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PETRONAS GAS BERHAD

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PETRONAS

PUSHING

FORWARD

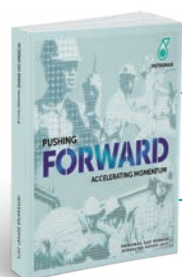
ACCELERATING MOMENTUM

**PETRONAS GAS BERHAD
SUSTAINABILITY REPORT 2019**

About This Report

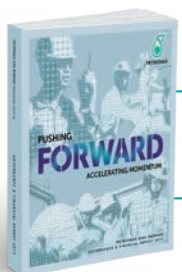
PETRONAS GAS BERHAD SUSTAINABILITY REPORT

At **PETRONAS Gas Berhad (PGB)**, we advocate transparency to stakeholders and we are honoured to present this report as the primary source of information of our Group's sustainability practices in 2019. It forms part of our reporting suite which comprises:



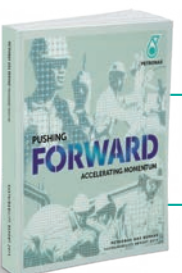
INTEGRATED REPORT <IR>

Our Integrated Report is the primary report to our stakeholders, showcasing our value creation proposition and delivery.



GOVERNANCE & FINANCIAL REPORT

Our Governance and Financial Report provides our comprehensive approach towards protection of value in our activities, together with our financial performance of the year.



SUSTAINABILITY REPORT

Our Sustainability Report details our efforts and commitment towards creating a sustainable business, positioned for long term success.



Scan this QR code with your smart device to access our Integrated Report suite.

RATIONALE

PETRONAS Gas Berhad continues to operate at world-class standards befitting our role as a Leading Gas Infrastructure and Centralised Utilities Company. With the liberalisation of the Malaysian gas market, we foresee exciting new developments ahead for the industry and we are **accelerating momentum** towards being a more competitive solutions provider in this new era.

We will continue **pushing forward** in elevating our operational and commercial efficiencies across our four core businesses as well as achieving our growth aspirations. We will also continue our pursuit to expand our customer base by targeting both existing and emerging industrial hubs. With digitalisation, underpinned by our strong systems and processes to maintain world-class standards, we are confident that our strategies will continue to strengthen our presence and provide a sustainable future for PGB.

We remain committed in delivering value to our stakeholders and meeting the nation's needs in a responsible manner.

REGULATIONS COMPLIED

- Bursa Malaysia Main Market Listing Requirements
- Companies Act 2016
- Malaysian Code on Corporate Governance 2017
- Corporate Governance (3rd Edition) issued by Bursa Malaysia
- Malaysian Financial Reporting Standards
- International Financial Reporting Standards

SCOPE AND BOUNDARY OF REPORTING

This report covers the primary activities of the Group, our business segments and our subsidiaries as well as joint venture operations, with the aim to address the information requirement of long term investors. We also present information relevant to the way we create value for other key stakeholders, including our employees, customers, government agencies and authorities, suppliers and communities.

This report covers the period from 1 January to 31 December 2019, unless otherwise stated.



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About **PETRONAS Gas Berhad**

WHO WE ARE

We are Malaysia's Leading Gas Infrastructure and Centralised Utilities Company and one of the largest companies on the local bourse in terms of market capitalisation, with core businesses in Gas Processing, Gas Transportation, Regasification and Utilities.

STATEMENT OF PURPOSE

A progressive energy and solutions partner enriching lives for a sustainable future

VISION

A Leading Gas Infrastructure and Utilities Company

MISSION

- We are a Business Entity
- Gas Infrastructure and Utilities is our Core Business
- We Operate Safely, Reliably and Competitively
- We Optimise the Gas Value Chain to Maximise Returns for our Stakeholders

SHARED VALUES



LOYALTY



PROFESSIONALISM



COHESIVENESS



INTEGRITY

HOW WE CREATE SUSTAINABLE VALUE

HOW WE DIFFERENTIATE OURSELVES

PETRONAS CULTURAL BELIEFS

1 VISION AND MISSION

2 MATERIAL MATTERS

3 STRATEGIC THRUSTS

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5 TARGETS, RESULTS & PRIORITISATIONS

6 GOVERNANCE



OUR PROFITABLE AND BALANCED BUSINESS PORTFOLIO



OUR INTEGRATED GAS INFRASTRUCTURE AND UTILITIES FACILITIES



OUR OPERATIONAL EXCELLENCE & RELIABLE PRODUCT DELIVERY AT COMPETITIVE COST



OUR HIGH-PERFORMING PEOPLE



RESULTS MATTER

I stretch my limits to deliver superior results



OWN IT!

I own the results and don't blame others



FOCUSED EXECUTION

I plan, commit and deliver with discipline



NURTURE TRUST

I always keep my promise and build mutual trust



TELL ME

I seek, give and act positively on feedback



SHARED SUCCESS

I collaborate for the greater good of PETRONAS

About **PETRONAS Gas Berhad**

WHAT WE DO

BUSINESS UNITS AND HIGHLIGHTS



GAS PROCESSING

Process PETRONAS' upstream natural gas from offshore Peninsular Malaysia into salesgas, ethane, propane and butane



GAS TRANSPORTATION

Transport salesgas to shippers' end-customers through Peninsular Gas Utilisation (PGU) pipeline network and Pengerang Gas Pipeline (PGP)



REGASIFICATION

Receive capacity users' imported Liquefied Natural Gas (LNG), store it in LNG Regasification Terminal Sungai Udang's (RGTSU) floating storage units and LNG Regasification Terminal Pengerang's (RGTP) storage tanks and convert the LNG to salesgas



UTILITIES

Produce, market and supply electricity, steam, industrial gases and other utility products to various petrochemical businesses and third parties in Kertih and Gebeng

PUSHING FORWARD ACCELERATING MOMENTUM



REVENUE
RM1.7
BILLION

GROSS PROFIT
RM 816.5
MILLION



REVENUE
RM1.2
BILLION

GROSS PROFIT
RM 799.5
MILLION



REVENUE
RM1.2
BILLION

GROSS PROFIT
RM 611.0
MILLION



REVENUE
RM1.4
BILLION

GROSS PROFIT
RM 160.1
MILLION

About PETRONAS Gas Berhad

WHERE WE OPERATE

OUR PRESENCE

- ▶ Headquartered at PETRONAS Twin Towers, Kuala Lumpur
- ▶ Eight operating sites across Malaysia
- ▶ Two gas processing complexes in Kertih and Santong, Terengganu
- ▶ Two utilities facilities in Kertih, Terengganu and Gebeng, Pahang
- ▶ 2,623 km of pipeline in Peninsular Malaysia
- ▶ Two LNG regasification terminals in Sungai Udang, Melaka and Pengerang, Johor
- ▶ Operations and maintenance (O&M) service provider

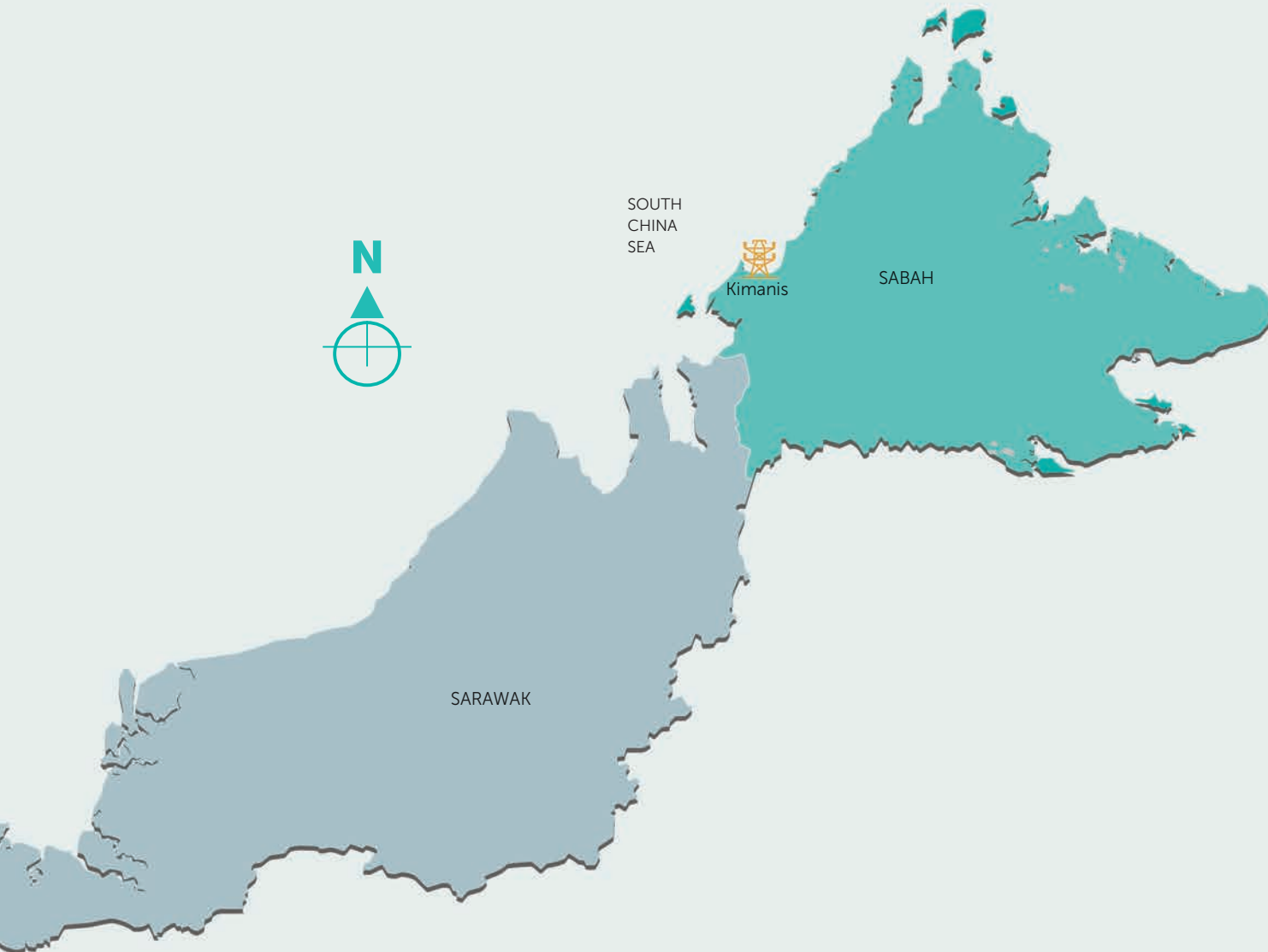
LEGENDS

- Gas Processing Plant
- Compressor Station
- Utilities Plant
- Industry
- Tenaga Nasional Berhad Power Station
- Independent Power Producer Power Station
- Kimanis Power Plant
- Offshore LNG Regasification Terminal
- Onshore LNG Regasification Terminal
- Air Separation Unit
- O&M Services



| MAIN PGU PIPELINE | LENGTH | GAS – IN |
|--------------------------------------|-----------------|----------|
| PGU I : Kertih – Teluk Kalong | 32 km | 1983 |
| PGU II | 714 km | |
| Sector I : Teluk Kalong – Segamat | 265 km | 1991 |
| Sector II : Segamat – Kapar | 241 km | 1991 |
| Sector III : Segamat – Plentong | 208 km | 1991 |
| PGU III | 450 km | |
| Sector I : Meru – Lumut | 184 km | 1996 |
| Sector II : Lumut – Gurun | 130 km | 1996 |
| Sector III : Gurun – Pauh | 136 km | 1996 |
| Loop 1 : Kertih – Segamat | 266 km | 1999 |
| Loop 2 : Segamat – Meru | 228 km | 2000 |
| Total | 1,690 km | |

| OVERALL PIPELINE | LENGTH (KM) |
|------------------|--------------|
| Main PGU | 1,690 |
| Lateral | 458 |
| Liquid | 373 |
| Sungai Udang | 30 |
| Pengerang | 72 |
| Total | 2,623 |



| COMPLEX | GPP | CAPACITY (mmscfd) |
|------------------------------|-----|-------------------|
| Gas Processing Kertih (GPK) | 1 | 310 |
| | 2 | 250 |
| | 3 | 250 |
| | 4 | 250 |
| Gas Processing Santong (GPS) | 5 | 500 |
| | 6 | 500 |
| Total | | 2,060 |

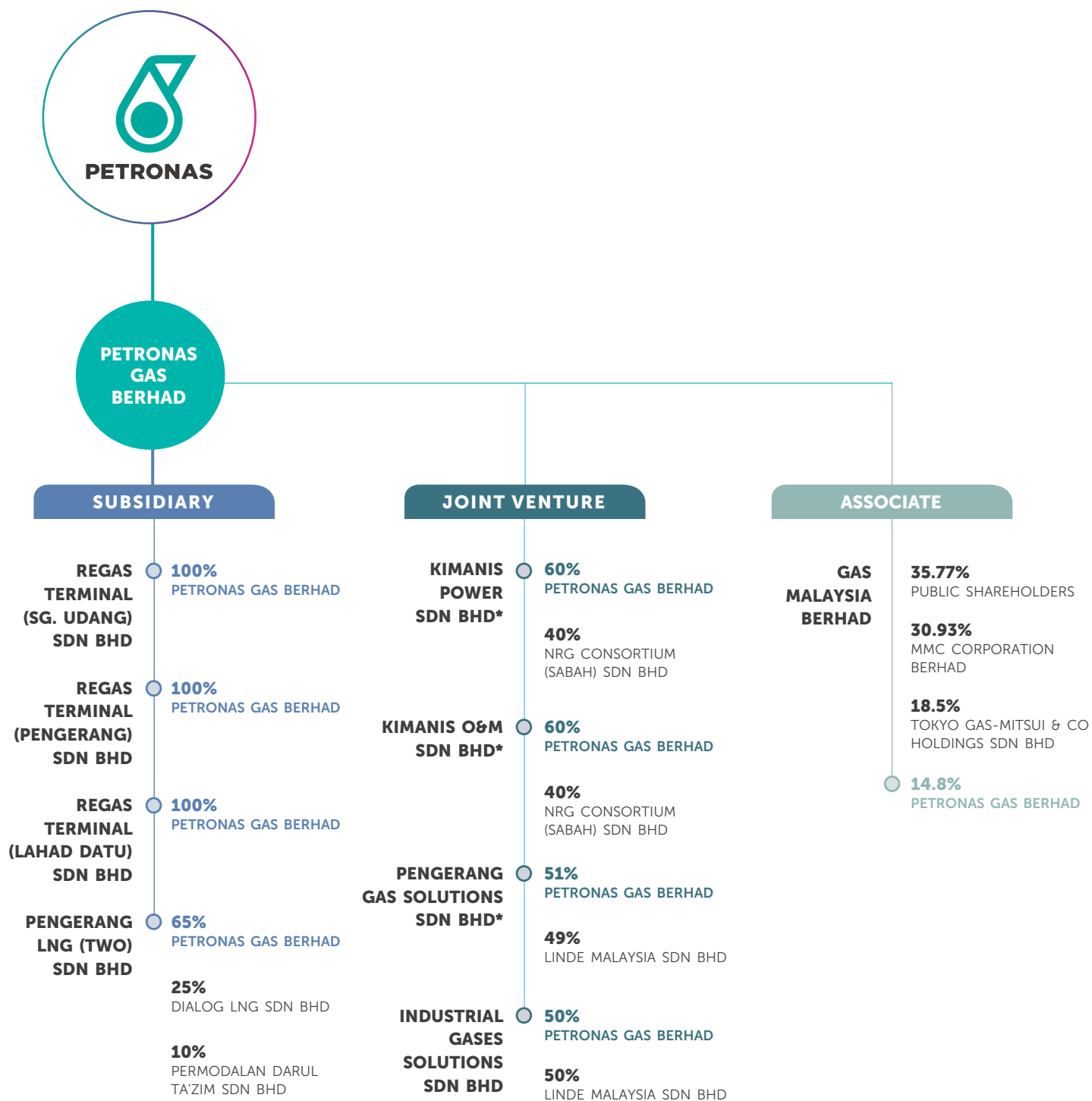
| LNG REGASIFICATION TERMINAL | CAPACITY (mmscfd) |
|-----------------------------|-------------------|
| Sungai Udang, Melaka | 530 |
| Pengerang, Johor | 490 |

| COMPLEX | PRODUCT CAPACITY | | | |
|-----------------------|------------------|-------------|-----------------------------|-------------------------------|
| | Electricity (MW) | Steam (t/h) | Oxygen (Nm ³ /h) | Nitrogen (Nm ³ /h) |
| Utilities Kertih (UK) | 160 | 600 | 32,000 | 54,500 |
| Utilities Gebeng (UG) | 96 | 360 | – | 8,240 |
| Total | 256 | 960 | 32,000 | 62,740 |

OPERATIONS & MAINTENANCE (O&M) SERVICES

1. Trans Thai-Malaysia (M) Sdn Bhd (TTM)
2. Voltage Renewables Sdn Bhd (VRSB)

Our Group Corporate Structure



* Although the Group has more than 50% ownership, the Group treats these companies as joint ventures in accordance with Malaysian Financial Reporting Standard 10.

Why Invest In Us



OUR VALUE PROPOSITION



LEADING GAS INFRASTRUCTURE

Owner and Operations & Maintenance (O&M) Service Provider

WORLD CLASS PERFORMANCE

High Reliability Across All Assets



ROBUST BALANCE SHEET

Providing Agility to Capture Opportunities



STABILITY OF EARNINGS

Underpinned by Long Term Contracts



SUSTAINABLE RETURNS

to Shareholders



MD/CEO Statement on Sustainability

DEAR STAKEHOLDERS

I am happy and proud to announce this year, the debut of our very first standalone Sustainability Report. This inaugural issue clearly demonstrates our increasing commitment and emphasis on sustainability to secure a better future for the world that we live in. Despite this being our maiden standalone report, sustainability has always been our culture and our contribution to the environment, people and society have started from the very first day we operated our business.

KAMAL BAHRIN AHMAD

Managing Director/
Chief Executive Officer



Since inception, our operating philosophy has always been about providing safe, reliable and clean gas supply to Malaysia. Our extensive infrastructures connect upstream gas supply source to gas-fired power plants that produce electricity with minimum greenhouse gas (GHG) emission and light up close to half of Malaysia's population.

As we move forward, our business environment is getting more dynamic. We have to embrace changes and make adjustments to ensure survivability of our business. Nevertheless, our central role in providing low carbon gas supply to Malaysia remains.

Recently, gas market liberalisation has opened up domestic supply market in Malaysia to the outside players. Under the new environment, consumers now have a choice in terms of gas suppliers. This has created competition amongst the players which in turn results in competitive gas pricing for consumers. We have ensured that our infrastructures continue to be robust and ready for this to happen while ensuring a smooth implementation through a comprehensive network codes which captures the terms of access sharing.

Our regasification terminals in Sungai Udang and Pengerang are at the very forefront in providing the access for importation of LNG from outside of Malaysia. With infrastructures to support multiple sources of gas supply in place, the crucial role that PGB plays in ensuring gas supply security to the nation cannot be further emphasised.

We see gas market liberalisation in Malaysia as something positive as we make progress towards a more sustainable environment for gas markets in Malaysia. From our perspectives, gas will remain as a key component in creating a clean future for Malaysia for years to come and we will continue to build and enhance our infrastructures while advocating and influencing the policies that can make this sustainable.

SUSTAINABILITY FRAMEWORK

Guided by our Statement of Purpose – A Progressive Energy and Solutions Partner Enriching Lives for a Sustainable Future, our approach to sustainability agenda has centred on progressive value creation, while simultaneously giving back to the people that contribute to our success.

Chief to our strategy is world-class framework and policies, in line with guidelines set by Bursa Malaysia, PETRONAS Corporate Sustainability Framework (PCSF) and UN Sustainability Development Goals (UNSDGs). In strengthening our approach towards sustainability, three key thrusts have been established that will drive our Sustainability Strategy going forward. They consist of Sustainable Business, Social Responsibility and Resource Efficiency. It is our mission to create a balanced approach to our business that can deliver value consistently and well-positioned for long term success.

