

SUSTAINABILITY AT THE CORE



PETRONAS



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MESSAGE FROM LEADERSHIP

Dear Stakeholders,

As the new Chairman and the new MD/CEO of the Group, we are appreciative for the commendable work done by our predecessors in catalysing PCG's Sustainability Agenda. This year has been monumental for PCG's sustainability journey, and we are excited to embark on our roles at such a pivotal moment. The Group has made significant progress in instilling sustainability at the core of everything we do, with a reinforced commitment to creating positive Economic, Environmental and Social (EES) impacts. This includes actively mitigating the effects of climate change and other sustainability risks when reviewing growth projects and opportunities.

**DATUK IR. (DR.) ABDUL
RAHIM HASHIM**
Chairman



MESSAGE FROM LEADERSHIP



Further details of PETRONAS Chemicals Group Berhad can be found on www.petronaschemicals.com



Sustainability is essential to remaining competitive, enabling us to address key EES challenges that threaten the long-term resiliency of our business, society and planet. This year, we reached a key milestone with the establishment of our Net Zero Carbon Emissions (NZCE) Roadmap, which aligns with PETRONAS Group's roadmap of achieving net-zero carbon emissions by 2050. Our overall sustainability efforts were also recognised by the Dow Jones Sustainability World Indices (DJSI) 2021. We were ranked the top 10% of the largest 2,500 global companies, positioning PCG as one of the top ten chemical companies for the World Index and top three for Emerging Markets. We had also sustained a 4-star rating from FTSE4Good Bursa Malaysia for our Environmental, Social and Governance (ESG) Disclosures.

IR. MOHD YUSRI MOHAMED YUSOF
Managing Director/Chief Executive Officer
(MD/CEO)

MESSAGE FROM LEADERSHIP

CATALYSING ECONOMIC DEVELOPMENT

As a major integrated chemicals player, our work significantly contributes to economic progress. Our customers stem from a range of industries, including agriculture, home, industrial & institutional (HI&I), packaging and construction. We strive to deliver responsible products and solutions that meet their changing needs and drive their industry forward. For instance, we developed the Ultra-High Purity Methanol (UHPM) for Fuel Cell Application, in line with market demand for clean energy. Every litre of UHPM utilised emits 24% lower CO₂ compared to diesel portable power generators of similar capacity.

At the same time, our strong regional presence also creates a catalytic effect in spurring the economy through employment opportunities and spinoff into the downstream value chain. This extends to our value chain, which we view as an opportunity to contribute to decent work and greater economic growth. In 2021, we transacted with PETRONAS Group of Companies for feedstocks amounting to RM8.3 billion and we worked with 1,243 local suppliers, contributing RM2.4 billion to the local economy. Additionally, we enabled 13 local vendors into becoming well-established companies through PETRONAS' Vendor Development Programme (VDP). We look for ways to improve the income of SMEs and other underserved businesses through our supply chain.

PROTECTING THE ENVIRONMENT

Climate action has become a top priority in PCG's Sustainability Agenda, in line with SDG 13. Our ability to create long-term stakeholder value depends on how we mitigate and adapt to the imminent environmental threats and opportunities. With this in mind, we established PCG's NZCE Roadmap to guide our climate change strategies and navigate the global shift to a low-carbon economy. The roadmap also aligns with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, which helps investors and other stakeholders fairly assess our climate resilience. Part of our climate strategy includes setting ambitious carbon-reduction targets, starting with a 20% reduction by 2030 towards an ultimate goal of becoming net-zero by 2050.

Our long-term approach to taking care of the environment also includes contributing to a circular economy. Plastic waste has become a major global environmental problem that we have the influence to address. Although this presents a challenge to the Group, we are excited about its opportunities. We will leverage our expertise and resources to accelerate the region's shift towards a New Plastics Economy (NPE), ensuring responsible consumption and production for a more sustainable planet. Our commitment to NPE includes exploring ways to convert end-of-life plastic waste into pyrolysis oil, creating an end product of certified circular polymer resins. This year, we made progress with a process trial of converting plastic waste into circular naphtha at a PETRONAS' refinery in Melaka. We have also conducted a feasibility study on converting end-of-life Polyethylene Terephthalate (PET) articles to recycled food-grade PET resins. Our efforts to solve the plastic waste problem contributes to Malaysia Plastics Sustainability Roadmap 2021-2030.



MESSAGE FROM LEADERSHIP

HELPING PEOPLE THRIVE

PCG would not be where it is today without its dedicated network of people. This ranges from committed employees, trusted suppliers and vendors, to our customers and communities. With that, we support social peace and justice by ensuring that the rights of all our stakeholders are protected. This year, we enhanced our compliance with Human Rights by conducting our Contractors Code of Conduct on Human Rights (CoCHR) awareness sessions and assessments to contractors. This resulted in the CoCHR coverage of 100% of identified contractors.

As the world entered its second year of the pandemic, PCG maintained its moral duty to support local communities. We activated our COVID-19 Relief Programme, which included the Community Relief Package (CRP) to help provide essential items and aid to the underprivileged and low-income communities where we operate. During the Movement Control Order (MCO), we partnered with the Department of Social Welfare (JKM) and PETRONAS stations' Food Bank Programme to provide families in need with food and support. We also provided essential equipment to support the vaccination process through the Vaccine Distribution Relief Centre. Similarly, through our Frontliners Relief Package (FRP), we supplied healthcare frontliners with gloves, masks and other protective gear. In total, our COVID-19 efforts had helped more than 18,000 people near our operations in 2021, playing our part in ensuring the good health and well-being of our communities.

In addition to COVID-19 challenges, the year ended on a hard note for many Malaysians, with thousands of people forced to evacuate their homes due to severe flooding events. We are grateful for our caring PCG employees, who set up volunteer initiatives with PCG to help those impacted by the natural disaster. As part of our corporate responsibility, employees collected and distributed food and other essential items at PETRONAS service stations, as well as made personal contributions to the National Disaster Management Agency (NADMA) worth over RM250,000 through PCG employees' own salary deductions. Their efforts helped minimise potential inequalities, hunger and poverty among hard-hit communities.

In closing, we are proud of the progress made by our dedicated employees in driving PCG's Sustainability Agenda. It truly shows how businesses can achieve growth that creates positive outcomes for everyone. As we continue to prioritise shared value and positive EES impacts, we would like to thank our stakeholders for their roles. Solving sustainability challenges requires a collective effort, so we would not have made such progress without their trust and support. Moving forward, we will continue to embed Sustainability at the Core of everything we do.

Co-signed by Chairman & MD/CEO.

Datuk Ir. (Dr.) Abdul Rahim Hashim
Chairman

Ir. Mohd Yusri Mohamed Yusof
Managing Director/
Chief Executive Officer



ABOUT THIS REPORT

SCOPE OF REPORTING

This is our fourth year producing PCG's Sustainability Report to encapsulate our Economic, Environmental, Social (EES) and Governance impact. This report delivers a clear and concise account of our contributions to the Sustainability Agenda, what it means to our business, and how we create long-term value for our various stakeholders.

REPORTING PERIOD & BOUNDARY

This report covers our sustainability performance for the 2021 calendar year, unless stated otherwise. Where relevant, we will also include data from previous years to track year-on-year progress and provide additional context. The report provides information on all our manufacturing subsidiaries with more than 50% ownership. In this regard, we are including data for BRB Group's operations, where available. The report also addresses our response to 14 material matters that impact our business and stakeholder value. This is further elaborated on pages 20 to 25, as well as in our Integrated Report 2021, pages 82 to 89.



The coloured goals represent PCG's priority SDGs.

REPORTING STANDARDS

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. Additionally, we have adhered to the best practice sustainability guidelines, standards and frameworks as follows:

- Bursa Malaysia's Main Market Listing Requirements on Sustainability Reporting
- FTSE4Good Bursa Malaysia Index's Environmental, Social and Governance indicators
- International Petroleum Industry Environmental Conservation Associations' (IPIECA) Oil and Gas Industry Guidance on Voluntary Sustainability Reporting
- Dow Jones Sustainability Indices
- The United Nations Sustainable Development Goals
- Taskforce on Climate-related Financial Disclosures (TCFD)

INDEPENDENT ASSURANCE

The authenticity of the information provided in this report is verified with an independent assurance, as conducted by KPMG. This verification demonstrates our commitment to ensure transparent reporting standard.

POINT OF CONTACT

We value your feedback and suggestions on how we can further improve our sustainability journey. Please contact our sustainability team at petronaschemicals_ir@petronas.com.

NAVIGATION ICONS

Material Matters

- Climate Change
- Environmental Stewardship
- Innovation & Product Stewardship
- New Plastics Economy (NPE)
- Workplace and Occupational Safety & Health (OSH)
- Supply Chain Management
- Community Engagement
- Talent Development
- Corporate Governance
- Strategy Purpose & Financial Resilience
- Plant Operations
- Human Rights
- Cybersecurity & Digitalisation
- Customer Relationship Management

Key Stakeholder Groups

- Employees
- Customers
- Suppliers & Vendors
- Business Partners
- Shareholders & Investment Community
- Government & Regulators
- Communities
- Media



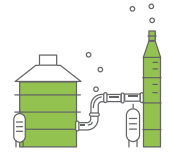
OVERVIEW OF PCG

STATEMENT OF PURPOSE

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

VISION

To be the preferred chemical company providing innovative customer solutions



SHARED VALUES

Our shared values are deeply embedded in our culture and ensure we operate with integrity at all times while contributing to the well-being of people in every nation where we have presence

LOYALTY ✓
Loyal to corporation

INTEGRITY ✓
Honest and upright

PROFESSIONALISM ✓
Strive for excellence

COHESIVENESS ✓
United, trust and respect for each other

OUR STRATEGY





MARKET CAPITALISATION:
AS AT 31 DECEMBER 2021

**RM71.4
BILLION**

TOTAL ASSETS BASE:

**RM46.6
BILLION**

ONE OF THE
LARGEST
INTEGRATED CHEMICALS
PRODUCERS IN
SOUTHEAST ASIA

PRODUCTION CAPACITY:

**12.8
MILLION TPA**

DOW JONES SUSTAINABILITY
INDICES (DJSI) 2021:

**TOP 10
COMPANIES**

DJSI WORLD
(CHEMICALS INDUSTRY)

TOP QUARTILE

FTSE4GOOD

BURSA MALAYSIA INDEX

WHO WE ARE

PCG is the chemical arm of PETRONAS and Malaysia's leading integrated chemicals producer. We operate in the manufacturing, marketing and selling of a diversified range of petrochemicals. We were established more than 30 years ago, and publicly listed on 26 November 2010.

Our Operational Excellence and Commercial Excellence has propelled us to become one of the largest integrated chemicals producers in Southeast Asia. We currently operate from 11 manufacturing sites in Malaysia, the Netherlands, Singapore, Germany and Canada. The Group's Growth Delivery Excellence has been a driving force in expanding into segments with opportunities to future-proof the business. Our investments in specialty chemicals continue to strengthen with the commencement of the silicone blending facility in Gebeng, Pahang.

As we realise our vision of becoming 'The Preferred Chemical Company Providing Innovative Customer Solutions', we remain focused on creating positive Economic, Environmental and Social (EES) impacts. With sustainability at the centre of all our decisions, we are on track to achieving net-zero carbon emissions by 2050.



WHAT WE DO

MANUFACTURING

Our **11 world-class chemical manufacturing sites** worldwide produce a range of commodities and specialty chemicals that are used by customers in various sectors – from agriculture to automotive, and packaging to personal care – to manufacture items that enhance our daily lives.

PRODUCT PORTFOLIO



PRODUCT APPLICATION



WHAT WE DO



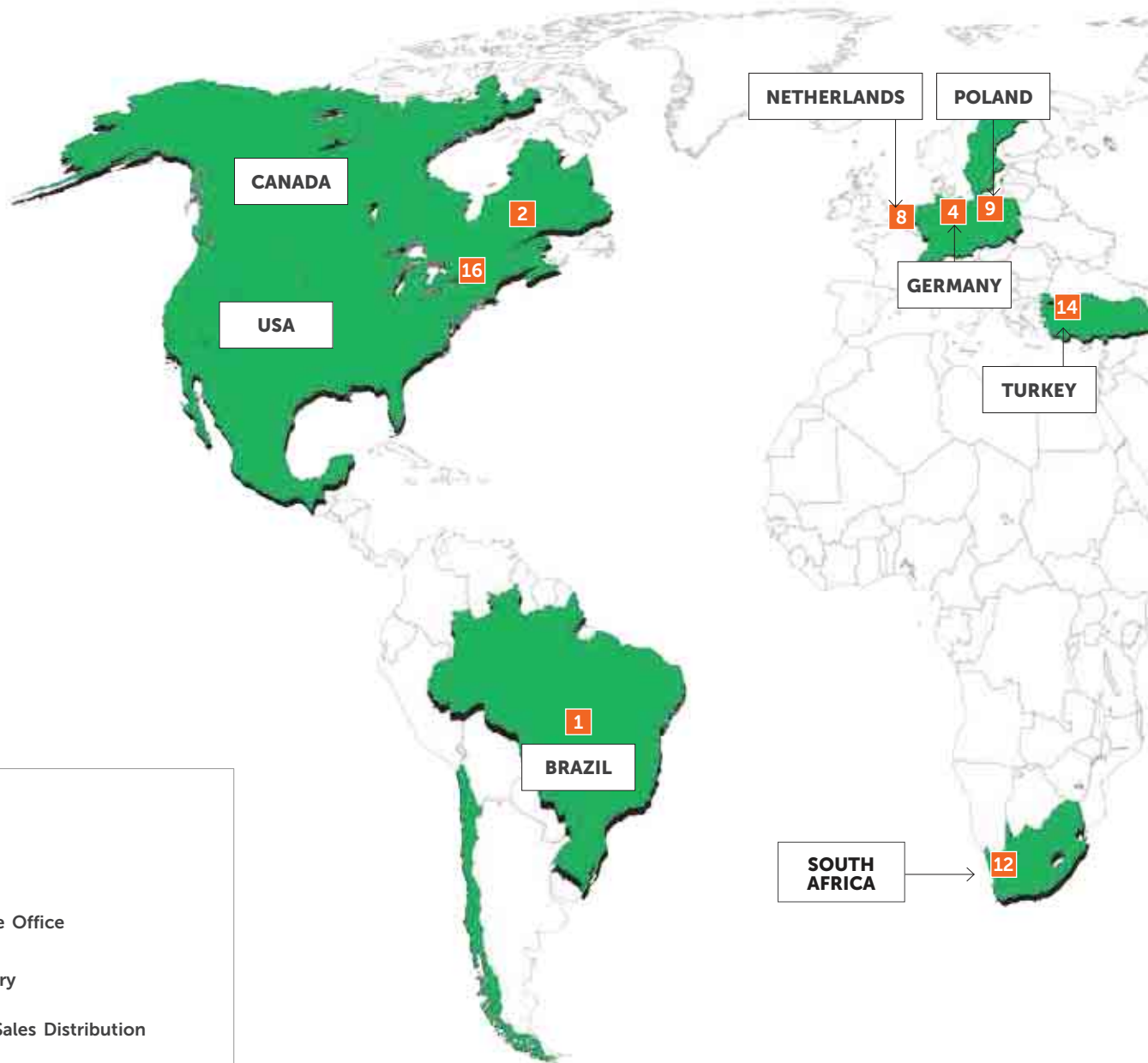
COMMERCIAL






We market and sell integrated chemical solutions, including specialty products and chemical derivatives. **Through innovative products and solutions**, we deliver best-in-class commercial value to our customers globally.








OUR PRESENCE






As at 31 December 2021



-  Plant
-  Sales Office
-  Representative Office
-  R&D Laboratory
-  Countries of Sales Distribution

- 1** BRAZIL 
- 2** CANADA  
- 3** CHINA 
- 4** GERMANY 
- 5** INDIA 
- 6** INDONESIA 

- 7** MALAYSIA   
- 8** NETHERLANDS   
- 9** POLAND 
- 10** PHILIPPINES 
- 11** SINGAPORE  
- 12** SOUTH AFRICA 

- 13** THAILAND 
- 14** TURKEY 
- 15** UAE 
- 16** USA 
- 17** VIETNAM 

OUR PRESENCE

SALES BY MARKETS

31%

Malaysia

26%

Southeast Asia
(excluding Malaysia)

24%

Northeast Asia

19%

Rest of the World



SALES BY COUNTRY

MALAYSIA	30.6%
CHINA	14.0%
THAILAND	12.6%
INDONESIA	9.9%
AUSTRALIA	5.4%
PHILIPPINES	4.8%
SINGAPORE	4.0%
VIETNAM	3.5%
JAPAN	3.4%
NEW ZEALAND	2.1%
INDIA	1.9%
SOUTH KOREA	1.5%
OTHERS*	6.3%

* Others include but is not limited to Austria, Bangladesh, Chile, Germany, Hong Kong, Mexico, Pakistan, Sweden, Switzerland and United States

MALAYSIAN OPERATIONS

FEDERAL TERRITORY OF KUALA LUMPUR

PETRONAS Chemicals Group is head quartered in the PETRONAS Twin Towers, Kuala Lumpur City Centre

FEDERAL TERRITORY OF LABUAN

- Methanol

SABAH

- Sipitang
- Ammonia
 - Urea

TERENGGANU

Kertih Integrated Petrochemical Complex (KIPC)

- Ammonia
- Benzene
- Butanol
- Butyl Acetate
- Butyl Glycol Ethers
- Ethanolamines
- Ethylene
- Ethylene Glycols
- Ethoxylates
- Polyethylene Glycols
- Paraxylene
- Polyethylene
- Propylene
- Acetic Acid*

SARAWAK

- Bintulu
- Ammonia
 - Urea

PAHANG

Gebeng Integrated Petrochemical Complex

- Methyl Tertiary Butyl Ether
- Propylene
- Highly Reactive Polyisobutylene*
- Acrylics*
- Citral*
- Citronellol*
- L-Menthol*
- 2-Ethylhexanoic Acid*
- Silicone Gum Blend
- Silicone Antifoam
- Silicone Emulsion

JOHOR

Pasir Gudang

- Styrene Monomer*

KEDAH

Gurun

- Ammonia
- Methanol
- Urea
- NPK Fertilisers*
- Diesel Exhaust Fluid

* Produced by joint ventures and associates

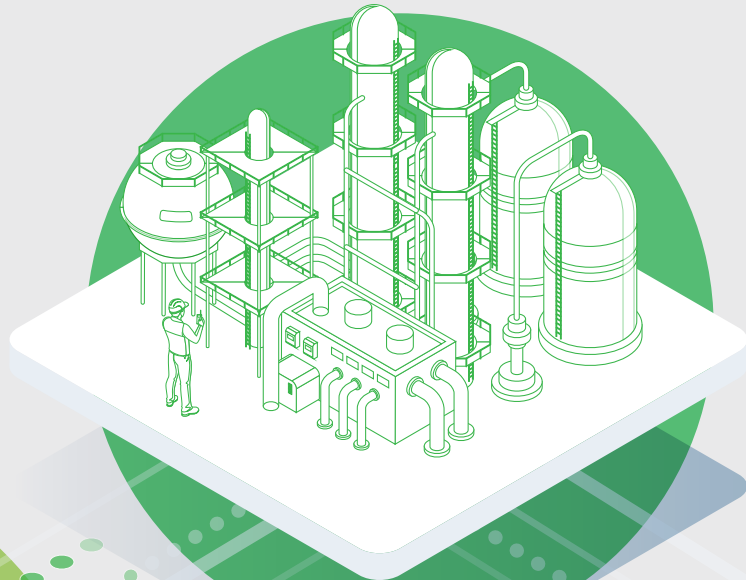
OUR VALUE CHAIN

PRODUCTION

We use natural resources efficiently through a prudent energy management system, optimising the use of raw materials and recycling back our waste. We minimise our footprint by leveraging technology and digitalisation.

