Biodiversity & Ecosystem Services

Carbon Management and Climate Change

Crude oil and natural gas continue to play a vital role in meeting global energy demand, with proactive measures being taken to monitor as well as manage carbon emissions. While the move towards a low carbon economy is gaining momentum; availability, accessibility and affordability remain some of the considerations influencing this shift. At PETRONAS, we are committed to improving energy efficiency and strive to effectively managing greenhouse gas (GHG) emissions, focusing on reducing flaring. PETRONAS' Health, Safety and Environment (HSE) policy, management system as well as control framework, alongside the Carbon Commitments are put in place to lower environmental footprint across our operating facilities. Where feasible, we deploy relevant technologies to maximise value creation.

PETRONAS Carbon Commitments

The PETRONAS Carbon Commitments were operationalised Groupwide in 2013, and supporting its realisation were several efforts carried out in 2014:

- Strengthened systems and processes to achieve a low carbon economy.
- Improved monitoring, reporting and verification of GHG data.
- Introduced guidelines outlining best practices on energy management for Downstream operations.
- Pursued gas monetisation projects in Malaysia to reduce flaring.
- Accelerated capability development efforts in GHG data accounting and management.

PETRONAS Carbon Commitments

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

Improved Governance in Carbon Management

- Established a Flaring & Venting Task Force (FVTF) that led to the development of Exploration & Production Flaring & Venting Framework.
- Incorporated a requirement in the PETRONAS Project Management System for GHG emissions to be estimated during early stages of all projects.
- Developed the PETRONAS Energy Performance Standards (PEPSTAR) to support the Energy & Loss Management System (ELMS).
- Revised PETRONAS Procedures and Guidelines for Upstream activities by integrating requirements on zero continuous venting & flaring.
- Tabulated the carbon footprint of existing operations, including greenfield & brownfield projects.

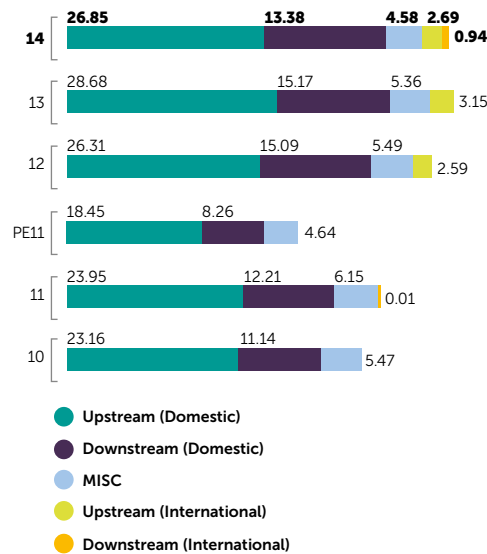


GHG Performance

In 2014, our total carbon footprint was 48.44 million tonnes of CO₂ equivalent (million tCO₂e), a 7.5% decrease from the 52.36 million tCO₂e recorded in 2013. Of this, our International operations accounted for 3.63 million tCO₂e, with Upstream Business at 2.69 million tCO₂e and Downstream Business at 0.94 million tCO₂e, respectively.

PETRONAS Total GHG Emissions

GHG Emissions (million tCO₂e)



*Note: Efforts are ongoing to achieve higher accuracy in data accounting.

Upstream International Operating Assets

2012	2013	2014
Mauritania Myanmar Turkmenistan Vietnam	Mauritania Myanmar Turkmenistan Vietnam	Ireland Mauritania Myanmar Turkmenistan Vietnam

In the period under review, we achieved lower emissions in the Upstream Business through the implementation of GHG reduction projects. However, improved equipment performance that led to reduction in flaring was offset by higher incidences of unplanned shutdowns, especially, in the Downstream petrochemical and gas processing plants.

To date, efforts are ongoing to continually improve the completeness and accuracy of GHG data accounting in PETRONAS. Parallel to this, in 2014, we included data from our international subsidiaries Engen Petroleum Ltd in South Africa and PETRONAS Lubricants International (PLI) as well as partly-owned Malaysian subsidiary PETRONAS Dagangan Berhad (PDB) in the computation of the Downstream Business' carbon footprint.

Reducing GHG Emissions

Projects implemented at selected offshore sites in Malaysia coupled with other initiatives to improve operational excellence reduced GHG emissions by approximately 15% having:

- Installed bigger capacity gas compressors to maximise resource monetisation.
- Refurbished compressor train to achieve zero continuous flaring by enhancing oil production.
- Improved compressor performance by reducing equipment breakdowns.
- Introduced a new performance indicator to measure flaring and venting intensity (FVI).

Boosting Energy Efficiency

The PETRONAS Energy Performance Standards (PEPSTAR) was developed to facilitate implementation of our revised Energy and Loss Management System (ELMS) version 2.0. The updated ELMS document strengthened governance of energy management in downstream plants. The PEPSTAR outlined optimisation, improvement and loss reduction practices to improve overall energy utilisation and efficiency rates across our operations.

Streamlining Energy Accounting

A baseline study was conducted to calculate energy consumption across our Downstream facilities. Results gathered were used as a basis to monitor & track energy performance, including measure the effectiveness of reduction initiatives implemented in realising PETRONAS' Carbon Commitments.

The exercise entailed reviewing our Downstream Business' current practices to streamline energy accounting methodology in accordance with the ELMS and improve site instrumentation accuracy across the various plants.

Workshops were carried out to initiate the study such as; define key quantitative information required, provide update on the enhanced ELMS and deliberate on findings of the consolidated data in developing an internal Energy Index (EI).

Renewable Energy

PETRONAS continued with our existing projects to convert solar energy into electricity using photovoltaic (PV) technology. This included the Solar PV Demonstration Project at the rooftops of Suria KLCC and PETRONAS' first-of-its-kind twin stations in Peninsular Malaysia, as well as a Solar Independent Power Producer (IPP) venture at Gebeng in Pahang, Malaysia. Power generated from the Solar IPP joint-venture project, which marks PETRONAS' largest renewable energy undertaking in Malaysia, was sold as a cleaner source of energy for domestic use.

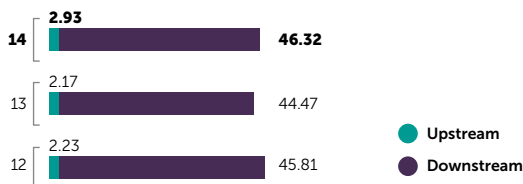
Water Management

Water availability and conservation are increasingly gaining importance, especially in regions facing shortage of the natural resource. Consequently, operational and commercial activities become more challenging as regulations on water become more stringent, alongside the rising cost of water. In PETRONAS, we closely monitor the use of fresh water across our operations. This includes complying with relevant laws and internal requirements in managing this commodity. Other ongoing efforts include minimising fresh water withdrawal via re-use and recycling efforts.

Fresh Water Withdrawal

In 2014, the total fresh water withdrawn by PETRONAS was approximately 49.25 million cubic metres (m³), from our domestic as well as international operations (Carigali-operated Blocks and our subsidiary, Engen Petroleum Ltd, in South Africa). An increase of 5.6% in 2014, from the 46.64 Mm³ reported in 2013 was largely resulting from several unplanned shutdowns in the Downstream plants.

PETRONAS Fresh Water Withdrawal by Business (m³)



Energy Generated from Solar PV Installations in Malaysia (megawatt-hours (MWh))

	Suria KLCC, PETRONAS Solaris Putra & PETRONAS Solaris Serdang (MWh)	Total CO ₂ Reduction (tonnes)
2013	860	588
2014	811	555

	Solar Independent Power Producer (IPP) project (MWh)	Energy Supplied to the National Grid (MWh)	Total CO ₂ Reduction (tonnes)
2013	802*	802	548
2014	13,971**	13,971	9,556

* Covers a period of two months, November and December 2013 following plant operationalisation.

** Covers a period of 12 months, from January to December 2014.

Engagements on Carbon Management in Malaysia

PETRONAS engages with relevant regulatory authorities to discuss initiatives on addressing carbon footprint management & associated matters within the Malaysian context, in particular, with the Ministry of Natural Resource and Environment (MNRE) as well as Ministry of Energy, Green Technology & Water (KeTTHA). Some of the topics deliberated were climate change & adaptation, as well as carbon capture & storage, including proposing improvements to the existing GHG reporting framework.

Fresh Water Management Practices

We are working towards developing Fresh Water Commitments for the PETRONAS Group. Some of the key initiatives undertaken across our Upstream and Downstream operating facilities included:

What was Done	How it was Executed
Internal fresh water assessment	<ul style="list-style-type: none"> Analysed current water utilisation practices. Enhanced plants' water balance accounting methodology.
Development of the PETRONAS Water Management Guide	<ul style="list-style-type: none"> Improved reliability of water systems for continual improvements. Streamlined water management practices against IPIECA's Water Management Framework.
Water Gap Closure Workshop	<ul style="list-style-type: none"> Explored potential water reduction and direct re-use opportunities. Reviewed plants' design constraints to classify non-optimised water units Formulated water gap closure plans for reducing water loss.

Over and above these, we continued the application of high-rate filtration process at one of our refineries in Malaysia. This sustained water efficiency rate at the refinery and contributed towards the ongoing efforts to reduce fresh water withdrawal in our operations.

Furthermore, regular trainings and engagement sessions were conducted Groupwide to ensure consistent understanding as well as accurate accounting on fresh water withdrawal.

Spill Management

We work towards continuously improving our oil spill risk management practices by analysing previous internal and industry-wide spill incidents, to enhance our own preventive as well as mitigation plans. This includes strengthening existing technical standards, operating procedures and asset integrity programmes. Adding to these are efforts aimed at enhancing our capabilities in oil-spill response.