BUSINESS SUSTAINABILITY

In anticipating gas market liberalisation, we have diversified our business into integrated solutions. As a regasification terminal player, we have capitalised on our terminals to provide value-adding services to vessels plying the regional route with our Gassing Up and Cooling Down (GUCD) service, LNG reloading service and in the future LNG bunkering service. This further enhances the role that gas/LNG plays in the shipping world and it is aligned to the International Maritime Organization (IMO)'s target to cap sulphur content in bunker fuel by 0.5% beginning 1 January 2020.

In extending the reach of gas to currently unserved markets due to absence of pipeline connectivity, we have started the construction of LNG truck loading facilities at our LNG Regasification Terminal in Pengerang, to support PETRONAS' virtual pipeline project. Once online, it will enable access to gas for those at the farthest reaches of the nation with small demand volume, while getting them onboard with the climate change agenda.

All these elements are systematically planned and established to facilitate liquidity of business activities at our regasification terminals to support our ultimate aspiration of becoming the leading LNG hub in Southeast Asia.

Meanwhile, our cogeneration assets in Utilities Kertih and Gebeng are well-known as being highly efficient in electricity generation. The efficiency in converting fuel gas to power is consistently above 80% when steam is being run at full capacity compared to market leading combined cycle gas-fired power plant of around 60-70%. Since the fuel gas used is less, the GHG emission is also lower. Furthermore, as the production of electricity is on-site, the burden on the utility network is reduced and transmission line losses are eliminated. Due to this fact, PGB has strategically positioned ourselves to expand the co-generation business to other hubs as part of our Utilities transformation plan. With these efforts, we aim to encourage our customers to use energy more sustainably, while cutting down on their energy bill.

MD/CEO Statement on Sustainability

SOCIAL RESPONSIBILITY

Being socially responsible means commitment to Health, Safety, Security, Talents and Society. As safety is our number one priority, we continuously work towards enhancing our safety standards towards generative safety culture, where we nurture a self-learning culture with tight responsibility towards everyone. In other words, everyone is responsible for each other and will self-learn from errors and mistakes to avoid future incidents. Our culture celebrates openness, immediate feedback on concerns and mistakes. We also believe lasting change is based on teamwork and shared commitments.

To foster closer relationship with our communities, PGB has also been supportive to various local social programmes such as Sentuhan Alam where we planted more than 6,000 mangrove saplings at Sungai Latoh, Johor. Our collaboration with Malaysia Nature Society is aimed at preserving and restoring the ecosystem and related species in the area.

In terms of talent, we strive to create a conducive and supportive environment in line with PETRONAS Human Resource policy and benefits, while ensuring they are ready for the future. Their career needs, training as well as welfare have been our priorities. The hard work really pays off when PETRONAS was awarded as Malaysia's Most Attractive Employer (Randstad Employer Brand Awards 2018). Being a subsidiary of PETRONAS, implementing similar policy, the award is also a reflection of the working environment at PGB.

Additionally, we are progressively pursuing diversity in our workforce and we value the diverse background and age group for the fresh perspectives and insights they bring to the Company. 50% of our Board Directors are female, while in our leadership team the mix stands at 33%.



In managing our talents, we internalise PETRONAS Employment Value Proposition (EVP) of Trust, Grow and Reward. We are also aligned with PETRONAS Global Talent Strategy (GTS) in ensuring the availability of competent and multi-disciplinary pool of talents in meeting PGB's business growth.

All of these initiatives will lead PGB towards an Empowered Organisation, with Agile Workforce that supports Diversity and Inclusion.



“

In pursuit of providing clean energy and meeting the demands of our customers, we are committed to our sustainability agenda by ensuring GHG emission reduction is in line with our targets.

”

RESOURCE EFFICIENCY

As we embarked our 301Q99 game plan in 2019, our priority has been focusing on plant optimisation and efficiency. The outcome has been remarkable. We are proud to announce that we have managed to substantially reduce energy intensity and maintenance costs spent at our facilities which has contributed to an overall value creation of RM68.0 million under the game plan. Our GHG emission is also below our target limit of 5 million tonnes CO_{2e}. Despite the size of our operations, we are able to reduce our GHG emission from 4.6 million tonnes CO_{2e} in 2018 to 4.4 million tonnes CO_{2e} in 2019.

CONCLUSION

All of the above efforts have put us on a very strong footing going into 2020. We will build up the momentum from this solid foundation and continue to embrace sustainability culture in our organisation. Before I end, I would like to take this opportunity to thank our stakeholders and partners for engaging proactively on various matters which are key to us. Your inputs and support are important in charting our action plans towards prioritisation of our business opportunities, issues and risks, while we work on maximising value creation for your benefits. With this, I present to you, PGB's very first Sustainability Report.

Sustainability Highlights

ECONOMIC



DIVIDENDS PAID
RM 1.4 billion
2018: RM1.4 billion



TAX PAID
RM 429.8 million
2018: RM386.7 million



EMPLOYEE COMPENSATION
RM 426.8 million
2018: RM403.2 million



WORKFORCE
1,829 employees
2018: 1,959 employees



LAND
4,961 hectares
2018: 4,961 hectares



PRODUCT DELIVERY RELIABILITY
(C1, C3, C4, Electricity)
100%
2018: 100%



SALESGAS DELIVERED
2,272 mmscfd
2018: 2,060 mmscfd

ENVIRONMENT



Carbon Emission
4.4 million tonnes CO_{2e}
2018: 4.6 million tonnes CO_{2e}



SAYANGI SUNGAI LATOH
Ecosystem baseline assessment



Achieved Reduction in Waste Disposal
28%



WASTE RECYCLED
48%
2018: 62%

RM 1.9 million spent for waste disposal effort
2018: RM1.7 million

SOCIAL

HSSE



Fatalities **0**
2018: 0



Lost Time Injury **2**
2018: 0



Major Fire **0**
2018: 0

SKILL



88% TECHNICAL
2018: 89%
12% NON-TECHNICAL
2018: 11%

GENDER DIVERSITY



Women Composition

50% BOARD
2018: 50%
33% LEADERSHIP TEAM
2018: 33%

HARVARD MANAGEMENTOR



LEAD SELF
LEAD OTHERS
LEAD BUSINESS

COMMUNITIES



PROGRAM SENTUHAN ALAM PETRONAS



PROGRAM SENTUHAN KASIH PETRONAS



PROGRAM SENTUHAN ILMU PETRONAS

Note: Carbon emission stated above is for PGB and its subsidiaries.

About Our Sustainability Report

We believe that as a corporation, we must take responsibility for the impact of our business on the society and be held accountable for it. We build enriching and value-adding interactions for our consumers, staff and communities where we work, rooted in a vision of the consumers and our common collection of cultural beliefs. We also use digitalisation to improve the performance of our plants and create sustainable value.

PETRONAS Gas Berhad (PGB) believes for a company to be successful and create long term value for the shareholders, sustainable development must be incorporated in all aspects of the business value chain.

Thus, we are actively managing our commitment to the Economic, Environmental, Society and Governance (EESG) sustainability, in our mission to create a sustainable business that is positioned for long term success. This Sustainability Report highlights the key EESG initiatives undertaken by the Company during the year under review. We progressively continue to evaluate and make adjustments to our approach to sustainability, in order to achieve our goals.



OUR SCOPE

Information in this Report covers the sustainability efforts undertaken by PGB and its subsidiaries, throughout the 12-month period from 1 January to 31 December 2019. Views and feedback from our various stakeholders have been compiled to help us identify, prioritise and address material sustainability issues in our business strategies. We endeavour to report issues that are material to the Company and our stakeholders, as determined through analyses of wide variety of sources such as Government and PETRONAS policies, benchmarking results, internal documents comprising enterprise risks, internal auditors reports, surveys, engagements and interactions with stakeholders, as well as media reports. We acknowledge that there is room for improvement in our disclosure, and we are committed to the monitoring and reporting on our sustainability activities each successive year.



OUR REFERENCE AND GUIDELINES

In producing this Report, we are guided by the local and international statutory and reporting frameworks, particularly Bursa Malaysia Securities Berhad (Bursa Malaysia)'s guidelines relating to Sustainability Statements, PETRONAS Corporate Sustainability Framework as well as the FTSE Environmental, Social and Governance assessment indicators.

SUSTAINABLE DEVELOPMENT GOALS

OUR SUPPORT FOR UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

In managing our approach to sustainability, we also ensure high degree of alignment with United Nations Sustainable Development Goals (UNSDGs) where relevant.

PGB is in support of eight UNSDGs where we believe we can contribute greatest possible impact to society. It helps us to coordinate our efforts effectively towards global sustainability agenda whilst enhancing collaborations with local community to deliver sustainable value creation.



FEEDBACK

We value feedback and welcome comments on our reporting. Please direct them to:

Sustainability Reporting Team
 Corporate Affairs
 PETRONAS Gas Berhad
 Level 50, Tower 1, PETRONAS Twin Towers
 Kuala Lumpur City Centre
 50088 Kuala Lumpur
 Malaysia
 or email: pgbca@petronas.com

Sustainability Strategy

SUSTAINABILITY STRATEGY

Sustainability plays a significant role in formulating our business plans and activities. As a leading gas infrastructure and centralised utilities company, we have the responsibility to demonstrate leadership not only in the business areas that we are in, but also with our environment and community. It is with this in mind that we have developed our Sustainability Strategy, which is aligned with our consideration for material matters and net positive impact that it has on our stakeholders.

Our strategy was also developed with reference to UN Sustainable Development Goals (SDGs) to ensure balanced focus and emphasis, as well as reflecting our support for global sustainability agenda. Our Sustainable Strategy focuses on three anchors; Sustainable Business, Social Responsibility and Resource Efficiency.

SUSTAINABILITY STRATEGY

Sustainable Business

Progressive partner anchoring on operational and commercial excellence as well as growth.





Social Responsibility

Commitment towards HSSE, caring for our talents and society











Resource Efficiency

Efficient use of our resources towards sustainable future generation.

How each of the strategy addresses our material matters is illustrated below:

| Sustainability Strategy | Material Matters | Responses | Result | Link to UNSDGs |
|--|---|--|--|--|
| Sustainable Business | <ol style="list-style-type: none"> Operational Reliability, Delivery and Efficiency Gas Market Dynamics Gas Market Liberalisation Business Growth Compliance to Regulation Sustainability | <ol style="list-style-type: none"> 301Q99 Pushing Forward Game Plan Efficient management of regulated assets Business expansions: <ol style="list-style-type: none"> Expansion of utilities capacity and customer base. Expansion of Tanjung Sulong Export Terminal (TSET) Introduction of ancillary services: <ol style="list-style-type: none"> Gassing Up Cooling Down (GUCD) LNG reloading LNG bunkering LNG truck loading | <ol style="list-style-type: none"> Increased profit and higher dividend paid in 2019 despite the challenges faced by the Group Ready infrastructure to support Third Party Access (TPA) at our gas facilities in supplementing domestic gas supply to ensure supply security. We also provide environment for competitive pricing in the liberalised gas market Business growth Diversified business for new revenue streams |   |
| Social Responsibility: Commitment to Health, Safety and Security | <ol style="list-style-type: none"> Health, Safety, Security and Environment (HSSE) Operational Reliability, Delivery and Efficiency Compliance to Regulation Human Capital Sustainability | <ol style="list-style-type: none"> Generative HSSE Culture and PETRONAS Zero Tolerance (ZeTo) Rules <ol style="list-style-type: none"> Stop Work Policy Jom Patuh dan Tegur 50,000 Safety Observations Medical privileges: <ol style="list-style-type: none"> Preventive Health Screening Setting up of Kertih Interplant Clinic (KIC) at Kertih Integrated Petroleum Complex Staff welfare Security measures: <ol style="list-style-type: none"> 200 Emergency Response Exercises Perimeter Intrusion Detection System (PIDS) and CCTV across all our sites | <ol style="list-style-type: none"> Zero Fatality, zero fire accident with multiple MSOSH Award in 2019 for outstanding OSH performance Award winner for Excellent Occupational Health & Safety (Chief Executive Officer/Private Company) from Department of Safety and Occupational Health Comprehensive medical benefits to staff and PETRONITA Creche for staff children Low security-related incidents and interventions for the past three years |   |

PUSHING FORWARD ACCELERATING MOMENTUM

| Sustainability Strategy | Material Matters | Responses | Result | Link to UNSDGs |
|---|--|---|--|--|
| Social Responsibility: Caring for Our Talents | <ol style="list-style-type: none"> Health, Safety, Security and Environment (HSSE) Human Capital Sustainability | <ol style="list-style-type: none"> Benchmark practice with the United Nations Guiding Principle on Business and Human Right (UNGPs) Effective talent sourcing and people management Pursue diversity in the workforce Comparable staff benefits | <ol style="list-style-type: none"> Employee work-life balance through flexible working hours and Compressed Work Week (CWW) programmes Skilled workforce and quality leaders, with smooth succession planning execution and low staff turnover Improved perspectives in insights and decision making |   |
| Social Responsibility: Caring for the Society | <ol style="list-style-type: none"> Human Capital Sustainability | <ol style="list-style-type: none"> School painting activities programme Free market activities Back-to-School programmes | <ol style="list-style-type: none"> Conducive learning environment Improved life for the less-fortunate community in Paka Better school-readiness for more than 200 students |  |
| Resource Efficiency | <ol style="list-style-type: none"> Health, Safety, Security and Environment (HSSE) Operational Reliability, Delivery and Efficiency Business Growth Compliance to Regulation Sustainability | <ol style="list-style-type: none"> GHG's emission target of 5.0 Million tCO_{2e} by 2024* Installation of Solar Photovoltaic System Installation of Best Available Technique (BAT) for air emission monitoring and control New COGEN with nitrogen oxide removal (deNO_x) 3R Programme – Re-use of spent catalyst and Benfield solution Life Cycle Assessment (LCA) Sayangi Sungai Latoh Programme | <ol style="list-style-type: none"> Reduction of CO₂ emission Circular economy by recycling CO₂ for other uses. Reduction in Energy Intensity under 301Q99 Pushing Forward game plan Cost-saving from electricity generated from sustainable source Efficient management of air emission Reduction of NO_x emission intensity RM5.0 million of cost saving from 3R Programme 87% of PGB sites have been certified with MS ISO 14001:2015 More than 6,000 mangrove saplings have been planted to improve the ecosystem |        |

* Target for PGB & its subsidiaries

Our Sustainability Journey

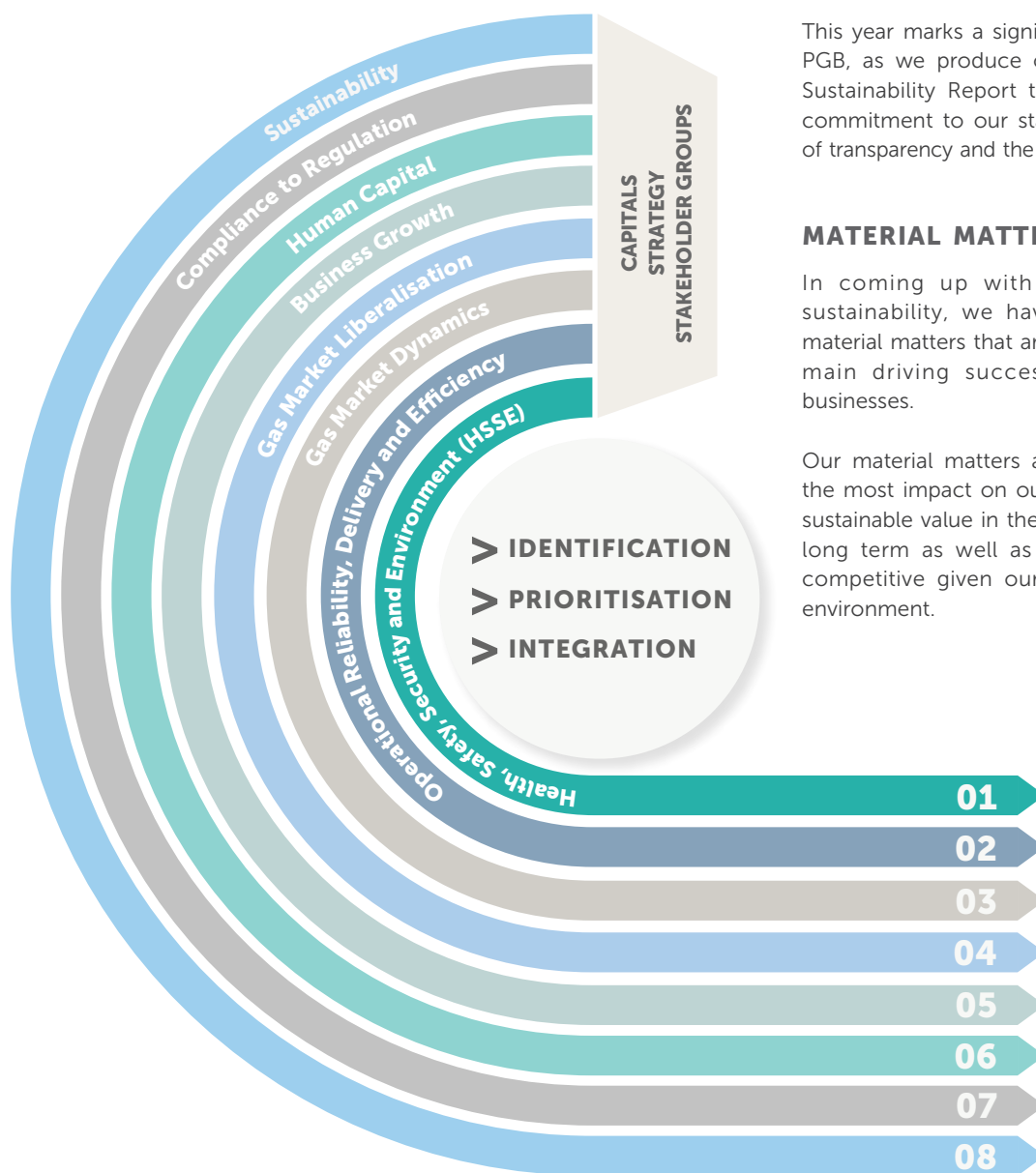
OUR APPROACH TO SUSTAINABILITY

This year marks a significant milestone for PGB, as we produce our first standalone Sustainability Report to demonstrate our commitment to our stakeholders in terms of transparency and the value we contribute.

















MATERIAL MATTERS

In coming up with the strategy for sustainability, we have identified eight material matters that are considered as the main driving success factors of our businesses.


Our material matters are those that have the most impact on our ability to create a sustainable value in the short, medium and long term as well as our ability to stay competitive given our current operating environment.