SOURCING

We seek to only work with suppliers who share our values of integrity. To ensure responsible sourcing, we conduct due diligence in our supply chain management. Our support for local suppliers helps develop them into multinational companies.



DISTRIBUTION

We ensure the safe and sound delivery of our products through our comprehensive Road Transport Operational Guideline (RTOG) programme focusing on leadership, vehicle and journey management.

OUR VALUE CHAIN

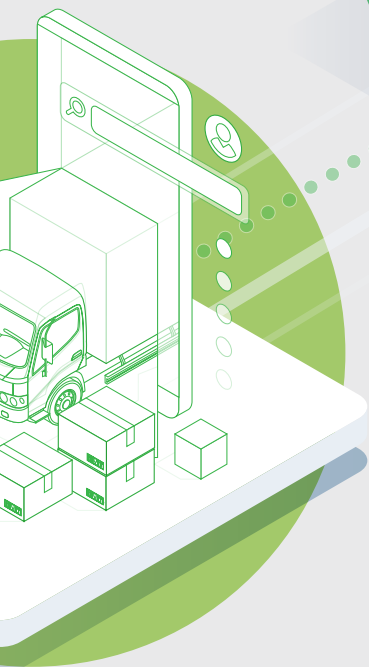
MARKETING AND SALES

We co-create with customers to deliver sustainable solutions. We also strive to meet our customers' needs by maintaining high satisfaction levels and further enhance on how we can deliver through periodic customer survey.



WASTE MANAGEMENT

We collaborate with our stakeholders, including the government, to recycle plastic waste into a circular economy. Our activation on sustainability module had reached internal and external stakeholders nationwide to educate the importance of recycling.



STAKEHOLDER ENGAGEMENT

Our long history in the chemicals industry is built on the trust and support of our stakeholders. Therefore, an essential aspect of our sustainability efforts involves maintaining open communication with our key stakeholders to keep them informed and updated, while understanding how to create value for them in the many years to come. Our strategy and decisions are based on their feedback and expectations.

Frequency of Engagement

- D** Daily
- W** Weekly
- M** Monthly
- AM** Alternate Month
- AR** As Required
- Q** Quarterly
- A** Annually
- BA** Bi-Annually
- BM** Bi-Monthly

Quality of Engagement



No existing relationship



Relationship established, but much work to be done to improve the quality of relationship



Relationship established, value-generating connection, but with some room for improvement



Good-quality, mutually beneficial relationship, with some room for improvement



Strong relationship of mutual benefit

WHY WE ENGAGE

We have 4,585 skilled and dedicated employees to drive our business objectives and execute our world-class manufacturing operations.

ENGAGEMENT PLATFORM

- Virtual townhalls **A**
- Digital communication **W**
- Staff engagement and appreciation sessions **M**
- HSE campaigns **Q**

KEY CONCERNS

- Health, safety and environment
- Cybersecurity
- Well-being and mental health
- Work-life balance
- Human rights



EMPLOYEES



RESPONSE

- Implement more initiatives on employee's well-being and mental health
- Provide a safe working environment to our employees
- Offer flexible working arrangements

WHY WE ENGAGE

Our customers play an integral part in our business growth. In order to deliver quality value-added products, we need to understand their expectations which will, in turn, build customer loyalty.

ENGAGEMENT PLATFORM

- Meetings with customers **W**
- Customer satisfaction surveys **BA**
- Feedback management system **M**
- Customer appreciation programmes **Q**
- Product stewardship seminars **A**

KEY CONCERNS

- Product quality and delivery
- Plastic and waste management
- Product pricing and credit terms



CUSTOMERS



RESPONSE

- Design distinct value propositions for each customer segment
- Integrate product stewardship into product Research & Development process to develop safe and sustainable products
- Collaborate with strategic partners to create high performance and competitive products

STAKEHOLDER ENGAGEMENT

WHY WE ENGAGE

Our suppliers and vendors support us in delivering high-quality products and services, which will, in turn, enable us to create value for our own products. This relationship means we also provide suppliers with the right support to thrive in the market.

ENGAGEMENT PLATFORM

- Regular meetings M
- Day-to-day interactions D
- Forums M BA
- Site visits Q

KEY CONCERNS

- Health, safety and environment
- Human rights
- Ethical business practices
- Sustainability in supply chain



SUPPLIERS & VENDORS



RESPONSE

- Implement stringent policies that protect suppliers' well-being
- Provide robust grievance mechanisms for suppliers
- Incorporate environmental and social standards in our procurement process
- Conduct governance-related sharing sessions

WHY WE ENGAGE

Our business partnerships – largely created through joint ventures, joint operations and associates – provide beneficial support to the growth of all respective businesses.

ENGAGEMENT PLATFORM

- Periodic meetings M BM
- Day-to-day interactions D
- Strategic dialogue AR
- Conferences and forums A

KEY CONCERNS

- Company performance
- Ethical business practices
- Good governance
- Continuous value creation



BUSINESS PARTNERS



RESPONSE

- Closely monitor and build upon partnership benefits
- Strengthen good governance leveraging on each shareholders' governance practice
- Provide a reliable supply of feedstock to partner ventures

STAKEHOLDER ENGAGEMENT

WHY WE ENGAGE

With the financial capital from our shareholders and investors enabling our sustainable growth, we are required to maintain their confidence in our ability to generate sustainable financial returns in a responsible manner.

ENGAGEMENT PLATFORM

- Investors' and Analysts' Briefings
- Meetings and conferences
- Annual reports
- Annual general meetings
- Announcements via Bursa Malaysia
- Company website

KEY CONCERNS

- Sustainable value creation
- Company's operational, commercial and financial performance
- Growth project progress and deliverables
- Environmental management
- Corporate Governance



SHAREHOLDERS & INVESTMENT COMMUNITY



RESPONSE

- Access to board members and senior management
- Increase communication frequency utilising available communication platforms such as conference calls, virtual conferences and one-on-one meetings
- Improve communication materials including easy website navigation
- Ensure compliance of disclosure guidelines
- Timely disclosure on key topics

WHY WE ENGAGE

Our strong relationship with the Government and regulators ensure that we operate within legal requirements and stay on top of any of the changing regulations.

ENGAGEMENT PLATFORM

- Regular reporting to relevant agencies
- Joint working committee with State Governments
- Regular meetings and briefings with agencies/regulators

KEY CONCERNS

- Regulatory compliance
- Environmental management



GOVERNMENT & REGULATORS



RESPONSE

- Establish transparent communication with relevant bodies
- Collaborate with relevant agencies with common objectives

STAKEHOLDER ENGAGEMENT

WHY WE ENGAGE

Our operations may directly or indirectly impact communities, so community engagement is important to understand their concerns. This will also highlight our social citizenship and instil public trust.

ENGAGEMENT PLATFORM

- Corporate Social Responsibility (CSR) programmes **Q**
- Briefings and engagement with local communities **M**

KEY CONCERNS

- Safety of plant operations
- Quality of air and water emissions
- Job and other income-generating opportunities



COMMUNITIES



RESPONSE

- Adopt stringent HSE best practices at PCG plants
- Regularly monitor air and water quality surrounding operations
- Invest in community development programmes

WHY WE ENGAGE

The media is an integral communication link between our business and our stakeholders. They are a key player when it comes to distributing significant information about our business and brand reputation.

ENGAGEMENT PLATFORM

- Virtual interviews with PCG Management **Q**
- Virtual press conferences **A**
- Press releases **Q AR**

KEY CONCERNS

- Business performance
- Environmental management and sustainability efforts
- New innovation and technology



MEDIA



RESPONSE

- Foster open and transparent communication with the media
- Provide a speedy response to the media's enquiries on business developments
- Organise rapport-building activities

MATERIAL MATTERS

A solid understanding of industry trends, operating challenges and stakeholder expectations is essential to delivering long-term value. With that, we devise our strategies according to the material aspects of business growth and stakeholders’ needs. These material matters guide our Board and leadership team in building the company towards sustainable growth.

MATERIALITY METHODOLOGY

We conduct a materiality assessment every two years to ensure that the material matters remain timely and relevant, while also allowing time to incorporate them into our strategies. This report’s material matters are based on our most recent assessment initiated in 2021. We applied the Global Reporting Initiative (GRI) Principles of Stakeholder Inclusiveness, Sustainability Context, Materiality and Completeness during our materiality process.

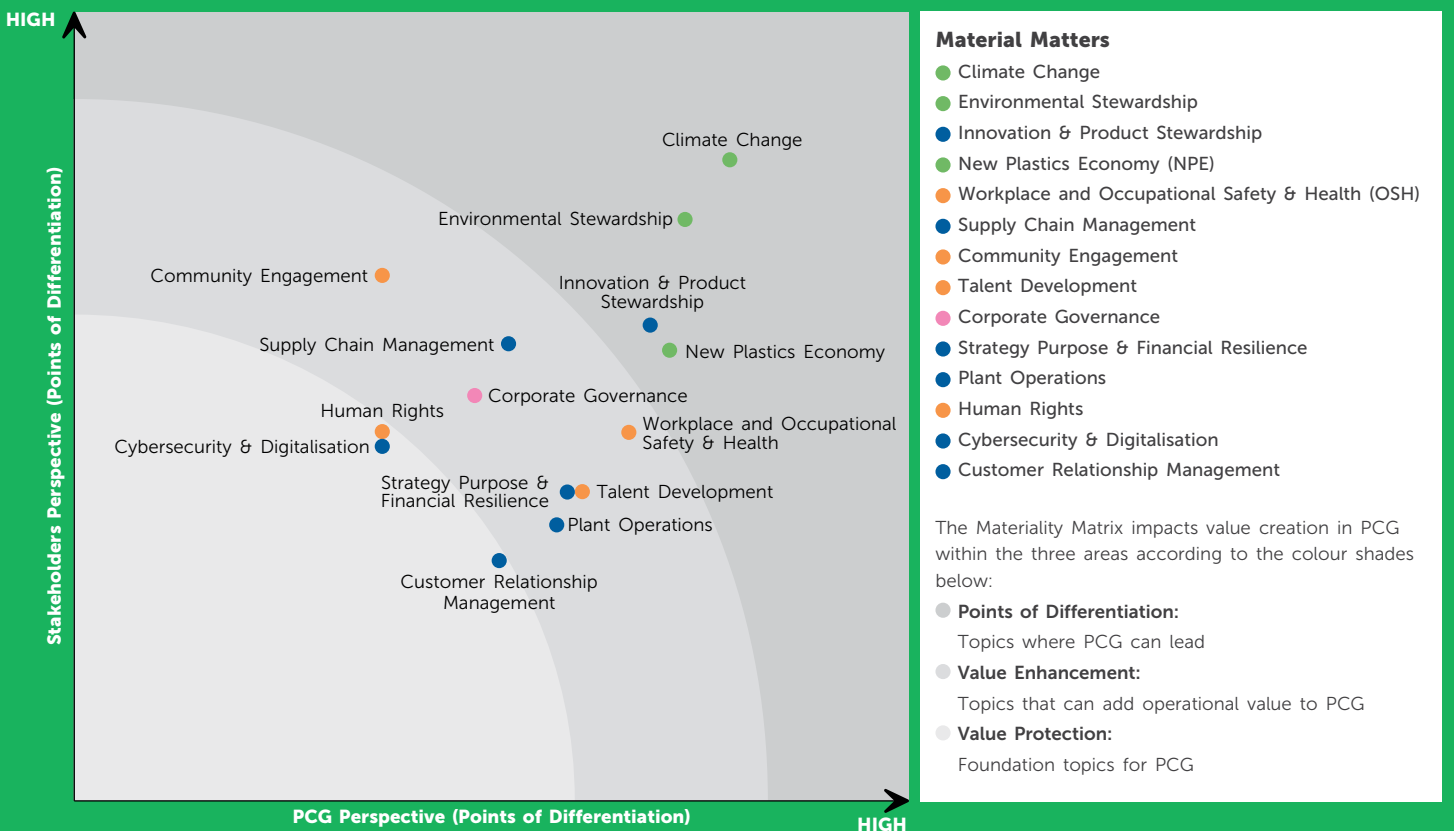
The materiality process comprises four key steps:



MATERIALITY MATRIX

According to our latest assessment, the majority of the material topics have increased in significance and influence. There has also been greater emphasis on Climate Change and Environmental Stewardship for both internal and external stakeholders. Additionally, we have identified two new material matters:

- Strategy Purpose & Financial Resilience
- Plant Operations








MATERIAL MATTERS

PCG had conducted a reassessment of the material matters for Integrated Report 2021. Based on the reassessment, there are revisions on the priority of the material topics as follows:

- Greater emphasis on the topics on Climate Change and Environmental Stewardship. Tougher regulations and increasing expectations from both internal and external stakeholders
- Community Engagement, Supply Chain Management, and Corporate Governance increased as compared to last year's. There is a rising expectation from external stakeholders in the leadership role PCG plays in sustainability. This is supported by the level of involvement with communities, suppliers & vendors, and business partners. It is also further determined by the revised Malaysian Code of Corporate Governance which was published in April 2021 stating the need to strengthen these topics
- Customer Relationship Management and Talent Development shown decreased significance and influence as compared to last year's. These are foundation topics to PCG and considered as business as usual and may not be considered as critical as the top 5

According to our latest assessment, the majority of the material topics have increased in significance and influence. There has also been greater emphasis on Climate Change and Environmental Stewardship for both internal and external stakeholders.

For clarity and context of the changes to the material matter topics, the following material matters have been renamed or introduced:















Material Matter Topic	Rationale
 Cybersecurity & Digitalisation	• Previously Cybersecurity; Digitalisation was added for a broader scope and context
 Human Rights	• Previously Human Rights & Fair Employment; removed 'Fair Employment' as it is included in 'Human Rights'
 Climate Change	• Previously GHG Emissions & Climate Adaptation; the renaming covers broader climate issues
 Strategy Purpose & Financial Resilience	• New material matter; highlights the importance of having the right strategy for future resilience and sustainability amidst challenging markets
 Plant Operations	• New material matter; describes the importance of asset reliability and uninterrupted production

Additionally we have re-aligned four material matters: Cost Management, Price Volatility and Market Volatility are covered under Strategy Purpose and Financial Resilience; Asset Reliability is covered under Plant Operations.







