

**WWW.PETRONAS.COM**

 [www.petronasofficial.com](http://www.petronasofficial.com)  Petroliam Nasional Berhad (PETRONAS)  
 PETRONASOfficial  PETRONAS  @petronas  @petronasofficial

**PETROLIAM NASIONAL BERHAD (PETRONAS) (20076-K)**  
Tower 1, Petronas Twin Towers, Kuala Lumpur City Centre  
50088 Kuala Lumpur, Malaysia



# BUILDING STRENGTH THROUGH ADVERSITIES

PETROLIAM NASIONAL BERHAD (PETRONAS)  
**SUSTAINABILITY REPORT 2016**





## PETRONAS' SUSTAINABILITY JOURNEY



PETRONAS views sustainability as a business imperative that complements our growth strategy by addressing environmental, social and governance concerns of various stakeholders driven by balanced economic and business practices.

Since our inception in 1974, PETRONAS has grown to become a fully integrated oil and gas corporation and thrives amongst Fortune Global 500® companies. Over the last four decades, we remain committed and have not compromised our promise to develop the right talent, protect the environment, and contribute to the communities in areas where we operate.

Sustainability has become a vital element in doing business, responsibly and successfully. Aptly titled "Building Strength Through Adversities", the Sustainability Report shares PETRONAS' bold and uncompromising efforts as we continue our sustainability journey.

The Group Sustainability Report 2016 (SR 2016) is the ninth edition for PETRONAS and highlights the key Environmental, Social and Governance (ESG) initiatives carried out over a 12-month period, from 1 January to 31 December 2016. It also emphasises PETRONAS' continuous efforts to operate in a safe, responsible and ethical manner amidst the challenging operating environment.

Information relating to PETRONAS' corporate overview, financial statements and strategic business plans are made available in the Group Annual Report 2016.



Both reports are accessible online at  
**[www.petronas.com.my](http://www.petronas.com.my)**  
or Scan this QR Code with your smart device.

## INSIDE OUR REPORT

### SECTION

#### INTRODUCTION

01



- 5 Sustainability Highlights and Group Financial Performance Overview
- 6 Letter from the President and Group Chief Executive Officer
- 9 Sustainable Development in PETRONAS
- 10 PETRONAS Corporate Sustainability Framework
- 11 About this Report
- 12 Sustainability Performance Data

### SECTION

#### ENVIRONMENT

02



- 17 Climate Change
- 22 FEATURE: Interview with Dzafrî Sham Ahmad  
- The Climate Challenge and Our Opportunity for Change - Malaysia and Beyond
- 23 Water Management
- 24 Environmental Performance
- 26 FEATURE: Instilling Environmental Awareness

### SECTION

#### SOCIAL

03



- 31 Occupational Safety
- 33 Process Safety
- 35 Occupational Health and Wellness
- 36 Industrial Hygiene
- 38 Emergency Preparedness and Response
- 39 Product Stewardship
- 42 Our People
- 44 Social Performance
- 46 Community Investments

### SECTION

#### GOVERNANCE

04



- 53 Corporate Governance and Business Ethics
- 56 Health, Safety, Security and Environment Governance