PUSHING FORWARD ACCELERATING MOMENTUM

| MATERIAL MATTERS | WHAT ARE THE RISKS | WHAT ARE THE OPPORTUNITIES | OUR RESPONSE | Link to UNSDGs |
|--|---|--|---|---|
|  <p>Health, Safety, Security and Environment (HSSE)</p> | Occurrence of major HSSE incidents affecting PGB business and reputation | Inculcation of behavioural safety culture with commitment from all staff, leading to increasing operational reliability and efficiency | <p>Strengthen HSSE practices via identified key focus areas, which include:</p> <ul style="list-style-type: none"> • HSSE compliance improvement via digitalisation; • Efficient functional assurance; • Upskilling HSSE capability; and • Effective communication programme. <p>Concerted and continued efforts to strengthen behaviour towards Generative HSSE Culture.</p> |  |
|  <p>Operational Reliability, Delivery and Efficiency</p> | Unsustainable operational performance and non-competitive costs impacting customers | <p>Development of key operational strategies to achieve and sustain world-class standard which can be leveraged upon to generate additional revenue</p> <p>Development of initiatives to ensure cost-competitiveness</p> | <p>Identification and timely completion of operational initiatives under R2 Game Plan:301Q99 Pushing Forward.</p> <p>Implementation of digital solutions for effective monitoring and intervention.</p> |  |
|  <p>Gas Market Dynamics</p> | Low asset utilisation arising from reduced demand for gas, use of alternative fuels, and increasing call for renewables | Advocacy on the use of natural gas towards achieving sustainable energy mix in Malaysia to generate business opportunities | Explore growth opportunities to add further value to existing assets and future-proof the business. |  |
|  <p>Gas Market Liberalisation</p> | Pressure on tariffs and earnings for regulated businesses | Potential growth opportunities in non-regulated areas, such as utilities, power and ancillary services | <p>Undertake efforts in ensuring fair tariff development through continuous engagement with Suruhanjaya Tenaga, Ministry of Economic Affairs (MEA) and economic consultant.</p> <p>Identification and effective implementation of commercial initiatives under R2 Game Plan: 301Q99 Pushing Forward.</p> |  |
|  <p>Business Growth</p> | Challenges in achieving growth targets to support PGB business | Potential growth opportunities in core and adjacent plays to add further value to the business | <p>Strategic engagements with various parties to explore potential collaboration opportunities.</p> <p>Establishment of Result Delivery Steering Committee to closely monitor growth progress.</p> |  |
|  <p>Human Capital</p> | Readiness of competent and capable talents to drive value in business operations and strategies | Robust talent management strategies and plans to produce capable and continuous pipeline of talents | <p>Development and implementation of Talent Mix Strategy which enables empowered organisation, agile workforce as well as diversity and inclusion.</p> <p>Management of talent competencies through RESCISCO implementation.</p> |  |
|  <p>Compliance to Regulation</p> | Potential breaches of critical laws, regulations and licenses resulting in reputational damage and financial loss | Adherence to critical laws and regulations resulting in strong reputation and standing | Execution of awareness and communication programmes on laws, regulations and licenses across PGB. |  |
|  <p>Sustainability</p> | Inability to ensure and balance sustainability from economic, social and governance standpoints | Potential collaboration with all stakeholders along the value chain to deliver sustainable solutions | <p>Identification and monitoring of annual sustainability targets.</p> <p>Deliberate on sustainability practices at PGB Leadership Team meeting.</p> <p>Alignment of sustainability targets and initiatives with PETRONAS.</p> |  |

Sustainability **Commitment**



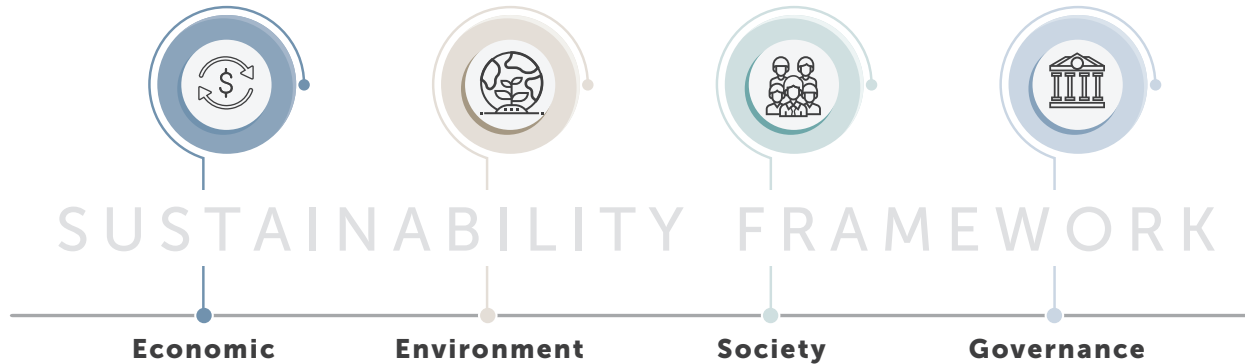
This commitment statement defines what PGB means by sustainability.

Governed by PETRONAS Group's new Statement of Purpose, "A progressive energy and solutions partner, enriching lives for a sustainable future", PGB has focused our sustainability efforts around the following:

- PGB as a progressive solutions partner will continuously push the boundaries in enhancing our value proposition to our customers, while at the same time strengthening our portfolio through diversifying in adjacent plays to future proof PGB's business.
- In enriching lives, PGB is committed towards improving the quality of life of all our stakeholders by creating value and delivering products that are sensitive to our customers' requirements and needs. PGB will provide opportunity for our own employees to develop their career and grow with the company and ultimately help society to reach its full potential.
- Being a responsible corporation, we emphasise on the impact that we want to see within our environment, i.e. sustainable future by ensuring the benefits that we are creating can be sustained over the longer term, and can be measured not only in terms of shareholder value creation, but societal progress and environmental sustainability.

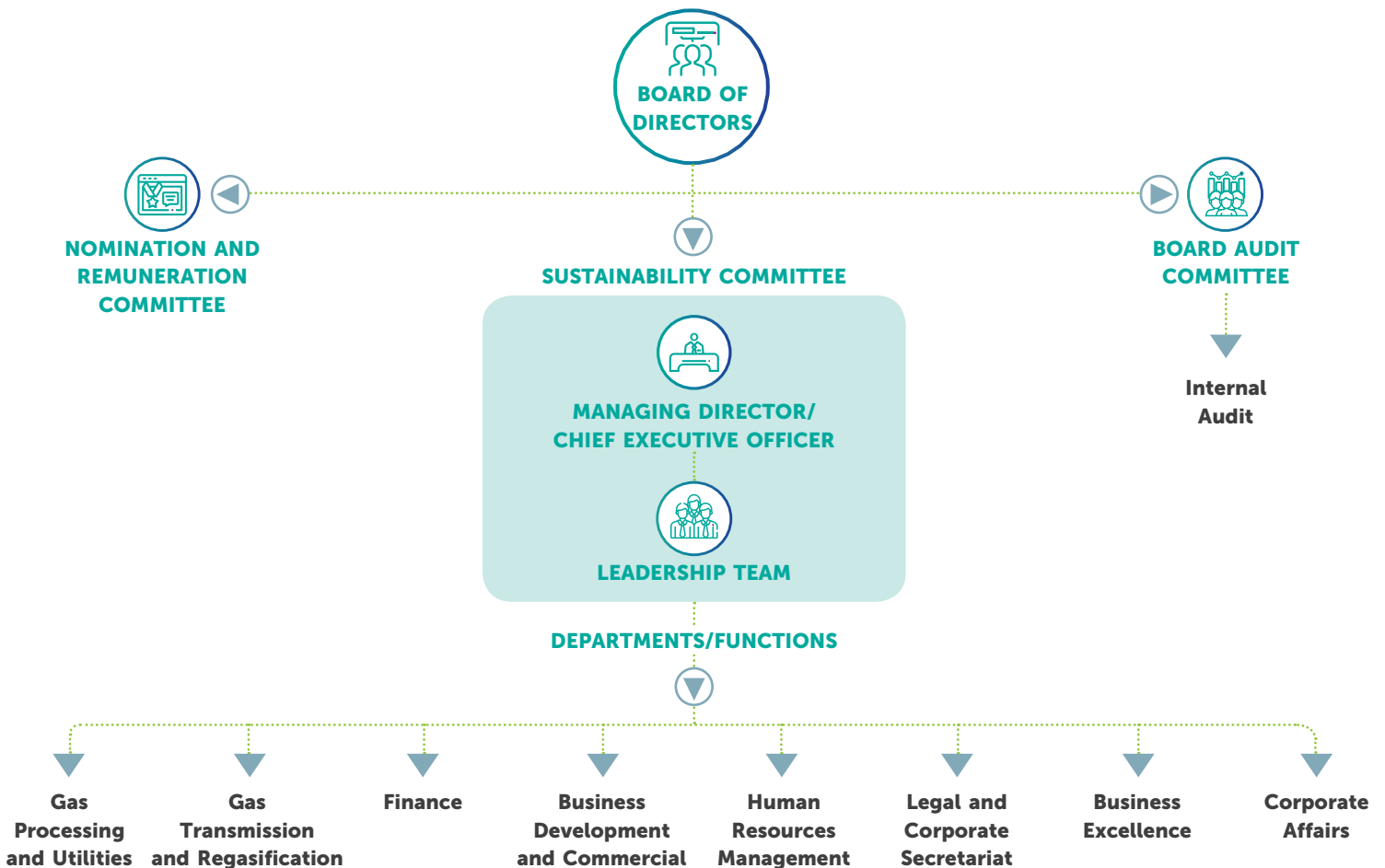
Sustainability Framework

We view sustainability or sustainable development as a business imperative, and this means looking beyond financial profitability by balancing economic, social and environmental considerations in making sound business decisions.



SUSTAINABILITY GOVERNANCE

As part of our sustainability journey, Sustainability Committee is established to craft sustainability policy, strategies and monitor the execution of the approved plans. The Committee is also trusted to guide us in meeting our economic, environmental and social sustainability goals as well as ensuring compliance to governance. In ensuring that sustainability issues are taken into account across all our products and services, the MD/CEO heads the Sustainability Committee, whose members consist of representatives from all the business unit support functions within PGB and its subsidiaries. The Chairman of the Committee is also responsible for the governance and implementation of sustainability policy.



Sustainability Framework

Roles and Responsibilities of Sustainability Committee encompasses:

- i. Develop and recommend the Sustainability Policy for the approval of the Board
- ii. Implement the approved Sustainability Policy
- iii. Plan and recommend on EESG activities or actions for the approval of the Board
- iv. Execute the approved EESG activities or actions
- v. Update and report to the Board on the executed EESG activities/actions
- vi. Review the adopted Sustainability Policy and approved activities on regular basis

Sustainability efforts, progress and commitments are also being reported and monitored monthly at PGB Leadership Team level and any issues are being deliberated and resolved collectively. In terms of climate change, Sustainability Committee is responsible to provide stewardship and guidance on relevant key sustainability matters and initiatives.

We have plans for 2020 for climate change to be included as part of our Company scorecard in addition to KPIs on HSSE records.

Driving Change Today

We are committed to conduct our business in an ethical and compliant manner, ensuring that we respect the rights of all people.

Good governance drives an ethical and focused mindset, one that is committed towards delivering the best without any compromise. Underlying the approach are strong commitments and policies including the **Code of Conduct and Business Ethics (CoBE)**, **PETRONAS Integrity Compliance Framework (PICF)** and **PETRONAS Corporate Sustainability Framework**.

Progressing For Tomorrow

Ongoing structured programmes are in place to empower employees and contractors wherever we operate to reaffirm our governance policies and system at all times.

To ensure our contractors share our efforts, we will be enhancing assessments of their social, ethical and environmental standards to safeguard against governance risks as well as human rights risks.

Good Governance

PETRONAS Code of Conduct and Business Ethics (CoBE)

The CoBE is applicable to all employees of PETRONAS. In addition, third parties are required to always act consistently with CoBE when dealing with, acting on behalf of, or in the name of PETRONAS Group. It covers areas such as conflict of interest, anti-corruption, competition, anti-money laundering, international trade and export controls. Disciplinary action will be taken against any employee not complying with CoBE, subject to applicable laws.

CoBE is the essential guide to assist all PETRONAS employees in exercising their judgment to act in the best interest of PETRONAS.

PETRONAS CoBE Guide is available on PETRONAS' corporate website at www.petronas.com

Any improper conduct can be submitted to CoBe channel i.e. cobe@petronas.com

PETRONAS Anti-Bribery and Corruption Manual

PETRONAS has a zero-tolerance policy with regards to all forms of bribery and corruption

The PETRONAS Anti-Bribery and Corruption Manual (ABC Manual) governs matters such as engagement with public officials, no facilitation payments, engagement with third parties, as well as gifts, entertainment and corporate hospitality.

The ISO 37001 is a testament of PETRONAS commitment to implementing international practices to combat corruption and our strong commitment towards zero-tolerance for bribery and corruption.

PETRONAS ABC manual is available on PETRONAS' corporate website at www.petronas.com

Any improper conduct can be submitted to ABC channel i.e. cobe@petronas.com

PETRONAS Whistleblowing Policy

The PETRONAS Whistleblowing Policy provides employees and members of the public with an avenue to disclose any improper conduct such as misconduct, criminal offence or malpractices.

The Whistleblowing Committee deliberates and decides on the course of action for the submissions and monitors the progress of submissions.

PETRONAS Whistleblowing Policy and Procedures are available on PETRONAS' corporate website at www.petronas.com

Any improper conduct can be submitted to the whistleblowing channel i.e. whistle@petronas.com



INTERNAL POLICIES

Good governance enables PGB to function efficiently and effectively by providing clarity on acceptable as well as expected standards of behaviour. In carrying out our business activities responsibly, safely and reliably, we are guided by PETRONAS' Shared Values of Loyalty, Professionalism, Integrity and Cohesiveness. These are supported by our strict conformance to respective laws, rules and regulations.



PETRONAS Anti-Bribery and Corruption Manual



PETRONAS Corporate Privacy Policy



PETRONAS Raid Protocol



PETRONAS Carbon Commitments



PETRONAS Corporate Social Investment (CSI) Strategic Framework



PETRONAS Risk Policy



PETRONAS Code of Conduct and Business Ethics (CoBE)



PETRONAS Corporate Sustainability Framework



PETRONAS Social Performance Framework



PETRONAS Competition Law Guidelines



PETRONAS Cultural Beliefs (PCB)



PETRONAS Technical Standards



PETRONAS Corporate Financial Policy



PETRONAS Framework on Climate Change



PETRONAS Whistleblowing Policy and Procedures

- Asset Liability Management Policy
- Banking Policy
- Capital Structure and Financing Policy
- Commodity Price Policy
- Credit Policy
- Financial Risk Management Policy
- Foreign Exchange Management Policy
- Group Tax Policy
- Internal Financial Shared Services Centre Centralisation Policy
- Investment Policy
- Liquidity Management Policy



PETRONAS Framework on External Auditors



PETRONAS Zero Tolerance (ZeTo) Rules



PETRONAS Human Rights Commitment



PGB HSE Policy



PETRONAS Gas Berhad Investment Criteria



PGB Limits of Authority










PETRONAS Position Statement on Climate Change



PGB Policies and Procedure for Related Party Transactions and Conflict of Interest Situations

Stakeholder Management Framework

| Key Stakeholder Group | Channel and Frequency of Engagement | Key Concerns |
|---|--|---|
|  <p>INVESTORS AND FUNDING INSTITUTIONS</p> | <ul style="list-style-type: none"> • Annual Report and Annual General Meeting • Quarterly analyst briefings • Investor roadshows and conferences • One-on-one meetings • Site visits • PGB website | <ul style="list-style-type: none"> • Shareholders' return • Third Party Access and regulatory risks to business • Future growth strategy • Environment, Social, Society and Governance (EESG) practice |
|  <p>CUSTOMERS</p> | <ul style="list-style-type: none"> • Annual customer experience survey • Customer visits • Industry conferences, forums and events • One-on-one meetings | <ul style="list-style-type: none"> • Product Delivery Reliability (PDR) • Product quality • Competitive product offering |
|  <p>BUSINESS PARTNERS</p> | <ul style="list-style-type: none"> • Board meetings • Management committee meetings • Strategic dialogues, conferences, forums and events • One-on-one meetings | <ul style="list-style-type: none"> • Performance and returns of business ventures • Opportunity for growth and value creation • Sustaining long term partnership • Regulatory compliance |
|  <p>SUPPLIERS AND VENDORS</p> | <ul style="list-style-type: none"> • Toolbox sessions • Project sponsor meetings | <ul style="list-style-type: none"> • Fair procurement and pricing practice • Project delivery performance |
|  <p>EMPLOYEES AND UNIONS</p> | <ul style="list-style-type: none"> • Annual townhall • Union engagement and activities • Monthly engagement with the Leadership Team • Periodic employee engagement with Human Resources Department • Intranet and Internal newsletters • Bi-annual PGB Barometer survey • R2C2 monthly message sharing | <ul style="list-style-type: none"> • Conducive working environment • Diversity and Inclusivity (DNI) • Staff understanding on their contribution to company's strategy and business plans |
|  <p>GOVERNMENT AGENCIES AND AUTHORITIES</p> | <ul style="list-style-type: none"> • Quarterly engagement programmes • Consultative sessions • One-on-one meetings | <ul style="list-style-type: none"> • Gas supply, security and reliability • Economic impact to consumers • Regulatory compliance • Health and safety of PGB operations and impact to surrounding communities • Ethical business practice |
|  <p>COMMUNITIES</p> | <ul style="list-style-type: none"> • Quarterly Corporate Social Responsibility (CSR) programmes • Periodic briefings and engagements with local communities | <ul style="list-style-type: none"> • Health and safety of PGB operations and impact to surrounding communities • Education and social support • Environmental protection and biodiversity preservation |

PUSHING FORWARD ACCELERATING MOMENTUM

Our Stakeholder Management Framework sets out our approach in managing our key stakeholders to ensure their key concerns are properly addressed in our strategies and action plans. The framework also helps us to secure insights of their expectations to ensure alignment.

| Our Response | Results | Link to Material Matters |
|--|---|---|
| <ul style="list-style-type: none"> Guided disclosure on company focus, financial performance and progress of growth projects Special briefing session on Third Party Access Issuance of media release for PGB quarterly results Increased engagement with investors and funding institutions Disclosure of EESG practices in the Annual Report | <ul style="list-style-type: none"> Greater awareness and increased interaction with the capital market: <ul style="list-style-type: none"> Increased number of meetings with investors and analysts (2019 = 83 vs. 2018 = 66) Increased participation in investor conferences, both domestic and international (2019 = 3 vs. 2018 = 1) Increased number of analyst coverage (2019 = 15 vs. 2018 = 14) Increased nomination for Malaysian Investor Relations Association (MIRA) Awards (2019 = 5 vs. 2018 = 0) | <ul style="list-style-type: none"> Operational Reliability, Delivery and Efficiency Gas Market Dynamics Business growth Sustainability |
| <ul style="list-style-type: none"> Close integration along the value chain to ensure reliability and PDR Increased offering of customer centric-solutions for both products and prices Increased customer engagement and visits Increased marketing activities and outreach to customers | <ul style="list-style-type: none"> Increased positive and constructive feedback from customers New and extension of contracts from customers Secured Heads of Agreement for new product offtake Successful delivery of Malaysia's maiden third party LNG cargo | <ul style="list-style-type: none"> Operational Reliability, Delivery and Efficiency Gas Market Dynamics Gas Market Liberalisation Business Growth Sustainability |
| <ul style="list-style-type: none"> Assimilation of operational and commercial excellence to drive performance Identification of potential business opportunities Mutual secondment of staff Focused effort on managing existing and potential partners | <ul style="list-style-type: none"> Commercial operation of Pengerang Air Separation Unit ahead of schedule Strong performance of joint venture entities Mutual understanding towards common goals Transfer of knowledge and skills | <ul style="list-style-type: none"> Health, Safety, Security & Environment (HSSE) Operational Reliability and Efficiency |
| <ul style="list-style-type: none"> Leverage on PETRONAS Group Procurement services Communications and guidance of standards through: <ul style="list-style-type: none"> PETRONAS Code of Conduct and Business Ethics (COBE); PETRONAS Anti-Bribery and Corruption Manual (ABC); and PETRONAS Vendor Development Programme. | <ul style="list-style-type: none"> Improved delivery of services Improved two-way communication between suppliers/vendors and PGB | <ul style="list-style-type: none"> Health, Safety, Security & Environment (HSSE) Human Capital |
| <ul style="list-style-type: none"> "Workplace for Tomorrow" to encourage openness and collaborative workforce Increased flexibility in working arrangements Revision and introduction of benefits e.g. medical, pilgrimage for all religions Structured leadership development framework Internal programmes to encourage staff participation and understanding of PGB's strategy and business plans | <ul style="list-style-type: none"> Positive barometer survey results specifically relating to leadership, HSSE, culture and system Implementation of talent mix strategy, addressing Diversity and Inclusion (DNI) and mobility | <ul style="list-style-type: none"> Operational Reliability and Efficiency Business Growth Gas Market Dynamics Gas Market Liberalisation Compliance to Regulation Sustainability |
| <ul style="list-style-type: none"> Formal and informal engagements Joint emergency response exercises Familiarisation visit to PGB facilities Regular reporting to government agencies | <ul style="list-style-type: none"> Better understanding and appreciation of PGB business operations Increased involvement and contribution towards gas market needs Successful testing of PGB readiness to implement Third Party Access (TPA) system Successful delivery of Malaysia's maiden third party LNG cargo Approval of Regulatory Period 1 (RP1) tariffs with consideration of protecting shareholders' interests Emergency response preparedness tested and executed successfully with relevant parties | <ul style="list-style-type: none"> Health, Safety, Security & Environment (HSSE) Operational Reliability, Delivery and Efficiency Sustainability |
| <ul style="list-style-type: none"> Implementation of Corporate Social Responsibility (CSR) programmes in the areas of education, environment and social support <ul style="list-style-type: none"> Back-to-school programmes 'Sayangi Sungai Latoh' mangrove planting programme Free market of which the proceeds were channelled to B40 recipients Sponsorships and donations Outreach programmes to foster good relationship with community | <ul style="list-style-type: none"> Increased engagement and awareness of PGB operations Increased outreach programmes with positive feedback Amicable resolutions of issues and concerns with the local communities | <ul style="list-style-type: none"> Business Growth Compliance to Regulation Sustainability |

Partnerships and Collaborations

PGB supports sustainability efforts as part of the wider oil and gas sector while continue to enhance our relationships with stakeholders.