Based on our materiality assessment, we identified 14 material matters that can either support or impede our growth. As shown in the materiality matrix, five of our material matters are of high priority to PCG:

- Climate Change
- Environmental Stewardship
- Innovation & Product Stewardship
- New Plastics Economy (NPE)
- Workplace and Occupational Safety & Health (OSH)

We implement mitigation measures and monitor performance indicators for all 14 of our material matters. Additionally, our material matters are categorised into Economic, Environmental, Social and Governance:

<p>ECONOMIC</p> <ul style="list-style-type: none">  Innovation & Product Stewardship  Supply Chain Management  Strategy Purpose & Financial Resilience  Plant Operations  Cybersecurity & Digitalisation  Customer Relationship Management 	<p>ENVIRONMENTAL</p> <ul style="list-style-type: none">  Climate Change  Environmental Stewardship  New Plastics Economy (NPE) 	<p>SOCIAL</p> <ul style="list-style-type: none">  Workplace and Occupational Safety & Health  Community Engagement  Talent Development  Human Rights
<p>GOVERNANCE  Corporate Governance</p>		

MATERIAL MATTERS

SUSTAINABILITY PILLARS	MATERIAL MATTERS	WHY IT IS IMPORTANT	RISKS
<p>ECONOMIC</p>	 <p>Innovation & Product Stewardship</p>	<p>Meeting the demands of customer and societal needs with innovative product solutions adds a competitive edge. Delivering high-performance products safely and responsibly while ensuring proper product usage helps customers maximise value from our products.</p>	<ul style="list-style-type: none"> • Slow expansion into specialty chemicals and new products impedes our growth ambitions • Poor adoption of emerging technology and innovation impacts our competitive edge
	 <p>Supply Chain Management</p>	<p>Issues faced by suppliers can create a ripple effect across the value chain, thus strong supply chain management is key to operational efficiency. This is to maintain reliable feedstock and service from our suppliers.</p>	<ul style="list-style-type: none"> • Disruptions in feedstock supply directly impact operational continuity and production volume • Unavailability of goods and services affecting business operations • Non-compliance to procurement governance exposing the business to value leakage
	 <p>Strategy Purpose & Financial Resilience</p>	<p>Having the right robust strategy is critical in meeting our financial and sustainability goals. It helps us balance stakeholders' needs for future growth. This includes ensuring financial returns to shareholders by optimising cost management.</p>	<ul style="list-style-type: none"> • Loss of confidence from stakeholders and investment opportunity due to unsustainable positioning • Inability to secure project growth funding
	 <p>Plant Operations</p>	<p>Safe, reliable and efficient plant operations are key to consistently delivering high plant performance. For the business to expand and grow, the business relies on the performance of plant operations which translates to cash generation.</p>	<ul style="list-style-type: none"> • Unsafe working environments expose our employees and contractors to physical and chemical hazards, leading to potential injuries or fatalities • Unreliable and inconsistent production impacts sales volume and revenue growth • Unreliable feedstock, utilities and chemicals supply may disrupt plant operations • Unreliable plant assets due to poor asset management impact plant operation continuity
	 <p>Cybersecurity & Digitalisation</p>	<p>Enhanced digitalisation of systems and technologies brings the opportunity of convenience and efficiency to promote new business models, revenue streams and value creation opportunities. However, it also exposes us to cyberattacks and breaches. It is our corporate responsibility to protect the business and stakeholders from any malicious cybercrime.</p>	<ul style="list-style-type: none"> • Network intrusion impacting operations, delays delivery of customer products • Cybersecurity breaches and data loss leading to financial loss and reputational damage • Low utilisation of digital application tools causing slower realisation of benefits and return on investment • Unreliable infrastructure leads to disruptions in digital systems
	 <p>Customer Relationship Management</p>	<p>Cultivating meaningful customer relationships come with our collaborative efforts and staying ahead of their expectations. With that, we build long-term customer trust and loyalty.</p>	<ul style="list-style-type: none"> • Inability to effectively meet customers' expectations will impact our brand reputation • Reduced customers' confidence and loyalty leads to lower revenue

MATERIAL MATTERS

OPPORTUNITIES

- New and innovative products enable customers to penetrate new markets and grow their businesses
- Rising demand for sustainable products helps expand our product portfolio and encourages innovative creations

- Strong partnerships with suppliers enhance downstream supply and productivity
- Relevantly skilled suppliers help maintain our standard of HSE performance
- Sound procurement governance enables in securing credible and commercially attractive vendors

- Improved stakeholders' trust
- Strong business fundamentals to attract investment and funding for growth projects

- Drive the implementation of HSE excellence programmes at all levels to ensure a safe working environment
- Deliver Operational Excellence through digital implementation, effective collaboration with feedstock, utilities and chemicals suppliers, and focusing on managing plant reliability issues

- Robust cybersecurity measures build stakeholder trust
- Safe use of technology protects critical data and business continuity
- Digitalisation promotes an efficient and safer way of working through automation and built-in governance and control
- Enhanced data management enables better services to internal and external customers

- Collaborations and partnerships with customers maximise regional and global market growth
- Regular dialogues with customers allow for continuous improvements to meet customers' expectations and cultivate close relationships

STAKEHOLDERS AFFECTED



OUR APPROACH, PERFORMANCE & KEY INITIATIVES



Read more on pages 39 to 41



Read more on pages 44 to 45



Read more on page 48



Read more on page 87 of the Integrated Report



Read more on pages 46 to 47











Read more on pages 42 to 43

SDGS



MATERIAL MATTERS

SUSTAINABILITY PILLARS	MATERIAL MATTERS	WHY IT IS IMPORTANT	RISKS
<p>ENVIRONMENTAL</p>	 <p>Climate Change</p>	<p>Climate change, directly and indirectly, affects our profitability and sustainable growth. It is crucial to protect these by mitigating and adapting to climate-related risks.</p>	<ul style="list-style-type: none"> • Inability to meet new climate-related regulations causes non-compliance and financial costs • Reallocation of capital to green investments by financial institutions impacts business funding • Poor climate change adaptation exposes our physical assets to severe damage and high financial losses
	 <p>Environmental Stewardship</p>	<p>Responsible environmental practices protect our business from regulatory, reputational and operational costs. It also protects society and the planet from pollution and degradation.</p>	<ul style="list-style-type: none"> • Environmental non-compliances lead to regulatory penalties and fines • Unsustainable environmental practices negatively impact public trust and confidence
	 <p>New Plastics Economy (NPE)</p>	<p>The current linear economy is unsustainable for environmental and social health. We need to transition to NPE and circular economy to ensure the sustainable consumption and production of plastic.</p>	<ul style="list-style-type: none"> • Lack of action to address plastic waste damages the company's reputation • Slow transition to a circular economy lowers our competitive advantages in the long-term
<p>SOCIAL</p>	 <p>Workplace and Occupational Safety & Health (OSH)</p>	<p>It is our responsibility to always prioritise the health and safety of our people. In conducting business in our organisation, OSH protects the company against financial, operational and legal ramifications.</p>	<ul style="list-style-type: none"> • Accidents and injuries result in regulatory penalties and reputational damage • Damaged assets impact operational continuity and financial performance
	 <p>Community Engagement</p>	<p>Empowering the communities where we operate reinforces our commitment to social development and corporate responsibility. The community engagement programmes create an ecosystem of trust and growth.</p>	<ul style="list-style-type: none"> • Business activities that negatively impact communities lead to loss of financing from investors and reputational damage to our public image • Community-related disagreement or tensions may result in protest and boycotts
	 <p>Talent Development</p>	<p>Our employees drive our plans forward and execute our strategies. Attracting and retaining the industry's top talent is instrumental, as well as future-proofing them with the skills to thrive in the long-term.</p>	<ul style="list-style-type: none"> • Disengaged and underdeveloped employees contribute to low productivity and performance • Lack of relevant skills and competencies hinders growth in derivatives and specialty chemicals
	 <p>Human Rights</p>	<p>Upholding basic human rights is a fundamental aspect of any responsible business. Protecting these rights create a stable and inclusive operating environment for all stakeholders to thrive and contribute to a healthy work culture.</p>	<ul style="list-style-type: none"> • Breaches in human rights lead to regulatory penalties and costs • Reputational damage from breaches results in loss of customers and public trust
<p>CORPORATE GOVERNANCE</p>	 <p>Corporate Governance</p>	<p>Good corporate governance is central to sustainable growth, long-term planning and strategic decision-making. A robust governance system protects the best interest of both business and stakeholders.</p>	<ul style="list-style-type: none"> • Corruption and misconduct cases result in reputational damage • Severe breaches in corporate governance result in forced stop-work orders or business closure

MATERIAL MATTERS

OPPORTUNITIES

- Effective emissions management improves stakeholder trust and public perception
 - Lower resource consumption contributes to cost savings and better performance
 - Secure positioning in low carbon solutions market in order to meet increasing demand
-
- Waste reduction and resource efficiency reduces operational costs
 - Environmentally responsible activities attract investors and funding opportunities
-
- Rapid advancements in NPE reinforces our role as a leader in Malaysia's NPE
 - Conversion of plastic waste into circular feedstock has the potential to improve resource efficiency and create new business opportunities
-
- Emphasis on health and safety culture attracts and retains top industry talent
 - Reputation as a safe and reputable manufacturer attracts investors
-
- Social responsibility programmes increase visibility and safeguard reputation as a caring and environmentally-responsible organisation
 - Community engagement provides insight into the efficient execution of key projects, e.g., NPE
-
- Inclusive and empowering work culture improves agility and efficiency
 - Effective talent development programmes retain and attract top-quality industry talent
-
- Reputation as a fair employer attracts high-quality talents
 - Strong human rights practices reinforce reputation as a responsible corporate citizen
-
- High transparency leads to the efficient execution of business plans and strategy
 - Good governance creates a high-performance work environment

STAKEHOLDERS AFFECTED



OUR APPROACH, PERFORMANCE & KEY INITIATIVES

SR

Read more on pages 50 to 54

SR

Read more on pages 57 to 59

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Read more on pages 55 to 56

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Read more on pages 64 to 66

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Read more on pages 70 to 72

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Read more on pages 67 to 69

SR

Read more on pages 61 to 63

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Read more on pages 74 to 76

SDGs



SUSTAINABILITY STRATEGY

GOVERNANCE

ECONOMIC

Business Sustenance & Green Initiatives

- Operational Excellence
- Commercial Excellence
- Growth Delivery Excellence

ENVIRONMENTAL

Environment Stewardship & Resource Efficiency

- GHG Emission Reduction
- Energy Optimisation
- Waste Minimisation
- Water Conservation
- New Plastics Economy (NPE)

SOCIAL

Social Responsibility

- Managing Human Rights Risk
- Community Well-Being
- NPE Education and Clean Up



SUSTAINABILITY STRATEGY



FTSE4Good
FTSE4GOOD Bursa Malaysia
 Score: 4-Star Rating

Member of
Dow Jones
Sustainability Indices

Powered by the S&P Global CSA

Achieved Top 10%
 DJSI World Ranking

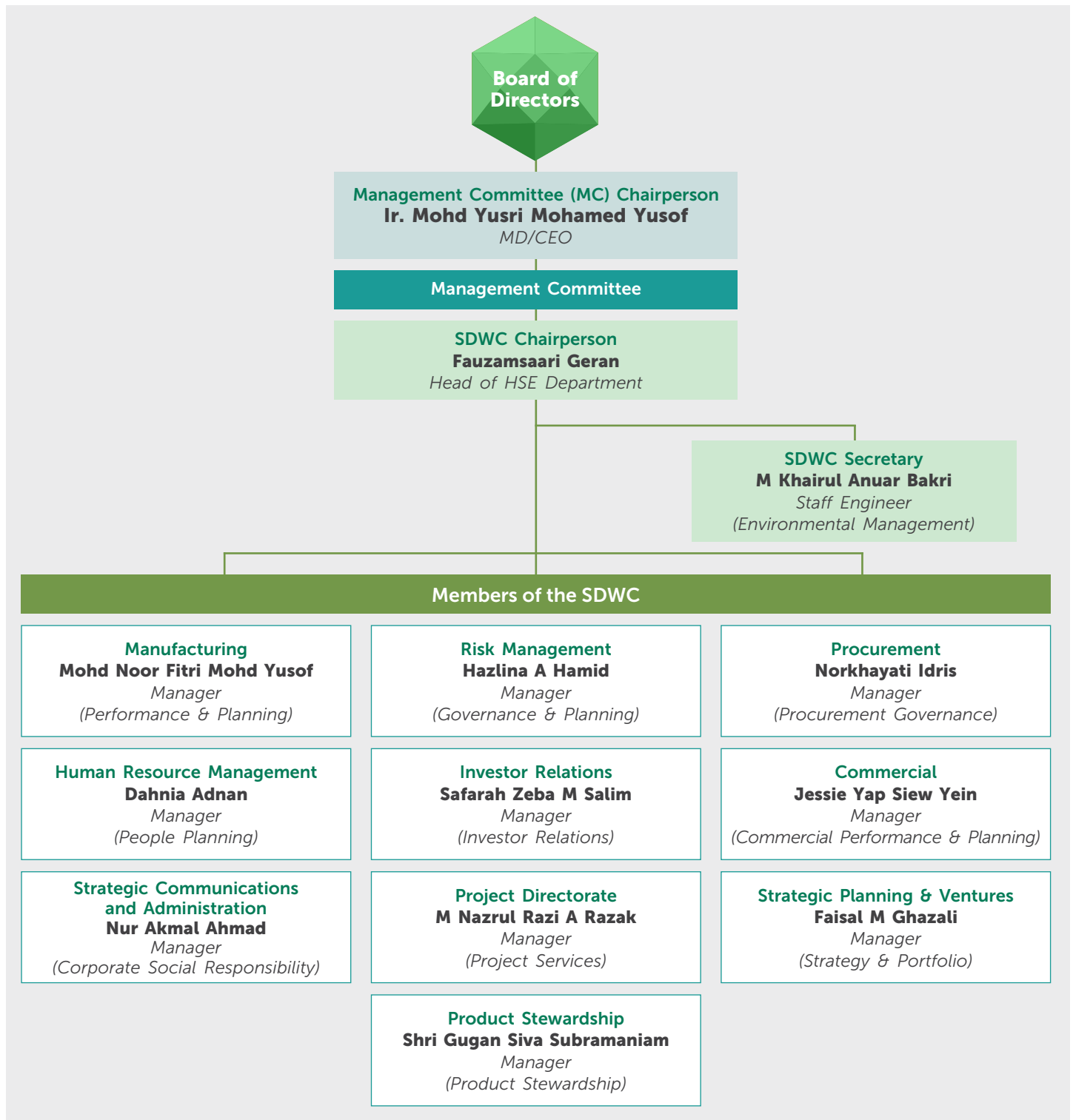


At PCG, we view sustainability as a key aspect of our business success. We aim to integrate sustainability into everything we do. Therefore, our Sustainability Strategy aligns with the Group's Two-Pronged Strategy, which is built on the three Pillars of Economic, Environmental and Social (EES). Our Economic contribution is supported by the three strategic thrusts of Operational Excellence, Commercial Excellence and Growth Delivery Excellence, which subsequently contributes to positive Environmental and Social impact.

GOVERNANCE STRUCTURE

At PCG, we strive always to uphold the highest level of integrity and accountability, while promoting a solid sustainability mindset across the Board and leadership team. This year, we introduced sustainability key performance indicators (KPIs) in top management performance appraisals. Additionally, the Board holds quarterly deliberations on sustainability issues and undergo external training on sustainability-related matters. Similarly, we have included PCG’s sustainability performance as a permanent agenda in quarterly Board meetings.

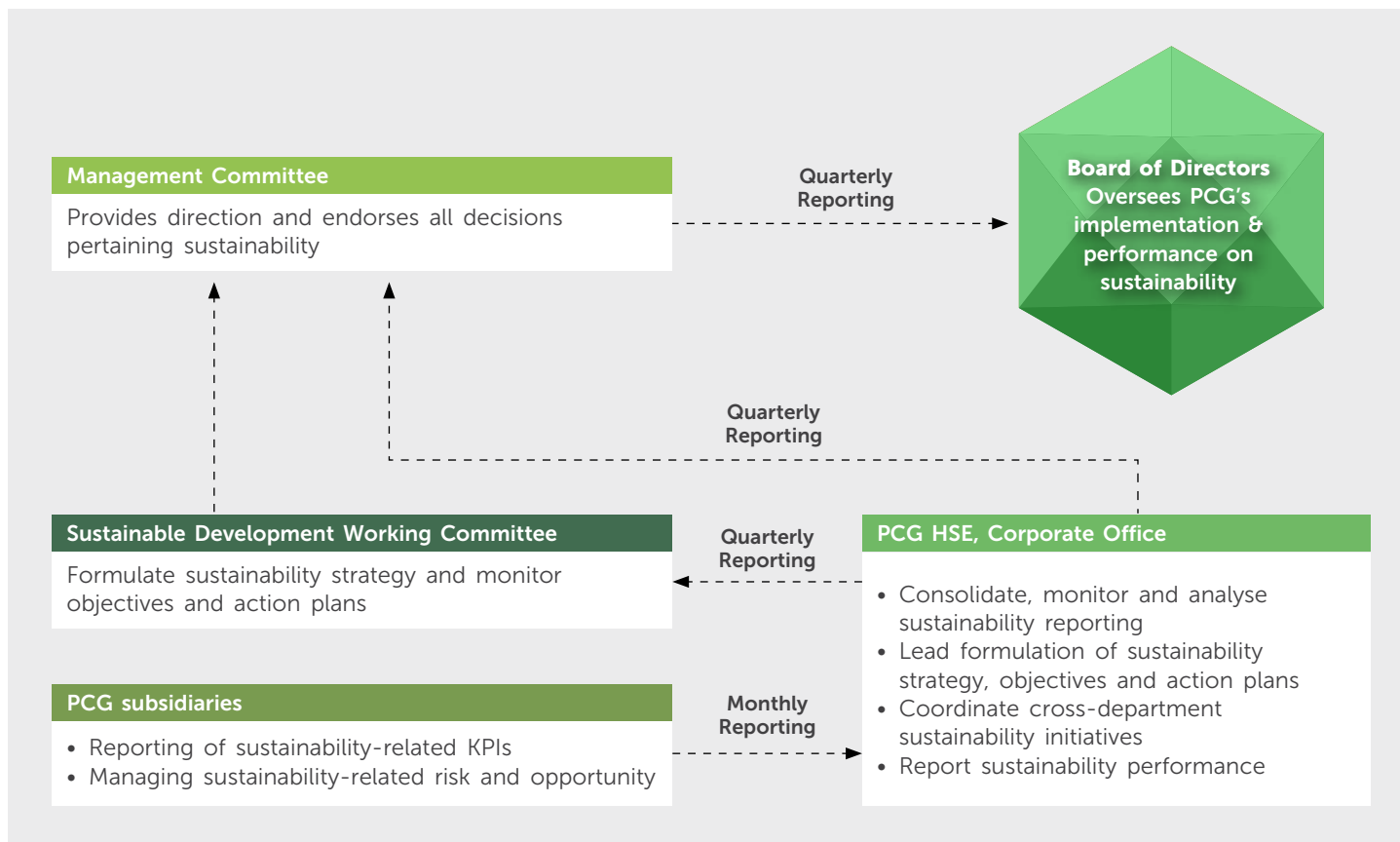
PCG’s sustainability governance prioritises transparency and accountability when delivering our sustainability strategies. A Sustainable Development Working Committee (SDWC) leads our sustainability agenda, which is then reviewed and approved by the Management Committee and reported to the Board. The clear delineation of roles and responsibilities enables us to uphold the highest level of integrity and efficiency for our sustainability agenda and implementation.