### SECTION

#### FEATURE STORIES

05



- 58 PFLNG SATU
- 59 Pengerang Integrated Complex

### SECTION

#### OUR ACHIEVEMENT

06



- 62 Awards and Recognition

### SECTION

#### APPENDIX

07



- 66 Our Approach to Reporting

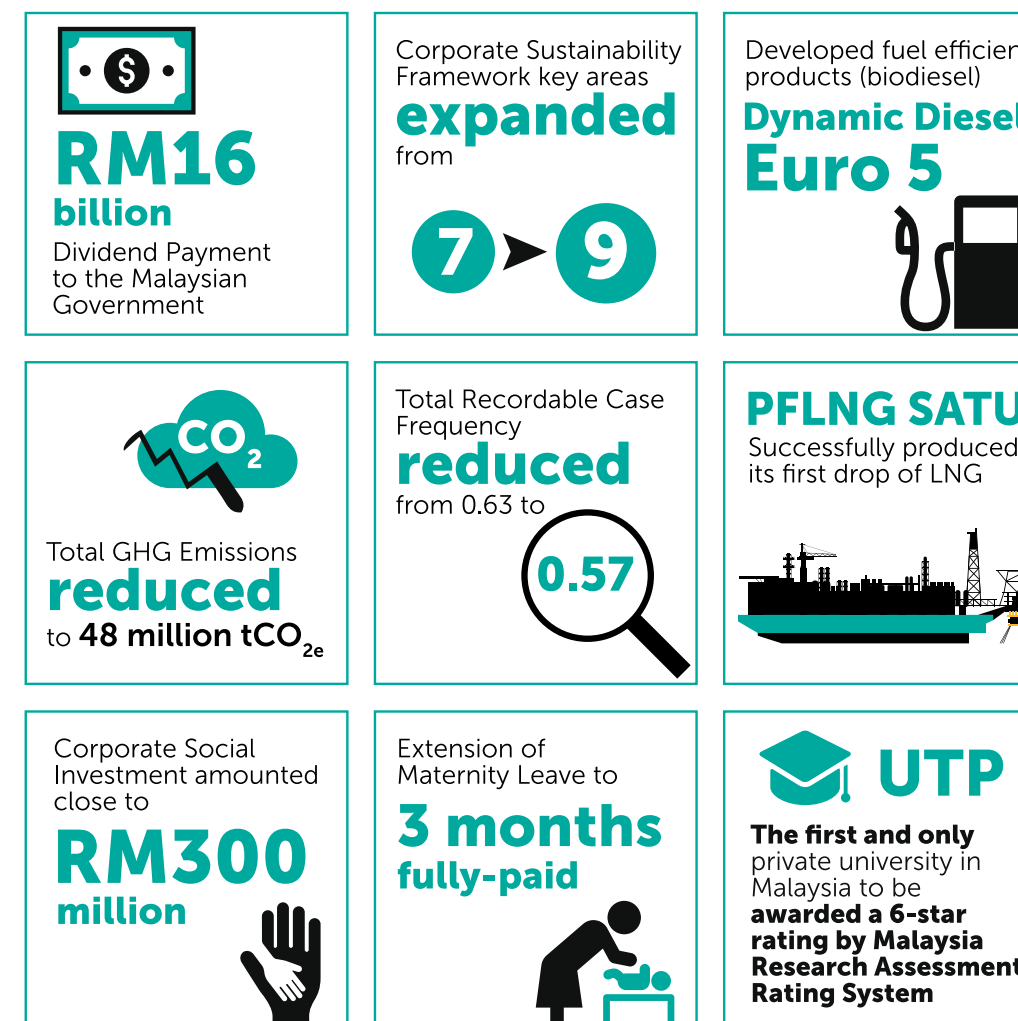
## Section One

# INTRODUCTION

## CONTENT

- 5 Sustainability Highlights and Group Financial Performance Overview
- 6 Letter from the President and Group Chief Executive Officer
- 9 Sustainable Development in PETRONAS
- 10 PETRONAS Corporate Sustainability Framework
- 12 About this Report
- 13 Sustainability Performance Data

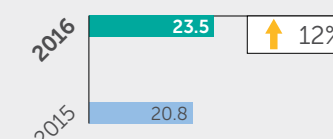
## SUSTAINABILITY HIGHLIGHTS



## GROUP FINANCIAL PERFORMANCE OVERVIEW (RM BILLION)

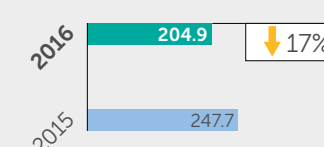
KEY INDICATORS	2015	2016
Dated Brent (USD/bbl)	52.46	43.69
JCC single-month (USD / bbl)	62.63	39.13
USD / MYR	3.90	4.15

### PROFIT AFTER TAX (PAT)

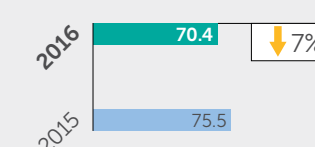


Higher PAT was mainly due to lower operating expenditure, net impairment on assets and tax expense partially offset by lower average prices.