Water Savings at PETRONAS Refineries

ENGEN Refinery in South Africa has been reducing its fresh water withdrawal by improving systems efficiency and reliability. The efforts involved increasing the cooling tower's cycle of concentration (CoC) from an average of 2.5 to 4. This equated to water savings of approximately 110,000 m³ per year, equivalent to about USD150,000. In addition, the number of cycles for boilers as well as cooling water facilities were aligned to the ASME standards for increasing the average CoC from 6 to between 10 and 15. Notably, the savings accounted to about 40,000 m³ per year for each boiler, lowering operational cost by approximately USD67, 000 per year.

A similar practice was also implemented in Malaysia, where PETRONAS Penapisan Terengganu Sdn Bhd revised the parameters of its cooling water unit for better optimisation of chemicals. In addition, water consumption was reduced by increasing the cooling tower's concentration cycle from 4-6 to 6-8.

In 2014, the number of hydrocarbon spills to the environment greater than one barrel was 25. The estimated total volume of hydrocarbon spills was 632 cubic meters. For more information on our oil spill response preparedness, please refer to page 36.

Note: PETRONAS has set 2014 as the base year to measure spills over one barrel.

Waste Management

PETRONAS pursues active efforts to reduce, recycle, recover and where feasible, re-use waste by adopting industry best practices. This includes complying with stringent regulations on hazardous waste handling and disposal. We seek to minimise waste generation at the front-end design and engineering stages. Concurrently, efforts are ongoing to strengthen internal processes as well as capabilities in the areas of waste identification, characterisation, handling and disposal.

In 2014, PETRONAS generated hazardous waste totalling up to approximately 62,731 metric tonnes from our operations in Malaysia and internationally. Of this, about 43% or 26,974 metric tonnes were safely disposed, whereas, 57% was sent for recycling and recovery activities at approved licenced facilities.

Discharges to Water

PETRONAS' wastewater treatment systems are designed, constructed and operated in accordance with approved technical standards, and are in compliance with regulatory requirements as well as industry best practices. We closely monitor discharges from our operations and look for new ways to improve discharge quality. For example, a pilot reed-bed effluent treatment facility was launched in PETRONAS Chemicals Fertiliser Kedah Sdn Bhd, Malaysia comprising an artificial wetland to filter and treat wastewater prior to discharge. The bioremediation concept involved utilising water, soil, plants and microorganisms to improve discharge quality. In 2014, our controlled discharges of oil to water were approximately 992 metric tonnes.

Emissions Management

PETRONAS is enhancing our emissions monitoring and management programmes, particularly in Malaysia, by reviewing our existing practices to be in compliance with the newly enforced *Environmental Quality (Clean Air) Regulations, 2014*. In addition to meeting regulatory requirements in countries of operations, we also inventorise sulphur oxides (SOx) and nitrogen oxides (NOx) loadings. In 2014, emissions of SOx and NOx from PETRONAS' operations were estimated at 61,698 and 100,915 metric tonnes, respectively.

Biodiversity & Ecosystem Services

PETRONAS recognises and encourages the protection of biodiversity wherever we operate for the benefit of present and future generations. To date, much of our efforts concentrate on creating awareness on the importance of preserving biodiversity. Concurrently, we execute various initiatives striving to maintain ecosystem sustenance, ranging from environmental studies to development of infrastructure such as research facilities and building local knowledge in the area of biodiversity management. We also pursue partnerships with environmental experts to undertake conservation programmes in Malaysia and internationally.



A BEACON of Hope

Trawlers' over-fishing, among others, have significantly impacted the pristine waters and rich biodiversity off the coast of Bintulu in Sarawak, Malaysia. Recognising this, PETRONAS, through our subsidiary Malaysia LNG Group of Companies' (MLNG), embarked on the Biodiversity, Environmental and Conservation (BEACON) Project in 2013 to regenerate marine life around the coastline of Similajau National Park in Bintulu.

The BEACON project, carried out alongside the Sarawak Forestry Corporation Sdn Bhd (SFC) which provided technical expertise and consultation, is made up of two components.

The first involves deployment of 1,500 artificial reef balls over a period of three years, starting 2013, entailing some RM4.7 million worth of investments. Commendably, as at 2014, 67% or 1,000 artificial reef balls were already planted.

Typically, the process to drop a total of 250 reef balls can take up to 10 days, requiring capable divers to survey, find and mark the right spots. In ensuring the availability of sufficient number of qualified divers, MLNG provided opportunities for interested staff to become licensed divers. Many were members of MLNG's *I LOVE Volunteering* group, comprising staff who actively lead a variety of social causes.

The second component of the undertaking are Conservation, Education, Promotion and Awareness (CEPA) programmes which will last throughout the three years. A key activity among the initiatives was a three-day long programme for Form 4 students called Friends of Nature, in which children aged 16 years of age were exposed to Mother Nature and educated on marine life conservation.



The BEACON Project has resulted in several encouraging results thus far:

- Reduction in the number of dead turtles found on beaches; to fewer than 10 each year.
- Turtles were also spotted feeding close to the coastal area; a rare sight in the last five years.
- Various species of dolphins such as the Indo-Pacific Bottlenose, Long-Snouted Spinner, Pantropical Spotted and Dwarf Spinner, were also seen in the waters. In fact, it was for the first time that the Dwarf Spinner dolphin was reportedly sighted in Sarawak waters.

BEACON Reef Ball Project at Glance

1,500 reefballs over three years (2013-2015) amounting to RM4.7 million.

Conservation, Education, Promotion & Awareness Programme

- BEACON Cetacean Aerial & Boat survey
- Friends of Nature
- BEACON Divers Training
- Turtle Hatchery & Conservation Programme
- Beach & Reef Cleaning Programme

Imbak Canyon Conservation Area

One of the last stretches of virgin rainforest in Sabah, the Imbak Canyon is home to nearly 600 species of unique flora and fauna that grow within its 30,000 hectares. Given the partnership between PETRONAS and Yayasan Sabah, the beauty of Imbak Canyon as well as the variety of life contained within it, are now preserved for the future generations to enjoy. Launched in 2011, the partnership aims to conserve the unique biodiversity found in Imbak Canyon and promote environmental education, public awareness and community outreach. In 2014, PETRONAS contributed RM77 million for the development of a 27-hectare Imbak Canyon Study Centre (ICSC), scheduled for completion in 2016.

Imbak Canyon Study Centre

Targeted to be completed in 2016, this is a research centre and a gene bank for pharmaceutical and biotechnological-potential species as well as a centre of learning in biodiversity conservation and the sustainable use of natural resources.

The project, implemented under Phase 2 of Yayasan Sabah-PETRONAS Imbak Canyon Conservation Partnership, will be used as a platform for scientific research and space for training, recreational as well as ecotourism activities, in addition to being an administrative hub for the conservation area.

The ICSC will be equipped with a research lab, staff quarters, accommodation, seminar rooms, office, education complex and other specially-designed facilities.

Ongoing Efforts in 2014 included:

Imbak Canyon Conservation Area Management Plan

Jointly formulated with Yayasan Sabah for the effective management of the conservation area.

Imbak Canyon Information Kiosk

A one-stop venue established in 2013 to serve visitors to the Imbak Canyon and also headquarters for the Imbak Tourist Guides and Porters Association. A total of nine porters had obtained the Local Nature Green Badge License in the year under review.

Ethno-Botanical Survey & Research

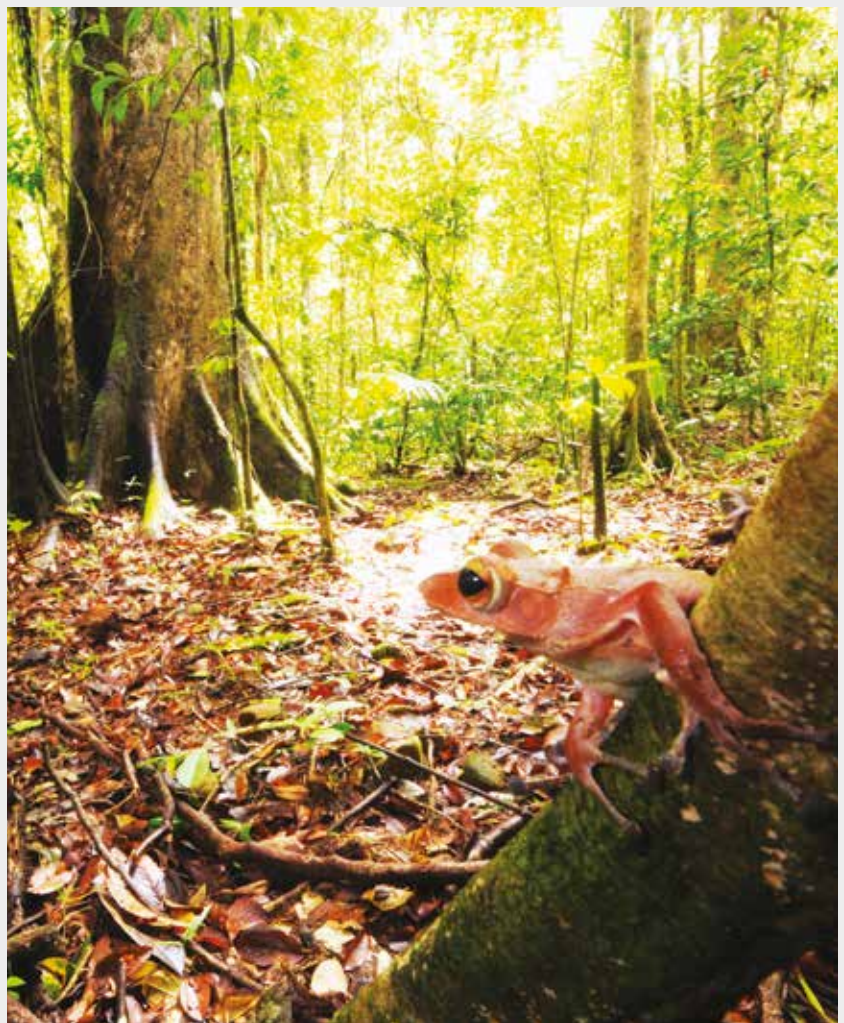
Carried out in partnership with local authorities and universities to catalogue the use of traditional medicine in preserving traditional knowledge and practices of native peoples.