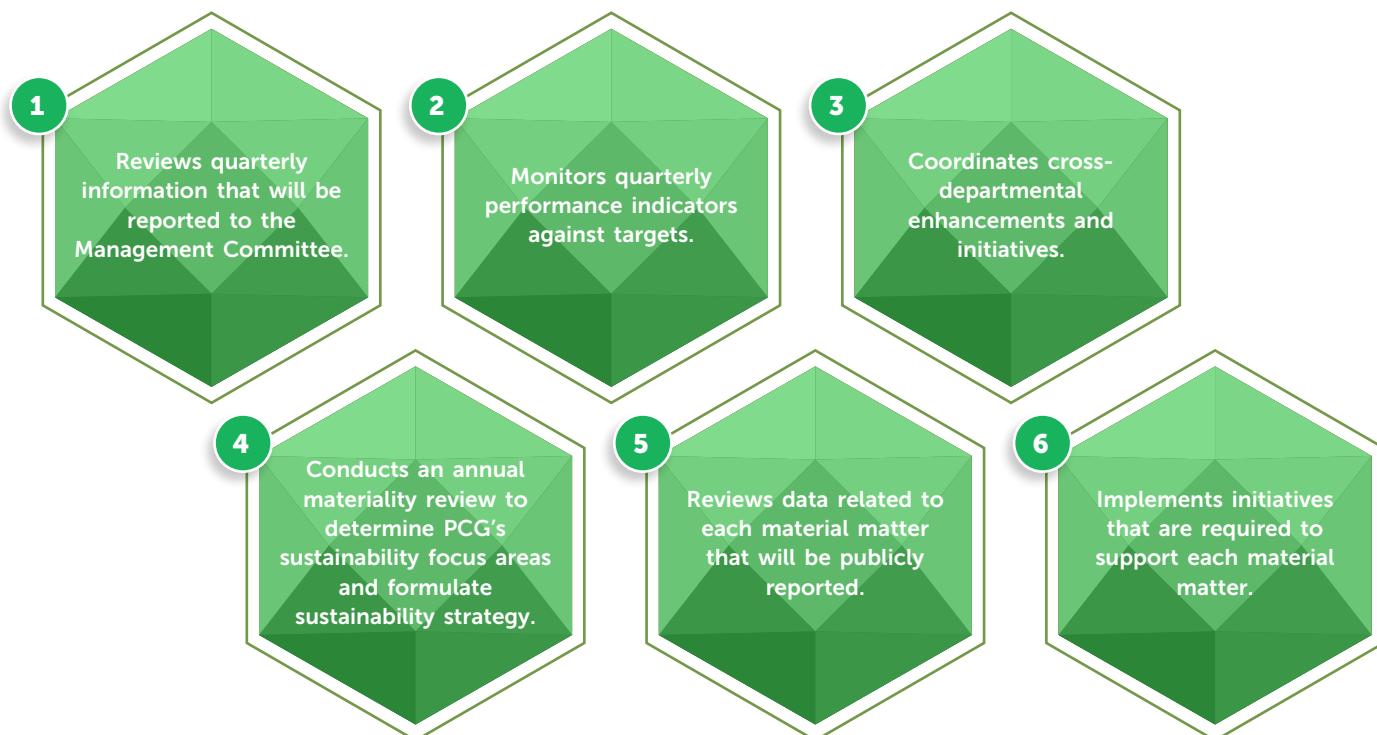


GOVERNANCE STRUCTURE

ROLES & RESPONSIBILITIES



Role of the SDWC



SUSTAINABILITY & RISK MANAGEMENT

At PCG, we proactively identify, analyse and manage risks that materially impact our value creation abilities, including sustainability-related risks and opportunities. Economic, Environmental, and Social (EES) factors are fundamental to business resilience and stakeholder trust. Therefore, we adopt a holistic view in managing risks interrelations between our strategy, EES risks and sustainability.

We have embedded effective risk management processes across the entire value creation in all our lines of business. We identify, assess, treat, and monitor all risks that could potentially impact our business, including inherent risks as early as possible. During the year under review, sustainability risk was added to include climate change as well as circular economy, previously known as 'War on Plastic'.

We are also conscious of the rapidly rising climate change, including both Physical and Transition risks. In response, we developed PCG's Net Zero Carbon Emissions 2050 Roadmap, which is aligned with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations. This guides our analysis of climate-related risks and opportunities, which is regularly deliberated by the Board and driven by the management team. We also assess Physical and Transition risks using qualitative and quantitative climate-related scenario analysis. Furthermore, PCG had integrated climate risks identification, prioritisation management and disclosure processes as well as various GHG mitigation initiatives into our Corporate Risk Profile (CRP).

We also believe that if governments and businesses fail to enforce, enact or invest in effective climate change adaptation and mitigation measure, preserve ecosystems, protect populations and transition to a net-zero economy; this may result in and continue to be an emerging risk.

Additionally, we strive to meet the standards of global sustainability indices to improve our governance and disclosures on sustainability-related risks in meeting our stakeholder expectations.

Climate Change

Climate change will have wide-ranging effects on the environment and socio-economic related sectors. These include water resources, agriculture and food security, human health, terrestrial ecosystems, and biodiversity and coastal zones. Delays in our climate change response lower our competitive edge against changing markets, regulations and technologies.

This risk is likely to continue to exist if governments fail to establish and enforce effective policies to support climate change-related initiatives and businesses fail to execute and leverage on the opportunities.

Despite the latest Nationally Determined Contributions (NDCs) to decarbonisation made at the 2021 COP26, the rising temperature trend indicates that it will still fall short of the 1.5°C goal set out in the Paris Climate Agreement.

SUSTAINABILITY RISK

Circular Economy



With global awareness of the circular economy increasingly shaping stakeholder expectations, aggressive environmental pushes by policymakers and environmentalists may affect our business performance, reputation and long-term growth.



SUSTAINABILITY GUIDELINES

MATERIAL MATTERS	LIST OF POLICIES & GUIDELINES	AIM OF POLICIES & GUIDELINES
 Climate Change	PETRONAS Technical Standards on Greenhouse Gas (GHG) Emissions Management	To provide guidance on climate risks, opportunities and mitigation.
	PCG Net Zero Carbon Emissions 2050 Roadmap	To provide guidance on the selection of pathways for decarbonisation.
 Environmental Stewardship	PCG Health, Safety and Environment (HSE) Policy	To iterate PCG's aspiration and commitments to attain and sustain excellence in environmental matters.
	PETRONAS Mandatory Control Framework (MCF)	To strengthen our governance on responsible environmental management.
 Innovation & Product Stewardship	Research & Development Management Guidelines for PETRONAS Chemicals Group	To provide guidance for the selection and execution of Research & Technology projects through a stage-gate process.
	Product Sustainable Design Guideline	To guide the incorporation of sustainable product criteria into the design and development of innovative product selection.
 New Plastics Economy (NPE)	PCG Sustainability Agenda	To set the path towards recovering plastic waste into a circular economy.
	NPE Communication Plan	To increase public awareness and community outreach on the aims and aspirations of NPE.
 Workplace and Occupational Safety & Health	PCG Health, Safety and Environment (HSE) Policy	To reinforce our commitment to health and safety excellence.
	PETRONAS Mandatory Control Frameworks (MCF)	To strengthen HSE governance and expedite the implementation of process safety aspects and clearly defined scope of HSE assurance.
 Supply Chain Management	PETRONAS Contractors' Code of Conduct on Human Rights (CoCHR)	To strengthen the implementation of PETRONAS Human Rights Commitment and practices across the business value chain.
	PETRONAS Tender and Contracts Administrative Manual (PTCAM)	To secure the best value in the procurement of goods and services whilst upholding good procurement governance.
	Compliance Clauses (Ethics and Anti-Bribery, Anti-Money Laundering, Competition Laws, Personal Data Protection, Sanctions, Human Rights)	To mitigate legal, financial and reputational risks to PETRONAS, which extend to our supply chain.
 Community Engagement	Yayasan PETRONAS Guidelines for Donation	To define the standard procedures and guidelines for donation management.
	Yayasan PETRONAS Guidelines for Programme Development and Execution	To define the standard procedures and guidelines on matters related to the Corporate Social Responsibility programme development and execution.
	PETRONAS Strategic Communications Management System	To provide guidance for the PETRONAS Group to plan, implement and execute strategic communications activities.
 Talent Development	Talent Development for PETRONAS	To provide an enabling environment for employees to self-drive performance and development in order to create and add value to the individual and organisation's growth and sustainability.
	PCG Leadership Development Framework	To create a ready pool of talents that are agile and well-equipped with the necessary skills and experience to thrive in the long-term through the right exposure from the early stages of their career.

SUSTAINABILITY GUIDELINES

MATERIAL MATTERS	LIST OF POLICIES & GUIDELINES	AIM OF POLICIES & GUIDELINES
 Corporate Governance	PETRONAS Anti-Bribery & Corruption Manual	To provide guidance on how to deal with improper solicitation, bribery and corruption activities and issues that may arise in the course of business.
	PETRONAS Code of Conduct & Business Ethics	To advance the principles of discipline, good conduct, professionalism, loyalty, integrity and cohesiveness, which is critical to the success and well-being of the PETRONAS group.
	PETRONAS Whistleblowing Policy	To provide an avenue for stakeholders to disclose any improper conduct in accordance with the procedures, ensuring whistleblowers are protected from any retaliation.
	PCG Risk Policy	To be a risk resilient organisation in achieving business objectives.
	PETRONAS Tender and Contracts Administrative Manual (PTCAM)	To secure the best value in procurement of goods and services whilst upholding good procurement governance.
 Strategy Purpose & Financial Resilience	PCG Two-Pronged Strategy	To develop a portfolio of derivatives and specialty chemicals while sustaining PCG's strength in basic petrochemicals.
	PCG Sustainability Agenda	To build and grow a sustainability portfolio with the aim for net-zero carbon emissions by 2050.
 Plant Operations	Production & Operations Management System	To provide the minimum requirements to manage plant operations safely and efficiently.
	Physical Asset Management System	To effectively manage maintenance and physical assets, including the Turnaround Management system.
	Quality Management System	To ensure the effective management of product quality throughout the whole process.
 Human Rights	PETRONAS Contractors' Code of Conduct on Human Rights (CoCHR)	To strengthen the implementation of PETRONAS' Human Rights Commitment and practices across the business value chain.
	PETRONAS Human Rights Commitment	To state the company's respect for human rights through management commitment.
	Compliance Clauses (Ethics and Anti-Bribery, Anti-Money Laundering, Competition Laws, Personal Data Protection, Sanctions, Human Rights)	To mitigate legal, financial and reputational risks to PETRONAS.
 Cybersecurity & Digitalisation	PETRONAS ICT Principles	To serve as the overarching statements that set out the purpose, commitment, and governance of ICT and records management.
	PETRONAS Enterprise Cybersecurity Governance Framework	To provide a single consolidated view of the frameworks, standards, and guidelines required to govern and manage cybersecurity across PETRONAS, with clear lines of accountability.
	PETRONAS Cybersecurity Control Standards	To provide relevant employees, contractors and third parties across the PETRONAS group of companies with guidance on how to apply cybersecurity control requirements.
	PETRONAS Cybersecurity Risk Management Guidelines	To establish the governing elements and processes to assess, evaluate, treat, monitor and review cybersecurity risk.
	PETRONAS Records Management Standards & Guidelines	To standardise documents classified in accordance to the appropriate document security classification (i.e. secret, confidential, internal and open).
 Customer Relationship Management	PETRONAS Anti-Bribery and Corruption (ABC) Manual	To help employees learn how to deal with improper solicitation, bribery and corruption activities and issues that may arise in the course of business.
	PETRONAS Code of Conduct & Business Ethics (CoBE)	To emphasise and advance the principles of discipline, ethical conduct, appropriate standards of behaviour, professionalism, loyalty, integrity and cohesiveness in our business conduct and operations.

MEMBERSHIP AND ASSOCIATIONS



ASSOCIATIONS	PCG'S CONTRIBUTION
<p>Methanol Institute (MI)</p>	<ul style="list-style-type: none"> • Promoted gas-based production through MI Beijing Office, which supports China's move on Carbon Neutrality (a plan which includes gas-based methanol) with a commitment to achieve carbon neutrality by 2060 • Collaboration with MI on Product Stewardship programmes • Board Member advocating for cleaner feedstocks, i.e. methanol for marine fuel, and fuel cells • Regular discussions on product development updates, i.e. e-Methanol and bio-Methanol • Participating in the methanol low-carbon task force
<p>International Fertilizer Association (IFA)</p>	<ul style="list-style-type: none"> • Produces sustainable fertiliser to increase PCG's energy efficiency and CO₂ emission targets • Active participation in IFA through quarterly Board Meetings to drive the industry towards sustainability efforts in agriculture, as well as ammonia and fertilisers • Leveraging IFA Green Fertilizers for stabilised nitrogen focusing on Asia Pacific to improve the reduction of losses
<p>Malaysian Plastics Manufacturers Association (MPMA)</p>	<ul style="list-style-type: none"> • Collaborated with Pusat STEM Negara (from Ministry of Education), MPMA and Solid Waste Management and Corporation (SWCorp) in developing and activating the module to equip teachers with the right information on plastics and proper waste management to address global warming and marine litter issues • Organised advocacy works on the circular economy of plastics • Active committee member for MPMA webinars and MPMA Plastech Month • Capability building on understanding plastic materials • Acted as a speaker for the 2nd Council Meeting of the 19th Term AFPI and 31st APF – Combined Meeting (Topic: 'Plastic, Sustainability & You' Module)
<p>Malaysian Petrochemicals Association (MPA)</p>	<ul style="list-style-type: none"> • Held the leading position as the President of the MPA Council from 2020-2022 • Represented as a committee member and speaker for the MPA-Plastic Resin Producers' Group (MPA-PRPG) Plastic Webinar
<p>Malaysia Sustainable Plastic Alliance (MaSPA)</p>	<ul style="list-style-type: none"> • Participated as a team member in the development of the Malaysia Plastics Sustainability Roadmap 2021-2030
<p>Fertilizer Industry Association of Malaysia (FIAM)</p>	<ul style="list-style-type: none"> • Initiated the standardisation of fertilisers vocabulary, jargon and terms to match international standards • Organised a seminar on bio-fertilisers

AWARDS AND RECOGNITIONS

- 39th Malaysian Society for Occupational Safety & Health (MSOSH) OSH Award**
 - Gold Merit Award – PC ESB, PC PSB, PC MTBESB
- Prime Minister's Hibiscus Award 2019/2020**
 - Exceptional Award in Environmental Performance – PC PSB
 - Excellence Achievement in Environmental Performance – PC ASB
 - Silver Award for Special Project – PC ASB
- Royal Society for the Prevention of Accidents (RoSPA) Health & Safety Awards**
 - Gold Award – PC FKSB
 - Silver Award – PC ESB, PC PSB
- IKM Laboratory Excellence Award 2021**
 - Silver Award – PC ESB, PC MTBESB, PC PSB
 - Excellence Award – PC OSB, PC GSB, PC DSB, PC ASB, PC LPESB, PC FKSB, PC MSB, ABFSB
- International Convention on Quality Control Circle (ICQCC) 2021, Hyderabad**
 - Par Excellence Award – PC OSB, PC GSB, PC DSB, PC ESB, PC PSB, PC ASB, PC LPESB
- MSWG-ASEAN Corporate Governance Awards 2020**
 - Winner, Industry Excellence Award (Industrial Products and Services Category)
 - Runner-up, Excellence Award for Corporate Governance Disclosure
- Australasian Reporting Award (ARA) 2021**
 - Gold Award for General Award
 - Bronze Award for Sustainability Reporting
- Annual Report Competition (ARC) Awards International 2021**
 - Silver for Specialized Annual Reports: Integrated AR & CSR: Non-Traditional Format
 - Bronze for Financial Data
 - Best of Malaysia
- The Edge Billion Ringgit Club 2021**
 - Super Big Cap Companies: Companies with more than RM40 billion Market Capitalisation
 - Highest Returns to Shareholders over Three Years
- Sustainable Business Awards Malaysia 2020/21 by Global Initiatives**
 - Winner, Energy Management
 - Winner, Water Management
 - Significant Achievement, Sustainability Strategy
 - Significant Achievement, Workforce
 - Significant Achievement, Stakeholder Management
- Malaysian Top Sustainable Employer by the Sustainable Employer Research Centre**
- Dow Jones Sustainability Indices (DJSI) 2021**
 - Member of DJSI World Index
 - Member of DJSI Emerging Markets Index
- FTSE4Good Bursa Malaysia**
 - Full 4-Star ESG Rating of Public Listed Companies Assessed in line with the FTSE4Good Bursa Malaysia Review Cycle

SR For full names of the operating units, please refer to page 81 (Glossary of Terms, Abbreviations and Acronyms)



AWARDS AND RECOGNITIONS

- Certifications**

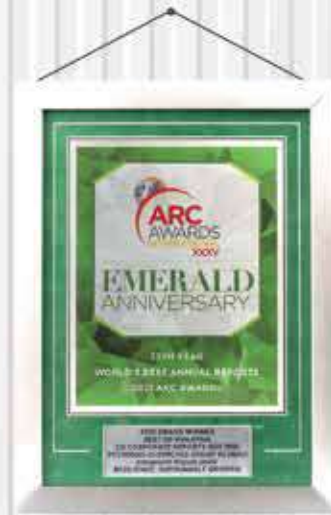
- ISO 14001:2015 Environmental Management System
- ISO 9001:2015 Quality Management System
- ISO 45001:2018 Occupational Health & Safety Management System
- ISO/IEC 17025:2017 Testing and Calibration Laboratories
- MS 1500:2009 – Halal Food-Production, Preparation, Handling and Storage

- Export Excellence Awards 2021**

- Silver Award for Industrial Product (Mid-tier & Large Company)

- Malaysia’s Most Attractive Graduate Employers to Work for in the Chemical Sector by Talentbank**

- The Graduates’ Choice Award



SUSTAINABILITY SCORECARD



ECONOMIC

Production Volume

10.4
million tpa

2020: 10.7 million tpa

Plant
Utilisation (PU)
93%
2020: 94%

Sales Volume

8.2
million tpa

2020: 8.2 million tpa

Order Fulfilment
Reliability

87%

2020: 97%

Production
capacity

12.8
million tpa

2020: 12.8 million tpa

Number of
new products

16

2020: 11



63%
of total
procurement
spending towards
local suppliers

2020: 60%

Number of
Co-created
Solutions

16

2020: 21



ENVIRONMENTAL

AIR

GHG Emissions

7.00
million tonne CO₂e

2020: 7.10 million tonne CO₂e

GHG Emissions Intensity

0.67
tonne CO₂e/tonne

2020: 0.66 tonne CO₂e/tonne

GHG Emissions
Reduction*

0.08
million tonne CO₂e

* Cumulative emissions reduced
since 2018

Air Emissions (NOx)

25.07
kilotonne

2020: 23.31 kilotonne

Air Emissions (SOx)

0.27
kilotonne

2020: 0.34 kilotonne

Air Emissions
Intensity

2.42
tonne/kilotonne

2020: 2.21 tonne/kilotonne

WASTE

Hazardous Waste
Generation

26.2
kilotonne

2020: 27.0 kilotonne

Hazardous
Waste 3R

75%

2020: 85%

Note:

The intensity calculation is now based on an improved calculation approach, i.e.: to reflect the efficiency of each production unit in relation to the indicator. The denominator applied has been changed to Production Volume, replacing the previously applied Sales Volume.