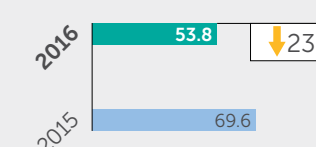
### REVENUE



### EBITDA



### CASH FLOW FROM OPERATIONS (CFFO)







DATUK WAN ZULKIFLEE  
WAN ARIFFIN

*President and  
Group Chief Executive Officer*

## LETTER FROM THE PRESIDENT AND GROUP CHIEF EXECUTIVE OFFICER

I'm pleased to present you the PETRONAS Group Sustainability Report 2016 on our efforts to meet the world's growing energy needs in a safe, responsible and ethical manner, amidst a challenging operating environment. This report goes on to highlight sustainability as a pillar of PETRONAS' business philosophy and our unwavering promise to embody genuine concern for the wellbeing of our present and future generations.

### 2016 IN REVIEW

In 2016, the global energy industry continued to be affected by volatile crude oil prices, consequences of which placed greater challenges on business sustainability. This exerted immense pressure on energy companies, such as PETRONAS, to transform even faster with innovative strategies to optimise business practices in order to stay ahead of the evolving social dynamics and a changing environmental landscape. Despite the volatility, PETRONAS' quest to be a reliable producer of affordable energy remains intact.

In facing the headwinds of this tough environment, business strategies and investment projects were thus scrutinised to ensure favourable results amidst prudent management of costs. PETRONAS' strategies under Project CACTUS addressed cash management and generation, cost efficiency and process simplification, and focused execution of our projects to ensure PETRONAS' resilience. For our long-term sustainability, we focused on talent development, driving technology as a differentiator and exemplifying a world-class work culture.

Our priorities, transcending hard business results, are discussed further in this report with a central focus on climate change, safety and people to achieve optimum levels of operational excellence in our pursuit of delivering an uninterrupted energy supply.

### REINFORCING SUSTAINABILITY

The uncertain operational landscape, coupled with the desire to prepare for emerging business challenges led us to undertake a thorough review of the PETRONAS Corporate Sustainability Framework (CSF) to better position our sustainability aspirations. The review exercise was concluded in early 2016 where the enhanced CSF was expanded from seven to nine key result areas to demonstrate an equal emphasis across the environmental, social and governance spheres.

With PETRONAS' participation in the UNFCCC Conference of Parties (COP 22) in 2016, the emphasis on Climate Change was further strengthened. We support the requirements stipulated in the Paris Agreement as well as our role as a responsible company to balance the issue of climate change with the challenge to sustainably produce affordable and

reliable energy. This is realised through diverse strategies to reduce operational greenhouse gas (GHG) emissions via energy efficiency improvements as well as reduction in flaring and venting, amongst others, in support of our Carbon Commitments.

We are also supporting Nationally Determined Contributions (NDC) by leveraging on our natural gas and liquefied natural gas (LNG) portfolio to deliver low carbon energy systems. Thanks to our game-changing technologies, we are able to tap into stranded and remote gas fields with our world's first floating liquified natural gas facility, the PETRONAS FLNG SATU (PFLNG SATU). By having greater access to gas resources, PETRONAS is in the position to promote natural gas as the cleaner energy alternative to meet future energy demand. Our ingenuity in the Floating LNG's design enables us to explore and produce gas with minimised environmental footprints, setting a new benchmark for the industry besides showing our serious commitment to sustainable energy.

### ELEVATING HSSE

With the realisation that sustainability is even more critical when operating in challenging times, PETRONAS upholds a strong Health, Safety and Environment (HSE) culture which is a crucial enabler to take us to greater heights. With a keen foresight in 2016, two critical functions, HSE and Security, were merged into a single division named Group Health, Safety, Security and Environment (HSSE), in response to the evolving external landscape, where security and HSE elements were increasingly integrated.

Despite mandating stringent safety requirements and establishing controls to mitigate safety risks, we experienced 13 fatalities in 2016. We were disappointed by this and have introduced focused interventions to enhance safety practices in areas requiring immediate attention, as well as steps to enhance accountability and ownership of safety practices. The inaugural HSE Stand Down held in October 2016 brought together management personnel from across the Group to discuss strategies to enforce a stronger HSSE compliance culture, requiring increased leadership visibility and a steadfast determination from all levels of employees including third-party service providers.