Capability Building Programmes

Yayasan Sabah staff and local community leaders were educated on topics such as Bird Identification, Wildlife Monitoring and Reporting, including on Road Safety and Basic Vehicle Maintenance.

Community Engagement

Dialogue sessions were held with local community members in Mukim Pinangah and Kuamut, Sabah to share updates on the conservation efforts undertaken. In addition, an educational tour of the Maliau Basin Conservation Area was carried out for building local knowledge and skills in protecting the Imbak Canyon's flora as well as fauna.



Society



We strive to uphold responsible growth by balancing business and societal value creation in all that we do. Wherever we operate, our approach to corporate social responsibility underpins the promotion of holistic value creation going beyond philanthropy. Our underlying aspiration

is to spur lasting socioeconomic development, one that is driven by people. Acknowledging this, we hone a progressive, empowered and resilient workforce, including local communities as we believe human capital is fundamental for companies and nations alike.

We place importance on:

- 55 Social Performance
- 56 Community Investments
- 62 Our People
- 65 Local Talent

Social Performance

Social Performance to us is managing impacts arising from areas of business while contributing to society in a responsible manner. In adherence with PETRONAS' Social Performance Framework, we carry out thorough Social Risk Assessments (SRA) across the Health, Safety, Environment, Socio-economic and Cultural as well as Security spheres. Concurrently, we conform with international social standards and requirements in countries where we operate to make holistic business decisions. We emphasise, advocate and reinforce the importance of Social Performance within our sphere of control, among internal and external stakeholders, through regular engagement sessions as well as trainings.

Managing Social Risks

In 2014, we continued to raise awareness on Social Performance via regular briefing sessions conducted in Malaysia and internationally, targeting all levels of staff. Primarily, we stress upon the importance for systematic social impact management plans to effectively address potential risks. This is to ensure local communities' expectations are adequately met.

Parallel to this, we conducted nine SRAs covering selected Malaysian as well as international operational sites to establish baseline data and determine social impacts associated with future and current operations. Targeted Social Performance plans are being developed to manage the identified impacts.

Similarly, an Environmental, Social and Health Impact Assessment was conducted for two new onshore blocks, RSF 2 and 3, in central Myanmar. The assessments were aligned to International Finance Corporation's (IFC) Social and Environmental Performance Standards. An Environmental, Social and Health (ESH) Management Plan was subsequently developed prior to project initiation, in compliance with the IFC's performance system requirements. Relevant guidelines outlining specific mandatory requirements for identified risk areas were developed to facilitate the implementation of the ESH Management Plan.



Community Engagements

Meaningful and timely discussion with local community members are carried out throughout various phases of a project to share insights and obtain valuable input for safeguarding the interests of our various stakeholders.

In Malaysia, the Sabah-Sarawak Gas Pipeline (SSGP) project encompassed the laying of onshore gas pipelines from the Sabah Oil and Gas Terminal in Kimanis, Sabah to the PETRONAS Liquefied Natural Gas (LNG) Complex in Bintulu, Sarawak. With infrastructure traversing along land belonging to several indigenous communities over 91 kilometres (km) in Sabah and approximately 421 km in Sarawak, the project called for numerous dialogue sessions with affected community members to provide updates and gather feedback. Leading the dialogue sessions were our project team members who engaged with representatives from the *Berawan, Iban, Kayan, Kelabit, Kenyah, Lunbawang and Penan* communities to provide insights on the SSGP, its operational and maintenance plan, including the growth opportunities in store for local community members such as provision of jobs.

Similar stakeholder consultations were also held in Myanmar prior to the initiation of projects RSF 2 and 3. Open discussions were held with villagers and local authorities on matters such as compensation and land acquisition to understand on-the-ground expectations. These sessions were conducted in the presence of local authorities comprising village heads, religious leaders and village elders. Largely, feedback received concentrated on land porosity matters. In addressing this, we carried out a vibration test to demonstrate how the land remains suitable for agriculture activities, substantiated by proven facts. Compensation was also disbursed to land and crop owners in a timely manner.

Developing Capabilities

Formal trainings were conducted to develop capacity in the Social Performance discipline, adopting the concept of train-the-trainer. The participants comprised identified personnel from the Upstream and Downstream Businesses, as well as other relevant teams that face a higher exposure to social risks in their day-to-day jobs. Some of the areas covered were IFC's Performance Standards on Environmental and Social Sustainability as well as best practices on Human Rights, including the due diligence process.

Furthermore, a Social Performance Working Group and Human Rights Task Force were established to review and improve the Company's practices as well as build capability across PETRONAS. Currently, work is ongoing for the development of a Human Rights Commitment, benchmarked against internationally-accepted best practices of global multinationals, the oil majors and international conventions and treaties.

Simultaneously, we participated in international fora on Social Performance, and continued to share our practices with industry peers through PETRONAS' membership in IPIECA.

Personal Data Protection

PETRONAS embarked on a Groupwide situational analysis exercise in 2014 for developing a comprehensive plan to facilitate full compliance with the principles & rights enshrined in the Personal Data Protection Act 2010 ("Act"), implemented in November 2013. As a result, the Security & Privacy Policy was developed, scheduled for roll-out to the PETRONAS Group in 2015. In addition, as of 31 December 2014, three train-the-trainers sessions were conducted to enhance selected personnel's understanding of the Act.

Community Investments

The needs of individuals are often influenced by the unique conditions in their respective localities. Acknowledging this, PETRONAS' Corporate Social Investment (CSI) philosophy is rooted on nurturing local communities with the right knowledge, skills and capabilities to drive lasting socioeconomic growth. This guiding principle is reinforced in our numerous social, environmental and community outreach programmes, among others. Our investments come in the form of sponsorships, donations and projects, varying across our operational sites in line with the needs of our stakeholders.

PETRONAS also promotes staff volunteerism, thereby encouraging staff to collectively lead the Company's social and capability building programmes. This involves active collaboration with the Wives and Women Staff Association of PETRONAS (PETRONITA) and Young Professionals' Club, among others.

Redefining CSI

PETRONAS reviewed our Corporate Social Investment (CSI) strategy in 2014 to maximise value creation by assessing the relevance of our existing programmes amid the changing externalities. The CSI Rationalisation exercise consolidated findings from internal as well as external research efforts, taking into consideration the national agenda, environmental and social issues, including emerging trends prevailing at our Malaysian and international operational sites.

As a precursor to this, we carried out an inventory exercise of all CSI programmes executed in 2013, the findings of which revealed that 75% of our efforts were multi-pronged and long-term in nature. A series of syndication with top management personnel and internal stakeholder workshops were also conducted to seek feedback on PETRONAS' CSI practices to unveil potential improvements.

As a result, the CSI philosophy *Empower Communities Where We Operate* was formalised, with clearer focus of three areas: Education; Community Wellbeing and Development; as well as Environment:

Education

Develop knowledge & capabilities to support nation building.

Community Well-being & Development

Improve the well-being & contribute to community development.

Environment

Conserve natural resources for current & future generations.



Reach Out, Make a Difference

We take into consideration local communities' aspirations for better quality of life and a thriving socioeconomic landscape. In playing our part, we invested approximately RM500 million in 2014 on more than 200 CSI and philanthropy-related voluntary initiatives executed Groupwide.

The CSI initiatives centered on the three main areas of education; community well-being and development; and environment. Largely, the initiatives carried out conformed to the respective countries' socioeconomic growth aspirations to benefit of the local community in our areas of operations.

Youth Empowerment

We continue to place precedence on nurturing the skill, capabilities and knowledge of the future generation. In 2014, we embarked on the PETRONAS All About Youth programme (AAY), to provide youths with a platform to showcase their ability and creativity in non-academic areas. Essentially, the objective is to enrich personal character with skills such as analytical thinking, leadership and project management. Overall, the AAY programme, which aligns with Malaysia's Education Blueprint, aims to nurture well-rounded youths.

The pilot AAY involved a total of 1,200 Malaysian youths aged 16, from 60 selected schools located in three states, namely, Terengganu, Sabah and Sarawak. Participating schools received a start-up fund of RM2,000 and was assigned a buddy from PETRONAS. The buddy, a PETRONAS staff volunteer, provided mentorship on project management and execution, as well as steered the participants' engagement with local community members.

The winning projects demonstrated originality, creativity and clarity in presentation, including a strong focus on sustainability and impact management. Led by the encouraging results of the pilot AAY, this initiative will be rolled-out nationwide in 2015.



PETRONAS Education Sponsorship Programme (PESP)

Integrating elements of education and human capital development, PESP supports national growth by paving the way for nurturing skilled individuals in various fields and disciplines. To date, PESP has provided more than 20,000 deserving individuals with an opportunity to realise their academic potential, entailing an cumulative investment of about RM2.8 billion since 1975. In 2014, 337 students aged 17 received PESP's education sponsorships amounting to RM100 million. The selected students are funded from foundational studies up to the first-degree level in Malaysian and international universities. Among the 337 recipients were 15 students of the PERMATApintar Negara programme, an initiative led by the Malaysian Government to identify and nurture academically-talented Malaysian students.