SUSTAINABILITY SCORECARD



SOCIAL

WATER



Freshwater Withdrawal
38.52
million m³

2020: 37.83 million m³

Freshwater Withdrawal Intensity
3.69
m³/tonne

2020: 3.53 m³/tonne



Wastewater Discharge
171.4
tonne

2020: 177.8 tonne

Wastewater Discharge Intensity
0.02
tonne/kilotonne

2020: 0.02 tonne/kilotonne

ENERGY

Energy Intensity
15.76
GJ/tonne

2020: 15.73 GJ/tonne

Energy Consumed
102.27
million GJ

2020: 110.01 million GJ

Energy Intensity Reduction
11%
from baseline year 2014



ecoCare



Mangrove trees planted
1,200

2020: 2,000



World-Class Safety Performance

0.07
Lost Time Injury Frequency (LTIF)

compared to oil & gas industry benchmark of 0.26

2020: 0.14



Training Days

3.0
(man-days)
On average per employee

2020: 3.3 (man-days) on average per employee

Number of Products Stewardship and Technical Seminars

12

2020: 14

Completed all High and Medium priority Global Product Strategy Safety Summaries

Employee Training & Development

RM6.9
million Invested

2020: RM17.6 million Invested

Female Workforce

17%

2020: 17%



Women Representation in Senior Management

18%

2020: 24%



CATALYSING ECONOMIC PERFORMANCE

From employing millions of people globally to generating billions of dollars in shareholder value and tax revenues for governments, the chemicals industry unlocks major economic contributions across the board. It lies at the crux of several value chains solidifying its role as a solutions provider to multiple economic sectors, all of which leads to a sustainable economic recovery. This is especially instrumental, given the uncertainty of the past two years. PCG aims to maximise profitability in the long term, starting with our assets creating value, allowing us to share the wealth generated with current and future stakeholders. Our efforts range from delivering innovative and sustainable products to collaborating with customers to meet their changing demands. This is aligned in helping the sector move towards a renewable and resilient future.



Note: The following chapters elaborate on our Economic, Environmental and Social (EES) impacts during the year. The material matter 'Plant Operations' covers the reliability and resilience of our production assets, focusing more on its impact on our business. Therefore, it has been excluded from this report. For more details on Plant Operations, please see page 87 of the Integrated Report.



INNOVATION & PRODUCT STEWARDSHIP



WHY IS THIS IMPORTANT?

In strengthening our position as a reputable and trustworthy solutions partner, we strive to provide innovative products and application solutions to our customers. Despite COVID-19 uncertainties, we continuously innovate and co-create for customers by addressing their pain points and supporting their specific business needs.

In pursuing our growth agenda, we have laid out clear growth plans by undertaking long-term bets on emerging technologies, aligned with the strategic direction to meet fast-changing market demands and trends. The early adoption of emerging technologies and innovations is key to staying ahead of the competition, benefiting both customers and consumers.

As we shift towards more sustainable solutions, the demand is moving towards supporting the low-carbon transition and meeting the needs of developing populations. Adopting a lifecycle approach and employing sustainable product design criteria prioritises the development of innovative product solutions that are safe and sustainable. These customised product solutions carry significant commercial opportunities in enabling our customers to penetrate new markets, grow their business, and derive optimal value from our products.

WHAT IS OUR APPROACH?

Our approach to innovation is spearheaded by PCG's Product Research and Development (R&D) team, who collaborates with customers to meet their needs and aspirations. PCG R&D focuses on creating solutions that are resilient to market risks and trends. PCG is also a signatory of the Responsible Care global charter, therefore, we adopt the principles of the Responsible Care programme. In doing so, we would be systematically conducting product design studies that allow us to assess raw materials for

potentially hazardous substances as well as prioritise sustainable design criteria to maximise product benefit while minimising risk during production, distribution, use-phase and end-of-life stages.

We embed Product Stewardship principles and best practices into our daily operations to ensure that customers and stakeholders benefit from our products with minimum impact on the environment. We also proactively monitor legislative developments to ensure all our product innovations comply with regulatory requirements in our market locations. This includes requirements across global chemical management, labelling requirements, dangerous goods transportation, banned/restricted chemical management, and Halal Assurance Systems.

With an extensive value chain and customer base, our products are handled by a wide network of people. Therefore, we equip relevant stakeholders with knowledge of our products through PCG's Product Stewardship programmes. We routinely assess and characterise the risk of our chemical products to ensure we communicate accurate and sufficient information to our customers and stakeholders. This is provided through an efficient SAP system, which manages our Product Safety Data Sheets (SDS), enabling customers and the public to access accurate and updated information via <https://sds.petronas.com.my>. The system also includes our voluntary development of the Global Product Strategy (GPS) Safety Summaries to tabulate accurate information on hazards and risk mitigation of PCG chemical products. These have been completed for all high-risk chemical products and are published on PETRONAS' portal to share our approach to stakeholders and the public transparently.

HOW DID WE CREATE VALUE

Co-creation with Customers

- Focused on delivering innovative, value-added solutions to customers while maximising business growth.
- Intensified efforts in becoming a total solutions partner to customers by providing webinars and online engagements to reach a wider customer base.

Sustainable Product Development/Sustainable Research & Technology

- Focused on two main areas of Sustainable Product Development:
 - To develop natural and environmentally-friendly specialty chemicals.
 - To develop chemicals to support a circular economy.
- Identified commercial opportunities to develop products that will deliver environmental or social benefits.
- Adopted a lifecycle approach in the design of innovative product solutions to deliver superior product solutions while minimising the use of hazardous substances.

Product Stewardship Communication

- Equipped stakeholders with accurate knowledge on product hazards and risk mitigation, including product regulatory compliance and safety information for all products.

INNOVATION & PRODUCT STEWARDSHIP

Product Stewardship and Technical Engagements

- Continuously educated customers, suppliers and distributors on product safety handling through regular direct engagement and Product Stewardship programmes.
- Conducted regular technical exchanges with customers to impart knowledge on our products and applications to enable them to maximise benefits from our products.

Exploring bio-based feedstocks/Provided bio-alternative feedstock for plastic production

- Invested more than RM40 million in project Bio-Monoethylene Glycols (Bio-MEG), which uses bio-alternative feedstock to produce polyethylene terephthalate (PET).
- Explored chemical markets and commercially ready bio-technologies to further mature the process technology to develop natural and environmentally-friendly specialty chemicals.

Life Cycle Analysis (LCA) of Products

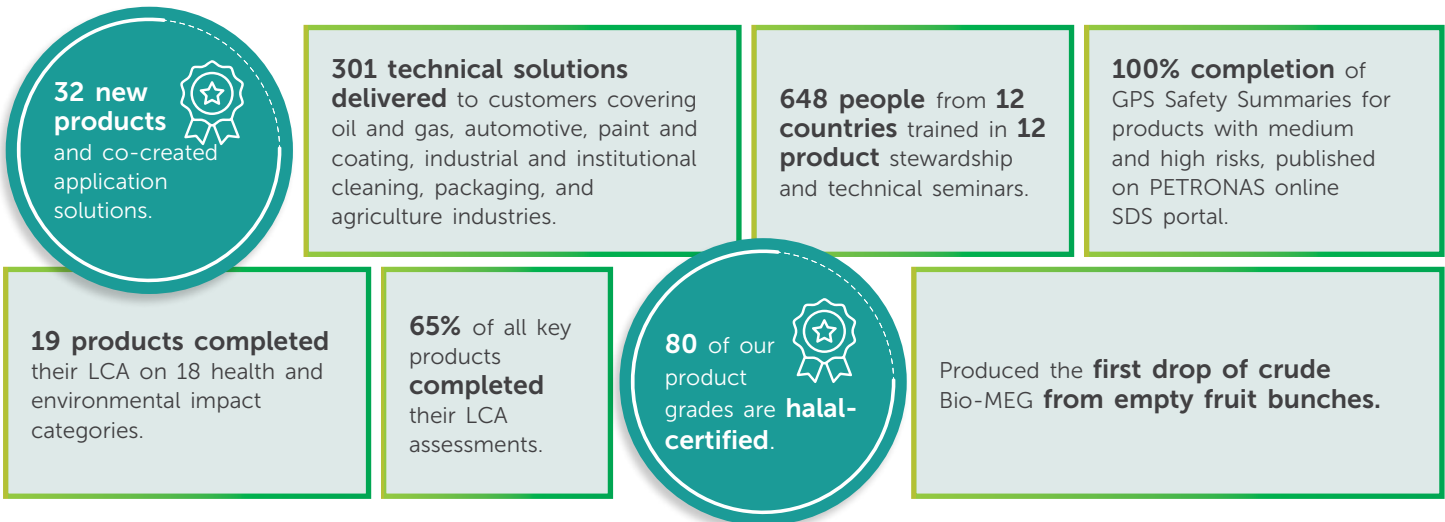
- Rigorously assessed the impact of our products on human health and the environment to identify opportunities to further reduce these impacts.

Regulatory Compliance

We performed consistent screenings on legislative developments in making sure that all our products meet with the compliance and regulatory requirements of the markets that PCG serves. This includes requirements across global chemical handling for safety and environment, labelling requirements, transportation procedures for dangerous chemicals, handling of restricted chemicals, and Halal Assurance Systems, among other things.

In April 2021, PCG won the STA2010 Compliance Award from the Ministry of International Trade and Industry (MITI). The acknowledgment was granted to the top 3 out of 131 Internal Compliance Program (ICP) companies enrolled under the Strategic Trade Act 2010 in performing their internal due diligence in ensuring smooth import and export activities of Chemical Weapon Convention (CWC) listed items. PCG was also awarded a maximum 5-year extension period, allowing us to perform import and export activities of CWC listed items until 2026.

WHAT WERE THE ACHIEVEMENTS?



NEW PRODUCT SOLUTIONS DEVELOPED BY R&D IN 2021

Ultra-High Purity Methanol (UHPM)	Si-COAT 461RC	AGRENAS Stabilised Nitrogen Fertiliser
This was hatched for fuel cell applications in line with market demand for clean energy, as the use of methanol fuel cells has increased.	A better formulation of silicone coatings for roof coating, developed to perform as waterproof roof coating. This maintenance product is applied to used roofing substrates to increase the lifespan of existent roofing substrates. This is to endure longer weather stability, high thermal reflectivity and optimal roof recovery and water sealability.	In the agriculture sector, this product is used to improve the Nitrogen (N) uptake efficiency of the crop. It also reduces the transformation rate of Ammonium (NH ₄ ⁺) into Nitrite (NO ₂ ⁻) and Nitrate (NO ₃ ⁻), thus extending the time required for nutrient availability onto the crops.

INNOVATION & PRODUCT STEWARDSHIP

NEW APPLICATION SOLUTIONS CO-CREATED WITH CUSTOMERS:

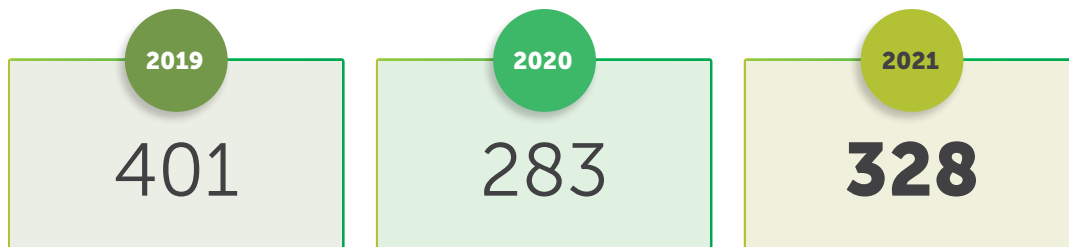
PE3838MA attracted a pioneering and globally recognised bubble wrap maker, qualifying the polymer as one of the grades for production of their high stiffness bubble wrap.

The formulation of the DOT-4 brake fluid with Tri-ethylene Glycols (TEG) as co-base fluid increases PCG's opportunity to break into the DOT-4 break fluid formulations.

Water-based cleaning solutions were co-created to address the safety and environmental concerns arising from the usage of solvent-based solutions, as well as regulatory restrictions.

PRODUCT SAFETY COMMUNICATION

Responded to customer requests regarding products



Indicators	Target & Results	2019	2020	2021	Mid-Term Target (2022-2026)
Number of new products	Target	2	5	3	2
	Results	6	11	16	
Number of co-created application solutions	Target	15	20	14	20
	Results	13	21	16	
Number of technical solutions	Target	100	350	200	200
	Results	183	545	301	
Number of product stewardship & technical seminars	Target	5	6	12	14
	Results	8	14	12	



CUSTOMER RELATIONSHIP MANAGEMENT



WHY IS THIS IMPORTANT?

PCG's relationship with our customers is built on sustainable and collaborative partnerships, delivering innovative products to meet their needs and adding value to their business. Ultimately, our Customer Relationship Management (CRM) is essential to our long-term growth and Commercial Excellence. This aligns with our vision to be 'The Preferred Chemical Company Providing Innovative Customer Solutions'.

Our customers are at the heart of everything we do – and our business and decisions are anchored on meeting their needs. This includes staying ahead of their expectations to build long-term customer trust and loyalty. Regular collaboration and dialogue with customers allow us to identify their pain points and continuously apply improvements and innovate product solutions. As market competitors gradually increase, we are expected to stay in the game and remain relevant by always bringing something new and valuable to the table.

WHAT IS OUR APPROACH?

At PCG, we aim to proactively meet customers' changing expectations, thus encouraging customer loyalty. Our close partnership with customers allows us to co-create innovative products and applications that bring added value to their business and contribute to sustainable growth. Through consistency, timely and high-quality product deliveries, we continuously strengthen our relationships with our existing network of customers. This extends to also building strong relationships with new customers.

With our customers' needs continuously evolving, we have to innovate to satisfy their changing needs. Our value propositions are customised accordingly to different customer segments, specific to their pain points and business needs. We curate these by collaborating with strategic customers to develop high-quality product offerings and application solutions. This is further improved by ongoing customer engagement and communication assisted by PCG's digital tools delivering a more reliable, efficient and effective customer experience. With increasing requirements for sustainable products and solutions, we also initiate strategic partnerships with our customers to meet their sustainability needs.

HOW DID WE CREATE VALUE

1 Ongoing Customer Engagement & Dialogue

- Maintained continuous engagements with customers through virtual meetings and webinars, despite travel restrictions and COVID-19 precautions.

2 Partnerships & Collaborations

- Collaborated with local associations to provide requirements or feedback for smooth business operations and continuity. These associations and agencies include:
 - Malaysian Petrochemicals Association (MPA),
 - Malaysian Plastics Manufacturers Association (MPMA),
 - Federation of Malaysian Manufacturers (FMM),
 - Ministry of Domestic Trade and Consumer Affairs (KPDNHEP), and;
 - Ministry of International Trade and Industry (MITI).
- Leveraged our relationship with MITI to assist and guide our customers through getting approvals to operate during the Movement Control Order (MCO).

3 Packaging & Transportation

- Launched the China Domestic Delivery (CDD) for Polymer products, unlocking greater value to customers with competitive prices from lower delivery costs and faster delivery lead time. There are four types of distribution methods which include:
 - Delivered Duty Paid (DDP) at the discharge port,
 - Delivered at Place (DAP) from the discharge port,
 - Ex-warehouse (EXW) sales, and;
 - DAP from warehouses.

4 Customer Complaint Management

- Remained responsive to customer feedback and ensured positive customer experiences.
- Continued to ensure effective customer engagement, improve responsiveness in attending to customer requests, and increase our product and application knowledge based on the previous Customer Satisfaction Survey (CSS) in Business & Sales support.