With all the pre-requisites in place, we are committed to push our limits to strive for better HSSE standards, driving a strong message of zero-tolerance to noncompliance to better protect our assets and most importantly, our people.

### STRENGTHENING RELATIONS

PETRONAS believes in people as one of the most critical and strategic aspect of our business as the Company becomes more diversified in terms of locations, operations and workforce composition. As part of our efforts to encourage

LETTER FROM THE PRESIDENT AND GROUP CHIEF EXECUTIVE OFFICER

our people to adopt a high-performing work culture, the PETRONAS Cultural Beliefs (PCB) was first introduced in 2015, which advocated positive behavioural change amongst our people, focusing on optimum performance delivery to co-create a resilient future for the Company. In meeting the needs of our people, we then rolled out two pilot initiatives in 2016 to provide an enhanced workplace experience, namely; Compressed Work Week and Enhanced Flexible Hours. Mutually-beneficial relationships with our stakeholders across varying multicultural settings are also fundamental to us. In 2016, we carried out social risk assessments at identified operational sites to ensure these risks are managed while meeting the expectations of our stakeholders. Governance mechanisms in the area of Human Rights were strengthened with the introduction of three new Technical Guidelines; namely on Indigenous Peoples Assessment, Land Acquisition and Involuntary Resettlement as well as Cultural Heritage Assessment. The Human Rights Best Practices for Contractors were also implemented in the same period.

PETRONAS continues to harness the collective strengths of our internal and external stakeholders in achieving our sustainability aspirations as set out in the PETRONAS CSF. We participated in numerous dialogues locally and internationally to discuss matters across the themes of environment, social and governance. This included insightful discussions on environmental management, operational safety, low-carbon economy and social performance. Closer to home, we have actively spearheaded gas-advocacy works and encouraged competitive sourcing of natural gas resources following the enactment of Third Party Access.

We will carry on pursuing stronger relationships with our stakeholders who can play an imperative role alongside businesses to collectively embark on sustainability endeavours in this increasingly interconnected marketplace.

PROGRESSING AHEAD

PETRONAS has been adapting well to the challenges of the industry's present-day realities, while staying focused on strengthening trust amongst our stakeholders as we pursue our Vision as a leading oil and gas multinational of choice. As energy remains a vital resource to facilitate developments across a myriad of industries to meet the needs of a growing global population, we will continue to leverage on technology to create a competitive advantage, turning numerous challenges into opportunities. We will continue to redefine the concept of value creation in the way we carry out our business activities, on the back of a dynamic world-class work culture.

Sustainability to us is a journey, and while PETRONAS has attained notable achievements over the years, we are actively exploring avenues to step a notch higher. In this regard, we will be embarking on an internal initiative to reassess our sustainability aspirations. It is likely that our resilience would be tested yet again as the global economy continues to face numerous challenges on the path towards a sustainable recovery. Nonetheless, PETRONAS will be ready to rise above adversities, with sustainability at the core of our business culture.



DATUK WAN ZULKIFLEE WAN ARIFFIN  
President and Group Chief Executive Officer

SUSTAINABLE DEVELOPMENT IN PETRONAS

The projected rise in global population along with growing urbanisation and socio-economic developments collectively increased the global energy demand. Crude oil and natural gas will remain as a significant portion of the global energy mix. Global economic activity is forecasted to remain below trend at 3.4 per cent in 2017, with improved performance of emerging markets and developing economies. Oil prices are expected to remain volatile in the coming year due to uncertainty regarding the implementation of production cuts announced by Organisation of the Petroleum Exporting Countries (OPEC) and non-OPEC countries in late 2016.

PETRONAS responded to these challenges through many initiatives, ranging from organisational restructuring to eliminating redundancy and reducing expenditure. Ongoing efforts include a greater focus on cost cutting, improving cash generation and ensuring successful delivery of key projects. Doing so while capitalising on our pool of dedicated, empowered and accountable workforce to turn aspirations into achievements. These initiatives are further elaborated in the 2016 Group Annual Report.

This report focuses on our response in managing Environment, Social and Governance (ESG) matters, guided by the PETRONAS Code of Conduct and Business (the CoBE), PETRONAS Policies, Standards and Guidelines, as well as the CSF which outlines nine Key Result Areas (KRA)\*.