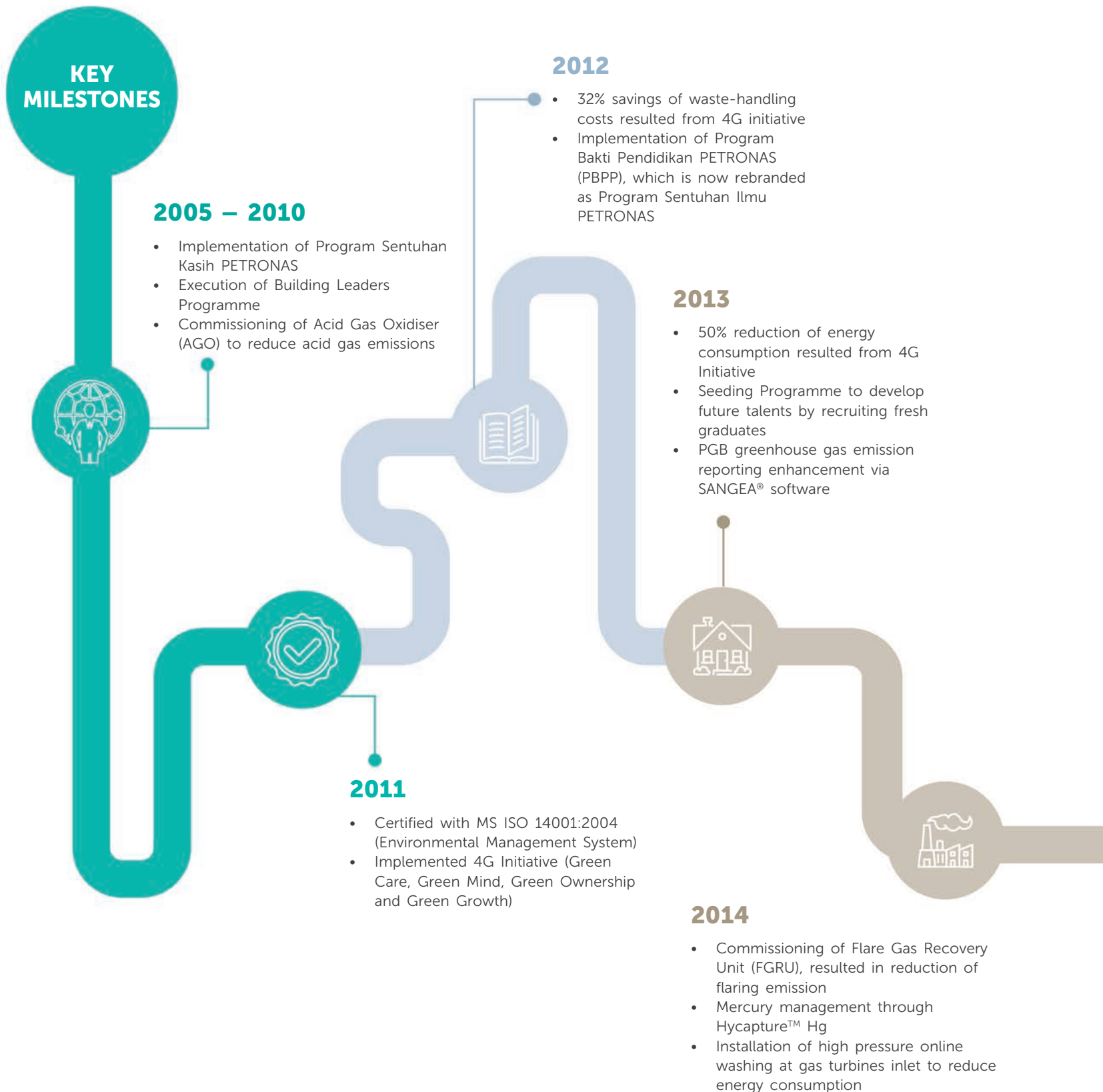
We believe greater impact can be achieved through close collaborations with the right players.



KEY ACTIVITIES IN 2019

- PGB is a member of Malaysia Gas Association (MGA), which is also a member of International Gas Union (IGU).
- Actively advocating for a clean Gas Masterplan for Malaysia at all platforms.
- Member of Cogen Taskforce under MGA to increase energy efficiency.
- Corporate Sponsor for 8th National Energy Forum organised by MGA.
- Panel speaker and sponsor of Malaysia's Inaugural Forum on Cogeneration, officiated by Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC).
- Panel speaker and International Gas Union (IGU) Energy forum in Jogjakarta
- Member of Gebeng Industrial Support Group (GISG) to solve water supply issues in Gebeng, Kuantan
- Support PETRONAS Leading Women Network (PLWN) to offer a platform for women to be part of an active network and seek for support to enable our women workforce to thrive in the workplace.
- Provided internships and industrial training programme placements for local universities students and graduates under Professional Training and Education for Growing Entrepreneurs (PROTÉGÉ) and Perdana Fellowships programmes.
- Proactive community programme and collaborations. Chinese New Year, Deepavali and Hari Raya celebrations with local community.
- 'Ziarah Programme', coordinated visits to staff suffering from health issues.
- Donations to the less fortunate.
- Back-to-School programme.
- 'Fun Day' with cancer patients.

Sustainability **Milestones**



2015

- Installation of cogeneration (COGEN) unit
- Collaboration with Malaysian Nature Society (MNS) to preserve the biodiversity of Sungai Paka
- Collaboration with Yayasan Salam Malaysia on the Livelihood Programme

2017

- Launched Mangrove Tree Planting programme at Hutan Simpan Kekal Kuala Paka
- Organised "Jom Buat Mudball" activity which was one of the activities planned under the Sayangi Sungai Paka programme launched back in 2015
- Utilities Kertih Plant Sustainable Water Management Project announced the winner for Special Project Award (Gold) of the Prime Minister's Hibiscus Award (PMHA) 2016/2017

2019

- Launching of 301Q99 Pushing Forward Game Plan to improve energy efficiency index, reduction of maintenance cost and increase utilisation
- Implementation generative HSSE culture
- RGTSU Export Compressor (RGTEC) won Silver Award from Anugerah Hijau Negeri Melaka under Green Project Category in Year 2019
- 'Sayangi Sungai Latoh' baseline assessment and tree planting in three phases
- Completion of Predictive Emission Monitoring System (PEMS)
- Participation in Hibiscus Award for seven plants
- Completion and commissioning of COGEN E
- Completion and the start of CO₂ recycling project (COSLA)
- Life Cycle Assessment for GPS and UG

2016

- Developed a structured Leak Detection and Repair (LDAR) programme to monitor fugitive emissions
- Installation of Predictive Emission Monitoring System (PEMS)
- Displayed Accelerating Culture Change (ACC) programme

2018

- Launched of 'Sayangi Sungai Latoh' programme
- Conversion of ISO14001:2004 into ISO14001:2015
- Received Green Apple Award for water conservation project at Utilities Kertih
- Diamond Project at GPS bestowed with the "5 Stars Band Award Project" from Malaysia Productivity Cooperation (MPC)

3ZERO100
PGB TRANSFORMATION

3ZERO100
BEYOND
Safe, Reliable & Efficient

301Q99
PUSHING 
forward



Economic Sustainability



PGB was set up as an infrastructure company to facilitate the monetisation of Malaysia's upstream gas resources. As such, since inception, our operating philosophy has always been about providing clean and low-carbon energy to Malaysia to ensure sustainable environment. Over the years, the role has further evolved as PGB moved further downstream with our entry into Utilities business where we become the industry that uses gas as a feedstock to generate electricity, steam and industrial gases.

MATERIAL MATTERS

- 1 Operational Reliability, Delivery and Efficiency
- 2 Gas Market Dynamics
- 3 Gas Market Liberalisation
- 4 Business Growth
- 5 Compliance to Regulation
- 6 Sustainability

7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



ECONOMIC PERFORMANCE

At PGB, it is vital for us not only to preserve the value that we have created but also to grow and add value to the capital put in by our investors. Value that has been materialised is passed back to our shareholders in the form of consistent dividend payouts and share capital appreciation.

The emphasis on returns is even greater given that our substantial shareholders are made up of state and government investment and retirement funds, whose mandate is to ensure sustainable returns to their portfolio. These returns indirectly impact the amount of dividend they are able to pay to their unit holders, thus the societal wealth at large.

In order to boost our profits, PGB has put in place strategies that focus on growing the business and improving plant operating efficiencies. Anchoring these strategies are our human capital and digitalisation agenda.

GAS MARKET LIBERALISATION

PGB is very supportive of the government initiatives on Third Party Access (TPA) as it will help to ensure the security of supply to the nation and drive energy and economic efficiency. With a more competitive gas price in the market, it is anticipated that more investors will enter Malaysia to invest in gas-related industries, and PGB will benefit this by offering utilities solutions to the new industries.

Late in 2019, PGB witnessed the delivery of the inaugural third party LNG cargo under the TPA system. The cargo was received by the Company's LNG Regasification Terminal Sungai Udang and delivered to the customer via its Peninsular Gas Utilisation network.

The successful delivery of the cargo reflects our infrastructure readiness to support the TPA, as we are encouraged to see more gas players utilising our facilities and services in the future.

Economic Sustainability



Gassing Up Cooling Down (GUCD)



Reloading at RGTP

INTRODUCTION OF ANCILLARY SERVICES

This year, as part of our revenue diversification efforts, PGB has a new revenue stream coming from integrated ancillary services at LNG Regasification Terminal in Pengerang (RGTP) which are known as Gassing Up Cooling Down (GUCD) and Reloading. These two projects signify PGB's commitment to be a progressive energy and solutions partner by offering flexible and diversified solutions to cater for the growing needs of our customers and provide flexibility to capacity users of RGTP to export LNG, which in turn increases RGTP asset utilisation.

GASSING UP COOLING DOWN (GUCD) SERVICES

On 19 April 2019, RGTP welcomed its maiden GUCD vessel, Puteri Zamrud Satu, marking the launch of the first ancillary service offered by PGB.

GUCD is a specialised service to bring the storage tanks on LNG carriers, after dry-docking, to a natural environment and cool it down to cryogenic temperature, of -160°C , before loading its next cargo.

With attractive rates and top-quality service, RGTP will be able to attract more LNG vessel operators and owners to utilise its services, and allow the facility to grow as a solutions hub, being strategically located along the Straits of Johor, close to the nearby Pasir Gudang and Singapore dockyards.

In 2019, we successfully completed eight GUCD services for our customers.

LNG RELOADING SERVICE

Beginning August 2019, RGTP secured a new stream of revenue through LNG reloading services for bunker vessels, mid-size cargoes and conventional LNG carriers.

We introduced the service in October 2018 where we successfully reloaded LNG into the world's largest LNG bunker vessel, Kairos.

Through the launch of this service, we are able to provide flexibility to capacity users of RGTP to export LNG. This elevates RGTP's position as an LNG Hub in the region, with extensive range of services to its customers.

In 2019, we successfully completed three reloading services.

LNG BUNKERING SERVICES

In line with International Marine Organisation (IMO) requirement, to cap the sulphur content in vessel bunker fuel by 0.5%, PGB has introduced LNG Bunkering services at Regasification Terminal Sungai Udang (RGTSU). The project is currently well underway and slated for completion in the second quarter of 2020. The introduction of the service is expected to increase utilisation rate of RGTSU and promote the terminal as an LNG hub.

LNG TRUCK LOADING FACILITIES

On 11 October 2019, a ground-breaking ceremony was held at RGTP to commemorate the construction of LNG truck loading facilities. This is a significant milestone for PGB given that this new facility will enable off-grid customers located away from Peninsular Gas Utilisation (PGU) network and small scale customers in Peninsular Malaysia to receive LNG. The loading facility will initially have four truck loading lanes with the potential for further expansion. This facility is expected to begin its commercial operation in the second quarter of 2020.

EXPANSION OF UTILITIES CAPACITY AND CUSTOMER BASE

Additionally, in 2019, our expansion strategy in Utilities business has started to bear fruits:

- We secured agreements to supply electricity and steam to new customers.
- We approved the Final Investment Decision (FID) for construction of a new nitrogen plan (NGU3) to supply nitrogen to PETRONAS Chemical Group's subsidiaries.

OUR ABOVE EFFORTS HAVE CONTRIBUTED TO OUTSTANDING RESULTS FOR THE COMPANY

EXPANSION OF TERENGGANU SULONG EXPORT TERMINAL (TSET)

Our pursuit for growth continues with the expansion of TSET capability through the construction of import facilities at the terminal. Our sister company, PETRONAS Trading Corporation Sdn. Bhd. (PETCO) will be utilising the terminal to import propane and butane gasses. The contract for the terminal usage is for 15 years, of which its first import of C3 and C4 took place in February 2020.

These strategic initiatives are expected to contribute positively to PGB's bottom line and ultimately the economy of the nation through increased business activities at the related assets.

ASSET INTEGRITY AND RELIABILITY

As a company that provides the backbone infrastructure for gas supply to the nation, reliability and safety of our assets are of paramount importance. Any supply disruption will have a huge impact to the business, economy and community in Malaysia.

Under the 301Q99 Game Plan, reliability is one of the specific elements of focus. Through strict discipline in our maintenance programmes such as plant turnaround, major inspections and revamp and rejuvenation plans, PGB is able to sustain its reliability.

Additionally, life cycle improvement and modernisation of assets studies are also being conducted from time to time to ensure timely and effective asset investment decision making.

Moving forward, PGB aspires to continue to be the preferred solutions partner to its customers through excellent operational performance and services. In achieving this status, we will continue to be driven by values that we seek to contribute to our stakeholders, be it economic, societal or environmental as reflected in the subsequent sections in this report.

RESULTS



REVENUE

RM5.5
billion

2018: RM5.5 billion



PROFIT AFTER TAX

RM2.0
billion

2018: RM1.9 billion



DIVIDEND PAID

RM 1.4
billion

2018: RM1.4 billion



TAX PAID TO GOVERNMENT

RM429.8
million

2018: RM386.7 million



EMPLOYEES COMPENSATION

RM426.8
million

2018: RM403.2 million



PAYMENT TO SUPPLIERS

RM2.7
billion

2018: RM3.3 billion



Environmental Sustainability

Being Responsible to the Environment



We believe in balancing our strategic business goals against sustainability imperatives, such as the reduction of our environmental footprint to minimise the impact on the local communities and environment within the areas of our plant operations.

As a plant operator with sizeable operations within the PETRONAS group, PGB will always ensure that registering low carbon emissions is a priority. As such, we fully support Malaysia's commitment to reduce Greenhouse Gas (GHG) emissions by 45% by 2030 in relation to the country's 2005 GDP. To this end, PGB has set the target to cap its emission at 5 million tCO_{2e} by 2024. The target remains even with possible future expansion of our plant operations. This is in line with PETRONAS' aim to reduce its groupwide GHG emissions from 56.5 million tCO_{2e} in 2017 to 49.5 million tCO_{2e} by 2024.

PGB pledges to conserve energy and GHG emissions through continuous improvements in the plant design and operation, reduction of flaring, improvement energy utilisation efficiency and increased usage of renewable energy.

MATERIAL MATTERS

- 1 Health, Safety, Security and Environment (HSSE)
- 2 Operational Reliability, Delivery and Efficiency
- 3 Compliance to Regulations or Regulatory Compliance
- 4 Sustainability



INITIATIVES TO REDUCE GREENHOUSE GASSES (GHG)

PGB recognises the importance of addressing climate change in our business given our operating environment. As such our management of CO₂ goes beyond regulatory compliance. During the year, several proactive action plans have been undertaken to reduce the emission.

Carbon Dioxide Supply to New Customers (COSLA) and Acid Gas Oxidiser (AGO) Centralisation Projects

PGB invested RM15.89 million for the COSLA Project, which started in 2018 with the objective to recover and process CO₂ as raw material for other industry sectors. Through this project, we have processed a total of 6,277 tCO₂ to the customers since October 2019. At the same time, loading of gas to AGO can be centrally managed and switched flexibly between customers and each AGO. As the gas loading is undertaken by customers, PGB can reduce the gas loading as well as the AGO needed to run, leading to a total of 11,000 tCO_{2e} reduction.

Boil-Off Gas (BOG) Flaring Management

Flaring of Boil-Off Gas (BOG) occurs at Regasification Terminal Sungai Udang (RGTSU) where during low demand, its regasification trains have to be shut down, leading to flaring of valuable BOG to avoid tank overpressure.

In managing the GHG impact, we have installed RGTSU Export Compressor (RGTEC) in 2017 to recover BOG and reroute it as salesgas into the PGU network. Through RGTEC, GHG emission has been successfully reduced by around 6,490 tCO_{2e} per year, which also translates into a cost saving of RM91 million per year. At the same facility, change of sweep gas from natural gas to nitrogen through Nitrogen Enhancement Project in 2018 has further contributed to an additional emission reduction of 14.6 tCO_{2e} per year. This Project has won a Silver award for Anugerah Hijau Negeri Melaka under the Green Project Category in 2019.

Environmental Sustainability

Installation of Solar Photovoltaic System

Another effort towards lowering carbon emission is through the installation of grid-connected Solar Photovoltaic (PV) System at PETRONAS' assets. This initiative is called SINARAN (Solar Installation and Application on PETRONAS Rooftops & Assets Nationwide). Solar photovoltaic panels have been installed on the rooftops of two buildings at PGB's Seremban Regional Office i.e. workshop cum warehouse and administrative building. The expected GHG reduction contributed from this project is approximately 131 tCO_{2e} per year. Pending full commissioning of the system, the cost savings from the PV system since September 2019, averaged at about RM3,700 per month with an average energy savings of 7,227 kWh per month.



Solar PV system installed at PGB Seremban Regional Office rooftops

Highly efficient co-generation

PGB has been operating highly efficient Co-Generation (COGEN) plants at our facilities in Gebeng and Kertih. The COGEN plants are able to achieve around 80% efficiency when running at baseload with full steam capacity. This innovative and highly efficient way to generate electricity leads to the reduction of GHG emissions as the fuel gas used is less. Our new COGEN plant comes complete with deNOx technology which is capable of reducing NOx emissions too.



Capacity and production by energy type of our plants

| Facilities | Electricity Generation Nameplate Capacity (MW) | Steam Generation Nameplate Capacity (MT/hour) |
|-------------|--|---|
| GPK | 27 | 80 |
| GPS | 27 | 40 |
| UK | 210 | 720 |
| UG | 140 | 480 |
| Kimanis | 300 | NA |
| Seremban RO | 0.141 | NA |

Note: At full capacity

The respective GHG intensities for PGB in Year 2019 compared to Year 2018 are as below:



GAS PROCESSING

Reduction contributed by COSLA Project and ELMS initiative

0.23
tCO_{2e}/tonne
of product

2018: 0.25 tCO_{2e}/tonne of product



GAS TRANSPORTATION

GHG intensities is maintained in 2019

0.0002
tCO_{2e}/mmBtu

2018: 0.0002 tCO_{2e}/mmBtu



REGASIFICATION

Reduction of Boil-off Gas

0.0005
tCO_{2e}/mmBtu

2018: 0.0019 tCO_{2e}/mmBtu



UTILITIES

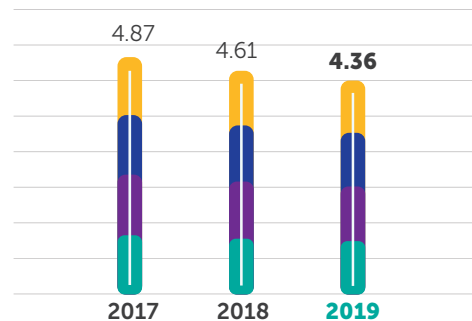
Slight increase due to high demand from customer.