To date, we have also invested about RM101.3 million to benefit a total of 1,144 non-Malaysians via the PESP, since 1998. The students received tertiary education at the *Universiti Teknologi PETRONAS (UTP)*, Malaysia. In 2014, 43 Host Country Nationals were awarded scholarships to pursue graduate studies in technical disciplines.

PESP as at 31 December 2014

Location	Total Number of Malaysian Students
Local – UTP	8,866
Local – Others Institutions	5,531
Overseas	6,857
Total	21,254

Program Sentuhan Ilmu PETRONAS (PSIP)

The PSIP is yet another education outreach initiative carried out in Malaysia focusing on the subjects of English, Mathematics and Science, including character building. PSIP is a combination of what was formerly known as the Program Bakti Pendidikan PETRONAS (PBPP) and PETRONAS Minor Scholarship Programme. The PBPP was first introduced in 2002 and to date, over 35,000 underprivileged students have benefited from the programme.

In 2014, pupils participating in the PSIP hailed from 53 primary schools and 13 secondary schools across the states of Johor, Kedah, Labuan, Melaka, Pahang, Sabah, Sarawak and Terengganu. Of this, 316 students with borderline academic performance scored a minimum of one A in the Primary School Achievement Test, compared to 278 students in 2013, citing an increase of 14%

Disaster Relief

Malaysia's East Coast region experienced the worst flooding over the last 30 years in December 2014. Thousands of people were evacuated from their homes, especially in the states of Kelantan, Terengganu and Pahang which were severely inundated.

In response to this national calamity, PETRONAS made contributions totalling over RM5 million in aid and services, with staff volunteers mobilised to provide immediate assistance to affected communities. The contributions-in-kind encompassed items such as Liquefied Petroleum Gas (LPG) cylinders, cooking stoves, cleaning and hygiene kits, food supplies, mattresses, diapers, torch lights, blankets as well as power banks, including logistic services. Some 21,500 households also received aid in the form of a Mesra Gift cards worth RM150 each, with two sets of comforters worth RM80.

Supporting the Group's efforts were independent flood donation drives led by our various operating units, including partly-owned subsidiaries which were collectively spearheaded by our staff, for example:

- East Coast Regional Office (ECRO) contributed RM450,000 worth of items including 890 units of LPG cylinders, 120 units of stoves and food supplies for Kelantan. Some 3,000 packs of basic cleaning kits as well as personal hygiene items were distributed to flood victims in Pahang, Kelantan and Terengganu.

- PETRONAS Carigali Sdn Bhd contributed Helicopter Support services for the National Security Council or *Majlis Keselamatan Negara's* (MKN) Flood Relief Operations, over a period of two weeks.
- PETRONAS Chemicals Group Berhad (PCGB) activated its *We Care Programme*, a staff volunteer initiative for flood relief, involving contribution of money and time for partaking in clean-up activities.
- PETRONAS Dagangan Berhad (PDB) supplied diesel for generators used at relief centres and hospitals, as well as fuel for vehicles transporting supplies to relief centres worth RM20,000. PDB also helped in delivering aid sponsored by our ECRO to local communities at Kemaman and Dungun in Terengganu. In addition, LPG cylinders were channelled to the Department of Social Welfare or *Jabatan Kebajikan Masyarakat* Pahang for distribution up to 51 relief centres in Kuantan, Pahang.

Furthermore, about 150 PETRONAS personnel from our headquarters in Kuala Lumpur, Malaysia assisted to restore a primary school in the district of Kemaman, Terengganu during post-flood clean-up works.

In Sabah, the State Government also received RM5 million to support its flood relief efforts.





Coming Together as a Nation

Malaysia experienced devastating tragedies involving our national carrier, namely, MH370 and MH17, leaving the nation in despair. In the face of such calamity, we participated in associated missions spearheaded by the Malaysian Government through financial resources and where possible, applying our technical expertise, including technology know-how.

In support of underwater search operations for MH370, PETRONAS absorbed a total cost of RM67 million for the lease of search assets, namely, the GO Phoenix vessel and Pro Synthetic Aperture Sonar (ProSAS).

The ProSAS mounted on the GO Phoenix vessel searched up to a depth of 6,000 metres, covered up to 194 square kilometres per day. The vessel, deployed for a 22-day search mission at the southern Indian Ocean about 3,000 km off Perth, Australia was also equipped with a multi-beam sonar to search blind spots.

In addition, we set up a seed fund with an initial contribution of RM10 million to assist the families of those onboard the unfortunate MH17. PETRONAS invited other organisations to collectively pull together their financial contribution. Queries could be channeled to careforMH17@petronas.com.my.

Entrepreneurship

In Indonesia, under the programme *Ksatria*, we provided entrepreneurship training on mobile phone repair and mechanical skills for boat maintenance to selected underprivileged students hailing from the local fishing communities.

Restoring Infrastructure

We spearheaded a facility improvement programme which entailed refurbishing and restoring classrooms, including constructing a staff room, multipurpose court and toilets for the Atlabara Primary School in Juba, the Republic of

the South Sudan. We also supplied new furniture and electrical fittings for all buildings in the school. Following the renovation works, the school was able to increase its student population by 36%, growing from 220 to 300 pupils.

In addition, we contributed some USD100,000 to School #12 in Turkmenbashi city, Turkmenistan for replacing its roof measuring some 3,000 square metres. This effort benefitted about 780 students, by making available a safer and more conducive learning environment.

Assisting Vulnerable Groups

In 2014, we supported the Deaf and Blind People Society as well as the Boarding School for Children with Special Needs in Turkmenbashi, Turkmenistan. Our contributions involved purchasing wadded pillows and blankets, bed sheet sets as well as t-shirts from the Deaf and Blind People Society. These items were later handed over to the boarding school for the use of its 154 pupils.

In addition, we continued to support Yenme, a public organisation in Turkmenistan which provides social support and rehabilitation services for children with physical disabilities.

PETRONAS Gets Acknowledged for its Efforts in Iraq

We aspire for our presence to bring about meaningful benefits to those residing in our areas of operations. In line with this, PETRONAS has undertaken numerous efforts focusing on education and local capability development, health and sanitation, including infrastructure development to benefit local community members residing in the Garraf Contract Area (GCA).

In recognition of this, PETRONAS received the Best Corporate Social Responsibility Award at the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) 2014. This accolade acknowledges the far-reaching impact of our contributions in Garraf which have improved the quality of life for many who reside around this area.

Educational Programmes

The Garraf Vocational Training Center (GVTC) was established to equip local men and women with basic soft as well as technical skills for better access to employment opportunities. To date, more than 900 graduates have benefitted from the various courses offered on Electrical Wiring and Maintenance, Refrigeration and Air-conditioning Maintenance, Sewing, Hairstyling and Beauty Care, Basic English as well as Information Technology.

In addition, a total of 6,225 students from 20 selected schools around the GCA received a set of winter garments to protect against the area's extreme cold weather conditions.

Upgrading Works

We restored infrastructure for 10 schools to provide a more conducive and safer learning environment for students. Our efforts ranged from constructing additional classrooms to refurbishing toilets and improving water systems, depending on the schools' respective conditions.

Subsequent to these efforts, notable improvements were recorded. For example, a significant increase in student attendance rate at the Imam-Ridha School.

Health & Sanitation

We continued distributing more than 10,000 litres of water a day, through two Reverse Osmosis water stations. The first-of-its-kind facility in the villages of al-Delha and al-Ibrahim, enabled access to clean fresh water for close to 27,000 people in 28 villages around the area.

Our People

PETRONAS' transformation from a regulator into an internationally-renowned integrated oil and gas company is a culmination of our people's hard work. Our people are our greatest assets in sustaining PETRONAS' competitive edge. Acknowledging this, we elevate the robustness of our workforce to deliver better performance, in tandem with the growing complexities facing the global oil and gas industry.

At PETRONAS, equality, diversity and inclusion are mandatory principles to facilitate our people's growth. Superior performance is thus rewarded via competitive remuneration packages benchmarked against industry best practices. Guiding us is a high performance culture based on the principles of meritocracy, performance and delivery, binding upon PETRONAS' Shared Values.

Cognisant of global requirements such as that stipulated by the International Labor Organisation as well as regulations in countries of operations, our human resources policies consolidate universal elements such as labour rights, non-discrimination, employees' right for freedom of association and collective bargaining, in line with applicable laws in countries of operations. In 2014, 8,954 staff were covered under the *Kesatuan Kakitangan Petroliaam Nasional Berhad's* (KAPENAS) Collective Agreement (CA).

Efforts are ongoing to develop a pipeline of leaders who will continue PETRONAS' legacy spanning over a period of four decades. Propelling us forward is a young and dynamic workforce embodying a global mindset for taking PETRONAS to greater heights.

Talent Sourcing and Recruitment

The limited availability of technically-competent talent is increasingly exerting pressure on the global oil and gas industry. This, coupled with concerns of an aging workforce inevitably heightens challenges surrounding the hiring and retaining of personnel.

PETRONAS manages our human resources risks by providing structured and stable development opportunities to members of our workforce. We are vigilant of evolving market trends to ensure



our talent sourcing and recruitment process is enhanced in response to the highly competitive employment trends. Recognising this, we are adapting to the generational shift within our workforce through continuous review of existing policies and strategic initiatives.