Note: \* The KRAs are described on page 10

A summary of ESG issues that were identified in the oil and gas industry are as follows:

ENVIRONMENT

- **Environmental risks related to climate change and fresh water use may result in water scarcity which is a threat to long-term viability of energy projects.**

SOCIAL

- **Increasing demand and requirements from stakeholders on social performance matters with rising concerns on human rights and community wellbeing.**
- **Maturing facilities and assets that require proper late field life management to ensure continued safe operations.**
- **Geopolitical issues and political unrest affecting security of supply.**

GOVERNANCE

- **Business transparency and corporate governance to address stakeholders' demand for a transparent, fair and corruption-free business environment.**

In responding to the ESG issues, a holistic management approach is embedded in our businesses and operations to ensure sustainability in PETRONAS. We do this by strengthening our existing governance mechanisms, leveraging on technology, rethinking talent, and contributing to socio-economic growth wherever we operate while creating a new cultural experience for the PETRONAS workforce.

Our approach on SD encompasses the following:



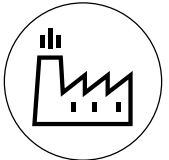
GOVERNANCE

Corporate Sustainability Council (CSC) guides the overall management and integration of sustainability in PETRONAS



INSTITUTIONALISATION

Ongoing capability development and robust systems and processes



INDUSTRY AFFILIATION

PETRONAS is a member of several industry associations and supports key relevant events to spur knowledge development



PETRONAS CORPORATE SUSTAINABILITY FRAMEWORK

Sustainable Development (SD) to PETRONAS means meeting the world’s growing energy needs in a responsible manner, by balancing the economic, environmental and social needs of our stakeholders, guided by sound governance and ethical business practices. It is about creating long-term stakeholder value thus ensuring present and future business relevance.

Sustainability is guided by Corporate Sustainability Framework (CSF) which delineates the areas in which we have a role to play in managing our risks and impacts, and leveraging on our strengths to contribute to SD.

In 2016, a review exercise of the Framework was concluded involving multidisciplinary stakeholder engagements across the Group to better position our sustainability aspirations with the evolving external landscape.

The CSF was enhanced from seven KRAs to nine, to include ecosystem services under the environmental dimension. The previous social dimension was given further focus on human rights, corporate social investment and workforce development. A new governance perspective was included to emphasise on good governance and business ethics.

CORPORATE SUSTAINABILITY COUNCIL

The Corporate Sustainability Council (CSC) is entrusted to spearhead and ensure that CSF is effectively implemented. It provides a platform to discuss matters related to sustainability practices and makes recommendations for implementation of corporate sustainability across PETRONAS. The Council meets on a quarterly basis.



Adif Zulkifli  
Corporate Sustainability Council Chairman

“Sustaining growth as an oil and gas company amidst an era of low oil prices, emerging global climate change policies and cost competitive renewables, will be our greatest challenge. In response, PETRONAS will need to innovate the way we do things and explore new opportunities to sustainably produce affordable and reliable energy.”



NINE KEY RESULT AREAS

1. SHAREHOLDER VALUE

Fulfilling our responsibility as a business entity to deliver returns to our shareholders through the long-term creation of economic value.

2. NATURAL RESOURCE USE

Promoting optimum use of hydrocarbons and water in our operations through efficient processes and application of technology.

3. CLIMATE CHANGE

Recognising our corporate responsibility as a key player in the global energy sector to balance the issue of climate change with the challenge of sustainably producing affordable and reliable energy.

4. BIODIVERSITY AND ECOSYSTEM SERVICES

Ensuring projects and operations do not have significant effect on biodiversity and local ecosystems.

5. HEALTH, SAFETY AND ENVIRONMENT

Ensuring our facilities, products and services are in accordance with all legal requirements and industry best practice to safeguard the health, safety and wellbeing of our employees, contractors, communities, and the local environment.

6. GOVERNANCE AND BUSINESS ETHICS

Safeguarding the organisation’s integrity and trustworthiness in delivering value through strong governance mechanisms and ethical business practices.

7. HUMAN RIGHTS

Respecting internationally-recognised human rights in our areas of operations, complying with our code of conduct and business ethics and all legal requirements.