CUSTOMER RELATIONSHIP MANAGEMENT

5 Addressed Customer Complaints

- Non-Technical: Leakage on flexitank

Unsuitable size of flexibag and foreign particles found inside the container caused a leakage. Immediate mitigation was deployed to change the flexibag to a smaller size, and requested the vendor to revise the fitting checklist to include a cover for shoes for fitter personal protective equipment (PPE). We also performed site verification and audit on the vendor, resulting in a suspension until further notice. No complaints on the flexibag leakage since.

- Technical: Contamination on board

A bulk shipment had product contamination during unloading where the ship’s pump, ship’s piping manifold system and topside facilities led to damage of total product inventory in the tank. This was a Cost, Insurance and Freight (CIF) shipment where we had assisted the customer in claiming the insurance. The customer agreed to close complaints as we had executed our responsibilities.

WHAT WERE THE ACHIEVEMENTS?



Achieved lower technical complaints:
2021: **10** vs 2020: 13

12 virtual product stewardship programmes held across Indonesia, the Philippines, Thailand, Singapore, and China.

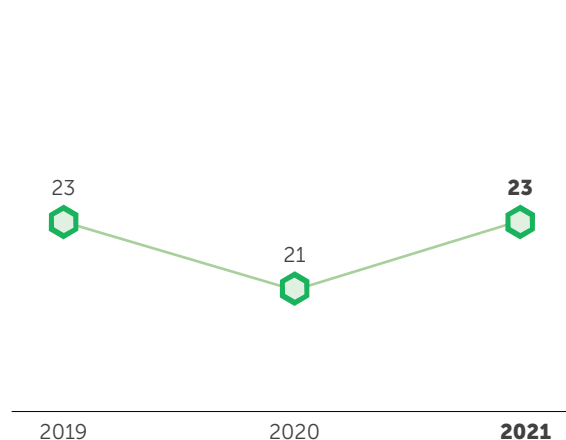
25 PCG virtual engagement sessions held with key customers from China, Japan, Thailand, Indonesia and Vietnam.

* This is based on the Six Sigma methodology monitoring customers’ experience and product quality on a monthly basis. The higher the sigma rating, the closer to process product or service perfection, with the Six Sigma being the highest.

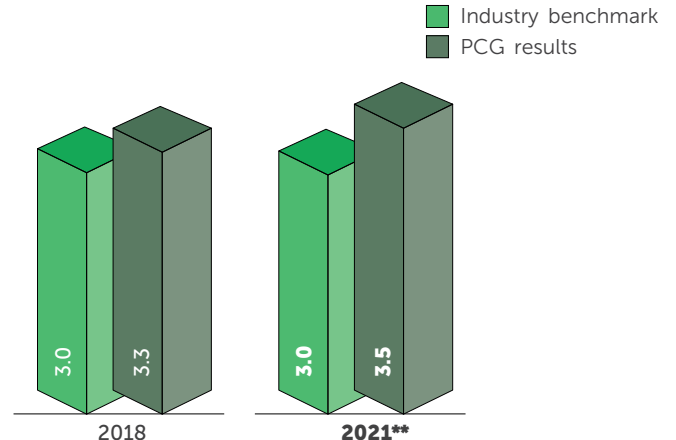
Indicators	Target & Results	2019	2020	2021	Mid-Term Target (2023)
Order fulfilment reliability (%)	Target	95	95	95	95
	Results	97	97	87*	
Total vehicle accident rate	Limit	0.25	0.24	0.21	0.20
	Results	0.07	0.13	0.20	

* The sudden worldwide disruption impacted the global supply chain and reduced the number of available containers and operational vessels.

Number of customer complaints



Customer Satisfaction Survey*



* Conducted every two years

** Not conducted in 2020 due to COVID-19 restrictions



SUPPLY CHAIN MANAGEMENT

WHY IS THIS IMPORTANT?

Strong supply chain management is critical for our operational efficiency. It is an integral part in incorporating environmental, social and governance practices as a corporate citizen. This translates to taking responsibility for the life cycle of products and protecting workers' rights. For PCG to grow our capabilities and deliver world-class products to our customers, we upkeep a resilient supply chain. It is key to maintain reliable feedstock and services from suppliers. Any sudden changes in the value chain can create a ripple effect, thus disrupting our ability to meet stakeholder needs.

Therefore, we seek to only work with suppliers who share our values of integrity, are committed to fighting bribery and corruption, and contribute to sustainable development. Our established best practices help ensure that our suppliers embrace our robust standards for safety, technical, environmental and human rights expectations and requirements. More importantly, this will enhance downstream productivity while maintaining PCG's standard of health, safety and environment (HSE) performance. Responsible supply chain management will also maximise economic growth surrounding our areas of operations. It is the perfect opportunity to improve the livelihoods of local communities.

WHAT IS OUR APPROACH?

We enforce ethical business practices ensuring governance of the procurement process is guided by PETRONAS' Tender and Contracts Administrative Manual (PTCAM) and established procedures. The process of suppliers' selection and tenders is in alignment with relevant PETRONAS Anti-Bribery and Corruption Manual. All contractors must meet safety, technical, environmental and Code of Business Ethics (CoBE) requirements for the licensing, bidding, contracting and execution stages. To strengthen the third-party due diligence process, we provide a "Know Your Customer" questionnaire to suppliers during evaluations.

We have zero tolerance for non-compliance or malpractices within our supply chain. Failure to comply with social and environmental regulations will result in serious action, including contract termination. A formal grievance system has been established for stakeholders to safely report any misconduct or malpractice. All grievances are investigated and resolved based on specific site arrangements.

We expect our contractors and suppliers to also respect and protect Human Rights, and have made explicit requirements as outlined in the PETRONAS Contractors Code of Conduct on Human Rights (CoCHR).

All contractors and suppliers are required to adhere to the following:



Freedom of Labour

by not engaging or employing people, under any circumstances, against their own free will or engaging in bonded labour/debt slavery



Establish Grievance Mechanisms

by providing a means of grievance reporting and appropriate follow-up measures while ensuring that the identity of the complainant is protected



Wages and Benefits

by complying with all applicable laws related to employee compensation, including minimum wage, overtime hours and legally mandated benefits



Working Hours

by complying with local laws of the host country or agreements regarding working hours, overtime hours, and work during holidays



Prevention of Child Labour

by not employing children below the legal minimum working age requirement of any country (generally at least 18 years)



Foreign or Migrant Workers

by employing them in full compliance with the labour and immigration laws of the host country



Humane Treatment

by respecting employee's rights and ensuring no harsh and inhumane treatment, including any form of mental or physical coercion, or verbal abuse



Non-Discrimination

by respecting diversity in the workplace and not engaging in any form of unlawful discrimination based on gender, race, ethnicity, skin colour, religion, nationality, sexual orientation, age, marital status, pregnancy, political affiliation, or disability in hiring and employment practices



Freedom of Association

by respecting the legal rights of employees to become members of a labour union, etc

SUPPLY CHAIN MANAGEMENT

HOW DID WE CREATE VALUE?

1 Corporate Liability

- Required for all vendors to understand the Corporate Liability Provision and establish adequate procedures against corporate liabilities.
- Encouraged all vendors to sign the Integrity Pledge as proof of commitment in the fight against corruption.
- Enhanced our third-party due diligence process to ensure that contractors, vendors and joint venture partners meet PETRONAS' standards of integrity through the "Third Party Risk Assessment".

2 Sustainable Supply Chain

- Establishing a raw material purchasing framework consisting information on the input of raw material used to manufacture PCG products with the objective to minimise the presence of substance of concern.
- Assessed and rated suppliers' performance according to Health, Safety, Security & Environment (HSSE) and contract compliance, specifically for outbound land and transportation security.

3 Health and Safety

- Deployed PCG's Road Transport Operational Guideline for logistical providers.
- Maintained the Contractors HSE Mentorship Programme to strengthen contractor capabilities in HSE Management.
- Offered ongoing and extensive supplier training programmes on up-to-date HSE topics.

4 Human Rights

- Enforced the PETRONAS Contractors Code of Conduct on Human Rights (CoCHR) and HSE requirements during the vendors' selection and tendering process.
- Conducted CoCHR awareness sessions with our contractors to ensure the expectations and requirements of the PETRONAS Human Rights Commitment and CoCHR is understood and abided by.
- Conducted CoCHR assessments to ensure our contractors were not committing human rights violations.

5 Supporting Local Suppliers

- Conducted structured programmes to empower local contractors to thrive in a competitive digital environment.
- Implemented the PETRONAS Vendor Development Programme, which focuses on nurturing local vendors to be resilient and sustainable, and work towards becoming technically competent, commercially attractive, develop home grown technologies, and foster growth in expanding internationally, as well as become a candidate for a Bursa Malaysia listing.

6 Digitalisation

- Implemented digital tools and technologies into our end-to-end procurement function.

WHAT WERE THE ACHIEVEMENTS?



Supporting local suppliers

Indicators	2019	2020	2021
Total number of suppliers	1,608	1,445	1,607
Ratio of total number of suppliers (local:international)	75:25	72:28	77:23
Total number of local suppliers from PETRONAS Vendor Development Programme (VDP)	12	11	13
Ratio of total procurement spending (local:international)	68:32	60:40	63:37



CYBERSECURITY & DIGITALISATION

WHY IS THIS IMPORTANT?

As we progressively rely on digital tools for our day-to-day operations, the use of digital technologies also promotes new business models, revenue streams and value creation opportunities. The increased use of digital services has been instrumental for PCG to achieve Operational Excellence and Commercial Excellence. On the flip side, digitalisation is also used alongside protecting data from cyberattacks and information confidentiality breaches. In the past two years, the pandemic has increased global connectivity, which has brought about increasingly sophisticated cybercrime. Attackers are employing new methods to circumvent traditional security controls. In ensuring the security of our sensitive data, PCG has embraced the digitalisation of systems and processes.

WHAT IS OUR APPROACH?

With our PCG Digital Steering Committee, we have created a platform for digital progress and value creation. This includes the downstream Operational Excellence Result 2 (OE R2) implementation to all PCG operating plant units (OPUs), through the adoption of the Downstream Digital Framework. Additionally, the digital Enterprise Optimiser and PETRONAS Integrated Vision for Operational Excellence Transformation (PIVOT) drives the best value for molecules, accelerating and integrating data analysis for faster decision-making process.

Operationally, the implementation of advanced analytics and data-driven technology can pre-empt and prevent equipment failure, minimising overall downtime. This includes operationalising the Asset Performance Management to digitalise critical data for improved plant efficiency. Other digitalisation tools include drones, which were also employed to safely monitor our equipment and operations at remote higher elevations during turnaround.

While the digitalisation of systems and processes enhances operational and resource efficiencies, the connectivity carries an inherent risk of cyber intrusion. As for PCG's cybersecurity efforts, the PETRONAS Enterprise Cyber Security Governance Framework (ECSGF) is a single governance framework for cybersecurity based on industry best practices and standards. It aims to protect our systems and data from malicious attacks. Our operations and network are actively monitored for cyber threats and attacks, which include conducting vulnerability assessments.

The next crucial step is educating employees on best practices to avoid cyber threats, as it helps them understand the potential risks associated with operating and communicating on our network and applications. These educational campaigns include modules on simple social engineering scams and sophisticated cybersecurity attacks designed to steal intellectual property or personal data. Additionally, regular phishing tests are carried out to ensure employees are kept vigilant at all times.



CYBERSECURITY & DIGITALISATION

HOW DID WE CREATE VALUE?

1 Asset Performance Management (APM)

- Managed asset reliability and integrity, so that plant facilities operate at acceptable risk and optimum costs.

2 Plant Operations Integrated Tools (POINT)

- Designed for Operate Facility Work Process (OFWP) for operators' tasks management, shift log management, plant manning and fatigue management.

3 PIVOT Advanced Analytics (AA)

- Enabled monitoring and abnormalities detection in plant facilities so that necessary steps can be taken to prevent plant downtime.

4 Primavera P6-SAP

- Accelerated the process of task scheduling for maintenance technicians from SAP Maintenance Orders.

5 Digital devices

- Enabled safe, smart devices and 4G LTE connection for accessibility and real-time information and updates in the process area.

6 Cybersecurity initiatives

- Implemented a Cybersecurity Strategy Deployment Programme (CSSDP) while an Enterprise Security Management System protects our data from spyware and virus attacks.
- Organised campaigns to raise employee awareness of cybersecurity.
- Performed phishing tests to exercise caution when using IT communication platforms to protect against phishing scams.
- Continued to conduct Cybersecurity Risk Management as part of our remediation against cyber risks and threats.
- Operationalised PCG's Enterprise Cyber Security Governance Framework.
- Initiated the Cybersecurity Business Impact Assessment (CSBIA) Legal & Regulatory Assessment (LRA) on PCG ICT system assets.

WHAT WERE THE ACHIEVEMENTS?



99% of employees attended and completed 188 modules with 95.7% passing the cybersecurity assessment.

>RM16 million value realised from APM in 2021.

>RM10 million value realised from PIVOT AA in 2021.

Indicators	2021 Target	2021 Results	Mid-Term Target (2022-2026)
Employees attended and completed cybersecurity modules (%)	>95	99	100
Phishing Test fail results (%)	<8	4.3	<6
Operational Excellence Result 2 (OE R2) Digital Transformation Progress (%)	100	90	100



STRATEGY PURPOSE & FINANCIAL RESILIENCE

WHY IS THIS IMPORTANT?

PCG's Two-Pronged Strategy is designed to support future financial resilience and the overall sustainability of our company in order to remain robust and resilient in weathering external challenges. This includes maximising cash generation and revenue growth for business sustenance, which the past two years and its uncertainties have put our strategy to the test.

This extends to the sustainability development of the business, which encapsulates the Group's sustainability agenda covering Economic, Environmental, Social (EES) and Governance.

WHAT IS OUR APPROACH?

In ensuring a holistic and cohesive strategic purpose, PCG is in alignment with PETRONAS' net-zero carbon target by 2050 with the establishment of our own Net Zero Carbon Emissions (NZCE) 2050 Roadmap. The long-term strategy is to reduce climate impact as well as improve the resilience of the business and capitalise on opportunities from the circular economy.

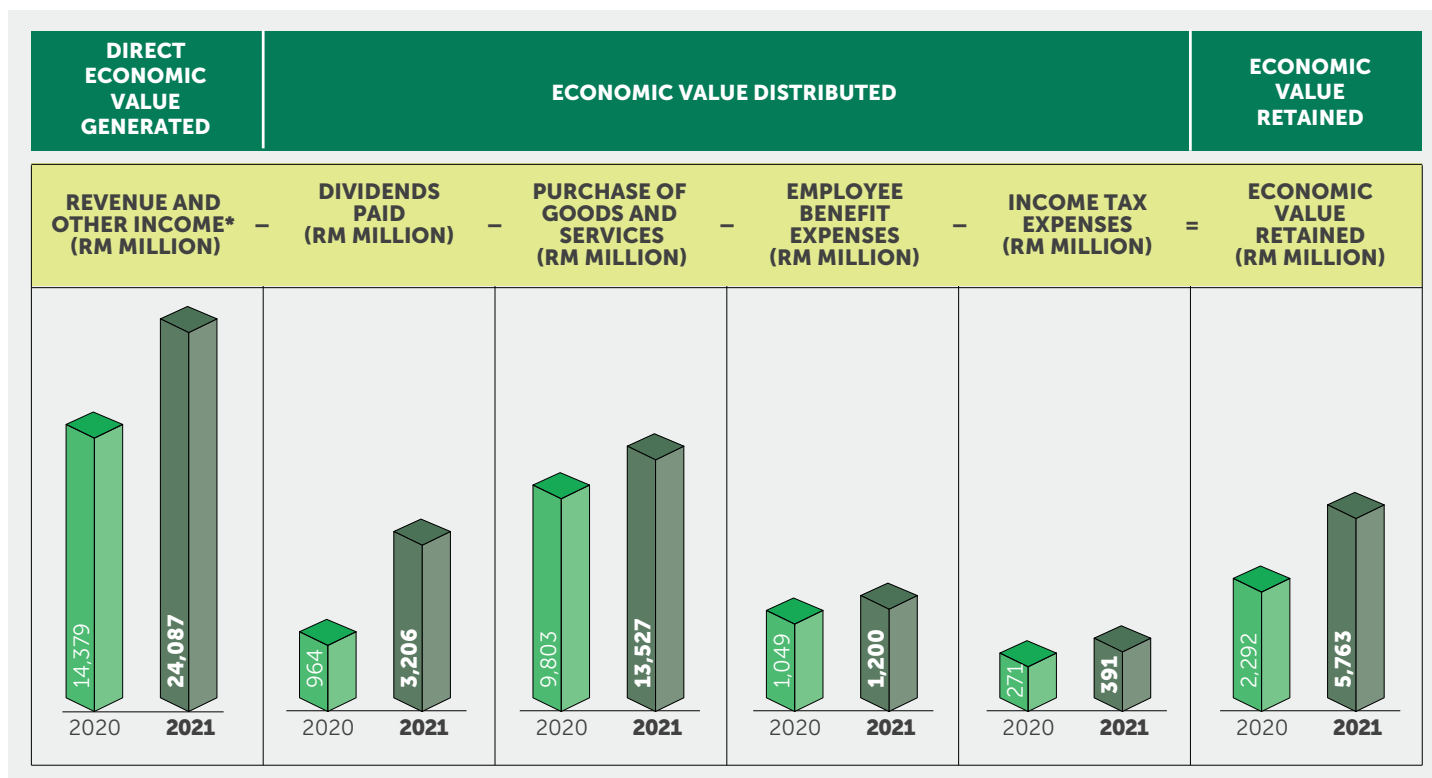
WHAT WERE THE ACHIEVEMENTS?