Commendably, in 2014, PETRONAS was recognised as among the most coveted employers by several external bodies. This included Employer Branding Institute and Universum - a global leader in employer branding.

Global Talent Strategy

PETRONAS Employment Value Proposition (EVP) of Trust, Grow and Reward develops rounded individuals in a multicultural as well as diverse work environment. The Global Talent Strategy (GTS) was thus instituted to sustain business growth for ensuring the availability of a competent and multi-disciplinary talent pool in meeting PETRONAS' global operational needs. The concept of GTS focuses on pursuing the right talents, providing them with the right environment and ultimately developing the right leaders. Collectively, these intend to mature an adaptable, inclusive and capable workforce.

Total Number of Employees
(Groupwide)

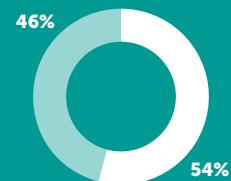
50,949

Gender

72%

28%

Employees



Above 35 years old
 Below 35 years old

As at 31 December 2014

Developing Leaders

Volatility is the new reality facing the global oil and gas industry. Bolstering people’s capabilities to rise above forthcoming challenges is an enabler for addressing rapid changes in the external business landscape.

In view of this, we introduced the PETRONAS Leadership Diamond in 2014 to rejuvenate awareness on the dimensions of Develop Self and Others, Outperform, Behave as Owner and Inspire Others (DOBI). This entailed placing a higher emphasis for leaders at all levels to undertake joint-responsibility for upholding PETRONAS’ Shared Values and internalise Leadership Competencies classified as pertinent in a high performance culture:

PETRONAS Leadership Competencies

Develop Self & Others	<ul style="list-style-type: none"> • Commit to learning & development.
Outperform	<ul style="list-style-type: none"> • Lead change & innovation. • Get results. • Foster collaboration & teamwork. • Strengthen interpersonal effectiveness.
Behave as an Owner	<ul style="list-style-type: none"> • Maximise value. • Build business partnerships.
Inspire Others	<ul style="list-style-type: none"> • Drive organisation vision & direction. • Demonstrate credibility.



Workforce Engagement

Trust and transparency are ranked highly in PETRONAS. The annual President townhall session as well as subsequent Business-specific gatherings are additional means to share the Company’s growth strategies and future plans, while responding to employees’ concerns. Frequent and regular updates on the PETRONAS intranet portal is yet another platform to keep our employees abreast of happenings across our businesses in Malaysia and internationally.

In addition, the Leaders Connect was among new avenues introduced in 2014 to enhance employees’ understanding of the business strategic direction. Themed *Onward, Forward* the sessions were led by PETRONAS’ top management personnel, who shared their experiences to uplift employees’ commitment and sense of belonging towards PETRONAS.

Furthermore, tailored interventions were also implemented Groupwide to address findings gathered from the PETRONAS Organisational Cultural survey (POCs) executed in 2013. Largely, the initiatives intended to improve employee satisfaction in cultivating a high performance culture.

Workforce Capability Development

We view empowerment and capability development as effective enablers for people to leverage on their inherent strengths in realising their fullest potential. PETRONAS’ human capital development framework is grounded on the principle of continuous learning to equip our people with strong business acumen, leadership, technical and management skills, providing a thriving environment for personal as well as professional growth.

Significant investments are made to fulfil the career needs of our people in facilitating PETRONAS’ future expansion aspirations. We nurture a competent workforce by providing staff with strategic learning, leadership and education opportunities to hone distinctive functional, and technical capabilities. This involves formal in-house and external trainings, regular mentoring as well as coaching of employees.

Training and Educational Institutions

We take an integrated approach in building the capacity of our workforce, including third party personnel and local community members. It covers a broad spectrum of education programmes and sponsorships, supported by the establishment of training facilities such as the following, which are owned and operated by PETRONAS. Collectively, these ensure that we systematically enhance the competency levels of our workforce and others, especially in the technical and leadership disciplines pertinent to the oil and gas industry at large.

Centre of Excellence for Tertiary Education

Universiti Teknologi PETRONAS (UTP), established in 1997 has received various awards to date for its excellence in both research and teaching. In 2014, UTP was the first private Malaysian university to receive a four QS Stars world class rating by Quacquarelli Symonds (QS). Furthermore, UTP was also the only private Malaysian university to earn a spot in the QS World University Top 200 Ranking, for the subject of Chemical Engineering.

Furthermore, UTP is equipped with quality infrastructure which promote research excellence and have received certification under the Laboratory Accreditation Scheme of Malaysia for meeting both its technical as well as management requirements, including for operating in accordance with the MS ISO 9001 - Quality Management Systems. The state-of-the-art laboratories have also been attested to conform with internationally-accepted standards of excellence.

Leadership Centre

The PETRONAS Leadership Centre (PLC) has been developing competent oil and gas personnel for over 30 years through a wide range of management and leadership-related programmes. PLC also plays a key role in moulding PETRONAS' leaders with the right values and competencies through its Building Global Talent programmes and Leadership Rejuvenation projects, aligned with the PETRONAS leadership philosophy. This includes leveraging on the concepts of *Leaders Develop Leaders* and *Change the Game, Change the Culture*.

PLC's trainings and courses are also made open for members of the local as well as international oil and gas fraternity. To date, PLC receives encouraging external interest given its ability to tailor specific modules based on the needs of its clients, many of whom comprise peer companies.

Institut Teknologi Petroleum PETRONAS (INSTEP)

INSTEP is a premier technical training institution for the oil and gas industry at large. To date, INSTEP has honed trainees from over 15 countries, with a client portfolio encompassing prominent names in the oil and gas industry. Also, with establishment of the Integrated Oil and Gas Training Centre, INSTEP is anticipated to increase its capacity from 850 to 1,700 trainees annually. INSTEP continuously seeks to obtain certification from global accreditation bodies to raise the quality levels and relevance of our various programmes in responding to needs of the industry. Parallel to this, INSTEP received the *Minister of Human Resources Award* under the *Training Provider* category in 2014. This accolade is the highest national recognition for the field of Human Resources in Malaysia, accorded by the Ministry of Human Resources. This award follows INSTEP's accreditation by the Business and Technology Council (BTEC), United Kingdom.

Graduate Employment

Rising youth unemployment heightens the need to enhance marketability of young talents. The SL1M-GEES-PETRONAS or Graduate Employability Enhancement Scheme equips selected individuals with the right knowledge, soft-skills & capabilities, essentially, to develop personal attributes vital for the workplace. This jointly-developed programme spans a period of eight months, in facilitating Malaysian graduates' transition from the academic to business world. This includes a two-month stint to undergo classroom trainings on task-based modules such as Personal Branding, Managing Cultural Diversity & Entrepreneurship. The remaining six months cover on-the-job training at PETRONAS' facilities where graduates acquire hands-on skills, while applying theoretical knowledge acquired in an actual working environment. Accommodation allowance & meals are also provided throughout the programme duration.

Since 2011, PETRONAS had cumulatively invested RM7.7 million to support the SL1M-GEES PETRONAS. A total of 275 participants have undergone this programme to date:

- Gender: 57% females & 43% males; and
- Discipline: 53% non-technical & 47% technical.

Encouragingly, about 70% of programme participants have secured employment with PETRONAS & other companies post-graduation.

PETRONAS has been recognised as an exemplary Company by the Malaysian Prime Minister's Department for its efforts and achievements in spearheading SL1M-GEES PETRONAS.

Local Talent

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 and making available employment opportunities. Collectively, honing a pool of empowered individuals for PETRONAS, our partners, host nations and communities where we operate.

Vocational Training for Local Talents

PETRONAS encourages educational excellence, including technical skill development among youth. Several programmes were carried out to grow a pool of technically-competent manpower in our areas of operations to support growth of the local oil and gas industry.

Nationwide

The Vocational Institution Sponsorship and Training Assistance (VISTA) is one of the many initiatives led by PETRONAS to inculcate basic technical expertise among local youth in our areas of operations throughout Malaysia. Our sponsorship is by way of providing equipment for selected institutions to run welding, building maintenance and pipe-fitting programmes, among others. Furthermore, in December 2014, an agreement was inked with the Malaysian Ministry of Youth and Sports for PETRONAS to lead transformation of the *Institut Kemahiran Belia Negara* (IKBN) via its inclusion as a beneficiary under PETRONAS' VISTA programme. To date, more than 7,000 participants have benefited from this programme.

East Malaysia

The Kimanis Training Center (KTC) was established to expand Sabah's local talent base to support its burgeoning oil and gas activities. Commendably, in 2014, the first batch of graduates were successfully employed to partake in the Sabah-Sarawak Integrated Oil and Gas Project. We also supported five other technical institutions in Sabah under the VISTA programme. This included *Institut Kemahiran MARA Kota Kinabalu*, *Institut Latihan Perindustrian Kota Kinabalu*, *Kolej Yayasan Sabah*, *Institut Latihan Teknik dan Perdagangan Papar* as well as *Pusat GIATMARA Kimanis*.



In Sarawak, we inked a Memorandum of Understanding with Yayasan Sarawak to collaborate on a technical programme for training welders at the Centre of Technical Excellence (CTE) in Kuching. This, while enhancing employability, assures the sufficient availability of young talent to support the State's socioeconomic growth. Sarawak, which is in the midst of rapid industrialisation, requires a reliable supply of some 300,000 skilled workers by 2030 to support its growth aspiration. This joint effort is a means to develop technical competencies through the PETRONAS sponsored 6G Welding Programme spanning a period of three years, starting October 2014. Other contributions included supplying training equipment, consumables and trainees' personal protective equipment. We will also provide services such as maintenance and technical advisory to the CTE, which was formerly known as *Pusat Latihan Pembangunan Belia*. Other technical institutions supported by PETRONAS in Sarawak include the *Pusat Perkembangan Kemahiran Sarawak* in Kuching and *Institut Latihan Perindustrian* in Miri.