8. CORPORATE SOCIAL INVESTMENT

Investing in sustainable initiatives as a socially-responsible company in line with our mission to contribute to the wellbeing of society.

9. WORKFORCE DEVELOPMENT

Equipping workforce with the skills and mindset to deliver sustained high performance.

ABOUT THIS REPORT

This report covers entities where PETRONAS has operational control in our businesses of oil and gas production, in Malaysia and internationally, unless otherwise stated. Sustainability performance data are collated through a centralised PETRONAS data management system.

The content of this report is based on the outcome of yearly review of material sustainability matters. The internal review process conducted took into consideration current industry challenges, emerging global trends on SD and our focused areas. Typically, regular and timely engagements enable PETRONAS to share updates as well as obtain viewpoints from our stakeholders to determine current areas of concern and key priorities.

MATERIAL SUSTAINABILITY MATTERS

PETRONAS has identified a total of 11 material sustainability matters, mapped against the Environment, Social and Governance (ESG). Information related to each of these matters are presented subsequently in this report supported by disclosure on management approach, performance data, and selected key initiatives implemented to institutionalise material matters.

OUR INTERNAL REVIEW PROCESS

Step 1: Review

Review sustainability matters, findings from several internal and external sources and outcome of a benchmarking exercise

Step 2: Prioritise

Prioritised list of sustainability matters

Step 3: Validate

Matters prioritised are validated by seeking input and verification with relevant subject matter experts

ENVIRONMENT

- Climate Change
- Water Management
- Environmental Performance

SOCIAL

- Occupational Safety
- Process Safety
- Occupational Health and Wellness
- Industrial Hygiene
- Product Stewardship
- Our People
- Social Performance
- Community Investment

GOVERNANCE

- Corporate Governance and Business Ethics
- Health, Safety, Security and Environment Governance

The above material sustainability matters were derived through engagements enabling PETRONAS to share updates as well as obtain viewpoints from our stakeholders to determine current areas of concern and key priorities.

STAKEHOLDER GROUPS	ENGAGEMENT PLATFORMS
Customers and Consumers	<ul style="list-style-type: none"><li>Hotline</li><li>Email queries</li></ul>
Employees and Trade Unions	<ul style="list-style-type: none"><li>Townhall sessions</li><li>Open dialogue among teams</li><li>Intranet portal</li></ul>
Industry Associations and NGOs	<ul style="list-style-type: none"><li>Engagement through business partnerships</li><li>Leading working groups in industry associations</li></ul>
Shareholders, Financial Institutions and Investors	<ul style="list-style-type: none"><li>Group Annual Report</li><li>Email queries</li><li>Media releases and/or briefings</li></ul>
Media	<ul style="list-style-type: none"><li>Media releases and/or briefings</li></ul>
Local Communities	<ul style="list-style-type: none"><li>Face-to-face meetings</li><li>Various social events</li></ul>
Host Governments and Regulatory Authorities	<ul style="list-style-type: none"><li>Participation in discussions</li><li>Regular reports</li><li>Face-to-face meetings</li></ul>
Business Partners, Suppliers and Service Providers	<ul style="list-style-type: none"><li>Face-to-face meetings</li><li>Audits</li><li>Targeted forums</li><li>Monitoring of contractual provisions</li></ul>

10

11

SUSTAINABILITY PERFORMANCE DATA

SAFETY	2012	2013	2014	2015	2016
NO OF FATALITIES	12	4	10	4	13
Employees	5	0	3	0	2
Contractors	7	4	7	4	11
FATAL ACCIDENT RATE (FAR)					
Reportable Fatalities per 100 million man-hours	3.91	1.23	3.03	1.02	3.53
LOST TIME INJURY FREQUENCY (LTIF)					
No of cases per one million man-hours	0.39	0.24	0.19	0.20	0.26
TOTAL RECORDABLE CASE FREQUENCY (TRCF)					
No of cases per one million man-hours	0.68	0.4	0.64	0.63	0.57
NO OF TIER 1 PROCESS SAFETY EVENTS	22	10	7	15	12
TOTAL RECORDABLE OCCUPATIONAL ILLNESS FREQUENCY (TROIF)					
Illness per million working hours - employees	0.50	0.51	0.07	0.33	0.32