0.50
tCO_{2e}

2018: 0.48 tCO_{2e}

At the Group level (PGB and its subsidiaries), we have successfully reduced overall GHG emission year upon year as illustrated below.

PGB GHG Emission (million tonnes)



As part of the effort to minimise climate change impact on the environment, PGB acknowledges our responsibility to ensure our processes and system are efficient. PGB is committed to comply with the new regulations as stipulated in the Environmental Quality (Clean Air) Regulations 2014 issued by the Department of Environment (DOE).

Under the regulations, PGB is required to install Best Available Techniques (BAT), Continuous Emission Monitoring (CEMS), Prediction Emission Monitoring System (PEMS) and conduct Leak Detection and Repair (LDAR).

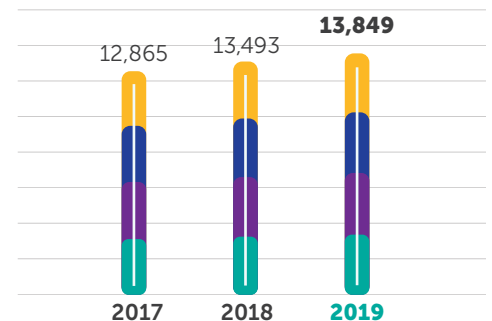
In 2019, the Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC) issued enforcement letter to industries in Malaysia to fully install BAT at selected fuel-burning equipment by 2024. Pursuant to this requirement, PGB has set up a BAT taskforce to ensure BAT installation can be completed by 2024.

As of 2019, 29 units of CEMS and PEMS have been installed on PGB equipments, with another 15 units remaining to be installed. This translates into 66% completion.

Prior to completion of CEMS and PEMS installations, PGB has taken the initiative to conduct manual monitoring through a third party contractor with accredited laboratory certificates to monitor the emissions.

The contractor has tracked the parameters stated in the Environmental Quality (Clean Air) Regulations, 2014. The monitoring was not only carried out on the emission but also the loading of NO_x. NO_x loading crept up slightly in 2019 as the installation of BAT are not fully completed. Installations are expected to be completed by 2024.

NO_x Loading (tonnes)



PGB has also conducted yearly LDAR programme starting from 2018. The programme has identified areas with Volatile Organic Compound (VOC) and scheduled leak repairs based on risk assessment. With this programme in place, PGB can further reduce GHG emission.

Environmental Sustainability

Emissions Risk Assessment

To ensure the good standards of health of surrounding communities, PGB has volunteered to become a pilot company within PETRONAS group to collaborate with PETRONAS Group HSSE is conducting risk assessment on cumulative air emission and the impact on baseline human health.

Based on the assessment, the emissions of Volatile Organic Compounds (VOCs), ammonia, nitrogen dioxide, sulphur dioxide, hydrogen sulfide, mercury and methanol gasses were found to be at an acceptable level with no significant risk to the environment and public communities.

Air Dispersion Modelling Assessment

PGB also worked together with PETRONAS Group Technical Services (GTS) to conduct air dispersion modelling for PGB facilities in Kertih. From the modelling, ground level concentration for NO₂ was found to be acceptable under the Malaysian Ambient Air Quality Standard (MAAQS) for all sensitive receptors (ASRs).

MANAGING WASTE

Managing waste responsibly and sustainably is key in our plant operations. In line with the increase in our plant activities, our scheduled waste recovery/recycling percentage has increased steadily since 2016, with a substantial amount of waste recovered and reused on-site.

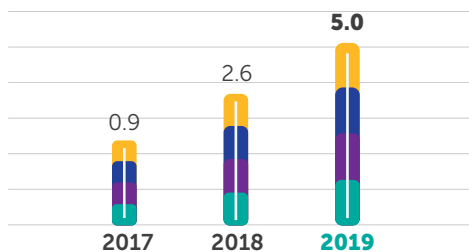
Our waste go to an appointed recovery and recycling companies that are licensed by DOE to be converted into raw materials and secondary products for other industries. These include spent lube oil, used catalyst and spent filter. With used catalyst being the highest generated scheduled waste in PGB, PGB has appropriately installed a 3R (Recycle, Reduce, Reuse) programme to properly manage wastages.

Despite having major turnarounds in 2019, PGB has successfully reduced the quantity of scheduled waste through frequent awareness training for the contractors.

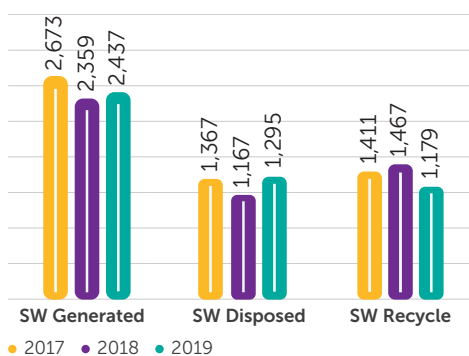
As a responsible Company, PGB took upon itself to reuse scheduled waste such as spent catalyst. A total minimum of 12 MT spent catalyst was recycled through the sieving process during turnaround activity at Utility Kertih and this initiative has successfully reduced new resource use. Gas Processing Kertih has also sent 1,700m³ spent Benfield solution to Industrial Effluent Treatment System (IETS) in Utility Kertih for onsite treatment. These initiatives have contributed indirectly to RM5 million cost saving for 2019 compared to RM2.6 million in 2018.

In addition, domestic waste recycling yielded a total of 1,179 MT in 2019 with recyclables such as used plastic bottles, used papers and metals.

Cost Saving from Scheduled Waste 3R Programme
(RM million)



Scheduled Waste Management Trend 2017-2019 (MT)



SIRIM Certification

PGB's facilities have also implemented an environmental management system in compliance with MS ISO 14001:2015 as certified by SIRIM QAS International Sdn. Bhd. As of 2019, the percentage of PGB sites that have been certified stands at 87%.

Innovative Use of Waste

As part of 5S and 3R initiatives, innovative use of waste competition was also organised at our Gas Processing Santong (GPS) facilities. Old newspapers are reused as pen stands and dustbin. Some of the innovations in turning the wastes into useful products are summarised below. Our creativity and innovation with plant waste have resulted in international recognition when we won Gold Award from the International Convention on Quality Control Circles (ICQCC) 2019 under 5S/QE Category in Tokyo, Japan.

List of Innovation from Waste

| Utilised Material | Innovation |
|--|---|
| Old newspapers | > Pen stands and dustbin for use by our employees |
| Unused pallets | > Umbrella house and storage boxes |
| Unused computer motherboard | > Energy clock |
| Unused paving blocks and cement | > Walkway |
| Unused valve and paint (excess during project) | > Art exhibits |
| Excess blocks and PVC pipe | > Friendly sink |
| Excess blocks and cement | > Water filter |
| Unused steel rods | > Safety helmet stand |
| Unused signage | > Visitor signage |
| Excess wooden block and paint | > Security pass holder |
| Unused scaffolding | > Grating cover |
| Unused partition blocks | > Event panel |
| Unused wooden blocks | > Podium |
| Unused partition | > Breastfeeding corner |



Gold Award at ICQCC 2019 5S/QE Category at Tokyo, Japan



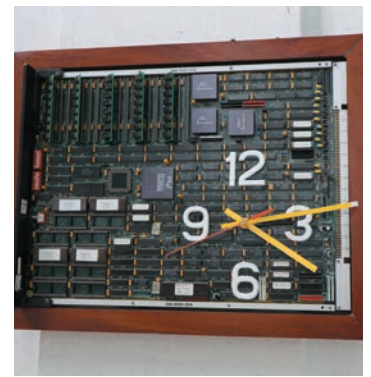
Before – used wooden pallets



After – storage box

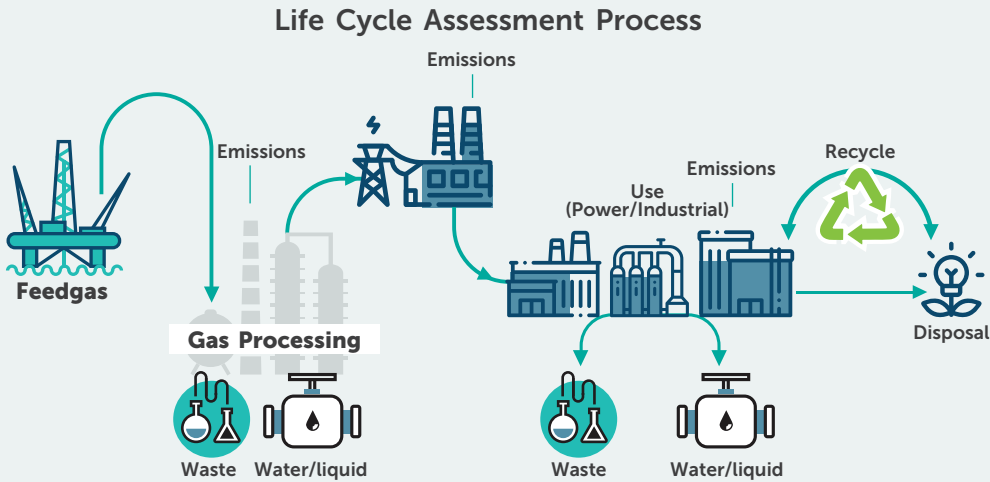


Before – unused computer motherboard



After – Wall Clock

Environmental Sustainability



PGB ensures that relevant measures are taken to protect the environment and that natural resources are being used sustainably. Towards this end, we have operated and maintained our own Industrial Effluent Treatment System (IETS) at our plants to ensure industrial effluent is being treated properly to an acceptable level, before being discharged into the river without posing danger to humankind and the environment.

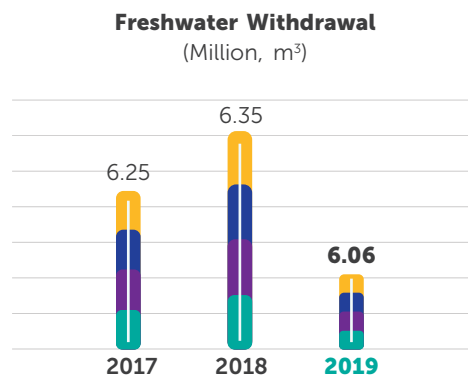
IETS has been established at several plant locations including GPK, GPS, UK and RGTP. There are three main types of IETS treatment processes commonly used; biological, physical and chemical treatments. The biological treatment process uses bacteria to break down the effluent. On the other hand, physical and chemical treatment processes usually include filtration, chlorination and coagulation technologies.

Life Cycle Assessment (LCA)

PGB has conducted Life Cycle Assessment (LCA) study in 2019 at Utility Gebeng (UG) and Gas Processing Santong (GPS). The initiative will be extended to other plants in the coming years. The goal of LCA study is to provide quantitative information on environmental footprint from cradle to gate for gas products. However, this study focuses on carbon footprint and human health impact assessment. This is due to increasing concerns on global warming. The results can be used as guidance for future improvement in the production processes, support tools in achieving sustainable development goals and provide environmental information for customers.

WATER MANAGEMENT

Our operations utilise water extensively for our cooling water system, demineralised water system, heating system and wastewater treatment. With significant amount of water being handled everyday, it is essential to monitor freshwater withdrawals, influent and effluent discharges to ensure sustainable consumption of natural resource and prevent pollution to the receiving environment. Our intensive efforts have resulted in total freshwater withdrawal to reduce to 6.06 million m³ in 2019 from 6.35 million m³ in 2018 .



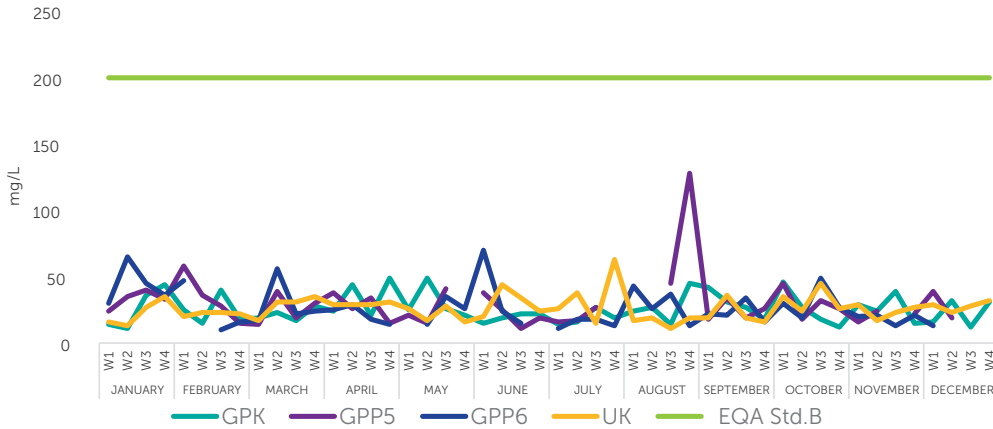
| Plant | Treatment Process |
|-------|--|
| GPK | Biological treatment |
| GPS | Biological, physical, chemical treatment |
| UK | Biological treatment |
| RGTP | Physical treatment |

To ensure that each of the IETS equipment is operating optimally, we have based our standards against Department of Environment (DOE)'s Guidance Document on Performance Monitoring of IETS. The Performance Monitoring is conducted by an IETS competent personnel certified by DOE. The effluent discharge from IETS is monitored to ensure compliance to DOE Standard B limit in Environmental Quality (Industrial Effluent) (EQ(IE)) Regulations 2009. PGB has also hired external party contractors to do the sampling and analysis of the effluent at the final discharge point. The results from the analyses are submitted to DOE through monthly Online Environment Reporting (OER).

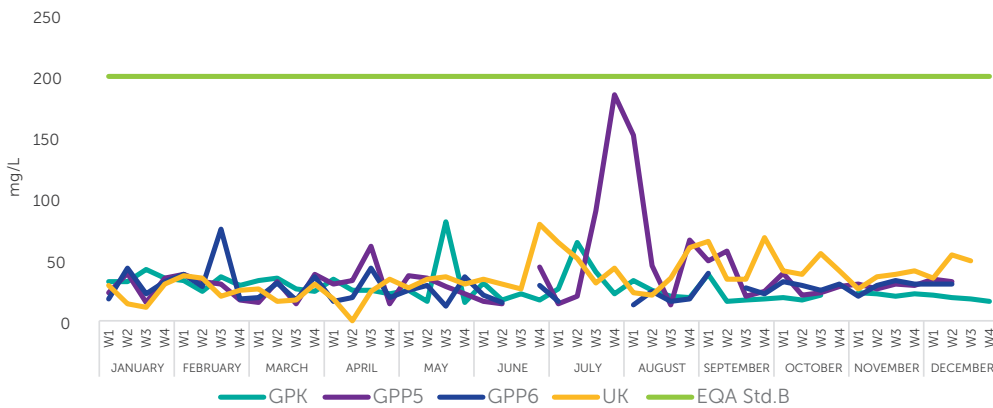
PUSHING FORWARD ACCELERATING MOMENTUM

The IETS discharge quality from 2017 to 2019 for 31 water quality parameters met EQ (IE) R2009 Standard B limit. Graph below illustrates the trending of one of the parameters that PGB monitors monthly:

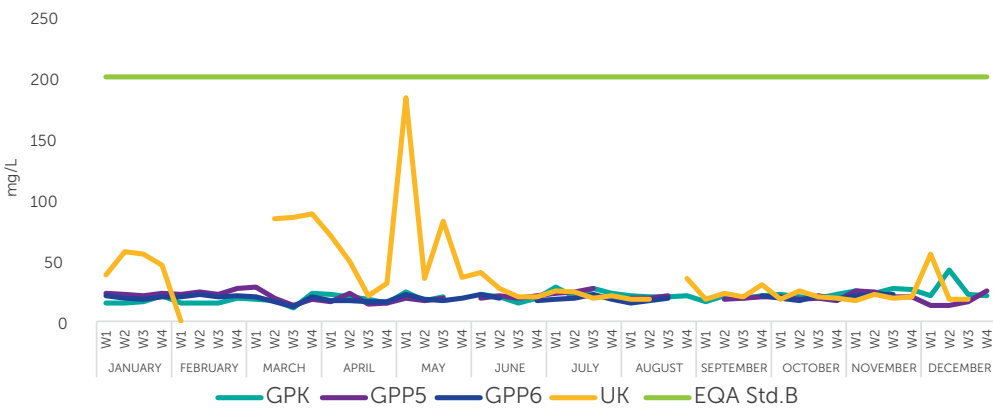
Chemical Oxygen Demand (COD) Effluent results 2017



Chemical Oxygen Demand (COD) Effluent results 2018



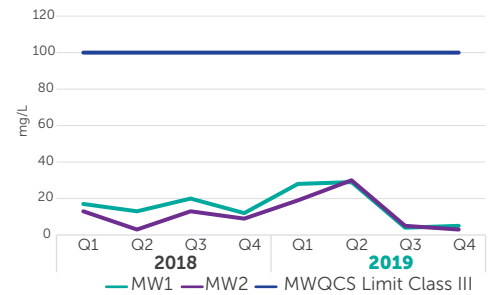
Chemical Oxygen Demand (COD) Effluent results 2019



PGB's operation discharges treated wastewater into Sungai Paka and Sungai Kertih. On this note, PGB commits to monitor river's performance, health and carrying capacity and religiously conduct sampling at Sungai Paka and Sungai Kertih to ensure our operation is in balance with the river ecosystem, hence sustainable. PGB's commitment to environmental protection has ensured compliance to local environmental requirements.

Other than river quality monitoring, PGB also conducts quarterly seawater quality monitoring at Singapore Straits at 2km and at 500m off the shore from RGTP plant. The Total Suspended Solids (TSS) results monitored in 2019 met the Malaysia Marine Water Quality Criteria and Standard (MWQCS) Class III.

TSS Result for RGTP Seawater Monitoring Quality



Environmental Sustainability

In 2019, an unfortunate fish kill incident occurred in Kertih, PGB took the proactive steps to conduct an in-depth investigation as well as collaborating with University Malaysia Terengganu with two objectives:

1. To find the potential sources that contributed to the fish kill e.g. from industrial and/or natural occurrence.
2. To identify the suitable ecosystem's health indicator other than using black Tilapia fish;

The study costing RM300,000 will go a long way in strengthening our understanding of surrounding ecosystems and the necessary steps to enhance it.



Fish Kill Study

Water Harvesting Project

PGB is committed to conserve water in places where we operate (in nine states in Malaysia) including the offshore facility at Melaka's Jetty Regasification Unit (JRU). Out of these locations, we have identified two areas with water stress issue, namely at Gebeng and RGTP.

Subsequently, PGB has embarked on a water harvesting project at its offshore JRU. The project was initiated when frequent water ponding occurrences were observed at Loading Platform 1 (LP1). It occurred as a result of dripping water condensates which was formed from the low temperature of LNG-send-out pipeline. The water dripped to the ground resulting in water ponding underneath. However, there is insufficient drainage and equipment to channel and contain the pool of water. Concurrently there is a notable water supply shortage at LP1 for cleaning activities. The solutions to this is to source the water requirement from the costly water supply coming from the bunkering vessels.

To solve this issue, we installed a drainage system under the LNG pipeline to collect the water droplets and routed the water harvested into water tanks for storage. The water is then utilised for cleaning activities. This does not only eliminate the water ponding issue, but also contributes to approximately RM7,400 savings per month of water withdrawn from the bunkering vessels.

At Utility Gebeng (UG), several major unscheduled water supply interruptions occurred since 2016, due to collapse of Kobat water catchment area resulting in:

- (a) Low incoming water supply pressure and flowrate; and
- (b) High incoming water conductivity

These recurring issues have affected plant operations and productions in Gebeng Industrial complexes.

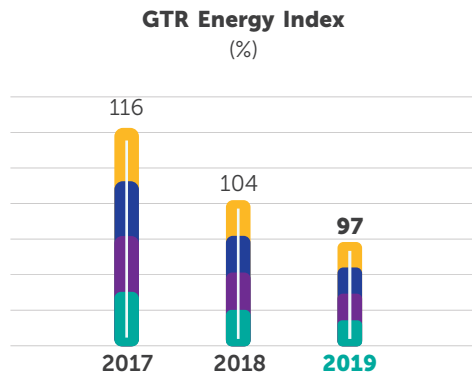
Based on media statement released by Pengurusan Air Pahang Berhad (PAIP), the issue was mainly due to depletion of Kuantan river water level as a result of dry season.