Internationally

We provide host country nationals (HCN) with similar capability development opportunities to uplift competitiveness while developing local talent for the oil and gas industry at large.

For example, in Turkmenistan, selected technical and non-technical personnel underwent structured programmes such as the PETRONAS Competency Assessment System (PECAS) and Accelerated Capability Development (ACD) programme. Several in-house training sessions were also held for identified HCN personnel from various functional units and levels at the Kiyarly Technical Training Centre. This included customised leadership programmes such as *Reimagining Your Leadership Success*; the *Building Leaders Program* and internalising *PETRONAS Corporate Philosophies*.

Emulating the same approach, in collaboration with Nile Petroleum Corporation (NILEPET), the Republic of South Sudan's national oil company, PETRONAS conducted a series of upstream petroleum training programmes for members of the Ministry of Petroleum and Mining, NILEPET, as well as the Joint Operating Companies. Selected individuals were also sent to Malaysia to undergo training at our technical and non-technical institutions, including site visits to relevant facilities.

In addition, 93 South Sudanese Production Operator and Technician trainees from INSTEP underwent on-the-job training at the Paloch DPOC oil field operations.

Local Vendor Development

We pursue local sourcing in areas of our operations to provide contractors with business opportunities which subsequently spur socioeconomic developments. Where necessary, we also provide skills training to ensure they are able to fulfil our requirements on quality control.

In 2014, the Upstream Business led several engagement sessions to encourage more local contractors to partake in East Malaysia's oil and gas projects. During these sessions, PETRONAS' tender process and licence application requirements were discussed, making reference to the Code of Business Conduct. Resulting from these engagements, local contractors' involvement in Sabah and Sarawak's upstream projects grew by 24%, from 63 to 78.

Internationally, more than 50% of contracts in 2014 were awarded to local service providers in the respective countries of operations, for areas such as Projects, Drilling and Logistics.

Contractor Recognition

Our growing project complexities as well as aggressive asset integrity programmes call for contractors with proven capacity and technical capability. At the annual Outstanding Vendor Award (OVA), PETRONAS' Upstream Business accords recognition of excellence to Malaysian as well as international oil and gas service companies in 15 different categories, emphasising on exemplary performance, reliability, responsiveness as well as high levels of commitment to Health, Safety and Environment.

Held annually since 2010, OVA also serves as an avenue for PETRONAS to share our business expectations and engage in dialogue with our contractors.

PETRONAS in Sabah

Sabah's local oil and gas industry is an integral component for realising the State's aspirations to become a developed as well as high-income State. Supporting this was execution of the Sabah Development Corridor (SDC) which focuses on six strategic development areas (SDAs), one of which is the oil, gas and energy sector.

Presently, Sabah accounts for a significant share of Malaysia's total national oil production, producing about 180,000 barrels of oil equivalent per day (boe/d).

To date, PETRONAS has and continues to play a significant role in spurring the growth of Sabah's energy sector, across the Upstream and Downstream Businesses, bringing about lasting socioeconomic growth. Our recent key ventures in State, worth about RM45 billion, are part of the larger Sabah-Sarawak Integrated Oil & Gas Project (SSIOGP). These include:

- Deepwater fields - *Gumusut-Kakap and Malikai*.
- Gas fields - *Kebabangan and Kinabalu NAG*.
- Terminal, Pipeline and Power Plant – *Sabah Oil and Gas Terminal (SOGT), Sabah-Sarawak Gas Pipeline (SSGP), Kimanis Power Plant (KPP)*.
- Downstream - *Sabah Ammonia Urea project (SAMUR) in Sipitang*.
- Local Talent Development – *Kimanis Petroleum Training Centre*.

Foraying Deeper Offshore

PETRONAS aspires to position Malaysia as a centre for deepwater development in this region following major discoveries of deepwater oil and gas fields in Sabah. This came into realisation with the operationalisation of Malaysia's first deepwater field, Kikeh, located offshore Sabah in 2007.

Kikeh which deploys state-of-the-art deepwater technology produces an average of 120,000 of barrels per day (bpd) during peak production. This inaugural foray was followed by the oil production from Gumusut-Kakap in October 2014, which is expected to constitute approximately 25% of Malaysia's oil production or 135,000 bpd. Crude oil from the facility is transmitted to the SOGT located in Kimanis via a 200km-long pipeline.

Other upcoming deepwater blocks including Siakap-North Petai as well as Malikai fields under the Kebabangan cluster, will also be supplying oil via subsea pipelines to the SOGT once commercialised.

Gas was piped from the Kinabalu NAG to the SOGT in December 2013 in facilitating the terminal's commissioning process. Findings on quantity of gas flared and noise generated over the trial period which completed in April 2014 were submitted to the State's Department of Environment. Oil was piped to the SOGT starting October 2014. Concurrently, engagement sessions were held with local community members to provide regular project updates during the course of construction, commissioning and post operationalisation.

The SOGT has the capacity to handle approximately 260,000 barrels of oil per day. To date, PETRONAS is pursuing our deepwater exploration projects through partnerships with international players, thereby, aiming for building of local knowledge as well as expertise in this field.

Integrated Operations

The Sabah-Sarawak Gas Pipeline (SSGP) is a core infrastructure which integrates upstream and downstream sectors across the two states.

Another crucial component of the SSIOGP is the SAMUR project, valued at USD 1.5 billion and pending completion in 2016. The plant is anticipated to produce 2,100 tonnes of fertiliser per day or up to 1.2 million tonnes annually, positioning it to become among the largest urea plants in South East Asia.

Furthermore, among our other key investments in Sabah was the Kimanis Power Plant (KPP), which is a joint-effort pursued to deliver more stable and reliable energy supply for Sabah. The plant has started full operations and has an installed capacity of some 300 megawatts of power. The KPP which uses gas feedstock from the SOGT has begun supplying power to the Sabah Electricity Sdn Bhd grid.



Local Spin-Offs

PETRONAS' projects under the SSIOGP are deemed a catalyst to create economic spin-offs and benefits for the people of Sabah.

During the construction period, the SOGT made available about 2,000 job opportunities, with almost 50% taken up by local community members. Furthermore, numerous engagements were held with the Sabah State Fishery Department, Papar Fishermen Association and the State Government, following which adequate assistance was provided to local fishermen.

In ensuring the availability of a consistent and sufficient talent pool, we established the Kimanis Petroleum Training Centre or KTC to hone a local talent base by providing skills training vital for the oil and gas industry. The KTC offers certificate courses in Industrial Instrumentation and Control, prioritising enrolment of local youths from Sabah.

The KTC can accommodate 60 trainees at one time and to date, two batches of students have graduated from the two-year technical programme.

Commendably, the year 2014 witnessed the admission of KTC's first batch of female trainees. For more information on our efforts to develop local talents in Sabah, please refer to page 65.

We also embarked on an initiative to conserve the Imbak Canyon Class 1 Forest in partnership with Yayasan Sabah. PETRONAS has contributed a total of RM83 million since 2010, including RM77 million towards development of the Imbak Canyon Studies Centre (ICSC) which is poised to become a central hub for research and studies on environmental biodiversity.

The 27-hectare ICSC project, implemented under the Phase 2 of the Yayasan Sabah - PETRONAS Imbak Canyon Conservation Partnership, is currently under construction near the iconic Imbak Waterfall within the Imbak Canyon Conservation Area (ICCA) located in the heart of Sabah, and is scheduled for completion in 2016. For more information, please refer to page 53.

The Pengerang Integrated Complex Project

A Dialogue with Vice President and Venture Director of The Pengerang Integrated Complex (PIC) Puan Juniwati Rahmat Hussin

1. PETRONAS' ventures in Johor are regarded as the Company's largest investment in Malaysia. Please tell us more.

Let me start with a brief background on how the Pengerang Integrated Complex (PIC) came to be.

Back in the 90s, PETRONAS was looking at becoming an integrated company as we wanted to maximise value creation in our Downstream sector. This strategy allowed us to grow our Downstream Business exponentially over the years; but of course there is always room for more growth and success.

We then started to look at the growing markets of differentiated and specialty petrochemical products. Given the finite gas resources in Peninsular Malaysia which limits gas-based petrochemical growth, a more sustainable alternative was to consider an integrated refinery and petrochemical complex with a naphtha-based cracker to further enhance the petrochemicals portfolio. Hence, in 2011, after many years of doing thorough market research and studies, PETRONAS embarked on the Refinery and Petrochemical Integrated Development (RAPID) project.

The refinery will have a capacity of 300,000 barrels per day (bpd), while the Steam Cracker's combined annual production is anticipated to be more than 3 million tonnes per annum (mtpa) of ethylene, propylene and C4-C6 olefins products. Products from the refinery and steam cracker will be the feedstock to produce premium differentiated specialty petrochemical products.

RAPID is a major strategic investment by PETRONAS aimed at capitalising on the growing need for energy and commodity petrochemical products in Asia over the next 20 years. RAPID was designed to produce premium differentiated and specialty petrochemical products, whilst at the same time meeting Malaysia's demand for petroleum products complying with future legislative requirements on Euro 4M (Mogas) and Euro 5 (Diesel) specifications as part of Malaysia's commitment under the Kyoto Protocol.

RAPID is PETRONAS' largest greenfield Downstream undertaking in Malaysia, with very little supporting infrastructures in place in Pengerang. In order for RAPID to be able to gear up for commercial productions, a number of facilities and infrastructures needed to be ready to support RAPID. Hence, PIC was born.