ENVIRONMENTAL STEWARDSHIP	2012	2013	2014	2015	2016
TOTAL GREENHOUSE GAS EMISSIONS (millions tCO <sub>2e</sub> )	49.75	52.32	48.91	49.05	47.79
Upstream	28.9	31.79	29.54	29.38	29.8
Downstream	15.36	15.17	14.79	15.22	13.43
MISC Bhd	5.49	5.36	4.58	4.45	4.56
TOTAL FRESH WATER WITHDRAWAL (million cubic metres per year)	49.94	48.89	50.47	52.26	56.5
Upstream	2.23	2.17	2.93	3.71	3.1
Downstream	47.71	46.72	47.54	48.55	50.8
MISC Bhd, KLCCP Stapled Group, PETRONAS Leadership Centre					2.58
TOTAL AMOUNT OF ENERGY GENERATED FROM SOLAR PV INSTALLATIONS IN MALAYSIA (megawatt-hours)	830	1,662	14,782	14,902	14,188
NO OF HYDROCARBON SPILLS TO THE ENVIRONMENT OVER ONE BARREL (BBL) (one bbl is equivalent to 159 litres)	-	24	25	25	27
TOTAL NITROGEN OXIDES EMISSIONS (metric tonnes)	-	85,496	100,915	154,128	133,801
TOTAL SULPHUR OXIDES EMISSIONS (metric tonnes)	-	63,721	61,698	86,814	72,134
TOTAL DISCHARGES TO WATER (metric tonnes of hydrocarbon)	-	992	992	680	534
TOTAL HAZARDOUS WASTE DISPOSED (metric tonnes)	-	-	26,974	29,280	32,355

Note:

- 1) Efforts are ongoing to achieve higher accuracy in data accounting.  
2) Variances in safety and environment data reported previously is resulted by ongoing enhancements to data management practices, including accounting methodology.

SUSTAINABILITY PERFORMANCE DATA

OUR WORKFORCE	2012	2013	2014	2015	2016
TOTAL NUMBER OF EMPLOYEES	46,145	49,193	50,949	53,149	51,034
BREAKDOWN OF EMPLOYEES (%)					
Malaysian	79	78	79	80	80
Others	21	22	21	20	20
CONTRACT TYPE (%)					
Permanent	84	82	85	83	85
Contract	16	18	15	17	15
GENDER DISTRIBUTION (%)					
Male	73	72	72	72	72
Female	27	28	28	28	28
EMPLOYEES ABOVE AND BELOW AGE OF 35 (%)					
Above 35	48	44	46	47	46
Below 35	52	56	54	53	54
NO OF NEW HIRES (core business in Malaysia)	5,428	3,699	3,541	4,078	2,932
Malaysian	4,864	3,380	3,198	3,781	2,667
Other Nationals	564	319	343	297	265
NO OF GROUPWIDE TECHNICAL EXPERTISE					
Technical Authorities (TAs)	125	163	276	499	325
Technical Professionals (TPs)	613	673	736	825	815
Technical Trade Specialists (TTS)	114	126	144	297	198
WOMEN IN TECHNICAL POSITIONS (%)	14	14	14	14	12
TOTAL ATTRITION RATE BASED ON NO OF EMPLOYEES (%)	5.9	6.5	5.7	5.9	7.3*
Male	5.2	6.1	5.3	5.5	7.1
Female	7.6	7.4	6.7	7	8
NO OF STAFF UNDER COLLECTIVE BARGAINING AGREEMENTS	10,260	10,684	8,954	9,651	8,616
NO OF PETRONAS SCHOLARS RECRUITED (%)	563	432	250	351	365
Recruited by PETRONAS	63	75	47	51	50
Recruited by Others	37	25	53	49	50
NO OF SCHOLARSHIPS AWARDED TO MALAYSIANS (%)	318	329	337	326	375
International Universities	25	41	44	42	38
Malaysian Universities	75	59	56	58	62
NO OF SPONSORED NON-MALAYSIANS					
Universiti Teknologi PETRONAS (UTP), Malaysia	290	255	257	191	147