Due to prolonged drought at Sungai Kuantan, Gebeng Industrial Support Group (GISG) has been set up to assist the Pahang State Government and relevant government agencies. PGB is one of the members of GISG.

Due to continued incoming raw water interruptions, in August 2018, UG had activated Business Continuity Plan (BCP).

Realising the material impact that it has on the business, PGB took upon itself to escalate the issue to the State and consequently, meetings were held with local water stakeholders to find a feasible solution addressing concerns from all parties. One of the agreed outcome as proposed by PGB was to source for an alternative water supply from a neighbouring state.

Energy Management

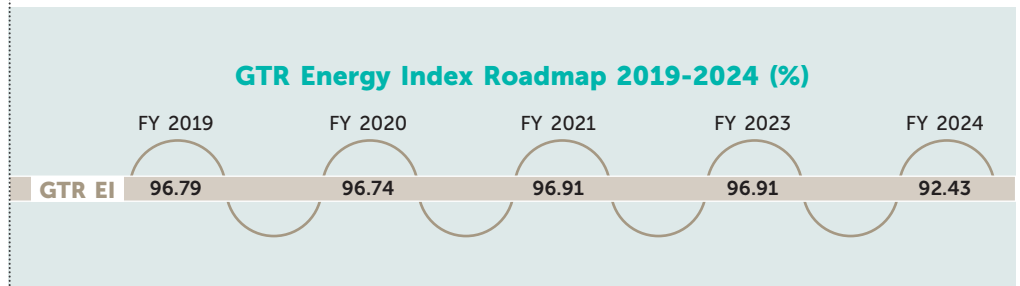


Gas Transmission and Regasification (GTR) Energy Index (EI) performance which measures energy efficiency has shown significant reduction from 2017 to 2019. This resulted from a focused effort via EI initiatives at GT, RGTSU and RGTP that had been identified under 301Q99 Game Plan.

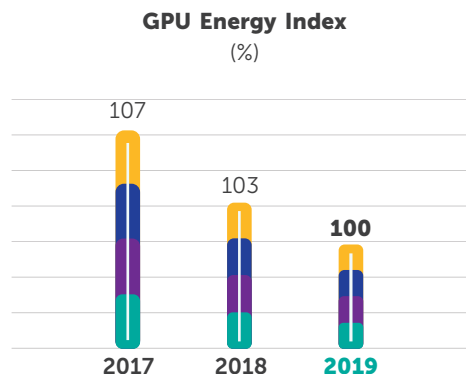
GTR's energy management efforts focus on efficient utilisation of internal gas consumption (IGC) and electrical consumption. GTR facilities currently embarking on 12 initiatives to reduce IGC and electricity consumption where three initiatives completed in 2019 have resulted in significant EI reduction from 104% in 2018 to 97% in 2019, as well as energy savings of 58.6K GJ. The key initiative contributing to this achievement was the "Improvement of Equipment Reliability" programme at RGTSU. This will contribute to RM0.72 million value creation to PGB in 2020. Higher utilisation of RGTP and RGTSU in 2019 also contributed to EI reduction.

The remaining nine initiatives which are to be completed in 2023 will contribute further reduction of EI to below than 95.7 and may bring about additional value creation of RM22.01 million in 2024. GTR has also undertaken Value Improvement for Production and Energy (VIPE) to identify the potential opportunities for improving energy performance.

Our GTR division has set out a 4-year roadmap to ensure steady reduction in Energy index and sustain our standards at 1st quartile.



Meanwhile, Gas Processing Unit (GPU) has shown a consistent reduction in Energy Index in four consecutive years. This is in line with GPU Energy Roadmap which is targeting continuous reduction in Energy Index across all five GPU plants. This is the outcome of a focused efforts under 301Q99 Game Plan. This is done by prioritising the initiatives that can provide quick-wins.



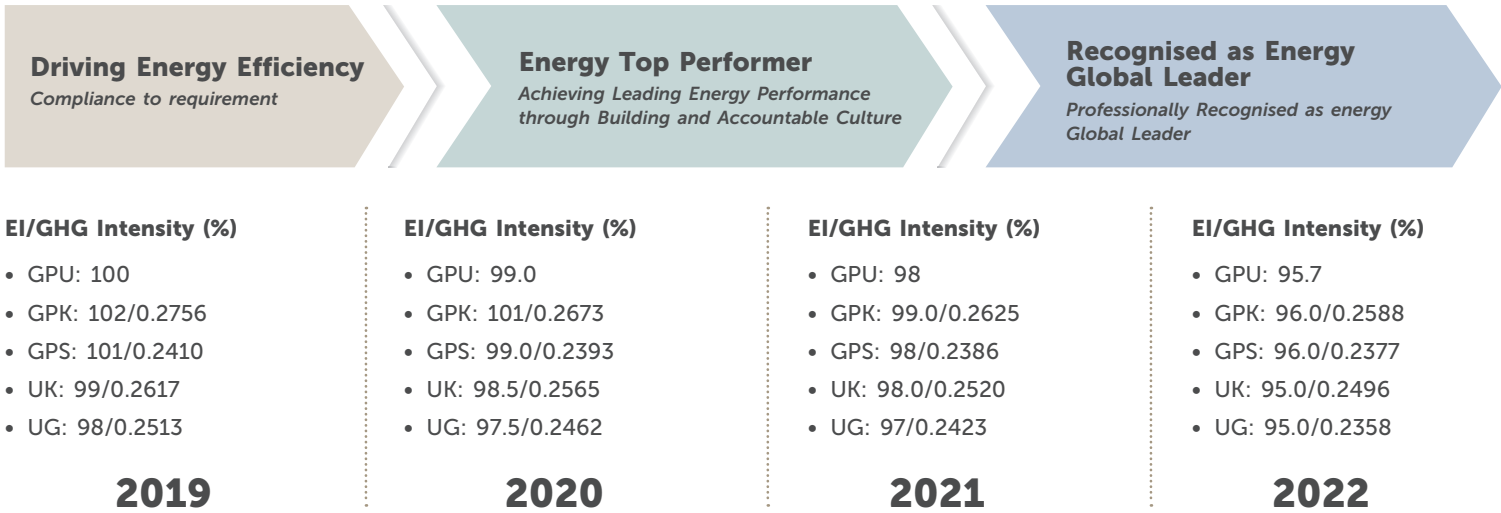
In 2019, GPU recorded an outstanding achievement of overall 100% Energy Index which is equivalent to world-class standard. At the same time, out of RM40.94 million value created under GPU's 301Q99 Game Plan, RM22.19 million came from Energy reduction initiatives. All the initiatives have been executed timely and delivered results as expected.

The main contribution came from High Efficiency Particulate Air (HEPA) filters installation at GPK, UK and UG which in total contributed RM10.24 million per year. These initiatives have not only reduced Gas Turbine fuel gas consumption but also contributed to high efficiency which is reflected in high Overall Equipment Effectiveness (OEE).

Continuous improvement at Utility plants which comprises of Utility Gebeng (UG) and Utility Kertih (UK) to reduce heat rate has been implemented rigorously. Initiative to reduce heat rate during TNB power import has shown a value creation of RM0.75 million per annum. In addition, an initiative under UK Gas Turbine Optimisation Project (GTOP) has resulted in value of RM2.5 million per annum.

Environmental Sustainability

GPU Energy Index Roadmap



On the other hand, our gas processing plants have also been putting in efforts to improve their equipment efficiency via various initiatives e.g. Liquefied Petroleum Gas (LPG) column optimisation and boiler efficiency improvement to ensure most efficient operating mode are continuously achieved. Overall value creation RM0.96 million per annum has been secured from this initiative.

With regards to energy consumption, GPU has shown outstanding effort in ensuring the energy used to operate the facilities is optimised by implementing best operating energy equipment and operating mode as well as minimising losses from the operation.

This has resulted in energy reduction of 6.4% or 3.8 million GJ of energy which was contributed by all five GPU plants.

We believe PGB is on the right track in managing its operations towards sustainable harmony with the environment. With clear roadmap in place and action plans, for both GTR and GPU, PGB is well positioned to achieve its sustainability targets for the future.

EMPLOYEE ENVIRONMENTAL INITIATIVES

Green Explore

Kuantan Regional Office (KTNRO) management has been supportive of employee participation in environment, health, safety and security programmes such as the Green Explorace that was held on 23 December 2019. The race encouraged all employees including top management to compete in fun games, activities, quizzes associated with environment, health, safety and security; amongst others:

- a. Exploring and understanding the policies, laws, regulations and guidelines published around the office;
- b. Quiz on the National Policy on The Environment;

- c. Quiz on the Environmental Quality (Scheduled Wastes) Regulations 2005, Environmental Quality (Control of Emission from Petrol Engines) Regulations 1996;
- d. Understanding of current scheduled wastes inventory and proper labelling method;
- e. Tree planting to sequester carbon around the office compound;
- f. Health tips related to relieving stress;
- g. Quantity and locations of fire extinguishers.

Through the participation, the employees were able to learn or refresh their memory with all environmental management imperatives relevant to KTNRO's operation and maintenance activities.

GPU HSSE-HR-ENERGY Grand Day 2019

GPU HSSE-HR-ENERGY Grand Day 2019 event was held across all GPU plants to provide awareness and appreciation to staff relating to environment. There were several environmental topics that were addressed in the form of competitions such as Final Effluent Discharge Point Competition and Hazardous Wastes Yard Competition, to ensure staff are conscious of the impact of their daily work routine on the environment.

To win the competition, a team must meet the following criteria:

Final Effluent Discharge Point Competition

Extra marks were given to the teams that have done extra initiatives to their battery limit.

Hazardous Wastes Yard Competition

The mark depends on the compliance towards Environmental Quality (Scheduled Wastes) Regulations, 2005 and Guidelines for packaging, labelling and storage of scheduled wastes in Malaysia.

Extra marks were given to the teams that have done extra initiatives beyond what is required under the regulations to their scheduled waste yard, for example, signage for each type of scheduled waste, warning signages and housekeeping.



Winner for Final Effluent Discharge Point Competition – Utility Gebeng

Some of the innovative ideas during the competition were the conversion of worn tyres as flower pots, usage of leftover paint from maintenance and operation activities to paint the battery limits and hazardous waste areas, reuse and refreshing of the old sign boards and turning of wooden pallets into storage boxes.

Environmental Sustainability



Launching of "No Plastic Bag, Polystyrene and Plastic Straw" Programme at GPU

No Plastic Bag Campaign

Plastic bags can take up to thousands of years to decompose, can contaminate soil and water, pose ingestion and entanglement hazards to wildlife. As such the Malaysian government has initiated "no plastic bag" campaign at all major grocery shops. In supporting this mission, PETRONAS Group HSE has been organising a campaign since 2017 with the following objectives:

1. to inculcate environmental consciousness throughout PETRONAS
2. to raise awareness on the need for prudent use of natural resources
3. to promote innovation and sharing of best practices

PGB has since participated in this campaign with GPU Human Resource Management Department as the pioneers. As a continuation of the campaign, PGB has expanded this initiative to its cafeterias at Gas Processing Kertih (GPK) and Utilities Kertih (UK) in year 2018, with a wider scope, this time covering polystyrene and plastic straws. This is done by designating Tuesday as a "No Plastic Bag, Polystyrene and Plastic Straw" day.

As a replacement, paper straws and biodegradable bags were given out. The initiative was then extended to all GPU plant cafeterias in 2019. We can expect that the initiative will be further extended to the whole PGB divisions including Gas Transmission and Regasification (GTR) division and Head Office in 2020. This year, the campaign will also the focus on doing away with single-use plastic bottles.

Our commitment to this initiative is further reflected in our push for compliance by our suppliers and vendors during turnaround exercise at GPU plants. Booths were set up where special quizzes were given out. Reusable bottles were given out to those who can ace the questions.

During turnaround exercise at GPP3 in Year 2019, reusable bottles were given away to vendors who successfully completed the quizzes.

PRESERVING BIODIVERSITY

We entered into the second year of our collaboration with the Malaysian Nature Society (MNS) for the environment conservation programme known as "Sayangi Sungai Latoh" in Kampung Sungai Latoh located in Kongkong Laut, Johor.

The five-year partnership is aimed at preserving and restoring the ecosystem and related species in the Sungai Latoh area. The data collection on the ecological stability, both flora and fauna, and river conservation will be beneficial for all the parties concerned, especially those residing within the area, which is in the proximity of PGB's gas pipeline Right-Of-Way.





Nurturing the young on the importance of preserving the environment



Inculcating "Sayangi Sungai Latoh" amongst employees and local community

Since the kick-off of the initiative in 2018, more than 6,500 mangrove saplings have been planted and a comprehensive study on the habitat of the flora and fauna of Sungai Latoh has also been undertaken by the subject matter experts from MNS and a local university, as well as through syndication with the local authorities.

The mangrove-planting programme was carried out using the comp-pillow technique introduced by the Forest Research Institute of Malaysia (FRIM). It is an innovative planting technique made from palm fibre, which is 100% natural, non-hazardous, biodegradable and environment friendly.

The beneficial effects of mangroves are enormous because the plant protects shorelines from damaging storm, waves and floods. Mangroves also help to prevent erosion by stabilising sediments with their tangled root systems. In addition, they maintain water quality and clarity, filtering pollutants and trapping sediments that originate from the land.

Apart from promoting awareness on the importance of preserving the environment through educational approach, the collaboration is also to foster and enhance good relationship with the relevant authorities and communities there.

Several government officials have been involved including representatives from Johor Bahru District Office; Department of Environment, Johor; Department of Drainage and Irrigation, Johor; Forestry Department of Johor; Education Department of Johor; Tiram State Assemblyman; Pasir Gudang Municipal Council and Seri Alam Police Department.



Social Sustainability

Commitment to Health, Safety and Security



At PGB, Health, Safety and Security are our main priorities. To this end, we are guided by our strict Health, Safety Security and Environment (HSSE) Policy, which is benchmarked against the world-class standards.

OCCUPATIONAL SAFETY AND HEALTH (OSH)

Safety

Health and safety risks, as well as the environmental risks for existing business and new projects are well-managed across the business through our strict adherence to prevailing group-wide requirements – the PETRONAS Health, Safety and Environment (HSE) Mandatory Control Framework (MCF), PETRONAS Technical Standards (PTS) and the HSE Management System (HSEMS). Our Generative HSSE Culture is anchored in the core belief that HSSE is intertwined with our business performance. Excellent operating plant and healthy workforce contribute to our high plant reliability, thus excellent business results. Our culture celebrates openness, immediate feedback on concerns and mistakes. We also believe lasting change is based on teamwork and shared commitment.

MATERIAL MATTERS

- 1 Health, Safety, Security and Environment
- 2 Operational Reliability, Delivery and Efficiency
- 3 Business Growth
- 4 Compliance to Regulation
- 5 Human Capital
- 6 Sustainability

3 GOOD HEALTH
AND WELL-BEING



4 QUALITY
EDUCATION



In addition, we periodically review and assess hazards and risks associated with HSSE and stakeholders in our Enterprise Risk and Plant Facilities Risk model. We also utilise the Hazards and Effects Management Process (HEMP) as a risk assessment tool to identify all the hazards and risks, which are then mitigated to As Low As Reasonably Practicable (ALARP) levels.

Great emphasis is also placed on the PETRONAS Zero Tolerance (ZeTo) Rules, which applies to all personnel, both internal and external, working at PGB's assets and facilities, with compliance being monitored by the top management. Employees or contractors who show exemplary behaviour towards HSSE are recognised by the top management as a way to ingrain good HSSE culture in each stakeholder. On the other hand, any violation of the ZeTo Rules by employees or contractors can lead to Balance of Consequences (BOC) which can result in termination of employment or service for employees and permanent ban from entering our assets for contractors.

Apart from that, our "Stop Work Policy" empowers employees and contractors to stop any work if there is any threat of harm, injury or environmental impact in the course of work. **"Jom Patuh dan Tegur"** (or Let's Comply and Intervene) is another HSSE campaign that encourages both the employees and contractors to remind one another on work safety before or during the execution.

Our top management team has also been proactive in performing plant safety walkabouts on monthly basis, to ensure compliance with the HSSE standards and procedures.

In 2019, PGB has conducted a total of eight Turnaround (TA) activities. The major TA (GPK and GPS) involved over 3,000 personnel comprising of staff and contractors. During the turnaround period, site walkabouts to monitor HSSE compliance in all activities were including by top management, on a daily basis.

Social Sustainability

– Commitment to Health, Safety and Security



Occupational Health

Analysis on accident investigations revealed that fatigue is among the contributors to a number of incidents. Under our Fatigue Management System (FMS), we are able to track Hours of Service Limit (HSL) to manage fatigue and compliance against our Technical Guidelines.

In terms of personal health and well-being, staff are entitled to undergo Preventive Health Screening once every two years upon reaching the age of 30 years old. There is also quarterly basic medical check up service offered by in-house doctor to all staff.

Our commitment to staff health is further demonstrated with the set up of a special purpose clinic, located in Kertih by PETRONAS. Kertih Interplant Clinic (KIC) which is available for use by PGB staff in Kertih has started operations on 2 May 2019 to provide comprehensive healthcare facilities to staff.

HSSE PERFORMANCE EXCELLENCE

HSSE performance in PGB is being driven by four key principles:

1. **Continuous monitoring at all levels:**
 - a. All Key Performance Indicators (KPI) including safety, process safety, as well as environment such as LTI and effluent discharge are monitored monthly at management meetings to ensure set targets are met and limits are not breached.
 - b. Mitigation and action plan for any gaps identified are immediately developed and the progress is being closely monitored by the top management. We also perform benchmarking to ensure continuous improvement of our business. All best practices from other industries are identified and where applicable is widely adopted and implemented.
2. **Having the right safety mindset:**

Each employee has been trained with a mindset that each "Incident is Preventable".
3. **Self-learning:**

All HSSE incidents are thoroughly investigated using PETRONAS established investigation tools to identify the root cause.

 - a. Based on the outcome, control measures are put in place and preventive measures are implemented across PGB facilities to ensure non-recurrence.
 - b. We also proactively incorporate incident lessons learnt into our Management System Review, as well as our HSSE plan. Top management also acts positively towards reported incidents and protects workers including employees and contractors from reprisal when reporting incidents as they are committed to create a safer workplace for all workers.
4. **HSSE Culture:**

PETRONAS Cultural Beliefs serve to inculcate Generative HSSE Culture in every staff in order to bring excellence and sustain great HSSE performance.

 - c. Our HSSE performance is tracked based on specific Key Result Areas (KRA). Leading indicators such as Emergency Response Exercise (ERE) or emergency drill, HSSE trainings; while lagging indicators like fatality rate, first aid case and near-miss are tracked and reported to the Leadership Team on monthly basis.

- a. Among the safety programmes initiated was the Safety Observation which required both the employees and contractors to identify, on monthly basis, at least two safe and unsafe acts or conditions at our facilities.
- b. This programme has received outstanding participation from all staff and contractor and the result is closely monitored by top management. As a result, more than 50,000 Safety Observations were recorded in 2019 across PGB. The result then being analysed and tabulated to top management in order to make continuous improvement for a better and safer workplace.

With the above programmes in place, we managed to keep fatality incidents to zero for the last three years

Awards & Recognitions

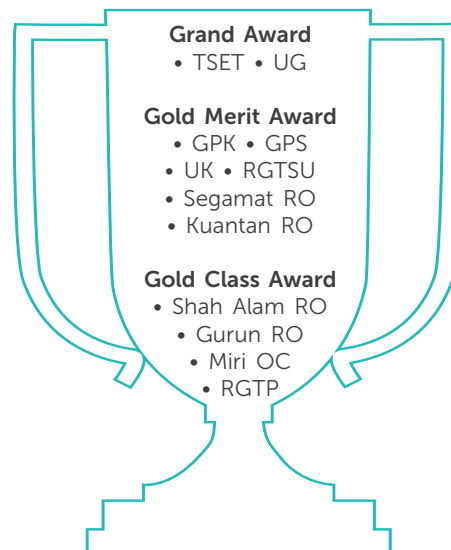
Malaysian Society for Occupational Safety and Health (MSOSH) Awards

Following our strict adherence to the prevailing regulatory requirements, PGB sites have the distinction of being bestowed with recognition in the various categories in MSOSH Awards for the past consecutive years. MSOSH Award is an annual award presented to organisations in Malaysia with proven outstanding Occupational Safety and Health (OSH) performance.