PIC then became a de-facto *Park Developer* to provide central and shared facilities and services within the PIC area. PIC is made up of RAPID and its six major associated facilities, namely the Pengerang Co-generation Plant, LNG Re-gasification Terminal, Air Separation Unit, Raw Water Supply project, the Liquid Bulk Terminal and the Central and Shared Utilities and Facilities. RAPID is estimated to cost USD16 billion while the associated facilities will involve an investment of about USD11 billion.

Essentially, the combined elements, scale and cost in itself, makes PIC an ambitious endeavour. PIC is located in an area of approximately 6,242 acres in Pengerang, which is in the southern tip of Johor.

Just to give you an idea of the size; that is 62 times the size of our Kuala Lumpur City Centre (KLCC) and 3,500 times the size of an average football field. It is huge!

PIC received PETRONAS Board's approval for the Final Investment Decision in April 2014. PIC is currently progressing as planned, with its Ready For Start-Up (RFSU) targeted by early 2019 with commercial operations scheduled to begin by mid-2019.

2. Malaysia aspires to become a developed nation by 2020. Does PETRONAS' undertakings in Pengerang, Johor contribute towards this realisation?

PIC itself forms part of Johor's ambitious Pengerang Integrated Petroleum Complex (PIPC), a State Government initiative aimed at supporting Malaysia's overall Economic Transformation Programme (ETP) under the Oil, Gas and Energy National Key Economic Area (NKEA). PIC plays a pioneer investor role in PIPC which is expected to transform southern Johor into a refining and petrochemical centre; enhancing Malaysia's and the region's petrochemical industry.

PIC is a strategic national project which will support Malaysia's transformation into a high income nation. Particularly, by developing premium differentiated specialty petrochemical products, catering for the need of sectors such as the automotive, pharmaceutical and consumer products. In addition, PIC will strengthen PETRONAS' position as a key player in the Asian chemicals market; creating new economic and employment opportunities for Malaysia, and Malaysians whilst facilitating greater transfers of technology.

Once fully operational, PIC which is located along key global shipping lanes and in proximity to major trading hubs will not only increase investments in the country, but also continue to generate significant economic development. Close to 4,000 high skilled employment opportunities await, along with the creation of spin-off opportunities for oil and gas service contractors, fabricators, shipping companies, logistics providers as well as providers of other ancillary services, creating a multiplier effect on the economy as a whole.



3. Briefly describe PETRONAS' corporate and operational policies, standards and guidelines applicable to the PIC project?

PETRONAS, regardless of the location of its operations or project type, is guided by the fundamental principle of doing our business responsibly. This is the very DNA of PETRONAS, which permeates throughout the lifespan of all our business activities and facilities.

At PIC, we too abide not only by PETRONAS' guidelines and policies and procedures such as PETRONAS' Code of Business Conduct, Health, Safety & Environment (HSE) Policy and Mandatory Control Framework (MCF); but also to other national and international benchmarks. For example, PIC was among the first in Malaysia to fully adopt the International Finance Corporation's (IFC) Environmental, Health and Safety Guidelines as well as the Equator Principles' requirements. In fact, PIC adopts the environment-cumulative impact concept in the design of its facilities.

4. What are some of the environmental practices integrated into the Company's business practices for its projects in Pengerang?

PIC is colossal. It marks our largest integrated greenfield development in a single location, as such managing environmental impacts is undeniably vital. For PIC, we went one step beyond local regulatory requirements to adopt and incorporate internationally accepted best practices in all that we do. This was practiced from the start when we did the project site selection and planning, continuing through the construction, detailed designing as well as operational phases of the project.

The early assessments conducted allowed us to review site suitability and identify environmentally-sensitive receptors in areas surrounding our operational sites, and subsequently establish an environmental baseline. Presently, we are closely monitoring our construction practices, among others, for managing pollutant movement to minimise impacts on local communities and sensitive receptors, whilst ensuring we meet the international border requirements. We have also adopted best available technology (BAT) to ensure minimal cumulative impact to the surrounding environment during the lifespan of our facilities.

5. PETRONAS launched a Social Performance framework in 2012. Is it applicable to the Company's undertakings in Pengerang?

For PIC, we developed and implemented the PIC Sustainability Strategy which is consistent with PETRONAS' Social Performance Framework and adopts industry best practices, namely; the IFC's Performance Standards as well as EHS Guidelines, including Good International Industry Practices (GIIP).

We have also conducted a Social Impact Assessment (SIA) study to identify potential risks for the local Pengerang community arising from the implementation of our projects.

From the study, we then developed the Social Impact Management Plan (SIMP) to address specific issues and matters, such as Stakeholder Engagement activities as well as resettlement plans and livelihoods continuity. SIMP became our guiding beacon to warrant proactive measures to ensure local community members such as business operators and fishermen who were relocated were fairly compensated and provided with adequate means to restore their livelihoods or income sources.

In addition, we adopted an active approach to continuously engage local community members through our programmes, where we took the opportunity to inform as well as update the community on our project happenings. Consultations with the community are conducted via the following channels:

- *Community Leadership Committee (CLC) Meeting* - Our PIC Community Engagement Team meets with the community leaders every month to update them on the latest project developments. The platform is also a means to address ground issues, listen to grievances and seek feedback.
- *Corporate Social Investment (CSI) Programmes* - We carry out numerous activities year-long, revolving around the themes of Education, HSE, Community Reach, Arts and Culture as well as Entrepreneurship.
- *Project Disclosure Sessions* - We conduct separate sessions to ensure various stakeholder groups such as students, teachers and youth community leaders are personally engaged over meaningful discussion sessions.
- *Site visit to Kerteh Integrated Petroleum Complex (KIPC)* - Seeing is believing. PIC has thus far organised three visits to KIPC for its key stakeholders aiming to familiarise them with the upcoming developments in Pengerang.

A Grievance Mechanism platform that is accessible, inclusive and culturally-appropriate was made available to the local community for them to raise concerns on any aspect of our operations. Our grievance mechanism practices are aligned with IFC's requirements on consultation, disclosure and participation.

6. Among PETRONAS' mission statements is to contribute to the well-being of the people and the nation. What benefits will PIC bring to local communities in Pengerang?

For all of us in PETRONAS, we hold close to our hearts the commitment to positively benefit local communities wherever we operate. Specifically for PIC, we focused on the areas of education and capability building, echoing the concept of Building Your Own Timber. At PIC, we believe that a sustainable future for energy starts with nurturing young minds with knowledge that inspires and empowers. From the start, our community investments have encompassed elements of people development alongside socioeconomic growth as to us, holistic development is fundamental in the longer term.

We have several initiatives ongoing at PIC, ranging from signature PETRONAS programmes to tailored social and educational efforts to build local capabilities, from the young, the newly-graduated right up to the working population in Pengerang :

- *Program Sentuhan Ilmu PETRONAS* enabled 80 less privileged and borderline students to improve their overall academic performance, with a strong exposure to Science, Technology, Engineering and Mathematics (STEM).
- *Young Scientists @ Pengerang (YSP)* held annually in collaboration with the *Universiti Teknologi PETRONAS (UTP)* inculcated interest in STEM by allowing students aged 16 to pursue scientific experiments at UTP's state-of-the-art laboratories, while gaining exposure to campus life. The students had to then present the results of their experiments to UTP lecturers, and further strengthening their soft skills in language and presentations.
- *SLIM-GEES-PETRONAS* enhanced the marketability and employability of selected fresh graduates from Pengerang.
- *PETRONAS' Vocational Sponsorship and Training Assistance (VISTA)* equipped local talents with technical skills to support PIC's future development. PETRONAS partnered with *Institut Kemahiran Belia Negara (IKBN)* in Bandar Penawar and Pagoh, as well as *Institut Latihan Perindustrian (ILP)* Pasir Gudang and Mersing, and since 2009, a total of 2,176 Johoreans have benefitted from this programme.

- PIC, through engagements with relevant parties such as schools, Parents and Teachers' Association, village heads have encouraged more participation from Johoreans to pursue technical training at the Institut *Teknologi Petroleum PETRONAS (INSTEP)*. To-date, 380 local individuals from Johor have been upskilled, of which 109 are currently working at PETRONAS' plants across Malaysia.

PETRONAS is also placing much emphasis on developing a new batch of entrepreneurs within the local community who will be able to take advantage of the spill-over economic opportunities and businesses. Auxiliary businesses such as food and beverage outlets, laundry business, telecommunications and sundry shops are just a few examples; and we encourage the locals to seize these opportunities. PETRONAS is working hard with relevant Johor State authorities to help realise this potential. Entrepreneurship seminars and workshops have been held to help nurture local entrepreneurs ready to benefit from the new business landscape emerging in Pengerang.

Compared to the construction period, it is true that the economic spin-offs will be more visible upon PIC's operationalisation. However even now, new townships are already being developed and in tandem, public services and infrastructure are being improved. As I mentioned earlier, the project will bring about job opportunities during both the construction and operations stages. At the same time, there will be a multiplier effect that will bring business opportunities for other local industries such as commercial, manufacturing, industrial, banking and financial services, residential and commercial development as well as hospitality service. All these will require the new, local entrepreneurs to take the lead.

There are many exciting things happening with PIC, and it certainly is the adventure of a lifetime and a game changer for PETRONAS and Malaysia. I look forward to PIC creating a new generation of Malaysians with an entrepreneurial mind-set and courage to craft a greater, sustainable future for all whilst grounded with a firm nationalistic pride. What an adventure.