On top of that, we commit to embedding the sustainability element as part of our day-to-day business decisions and growth initiatives. This also includes reaching key stakeholders in addressing risk and governance on sustainability.

HOW DID WE CREATE VALUE?

Sustainability Strategy for financial resilience

- Pursued sustainability-related growth projects as part of sustainable development initiatives to achieve net-zero carbon emissions by 2050.
- Optimised current assets for greater efficiency resulting in lower GHG emissions and cost reductions from manufacturing assets.
- Diversified product offerings with bio-based and circular economy portfolios, such as the Bio-Monoethylene Glycols (Bio-MEG).
- Initiated flagship projects to spearhead the circular plastic economy initiatives in Malaysia through New Plastics Economy.

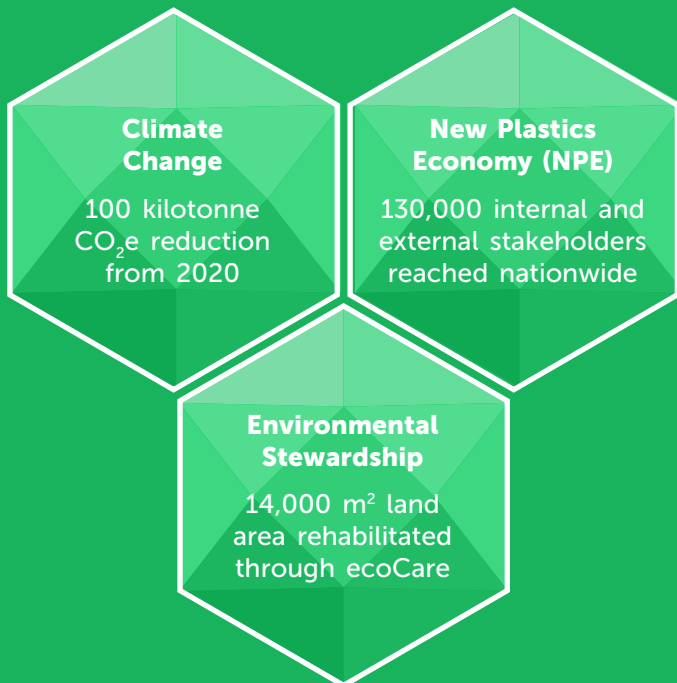


* Comprises net other income, financing costs and contribution from joint ventures and associates

Indicators	2021 Target	2021 Results	Mid-Term Target (2022-2026)
Increase in Cash Flow from Operations (CFFO) from 2020 (%)	10	>100	50

CONTRIBUTING TO THE GREEN AGENDA

Environmental stewardship is more than just seizing competitive opportunities and strengthening our resilience; it also enables us to give back to the green agenda. Our environmental efforts focus on creating a safe and healthy environment while improving productivity, lowering costs, and spurring innovation. Our focus remains on efficiency while researching breakthrough technologies for environmentally-friendly solutions. We adopt a holistic approach towards meeting rising expectations for greener and more sustainable practices. As a corporate citizen, we strive to consistently improve our environmental footprint and protect our planet for generations to come.





CLIMATE CHANGE

WHY IS THIS IMPORTANT?

Climate change is the biggest challenge facing humanity. The Intergovernmental Panel on Climate Change (IPCC)'s Sixth Assessment Report has indicated that the current state of climate change is reaching alarming levels. In 2021, we saw extreme weather events, from wildfires across North America and Southern Europe to extreme flooding in China and Western Europe. Some of these natural disasters also hit closer to home with devastating tropical cyclones from the Indian and Atlantic Oceans, causing floods and destruction.

This crisis threatens our ability to deliver long-term value to customers and stakeholders, who will also face significant impacts themselves. Climate change brings upon physical risks, in which our assets and operations may face disruption from natural disasters.

Climate change also presents transition risks and opportunities related to the global shift towards a low-carbon economy. Through our portfolio review, we can expand our products and solutions into new markets. We support PETRONAS aspirations to achieve net-zero carbon emissions by 2050 and have identified and reinforced our position as a sustainability thought leader.

WHAT IS OUR APPROACH?

To tackle climate change, we are deploying multiple transformational changes to our systems. This is supported by external frameworks, primarily the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations. Our holistic approach ranges from assessing and mitigating our operations' impact on climate change to factoring in carbon pricing in our growth projects.

Climate Scenario Analysis

Following TCFD recommendations, we performed a climate-related analysis to quantify the possible future financial impact on profitability from different climate change scenarios. The results inform a longer-term strategic decision making to improve the resilience of the business, and capitalise on opportunities from climate change and a circular economy.

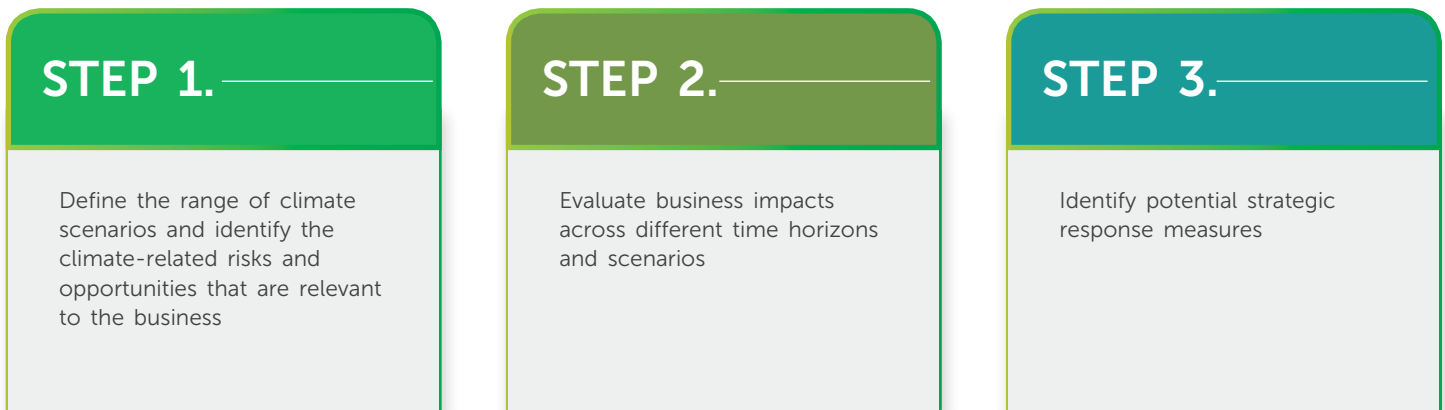
We adopted the IEA World Energy Outlook 2020 Scenarios to understand the potential impact of transition risks, including Stated Policies Scenario (STEPS) and Sustainable Development Scenario (SDS). For physical climate risks, two Representative Concentration

Pathway (RCP) scenarios, RCP 8.5 and RCP 4.5 have been used to assess potential business implications.

The scope of assessment includes:

- Climate transition risks and physical risks.
- Potential scenarios for legislation, technological development and market conditions.
- Our own operations, upstream and downstream activities and clients.
- The expected lifetime of the assets and activities to be consistent with the assessment.

Assessment Approach



Scope 3 GHG Emissions Assessment

For the first time, we also assessed our Scope 3 emissions. Our scope 3 GHG emissions categories are identified according to the GHG Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard. From the assessment, we determined our most material sources of Scope 3 GHG emissions:

Top 2 Most Relevant Sources of Scope 3 GHG Emissions Assessment:

1 Category I: **Purchased Goods and Services**



Emissions from purchased goods and services are more material for companies with downstream operations in the oil and gas value chain, such as petrochemical companies.

Emissions calculation methodology

- Estimation of category I Scope 3 emissions has applied simplified IPCC Tier 1 method using default emissions factors
- Tonne CO₂e = GHG activity data (unit) x default Emission Factor (tCO₂e/unit)

2 Category II: **Use of Sold Products**



Emissions from use of sold products is material to the majority of oil and gas companies, including petrochemical companies that produces products such as fertilisers that produce GHG emissions when they are used by customers.

Emissions calculation methodology

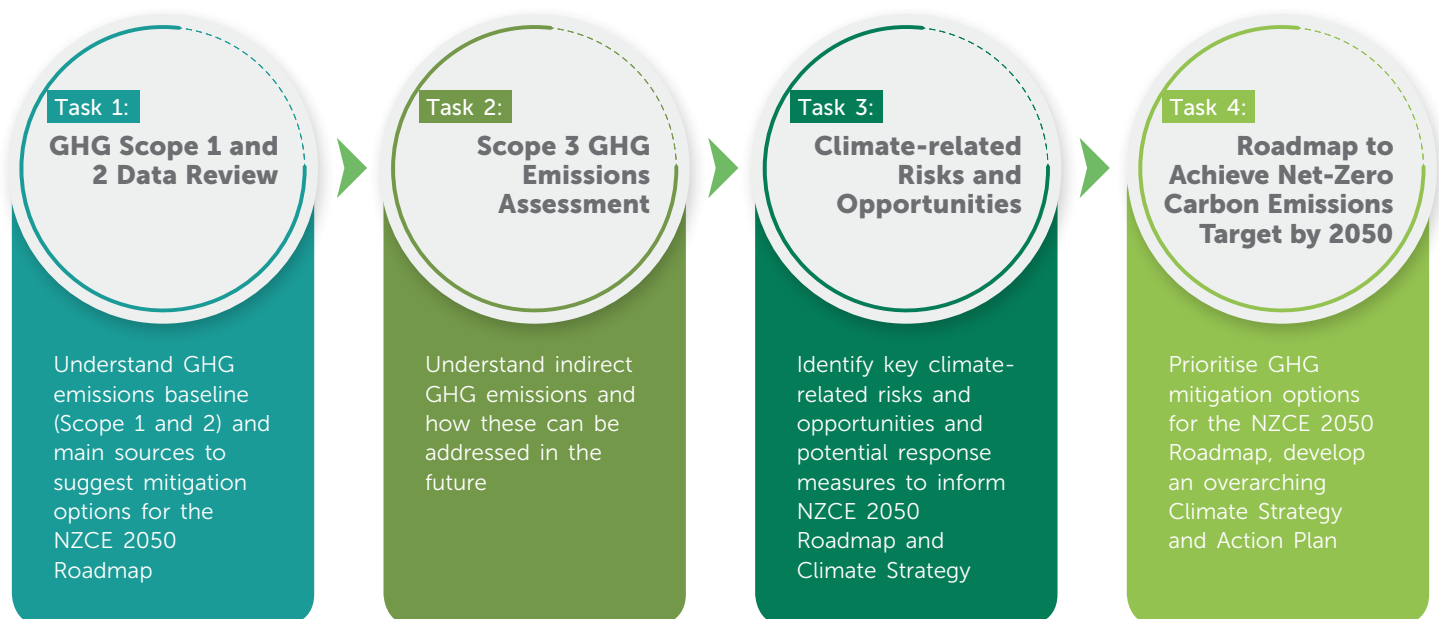
- Estimation of category II Scope 3 emissions has applied simplified IPCC Tier 1 method using default emissions factors
- Tonne CO₂e = GHG activity data (unit) x default Emission Factor (tCO₂e/unit)

HOW DID WE CREATE VALUE

1 Integrating Climate Action into the Business

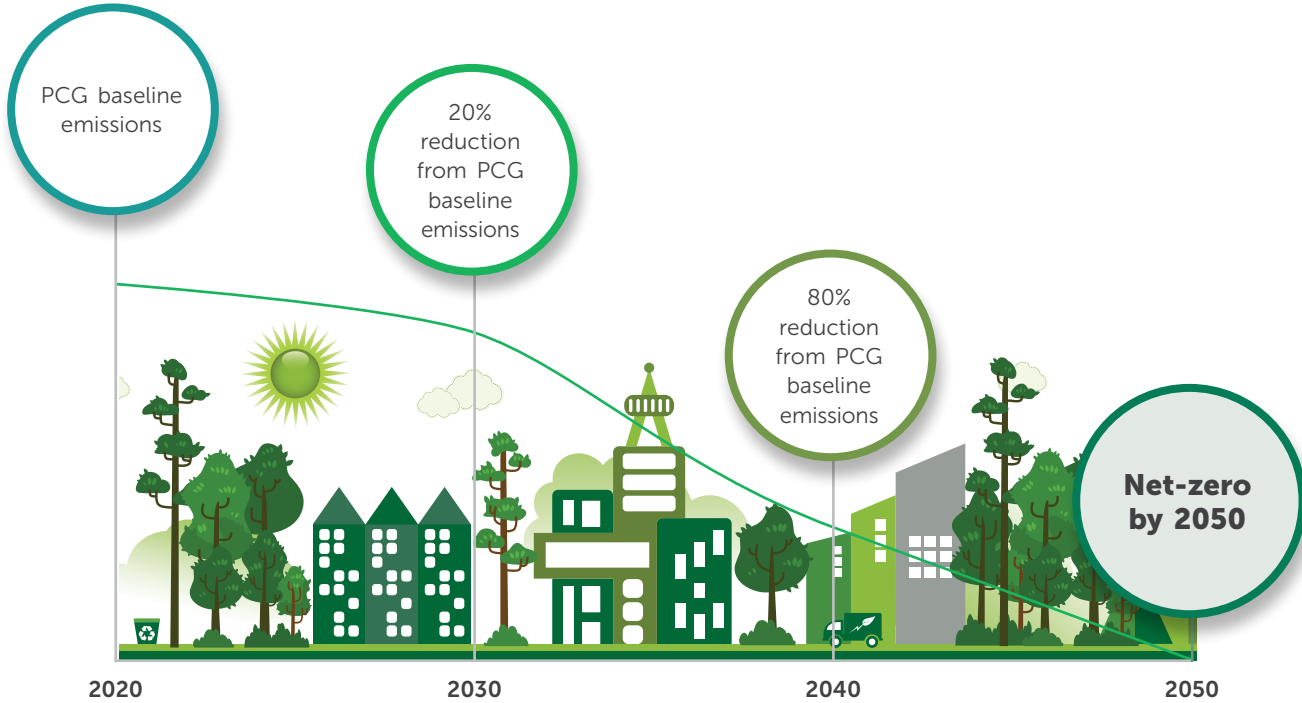
- Established PCG’s Net Zero Carbon Emissions (NZCE) 2050 Roadmap, aligning with PETRONAS’ aspiration, to achieve net-zero carbon emissions by 2050.
- Developed PCG’s Climate Strategy Framework, which includes strategic responses to climate-related risks and opportunities, decarbonisation and other initiatives.
- Integrated climate risks, strategy, metrics with performance evaluation and incentives into existing business processes and governance system.

The four-step approach in the development of NZCE 2050 Roadmap and Climate Strategy:







CLIMATE CHANGE

PCG NET ZERO CARBON EMISSIONS 2050 ROADMAP



PCG NET-ZERO CARBON EMISSIONS PATHWAYS

 <p>Increase Scope 1 and Scope 2 emissions reduction efforts</p> <p>Improve energy efficiency and increase reduction from operational GHG emissions</p>	 <p>Carbon capture & storage</p> <p>Collaborate with key stakeholders on carbon capture from gas combustion and transport to storage</p>	 <p>Scale up renewables and low carbon solutions</p> <p>Invest in renewables and embrace the circular economy</p>	 <p>Optimise the use of forest-based carbon offset</p> <p>Remove carbon using nature-based solutions like afforestation and avoid deforestation</p>
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2 Climate-Related Risks

- Conducted deeper quantitative analysis of climate risks and asset-level financial implications.
- Assessed physical climate risks in PCG's operating locations. An example of our strategic response to physical risk is as follows:
 - Conducted a freshwater availability study at one of our plants in Labuan to assess future freshwater availability against projected demands from 2021 – 2050 through detailed water availability projection modelling.
 - Identified current and future risks associated with freshwater availability and developed appropriate mitigation actions.
 - Developed an adaptation plan to address the future climate impact on freshwater availability.