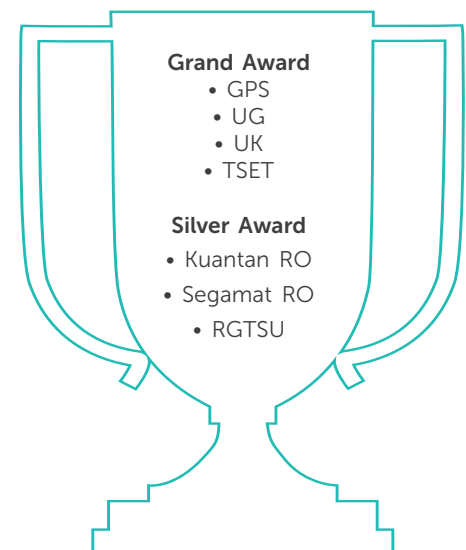
Identified companies are subjected to stringent document and site verification audits by MSOSH's panel of qualified and dedicated auditors of by the MSOSH Technical Committee in order to be nominated for the respective awards.

Highest award for MSOSH Awards 2019 (Grand Award) had been awarded to Tanjung Sulong Export Terminal (TSET) and Utilities Gebeng (UG) while remaining three assets in GPU and seven assets in GTR have been awarded Gold Awards.

MSOSH Award 2019



RoSPA Award 2019



Royal Society for the Prevention of Accidents (RoSPA) Awards

In addition, PGB also achieved Gold Awards in the internationally-renowned annual scheme run by the Royal Society for the Prevention of Accidents (RoSPA), United Kingdom. The RoSPA Awards scheme, now in its 63rd year, receives thousands of entries from organisations around the world and recognises achievement in health and safety, including practices such as leadership and workforce involvement.

Gold Award is awarded to organisations that achieved a very high level of performance in demonstrating well-developed occupational health and safety management systems and culture, outstanding control of risk and very low levels of error, harm and loss. As for 2019, four assets of GPU and three assets of GTR have been awarded Gold and Silver Award respectively.

Independent Assessments and Audits

PGB also undergoes regular assessment from government bodies such as the Department of Occupational Safety and Health (DOSH) where compliance audit was conducted to ensure that the sites comply with the legal requirements.

Standard and Industrial Research Institute of Malaysia (SIRIM) also conducts evaluation on PGB facilities based on the International OSHAS 18001 standard and provides certification on an annual basis.

Two more sites were certified in mid-2019 namely LNG Regasification Terminal Sungai Udang (RGTSU) and LNG Regasification Terminal Pengerang (RGTP). As OHSAS 18001 will be replaced by ISO45001, work is already underway towards being ISO45001 certified. Two of our GPU assets, Utilities Kertih (UK) and Utilities Gebeng are already taking actions to convert OHSAS18000 to ISO45001 and the remaining three assets (Gas Processing Kertih, Gas Processing Santong, and Tanjung Sulong Export Terminal) are targeting for ISO45001 certification by 2020. These efforts are a reflection of our consistent pursuit for excellence on par with international standards.

HSSE Training

HSSE trainings are made mandatory for all employees and specific tasks require an on-the-job-training to familiarise employees with the job. For the year 2019, 100% compliance to training was achieved through our Gas Academy which is equivalent to 4,074 employee mandays. The progress of employee training is also closely monitored by respective superiors and the result is being tabulated in management meeting.

Social Sustainability

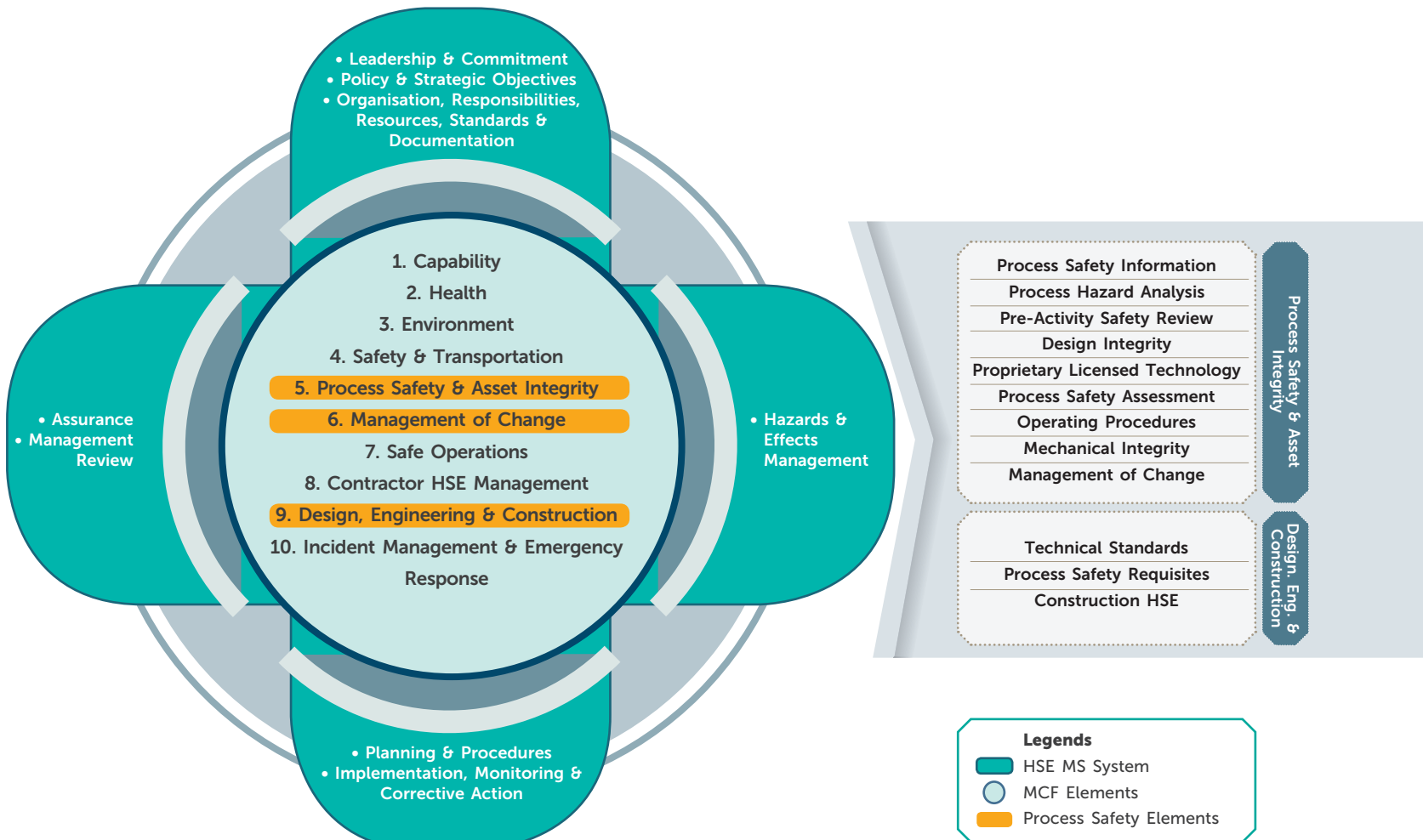
– Commitment to Health, Safety and Security

HSSE Mandatory Trainings

- HSE Tier-1 Audit Awareness
- Permit-to-Work (PTW) – Refresher Training
- Safe Handling of Chemical
- Awareness Training
- PTW – Work Leaders
- 4WD Defensive Driving Training
- Energy Isolation Training
- Working at Height Awareness
- Incident Investigation
- Lead Auditor and ISO 9001:2015
- Waste Acceptance Criteria Workshop
- Process Safety Management
- Behavioural Safety Training and Awareness
- Scheduled Waste Management
- Authorised Entrance and Standby Person (AESP) and Authorised Gas Tester & Entry Supervisor (AGTES) for confined space
- Job Hazard Analysis Training
- Basic Fire Fighting

Process Safety Management

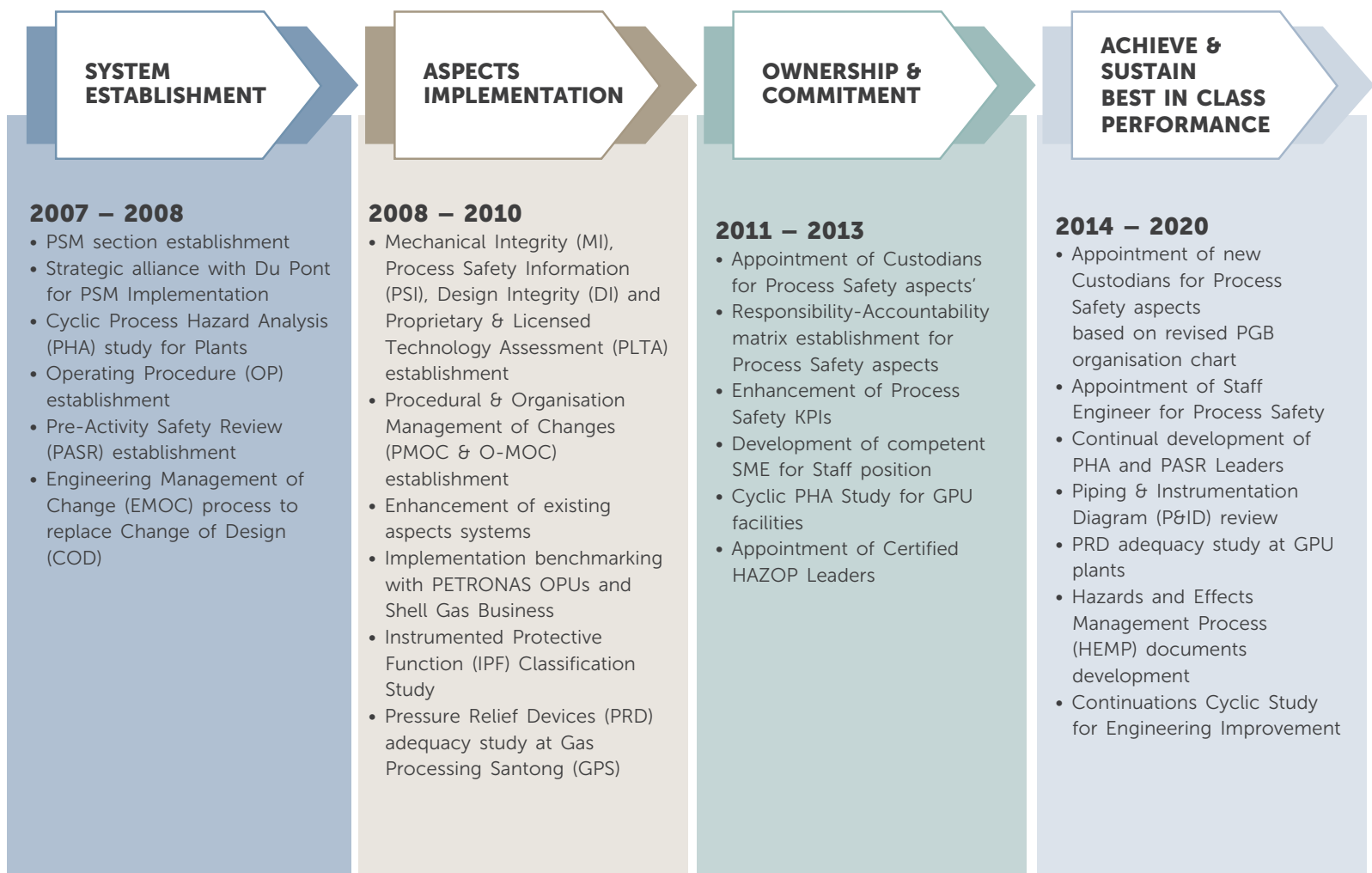
Process Safety Management (PSM) is the application of management principles and systems in the identification, understanding, and control of process hazards. PSM is crucial to prevent process-related injuries and accidents and hence, ensure our business continuity.



PGB started its PSM journey in 2007 by forming strategic alliance with a leading PSM entity in the world. After a year, PSM procedures were established throughout the organisation.

In 2011, as PSM is becoming increasingly significant in our organisation, and the knowledge is becoming highly specialised, staff with deep knowledge of PSM has been recognised as the Subject Matter Expert (SME) for Technical Staff position. This is continued by the appointment of Custodians of PSM in PGB organisation as well as Staff Engineer position for Process Safety in 2014.

Fast forward to 2019, PSM has been fully immersed as a culture in PGB such that Cyclic Study for process-related improvement and Hazards and Effects Management Process (HEMP) reviews have become a routine activity in PGB.



Social Sustainability

– Commitment to Health, Safety and Security

Our framework in Process Management is illustrated below.

Process Safety Information (PSI)

- Development of online document database using Engineering Document Management System (EDMS)
- PSI Library
- P&ID Updating for all plants in GPK
- Hazardous Area Classification Review for Gas Processing Kertih (GPK), HSSE and Utilities Kertih (UK)
- Instrumented Protective Function (IPF) Classification Review Study
- Chemical Reactivity Matrix (CRM) for all plants

Process Hazard Analysis (PHA)

- CIMAH Study review for Gas Processing Kertih (GPK), Tanjung Sulong Export Terminal (TSET)
- Cyclic PHA Review Study for all plants in GPU base on plan
- Hazard & Effect Register (HER) review together with Critical Activities Catalogue (CAC) and Remedial Action Plan (RAP)
- Bow-Tie Diagram for Major Hazards

Operating Procedure (OP)

- Gap Analysis based on Needs Assessment
- Develop Operating Procedures based on OeXMS Work Process
- Develop Hazardous and Non-Routine Activity Operating Assessment
- Adequacy Review for Operating Procedures
- Continuous Procedure Review

Pre-Activity Safety Review (PASR)

- Review of PASR Procedure and Checklist
- Conduct PASR for Shutdown GPP3 & GPP4
- Training of new PASR Leaders
- On Job Training for New PASR Leader

Management of Change (MOC)

- Review the work process of Engineering Management of Change (EMOC)
- Review the work process of Organisation Management of Change (OMOC)
- Review the work process of Procedural Management of Change (PMOC)
- Continuous Training for Management of Change

Mechanical Integrity (MI)

- Review of Safety Critical Elements (SCE) Management Procedure
- Develop list of SCE and their Performance Standards
- Develop the Equipment Reliability Strategy (ERS) documents for SCE
- Develop the Inspection, Testing & Preventive Maintenance (ITPM) Programme for the SCE
- Monitoring of SCE Performance

Emergency Preparedness & Crisis Management

PGB is always prepared to manage emergency and crisis in order to minimise impact on people, environment, asset and reputation. This is done through a systematic crisis management process:



All facilities in PGB have already established Emergency Response Plan (ERP) for all credible scenarios based on our Quantitative Risk Assessment and Hazards and Effects Register (HER). These documents contain detailed information to guide Emergency Response Team (ERT) to quickly respond to emergency and crisis situations. All developed ERP is tested periodically in the form of tabletop exercises or mock drills to ensure the adequacy and effectiveness of the plan to control and manage emergency scenarios.

In addition, as mandated under the Control of Industrial Major Accident Hazard (CIMAHA) regulation, we conducted more than 200 Emergency Response Exercises (Mock drills) in 2019 and these include:

- Tier-3 by GTR named "Ex Permata" at Shah Alam Regional Office (RO) in collaboration with Majlis Keselamatan Negara (MKN) and "Kedah-Songkhla Disaster Relief" at Gurun RO,

- Tier-2 by GPU at Utilities Gebeng and Gas Processing Kertih, and GTR at Paloh Hinai,
- Tier-1 "emergency drill" across PGB periodically (monthly)

Tier-3 Emergency Drill requires support and involvement from multiple external response agencies and/or authorities such as Majlis Keselamatan Negara (MKN), BOMBA and PDRM. There will be a situation where, depending on the severity, the authorities will take control of response operations either for public safety, national interest or if it determines that PGB is unable to manage the situation by invoking government emergency protocols. This drill is to ensure the effectiveness of emergency response management between PGB and external agencies and authorities.

Security

PGB business operations are exposed to civil unrest, criminality, and cyber threat that could have an adverse effect on our daily operations and might jeopardise our business continuity. We have always sought to obtain the best information that would enable us to assess security threat and risks. In 2017, PETRONAS had launched Security Management System (SeMS) which is intended to govern and manage operational security risk; describing on who is responsible and how security risk is to be managed at all levels, internationally and domestically. We at PGB, aligning ourselves with PETRONAS standards, embarked on establishing and implementing Security Management System (SeMS) in 2018 and has conducted detailed assessments for all PGB facilities and activities.

In 2019, initiatives to implement enhanced risk mitigation and control measures to detect and respond to security threats have been put in place. PGB has started to install Perimeter Intrusion Detection System (PIDS) and CCTV across all our sites which are scheduled to be completed by 2020. In addition, as a part of intrusion control at GTR facilities, we have initiated GATEZ project; a project to install anti-cut/anti-climb fencing covering 36 locations which intended to increase perimeter security. Moving forward, as part of PGB governance process in managing security risks, we have scheduled for the development of procedures and guidelines in order to ensure a systematic and effective intervention of security threats and risks.

As a result of SeMS implementation, security-related incidents and interventions have reduced significantly for the past three years.



Social Sustainability

Caring For Human and Society

HUMAN RIGHTS

PGB Group is committed to uphold internationally recognised human rights in areas of its operations, complying with its Code of Conduct and Business Ethics, and all relevant legal requirements via the subscription to PETRONAS Social Performance Framework. The introduction of this framework covers the supply chain, community well-being, labour and working conditions for contractors, and third party security which will strengthen the commitment of social responsibility. The Group is working closely with PETRONAS Group HSSE (GHSSE) to heighten human rights awareness in PGB. We hold in high regard the rights of the local communities, contracted partners in our supply chain, our staff and all other stakeholders with whom we may interact with across our operations. As one of PETRONAS subsidiaries, our standards and guidelines are in line with the United Nations Guiding Principles on Business and Human Rights (UNGPs), focusing on four areas: labour and working conditions, responsible security, supply chain management and community well-being.



Human Right Commitment

PETRONAS is committed to respecting Internationally-recognised human rights in areas of its operations, complying with its Code of Conducts and Business Ethics and all relevant requirement.



PGB is also vigilant to ensure all projects comply not only with the safety and environment, but also on social dimensions. Prior to any development of projects, social impact assessment will be conducted as part of the Environmental Impact Assessment process under the jurisdiction of the Department of Environment. Aspects and matters arising from community health (dust, noise pollution), safety (construction debris, traffic flow prone to accidents), community sensitivities (cultural heritage, relocation of local's important socio elements – pre-historical buildings) are aptly addressed. Stakeholder engagements were carried out with the local communities to reach a mutual level of understanding that benefit both sides without any prejudicial implication to the latter.

CUSTOMER SATISFACTION

In view of the increasing challenges and changes to market, the focus is on providing the best service and experience to all customers, through stringent safety standards, operational responsiveness and tailored solutions in order to exceed customer expectation.

In 2017, in line with the Commercial Excellence (CX) initiative driven by PETRONAS Downstream Business, we took the opportunity to review the revitalise our commercial approach and develop a renewed PGB CX strategy. Guided by a framework which comprehensively views commercial activities from multiple angles, PGB CX was designed with the customer mind. The strategy aims to maximise value creation while ensuring superior customer experience through our product and service delivery. To facilitate these efforts, four integrated workstreams have been formed within the ambit of PGB CX to drive groupwide programmes across the organisation namely Customer Relation Management (CRM), Capability Development, Integrated Marketing, Communications (IMC) and Technology.

TALENT SOURCING AND PEOPLE MANAGEMENT

Our people are the key to our success and our achievements are the result of their commitments. The success and achievements, in turn, do not only depend on having a talented and diverse workforce, but also on conducive working conditions and providing a safe and great workplace.

In managing our talents, we internalise PETRONAS Employment Value Proposition (EVP) of Trust, Grow and Reward. We are also aligned with PETRONAS Global Talent Strategy (GTS) in ensuring the availability of competent and multi-disciplinary pool of talents in meeting PGB's business growth. The GTS guides the Company in pursuing the right talents, and ensuring that the right environment is provided for them and ultimately developing the right leaders.

We are also aligned with PETRONAS' guiding principles of attracting and recruiting individuals based on merit, where only the most suitably qualified and competent individuals are selected for hire. We provide equal opportunity employment for all qualified candidates who meet the minimum entry requirements.