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

\* Attrition due to resignation, separation & termination

SUSTAINABILITY PERFORMANCE DATA

TOTAL NO OF MALAYSIAN & HOST COUNTRY NATIONALS (HCN) IN SELECTED COUNTRIES - 2016	NO. OF EMPLOYEES	HCN	MALAYSIANS	OTHER NATIONALITIES
Indonesia	387	361	25	1
Myanmar	346	268	74	4
South Africa	3,355	3,305	9	41
Turkmenistan	562	456	75	31

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

LOCAL PROCUREMENT - 2016	LOCAL COMPANIES (MALAYSIAN)	FOREIGN COMPANIES (NON-MALAYSIAN)
PERCENTAGE (%) OF SPEND VALUE AWARDED FOR JOBS IN MALAYSIA	63	37

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

Section Two

ENVIRONMENT

CONTENT

17	Climate Change
22	FEATURE: Interview with Dzafri Sham Ahmad - The Climate Challenge and Our Opportunity for Change - Malaysia and Beyond
23	Water Management
24	Environmental Performance
26	FEATURE: Instilling Environmental Awareness





PETRONAS' operations are premised on robust governance mechanisms to uphold environmental protection in all that we do. In doing so, we stay committed to our HSE Policy and complying to regulatory requirements wherever we operate, while keeping abreast of industry best practices.

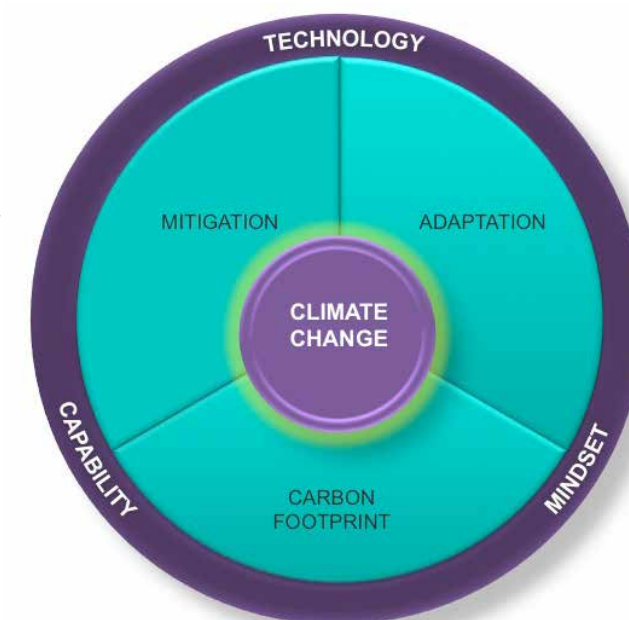
The underlying aim being to sustainably uphold operational excellence across our business value chain. This includes the prudent use of natural resources.

## CLIMATE CHANGE

World leaders at the United Nations Framework Convention on Climate Change (UNFCCC) ratified the Paris Agreement in 2016, which provides the foundation for climate change mitigation and adaptation actions. The oil and gas industry will play an important role in meeting this climate challenge by exploring low-emission pathways to meet the world's growing energy demand.

PETRONAS Position Statement and Framework on Climate Change, as well as prudent risk management, steer holistic and innovative climate actions in adapting to the new low-carbon energy landscape. Efforts to lower our carbon footprint are driven by PETRONAS Carbon Commitments which include reducing flaring and venting as well as improve energy efficiency wherever we have operational control. Our Position Statement, Framework and Carbon Commitments apply to all our domestic and international operations.

Within Malaysia, we collaborate with the Government to improve the national Greenhouse Gas (GHG) inventory, as well as lead the development of the climate mitigation roadmap for Malaysia's oil and gas sector in support of the Nationally Determined Contribution (NDC) ambition. PETRONAS advocates the use of natural gas as a low-carbon fuel in the power sector to reduce Malaysia's national electric grid emissions, which in turn will further promote the transition towards a low-carbon economy.



**PETRONAS CLIMATE CHANGE FRAMEWORK**



### PETRONAS AT COP 22

PETRONAS participated in the UNFCCC Conference of Parties (COP 22) in Morocco, highlighting how natural gas can play an important role in securing a low carbon future, as well as PETRONAS' climate actions as a responsible company.

### PETRONAS' Position Statement on Climate Change

We duly recognise our corporate responsibility as a player in the global energy sector to balance the issue of climate change with the challenge to sustainably produce affordable and reliable energy.