Awards & Recognitions



Malaysian Institute of Chemistry Laboratory Excellence Awards 2014

This award is designed to ensure the laboratory's commitment to achieve excellence in providing quality and competent testing services pertaining to local legislation especially in the fields of health, safety and the environment.

Area of Testing

ASEAN Bintulu Fertilizer Sdn Bhd

- Gases
- Water
- Wastewater
- Urea

PETRONAS Chemicals Group Berhad

- Water and Wastewater
- Ethylene
- Polyethylene

PETRONAS Chemicals Methanol Sdn Bhd

- Methanol
- Water
- Gas
- Environmental Samples

PETRONAS Chemicals MTBE (M) Sdn Bhd/ POLYPROPYLENE (M) Sdn Bhd

- Polypropylene
- MTBE and Propylene
- Water
- Catalyst

PETRONAS Gas Berhad

- Gas
- Wastewater
- Water

PETRONAS Penapisan (Melaka) Sdn Bhd

- Petroleum
- Water

PETRONAS Penapisan (Terengganu) Sdn Bhd

- Petroleum
- Petroleum Products
- Aromatics - Benzene and p-Xylene
- Utilities (Water)
- Gas
- Wastewater

PETRONAS Research Sdn Bhd

- Petroleum Products (Crude Oil, Fuel, Polyol Ester)
- Water (Drinking Water, Formation Water, Wastewater, Seawater)
- Natural Gas



Malaysian Society for Occupational Safety and Health (MSOSH) Awards

The annual award ceremony aims to give due recognition to companies from various sectors that have performed exceptionally well in occupational safety and health aspects.

Gold Class I Awards (Oil & Gas Sector)

- PETRONAS Dagangan Berhad (PDB) received recognition for its Prai Fuel & LPG and Kertih LPG Terminals Operations Department's effort and commitment towards safety and health aspects.



Chemical Industries Council of Malaysia (CICM) Responsible Care Awards

Corporate Awards for the Six Codes of Management Practices (Petrochemicals Category)

The objectives of the CICM Responsible Care Awards are to promote greater awareness of the Responsible Care Programme and its principles and to give recognition to organisations that have made the most progress in implementing the Responsible Care's Six Codes of Management Practices in Malaysia.

PETRONAS Chemicals LDPE Sdn Bhd

- Distribution Code (Gold)
- Product Stewardship Code (Gold)
- Community Awareness and Emergency Response Code (Silver)
- Employee Health and Safety Code (Silver)
- Pollution Prevention Code (Merit)
- Process Safety Code (Merit)

BASF PETRONAS Chemicals Sdn Bhd

- Distribution Code (Silver)
- Pollution Prevention Code (Silver)
- Process Safety Code (Silver)
- Employee Health and Safety Code (Merit)

ASEAN Bintulu Fertilizer Sdn Bhd

- Distribution Code (Silver)
- Community Awareness and Emergency Response Code (Merit)
- Process Safety Code (Merit)

PETRONAS Chemicals Derivatives Sdn Bhd

- Process Safety Code (Gold)
- Distribution Code (Silver)
- Community Awareness and Emergency Response Code (Silver)
- Pollution Prevention Code (Silver)

PETRONAS Chemicals Fertiliser Kedah Sdn Bhd

- Community Awareness and Emergency Response Code (Gold)
- Pollution Prevention Code (Gold)
- Process Safety Code (Silver)

PETRONAS Chemicals Ethylene/Polyethylene Sdn Bhd

- Community Awareness and Emergency Response Code (Silver)
- Employee Health and Safety Code (Merit)

PETRONAS Penapisan (Terengganu) Sdn Bhd

- Pollution Prevention Code (Silver)
- Community Awareness and Emergency Response Code (Merit)
- Process Safety Code (Merit)

PETRONAS Penapisan (Melaka) Sdn Bhd

- Employee Health and Safety Code (Silver)
- Pollution Prevention Code (Merit)
- Community Awareness and Emergency Response Code (Merit)
- Process Safety Code (Merit)

• PETRONAS Chemicals MTBE (M) Sdn Bhd/ POLYPROPYLENE (M) Sdn Bhd

- Employee Health and Safety Code (Gold)
- Pollution Prevention Code (Merit)

BP PETRONAS Acetyls Sdn Bhd

- Employee Health and Safety Code (Gold)
- Process Safety Code (Merit)

PETRONAS Chemicals Methanol Sdn Bhd

- Pollution Prevention Code (Merit)
- Process Safety Code (Merit)

PETRONAS Chemicals Ammonia Sdn Bhd

- Pollution Prevention Code (Merit)
- Process Safety Code (Merit)
- Employee Health and Safety Code (Merit)



Royal Society for the Prevention of Accidents (ROSPA) Occupational Health and Safety Awards

Since 1956, ROSPA has organised this prestigious national award scheme to recognise excellence in work-related health and safety performance by private and public sector organisations.

The scheme is based on an assessment of a broad portfolio of evidence on the level of development and performance of an entrant's occupational health and safety management system, and also takes into account the entrant's reportable accident rate and enforcement experience.

Sector Awards: Chemical Industry (Highly Commended)

- PETRONAS Chemicals Ammonia Sdn Bhd

Gold Awards

RoSPA Gold Award winners have achieved a high level of performance, demonstrating well-developed occupational health and safety management systems and culture, outstanding control of risk and low levels of error, harm and loss.

- PETRONAS Chemicals Ethylene/Polyethylene Sdn Bhd
- PETRONAS Penapisan (Melaka) Sdn Bhd

Silver Awards

RoSPA Silver Award winners have achieved a high level of performance underpinned by good management systems deliver consistent improvements and are working towards the level of excellence required for a Gold Award.

- PETRONAS Chemicals Methanol Sdn Bhd

National Excellence Awards for Occupational Safety and Health (OSH) 2014

Malaysia MLNG Sdn Bhd brought home two awards in the following categories:

- 'Storage Facilities' recognising MLNG's excellent management
- 'Chief Executive Officer' recognising MLNG's Vice President and Chief Executive Officer En Zakaria Kasah's leadership in promoting Occupational Safety and Health within and outside of the organisation.

British Safety Council 56th International Safety Awards

The International Safety Awards is an annual event that celebrates the success of organisations committed to the health, safety and well-being of their employees. Year 2014's award was participated by 524 organisations from 15 countries.

- PETRONAS Penapisan (Melaka) Sdn Bhd won the Distinction Award for demonstrating its strong commitment to maintaining the health, safety and well-being of its employees through good health and safety management.

MSWG – ASEAN Corporate Governance Index 2014 Award under the Industry Excellence Category for the Oil & Gas Sector

The award is presented to companies to encourage and recognise public-listed companies in their respective industries with the best corporate governance practices including transparency and performance.

- PETRONAS Gas Berhad won the award for its corporate governance disclosure in its annual reports.

Human Resources Development Award 2014

The highest national recognition in the field of Human Resources Development awarded by Pembangunan Sumber Manusia Bhd (PSMB) under the Ministry of Human Resources of Malaysia.

- Malaysia LNG Sdn Bhd won in the category of Large Employers (Manufacturing), a testament to its active involvement in developing human resources.

Chief Minister's Environmental Award 2014

The award recognises large and small organisations as well as municipal councils for their efforts in conserving and preserving the environment.

- Malaysia LNG Sdn Bhd won in the category of Oil and Gas (Large Industries) for its efforts in conserving the environment during their day-to-day operations and in championing the conservation of marine life through the MLNG BEACON Project.

Cooperative Research Centres Association (CRCA)'s Awards for Excellence in Innovation

This award recognises outstanding examples of the transfer of research results, knowledge and technologies that have been developed for a wide range of users of research, including the community, companies and government agencies.

- PETRONAS ProAssure™ Clamp won the Award for Excellence in Innovation from the Cooperative Research Centres Association (CRCA) of Australia.

Best Corporate Social Responsibility Award (CSR) Initiative in 2014

- PETRONAS received an award for its activities and contributions in Garraf, Iraq at the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) 2014.

Asia's Best Employer Brand Awards

The Asia's Best Employer Brand Awards are jointly hosted by Employer Branding Institute, World HRD Congress and Stars of the Industry Group, supported by CHRO Asia as strategic partner and endorsed by the Asian Confederation of Businesses.

The awards are designed, owned and executed by Employer Branding Institute, an organisation managed by professionals from various countries and geographies who share the same passion in human resources. The awards acknowledge more than 100 organisations across Asia that demonstrated excellence in building their brands and identities as employers of choice, visible through their human resource practices, policies and strategies, honouring exemplary work in employer branding in more than 20 Asian countries.

- PETRONAS won for its efforts and investment in enhancing human capital development and human resource practices, policies and strategies. These efforts offer an appealing value proposition to increasingly diverse talent segments.

IET Innovation Awards 2014 by Institute of Engineering and Technology (IET)

The IET awards are held to recognise and celebrate the best innovations across the breadth of science, engineering and technology which have made or have potential to make dramatic improvements to modern society. It demonstrates the power of the imagination for engineers worldwide as they tackle economic and social challenges. In 2014, over 400 entries from 22 countries were received.

- PETRONAS Sand Solutions was recognised as one of the finalists for its Open Hole Stand Alone Screen (OHSAS) model-based engineering solution, for managing sand in the production of oil and gas. This model was based on a Computational Fluid Dynamics (CFD) simulation using PETRONAS' proprietary sand erosion correlations.

JEC Europe 2014 Innovation Award

Created in 1998, one of the goals of this innovation programme is to identify, promote, and reward the most innovative composite solutions worldwide.

- PETRONAS ProAssure™ Clamp won for the Oil & Gas category.

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 3.1 INDEX

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