In addition, we are committed to support local requirements and is guided by existing company policies, procedures and guidelines when filling vacancies. In 2019, we participated in local recruitment drive with close collaboration with PETRONAS including rigorous in-person interviews. Through these efforts, the Company has successfully recruited 53 talents, all of whom are Malaysians.

Apart from sourcing externally, we continued to invest into developing the right competencies of our human capital and nurture a self-driven and an empowered workforce, enriching the knowledge and capability of our talents through cross business and function experiences. This encompasses talent progression and mobility within PGB and PETRONAS Group wide, whereby 42% (763) talent were progressed and mobilised within the organisation to support business requirement and talent development.



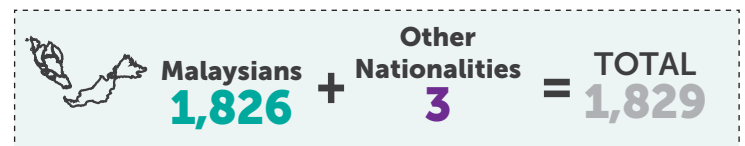
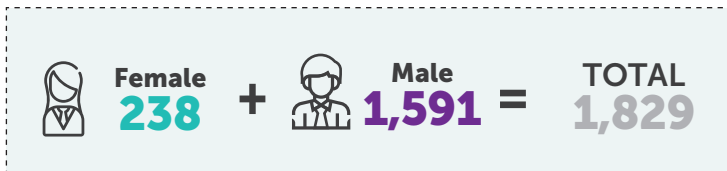
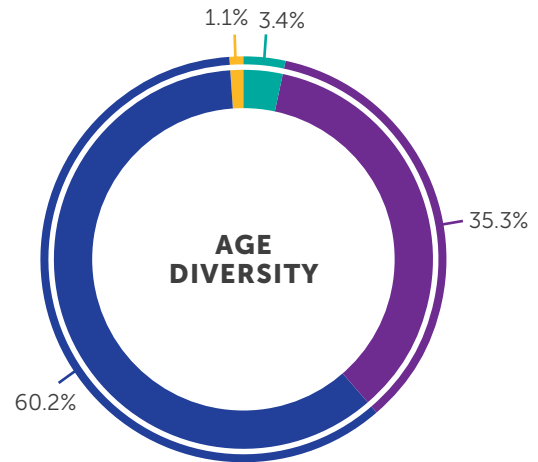
Social Sustainability

– Caring For Human and Society

DIVERSITY AND INCLUSION

We are also increasingly pursuing diversity in our workforce. Everyone is treated equally and without discrimination, and we value the diverse background and age group for the fresh perspectives and insights they bring to the Company.

To support this objective, PGB has developed Talent Mix Strategy that enables Empowered Organisation, Agile Workforce as well as Diversity & Inclusion. Company-wide, female employees make up 20% of our total workforce for technical executive and managerial position. At the Board level, gender balance is amplified with women making up 50% of our Board of Directors.



LEADERSHIP DEVELOPMENT

Succession Planning

In ensuring business continuity where the key positions remain filled with competent incumbents, succession planning exercises were conducted, not limited to key management positions, but also including plant critical positions. During the year, Succession Planning exercise has been conducted and completed for 364 identified PGB Plant Critical Positions in order to ensure the continuity of plant operations. In ensuring readiness talent to assume critical positions, PGB adopts PETRONAS Top Talent Management Value Chain to review talents on a wholesome basis annually. The aims are to determine their strengths, areas of development and career plans, which later followed by identification of successors for PGB Senior Management positions. The succession planning for PGB Senior Management positions was approved by the PETRONAS Talent Council.



PGB Nurturing Young Leaders Programme

PGB Nurturing Young Leaders Programme for executives based on the PETRONAS Potential Leaders Development Framework was approved in 2018. The programme focuses on the 70-20-10 blended learning approach where 72 executives have been identified to undergo the programme. In 2019, a series of programmes have been organised internally i.e. selected classroom training, job attachment and mentoring programme with PGB leaders.

PETRONAS Leadership In-Role Development Programmes

PETRONAS offers a series of leadership programmes in enhancing the effectiveness of new managers and senior management staff in leading self, leading others, leading change and leading business. The programmes aim to facilitate new managers transitioning into their new roles and accelerating the leadership development of new senior management staff as well as assisting them in effectively delivering the performance required. Riding on it, during the year PGB has identified 37 new managers and senior management staff to attend the Leadership In-Role Development Programmes offered by PETRONAS Leadership Centre in Bangi.

PGB Techno-Commercial Leadership Development (TCLD) Framework Programme

PGB Techno-Commercial Leadership Development (TCLD) Framework has been developed for executives at job grade level of G01 to G04 based on PETRONAS Potential Leaders (PL) criteria and technical experience (min of seven years). The programme aims to equip PGB techno-commercial talents in pursuing Techno-Commercial career path. The candidates were given exposure in commercial aspects through a series of programmes such as participation in PGB Commercial Excellence Academy, professional image building course and commercial inclination online assessment.

Social Sustainability

– Caring For Human and Society

CAPABILITY MANAGEMENT

Total Training Mandays

7.4

2018: 6.2

2017: 6.4



Training investment per employee
(RM'000 per staff)

8.4

2018: 5.2

2017: 3.6



HSSE Mandatory training for FY2019

- ▶ Working at Height
- ▶ Safe Handling of Chemical
- ▶ Hearing Conservation
- ▶ Scheduled Waste Management
- ▶ Permit-To-Work & Job Hazard Analysis (PTW & JHA)
- ▶ Energy Isolation
- ▶ Advanced Industrial Fire Fighting
- ▶ On-Scene Commander
- ▶ Basic First Aid for First Aider
- ▶ Defensive Driving for Gas Transmission Crew
- ▶ Basic Sea Survival for Terminal Crew

Capability

#CapabilityStartsWithMe

The tagline continues to inculcate the change of mindset amongst our employees, where they are responsible for their own capability development through continuous upskilling and lifelong learning to meet the demands of the ever-changing business environment in the era of Industrial Revolution 4.0. Further emphasis of 70:20:10 blended learning model is embedded in many of our programmes to encourage a self-driven culture amongst our employees. The focus is to create more opportunities for On-Job Training (OJT) i.e. 70% of the approach, coupled with coaching and mentoring (20%) and structured classroom learning (10%).

Managing Talent Competencies Through RESCISCO Implementation

We are currently embracing the RESCISCO project which was introduced at PETRONAS level in 2018. RESCISCO implementation initiative started with the Pilot Group of Mechanical disciplines, continued in 2019 for other Technical disciplines groupwide. It is aimed to deliver empowered, agile and enabled talent through operationalisation of competencies and wholesome development that is fit-for-purpose, flexible career pathing that maximises opportunity and technical talent cluster that guides staff career pathing.

The whole organisation will adopt an open and self-driven way of managing competency development through a transparent and easily accessible ecosystem. Each individual's progression will eventually be linked to their own pace and desire to develop their own competencies which allow people to amplify their skill sets to match the specialisation required by different parts of the organisation through Superior Managed Assessment (SMA), versus the one-size-fits-all approach during previous Accelerated Capability Development (ACD) programme introduced earlier.

Through RESCISCO implementation, individual staff will be empowered to take charge of their own progression, in line with the Company's culture of personal accountability.

Blended Learning through Microlearning and Digital Learning

We are continuously active in supporting microlearning, which promotes embedding the learning agenda as part of our day-to-day activities.

PETRONAS's MyLearning continues to be the go-to digital learning platform where online contents are accessible to everyone in the organisation including the 41 Harvard Manage Mentor (HMM) modules and 71 modules under the HMM Sparks series which would enable a more individualised learning experience, through its short burst of learning contents. In addition, the curated learning content in the mobile apps such as SWITCH and PETRONAS DOT have also made it easier to learn anytime, anywhere.

Industrial Training Opportunities for Undergraduate Students

A total of 172 undergraduates and diploma students from overseas and local universities were given the opportunity to undergo their internship programme at PGB in 2019. Of the total, 134 students were attached at Gas Processing & Utilities Division (GPU), 31 at Gas Transmission & Regasification (GTR) and seven at the Head Office (HO).

The students have spent between three to eight months at their assigned departments and completed the internship programme with final presentations to their respective Superiors on their projects.

While undergoing the internship, these students were also exposed to the Company's high-performing work culture which can provide them with positive examples in preparation for their working life upon graduating.

EMPLOYEE/INDUSTRIAL RELATIONS

During the year, our staff turnover rate remained level at 0.6% from 2018. This was a result of our continuous and effective initiative in creating the right working environment for our people.

Employee Turnover (Resignation)

0.6%

2018: 0.6%
2017: 0.5%



Workforce Engagements

Employee engagement sessions play an important role in employee motivation and alignment of their behaviours with our company values and business objectives. We provide open platforms on which we share common interests and collaborate to address concerns. We have conducted more than 39 engagement sessions with staff to update them on the latest HR benefits enhancements, policies and procedures and Tell Me session to seek feedback for continuous improvement and to attend their inquiries and concerns, based at the HO, GPU and GTR.

In addition, we have also conducted quarterly engagement session and activities i.e. plant visit and sports activities with our union representative, which is KAPENAS. We recorded all feedback and took the necessary steps to mitigate and close the concerns raised in ensuring harmonious working relationship between employee and employer.

We have also conducted two sessions of Appreciation Day and a Hi-Tea session involving Company's Leadership Team (LT) as a recognition to those who have served the company for 15, 20, 25, 30, 35 years and retirees.

To ensure HR is connected 24/7 with employees, HRM has established HRM PGB Helpdesk. Staff can reach HR via email and phone during office hours.

Grievances Management

We have a comprehensive work process in handling grievance with the aim of reaching earliest agreement at the lowest level and maintaining good relations between both parties. During the year, only three staff grievances were recorded, all of which were resolved.

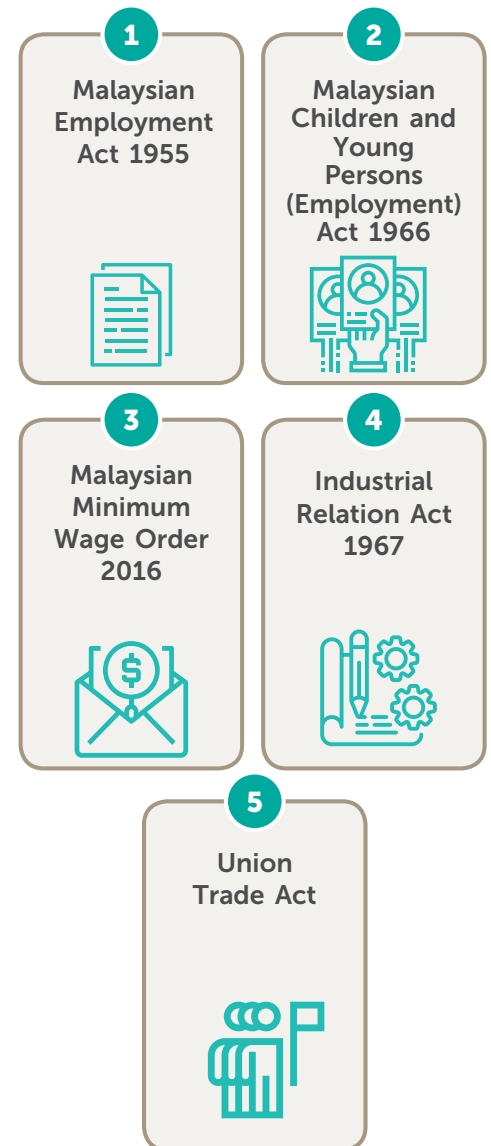
Disciplinary Action Process & Procedures and Consequence Management Procedures

PETRONAS Disciplinary Process & Procedures (DAPP) is principles to be applied in instituting disciplinary action against employee who found to have committed misconduct against express and/or implied terms of employment. This procedure provides the process flow, roles and responsibility with regard to managing Industrial Relations.

Consequence Management Procedures are PGB internal progressive consequence actions process and procedures to be applied in instituting discipline to employee who is found to have committed non-compliance against express and implied terms of employment as stated in PGB Consequence Management Matrix.

Workforce Protection

The Group adopts and practices PETRONAS policies and procedures on Industrial Relations and Code of Conduct Business Ethics (CoBE), the Company also has ensured compliance to the local labor laws, including:



This ensures PGB employees are adequately protected and well treated, while preventing the employment of child or forced labour.

Social Sustainability

– Caring For Human and Society

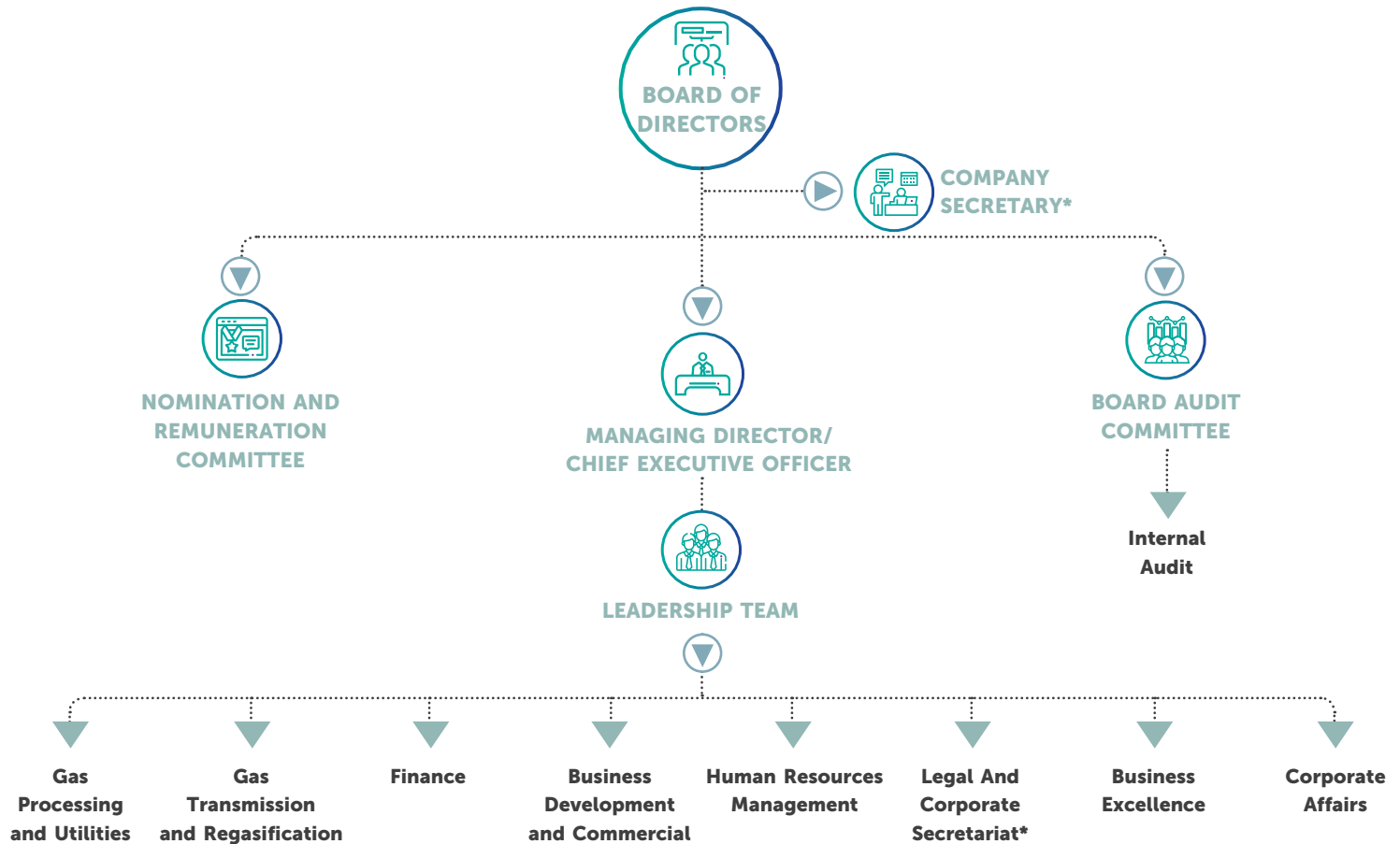
Staff Benefits

Staff also enjoy multiple benefits while working for the Company to ensure life and work balance and happy environment at home.



ORGANISATIONAL STRUCTURE AND APPROVED POSITIONS

PGB maintains a lean and effective organisational structure to carry out specific functional roles of the Company.



* Corporate Secretariat functions are undertaken by PETRONAS Group Legal

Approved positions distribution over companies within the Group.

| By Company | PGB | RGTSU | KPSB | PGSSB | PLNG Two |
|---------------------|-------|-------|------|-------|----------|
| Number of Positions | 1,747 | 122 | 92 | 17 | 1 |
| % Shareholdings | 100% | 100% | 60% | 51% | 65% |

| By Business Division | GP | UT | GT | RGT | HO |
|----------------------|-------|-----|-----|-----|-----|
| Number of Positions | 1,043 | 242 | 335 | 122 | 127 |
| Number of Staff | 1,023 | 240 | 328 | 114 | 124 |

HRM ACHIEVEMENT AND REWARDS FOR FY2019

PETRONAS has been recognised as the Most Attractive Employer in Malaysia under Randstad Employer Brand Awards. This award reflects an achievement for PGB too as its employment terms and conditions as well as remuneration package are fully aligned with PETRONAS.



Social Sustainability

Enriching The Communities

We also acknowledge the value and impact of our business to the various stakeholders surrounding us and aspire that our presence will positively benefit them. Thus, our highest commitment is towards meeting their expectations and requirements in reaching out through various Corporate Social Responsibility (CSR) initiatives in educational and community well-being & development. For the year under review, we collaborated with the Corporate Social Responsibility arm of PETRONAS – Yayasan PETRONAS as well as other non-profit organisations (NGOs).

PROGRAM SENTUHAN ILMU PETRONAS

With the aim of lessening the burden of underprivileged families, our Sentuhan Ilmu – Back-to-School programme benefitted approximately 1,000 school children in Negeri Sembilan and Perlis in which school uniforms, backpacks and stationeries were distributed.

The inaugural Back-to-School programme in Perlis, was graced by His Majesty Tuanku Raja Muda Perlis and Her Majesty Tuanku Raja Puan Muda Perlis, who presented the education and learning supplies to the students.

In addition, a two-day study camp was organised for 500 selected students in their preparation to sit for the Sijil Pelajaran Malaysia (SPM) in Melaka emphasising on Science, Technology, Engineering and Mathematics (STEM) subjects.

PROGRAM SENTUHAN KASIH PETRONAS

We entered into our sixth “Free Market” edition under the Sentuhan Kasih banner by having our employees donating their good conditioned pre-loved items to the selected B40 families in Selangor and Terengganu.



Together with the Menteri Besar of Perlis

For the "Free Market" Terengganu edition, the programme was extended through our collaboration with the Community Recycle for Charity (CRC), a non-profit organisation. Some 20 tonnes of goods and recycled items such as clothes, used papers, books, toys and furniture were donated by our employees. This programme not only helps to reduce waste generation and disposal to local landfill, but the recycled items also generated income which were donated back to the needy.

In addition, we brought smiles to 1000 less fortunate families in Selangor, Negeri Sembilan, Johor, Pahang, Terengganu and Perlis during festive celebrations such as Hari Raya, Chinese New Year and Deepavali where the beneficiaries received assistance ranging from basic necessities (rice, flour, sugar, cooking oil among others.), pocket money, hampers, vouchers and clothes in preparation for their celebration.



Bringing smiles to B40 families



Beach cleaning by employees and contractors



– Sharing the New Year joy with the locals

OTHER CSR ACTIVITIES

Beach Cleaning Activity

It is said that "what goes in the ocean, goes in you". Recognising this, we undertook an initiative to carry out a coastal perimeter cleaning activity near our LNG Regasification Terminal Sungai Udang (RGTSU) in Melaka.

In the spirit of shared success, we collaborated with our neighbouring business operations, – Malaysian Refining Company Sdn. Bhd. and Sungai Udang Port Sdn. Bhd. together with respective contractors, collected about 600 kg of waste. The programme was also to increase awareness on the impact of litter and plastic pollution to the ocean.

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