CLIMATE CHANGE

The diagram below shows assessed climate-related transition and physical risks identified in an analysis conducted in 2021:

Climate-related Transition Risks & Opportunities

Policy and legal	Transition Risk	Chemical Business Implications	Reputation	Transition Risk	Chemical Business Implications
	Carbon pricing and reporting obligations	<ul style="list-style-type: none"> Restrictive cap and trade policy Carbon taxes 		Increased stakeholder concern/negative feedback	<ul style="list-style-type: none"> Increase in cost of capital, both debt and equity
Market	Carbon Border Adjustment Mechanism (CBAM) and climate-related trade barriers	<ul style="list-style-type: none"> CBAM to be implemented in European Union (EU) Other countries with net-zero ambitions and carbon taxation may follow suit 	Technology	Shift in consumer preferences/ Stigmatisation of sector	<ul style="list-style-type: none"> Reputational risks can degrade the intangible value of the company and goodwill
	Reduce demand for virgin plastics	<ul style="list-style-type: none"> Higher demand for circular polymer 		Substitution of existing products and services with lower emissions options	<ul style="list-style-type: none"> Products from less carbon intensive sources will be preferred Bio-fuels and bio-feedstock Methanol-derived products as a blend
	Increase in demand for Electric Vehicles (EVs)	<ul style="list-style-type: none"> Plastics use intensity will change Higher demand for methanol and ammonia in the long-term 		Development and maturity of new technologies	<ul style="list-style-type: none"> Synthetic fuel, carbon capture, utilisation and storage (CCUS), hydrogen Bio-feedstock, electrification Patented technology that is not readily available
	Improved application efficiency in the agriculture sector, and reduced wastage	<ul style="list-style-type: none"> Reduction in demand for ammonia and urea over the long-term 			

Key Physical Climate Risks Identified

China indicates comparatively higher risk due to drought as compared to other countries of interest

Thailand indicates the highest risk due to sea level rise among the countries of interest

Risk Rank	Hazard	Drought				Cyclone				Extreme Heat				Extreme Cold				Flooding				Sea Level Rise				
		RCP 4.5		RCP 8.5		RCP 4.5		RCP 4.5		RCP 4.5		RCP 8.5		RCP 4.5		RCP 8.5		RCP 4.5		RCP 8.5		RCP 4.5		RCP 8.5		
		2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	
1	Thailand	1	1	1	1	2	2	2	3	2	2	2	2	-1	-2	-2	-2	3	3	3	3	3	3	3	3	3
2	China	2	2	2	3	2	2	2	3	2	3	2	3	-2	-3	-2	-3	2	3	2	3	1	2	2	2	2
3	Indonesia	2	1	1	1	2	2	2	3	1	2	1	2	-1	-2	-1	-2	3	3	3	3	1	2	1	2	2
4	Malaysia	1	1	1	1	2	2	2	3	1	2	1	2	-1	-2	-1	-2	3	3	2	3	1	2	1	2	2
5	India	1	1	1	1	1	2	2	2	2	2	2	3	-2	-2	-2	-3	3	3	3	3	1	2	1	2	2
6	The Netherland	1	1	1	1	NA	NA	NA	NA	2	3	2	3	-2	-2	-2	-2	2	2	2	2	1	1	1	2	2

Cyclones indicate intensification under RCP 8.5 scenario by 2050. Particularly, East and Southeast Asia indicate higher risk due to cyclone

Floods could be a major concern throughout Asia. Particularly Thailand, Indonesia and India indicate comparatively higher risks in the region

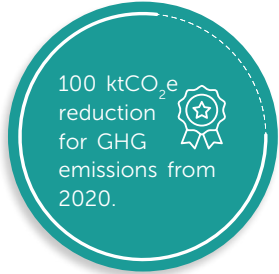
Risk of sea-level rising increases towards mid-century under both the RCPs

Reference: IPCC, 2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change

	Category
3	Significant Increase
2	Moderate Increase
1	Increase
0	No Change
-1	Decrease
-2	Moderate Decrease
-3	Significant Decrease

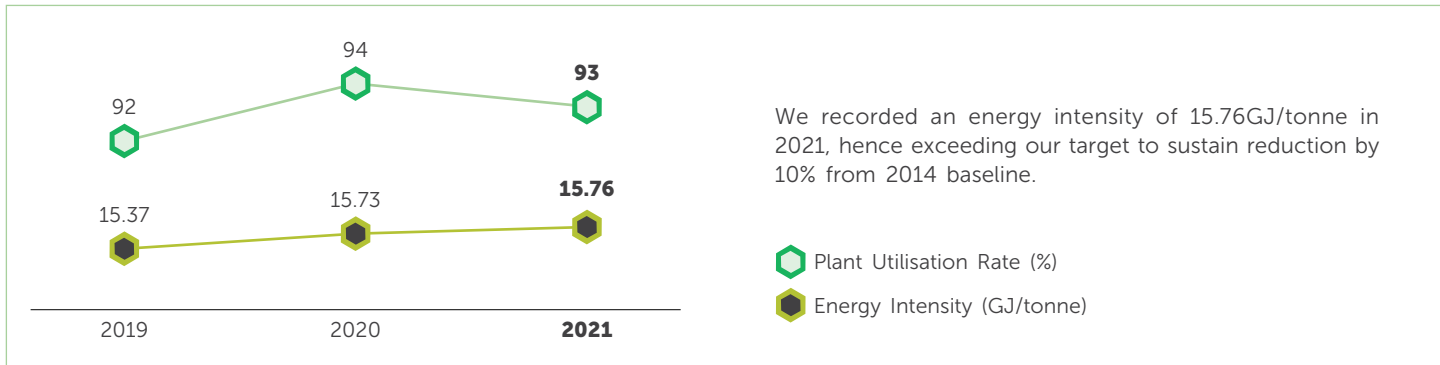
CLIMATE CHANGE

WHAT WERE THE ACHIEVEMENTS?

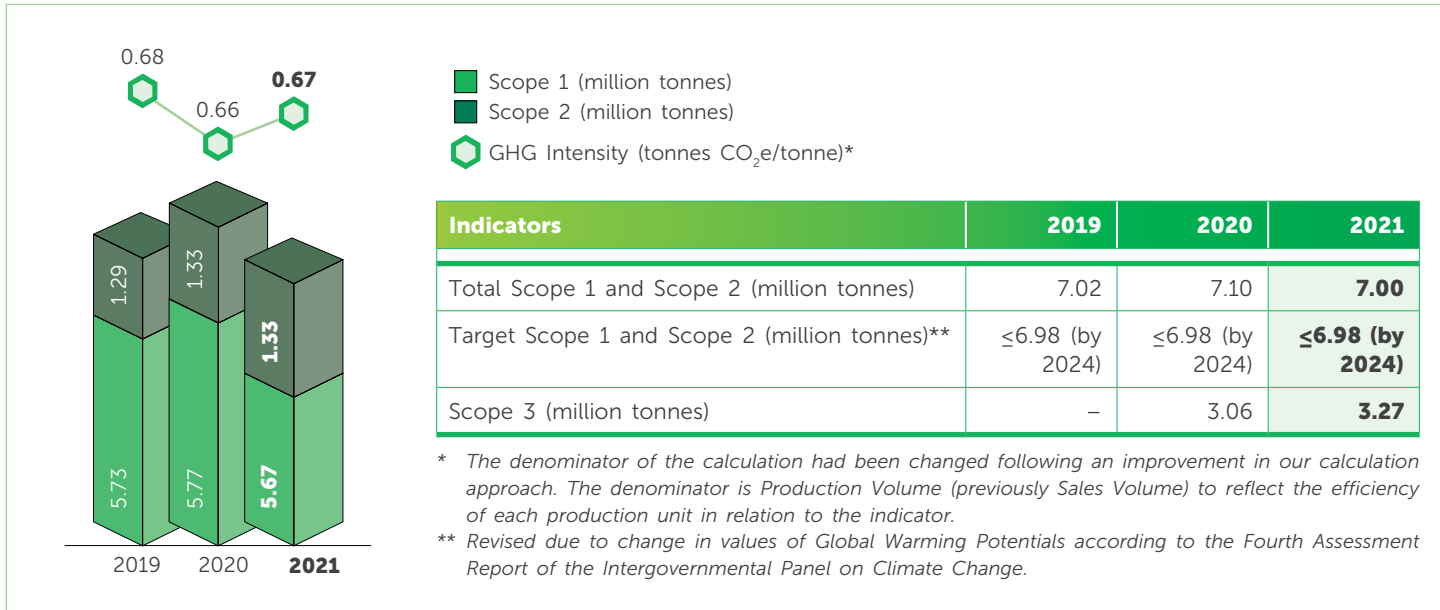


11% reduction in energy intensity (against 2014 baseline).

Energy Intensity



GHG Emissions and Intensity





NEW PLASTICS ECONOMY (NPE)

WHY IS THIS IMPORTANT?

The irresponsible usage and disposal of plastic is a growing threat to the environment when not managed effectively. The current linear economy for plastic is unsustainable and harmful to environmental and social health. To minimise this crisis, we need to transform the linear economy into a circular one. Through NPE, plastic does not become waste or pollution. Instead, it can be converted into a new resource, thus ensuring the sustainable production and consumption of plastic. This addresses the current plastics system's two main concerns – the use of finite resources to produce plastics and the plastics' impact on marine health and the environment.

By taking the lead in the advancements of NPE, we will reinforce our role as a chemical industry leader. It also aligns with stakeholders' future expectations of improved design and recycling requirements. We view this as an opportunity to secure new and emerging markets, explicitly turning plastic waste into new applications. This conversion of plastic waste into circular feedstock allows us the potential to create important value. By addressing plastic waste, we strengthen our resilience, maintain our competitive advantage, ensure sustainable growth, and, most importantly, protect the future of our planet.

WHAT IS OUR APPROACH?

PCG's NPE strategy aligns with Malaysia's plastic waste agenda, to end pollution from the Single-Use Plastics by 2030 and enhance the waste management system. PCG targets to recover 100% of the plastic waste of our polymer production volume for the Malaysian market by 2030, ultimately redirecting the waste into a circular economy. PCG had contributed to establishing Malaysia Plastics Sustainability Roadmap 2021-2030 with the Ministry of Environment and Water (KASA). As one of the founding members of Malaysia Sustainable Plastic Alliance (MaSPA), we continuously maintain a good rapport with government agencies, including Ministry of Housing and Local Government (KPKT), brand owners, industry leaders and NGOs, to collectively tackle plastic waste issues in Malaysia.

We adopt a holistic approach to NPE by focusing on four key workstreams:

- **Innovation:** Establishing a viable collaboration in innovative technology solutions to address plastic pollution. The innovative solutions are through these three focus areas:
 - ReDESIGN: Enhance the recyclability of plastic materials
 - ReGENERATE: Regenerate the end-of-life plastic into valuable materials
 - ReNEWABLE: Develop renewable-based plastic materials
- **Infrastructure:** Developing strategic partnerships and collaborations for an effective, sustainable waste recovery system.
- **Education:** Imparting knowledge and education on plastic to address misconceptions and promote change in behaviour and culture.
- **Clean-up:** Enhancing awareness of caring for the environment through 3R education, CSR activities and green campaigns.

HOW DID WE CREATE VALUE?

In supporting the government's effort, towards ending plastic pollution, we have aligned our sustainability agenda through the four key workstreams of innovation, infrastructure, education and clean-up. As a founding member of the MaSPA, we also actively participated in the development of the Malaysia Plastics Sustainability Roadmap 2021-2030.

1 Innovation

- Collaborated with Plastic Energy Ltd to develop a solution turning non-recyclable plastic waste into crude naphtha, and further processed to produce polymers as a feedstock for plastic production.
- Performed a feasibility study with Plastic Energy Ltd to construct plastic waste to crude naphtha facility in Malaysia. The objective of the feasibility study is to bring the technology to Malaysia by turning low-quality, mixed plastic waste from landfills into the naphtha quality pyrolysis oil.
- The pyrolysis oil will be used as a feedstock for polymer production, enabling PCG to offer certified circular polymers.
- Explored other innovative solutions based on the three focus areas under the innovation workstream.

2 Infrastructure

- Secured feedstock supply for projects currently ongoing in collaboration with local recyclers.
- Initiated internal and external collaborations to improve the recovery of recyclable materials through our internal 3R programme involving PCG Operating Units and other PETRONAS Business Units, including PETRONAS Gas Berhad.

3 Education

- Developed and distributed 'Plastic, Sustainability & You' Education (PSYE) modules to all schools in Malaysia, in collaboration with the Ministry of Education (MOE), Solid Waste Management and Public Cleansing Corporation (SWCorp) and Malaysian Plastics Manufacturers Association (MPMA).
- Held live webinar sessions on Pusat STEM Negara's social media channels for primary and secondary school students as well as teachers. We also conducted webinar sessions for:
 - Public and school students through Karnival Sains Sabah Edition, in collaboration with PETROSAINS and Ministry of Science, Innovation and Technology Sabah
 - Employees of the Prime Minister's Office and its agencies
 - ASEAN polymer industry players during the ASEAN Federation of Plastic Industries (AFPI) meeting and Asia Plastics Forum (APF) Conference in collaboration with MPMA. The participants were from 12 countries, namely Malaysia, Bangladesh, China, India, Indonesia, Japan, Myanmar, the Philippines, Singapore, Sri Lanka, Thailand and Vietnam.

NEW PLASTICS ECONOMY

4 Clean-up

- Conducted clean-up initiatives through our Be Green Programme, which encourages surrounding communities in our area of operations to learn about the importance of preserving the environment through proper waste and plastic management.

WHAT WERE THE ACHIEVEMENTS?



Nine sessions of the 'Plastic, Sustainability & You' webinar were held, reaching over 130,000 teachers, students, government officers, internal staff, public and industry players.

More than **46 tonnes** of recyclable waste collected through our internal 3R programme.

1.4 tonnes of recyclable waste was collected as part of the Be Green programme online competition.

Indicators	2019	2020	2021
Investments in NPE (RM million)	8	3	3
Recyclable waste collected via Be Green Programme (tonne)	1.3	2.0	1.4

Indicators	Mid-Term Target (2022-2026)
Education reach (number of people)	1,000,000



ENVIRONMENTAL STEWARDSHIP

WHY IS THIS IMPORTANT?

PCG uses natural capital such as energy, water and other finite resources, which we would need to safeguard for future generations. We must continue maintaining our Operational Excellence while ensuring our environmental footprint is kept to its minimum. While meeting the requirements of environmental standards and regulations, we also strive to go beyond compliance towards best practices. Responsible environmental management is more than just an ethical growing concern approach to business – it is also a motivator to grow and innovate current operations.

WHAT IS OUR APPROACH?

We ensure all our plants and operations consistently comply with environmental regulations across all our operating locations. We also subscribe to voluntary environmental standards, with almost all of our operations receiving ISO 14001:2015 certifications. PCG is also moving towards digitalisation and utilising technology to minimise material consumption and waste production.

PCG’s Health, Safety & Environment (HSE) policy provides the guidelines and practices to manage the plants’ water, waste and air emissions. We also have three frameworks to monitor our usage and impact on the following natural resources:

Water Consumption and Effluents Quality
PETRONAS Guidelines on Water Practices (WAPS)
 Aim: To monitor water usage from our operations, covering four systems: ion exchange, steam generator, condensate, and cooling water.

Waste Management
PETRONAS Technical Standards Waste Management & PCG Waste Minimisation Blueprint
 Aim: To minimise and recycle hazardous and industrial waste generated from our operations while managing any waste produced responsibly with minimal impact on the surrounding communities and environment.

Air Emissions/Quality
PETRONAS Technical Standards on Air Emissions & PCG Leak Detection and Repair (LDAR) Programme
 Aim: To address fugitive emissions through small or any other potential leaks, as well as monitor air emission pollutants via the Continuous Emissions Monitoring System, to obtain real-time data.

HOW DID WE CREATE VALUE?

- 1 Preserving Air Quality**
 - Utilised 100% LDAR to inspect joints, valves and potential leak points at all our operating plants.
 - Lowering pollutant in emissions through our Ultra High Purity Methanol (UHPM) fuel cell applications in line with market demand for clean energy, as the use of methanol fuel cells has increased.
- 2 Minimising Water Intake**
 - Continued water consumption verification exercise to identify opportunities for improvement and to establish water reduction targets.
 - Utilised mobile reverse osmosis technology at PC Methanol to enable the recovery of 140m³/hour of process condensate. This will help PC Methanol to reduce raw water consumption by 110m³/hour or 16% and significantly lessen the high raw water stress of Labuan Island.
- 3 Going beyond compliance for wastewater discharge**
 - Invested more than RM3 million to install an automated water quality monitoring system, backed by renewable energy, to monitor wastewater discharge from the Kertih Integrated Petrochemical Complex (KIPC), Terengganu in real-time. The alarm level set for the system is stricter than the regulatory limit. The facilities at KIPC discharges water into a 6 km common drain which eventually flows to the Kertih river.
 - Ensured the KIPC drain is in good condition by reducing the environmental impact of water and wastewater discharges to minimise the disturbance to aquatic life.
- 4 Responsible Waste Management**
 - Conducted the annual waste minimisation plan to identify opportunities for waste reduction.
 - Developed a turnaround and shutdown waste minimisation blueprint to tackle waste at its source.
 - Segregated waste to prevent mixture of waste, thus reducing total waste volume.
 - Improved waste recycling by identifying and implementing 3R on the targeted waste stream.
 - Launched a digital competition nationwide encouraging employees to promote the Be Green education and competition programme among friends and neighbours; aiming to improve the recovery of recyclable materials from home.
- 5 Environmental Compliance**
 - Implemented penalties for non-compliance to PCG’s HSE policy, including consequences on employees’ salaries, promotions, and contractor payments.
- 6 Raising Environmental Awareness**
 - Implemented ecoCare, a mangrove conservation and biodiversity programme for the Kertih river community to protect high biodiversity and ecologically sensitive areas.

ENVIRONMENTAL STEWARDSHIP

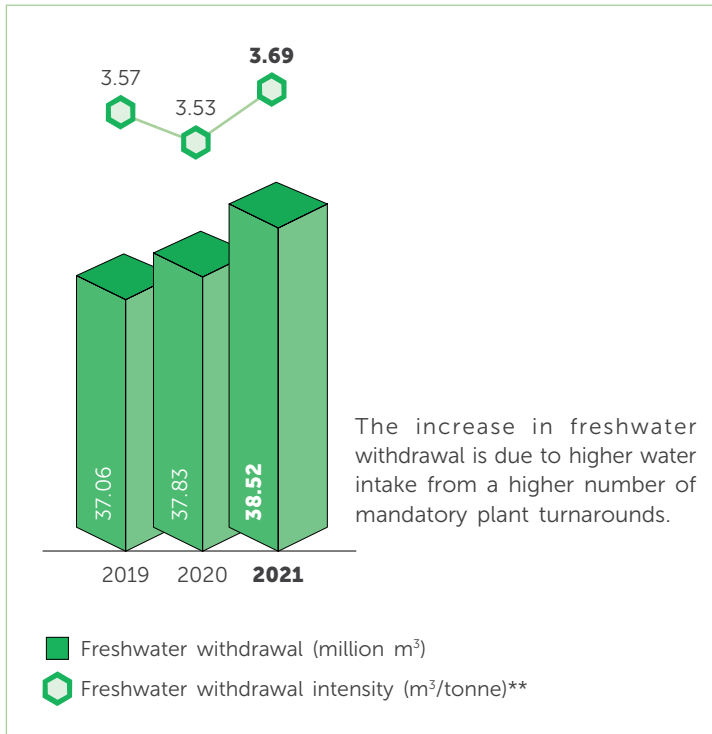
WHAT WERE THE ACHIEVEMENTS?



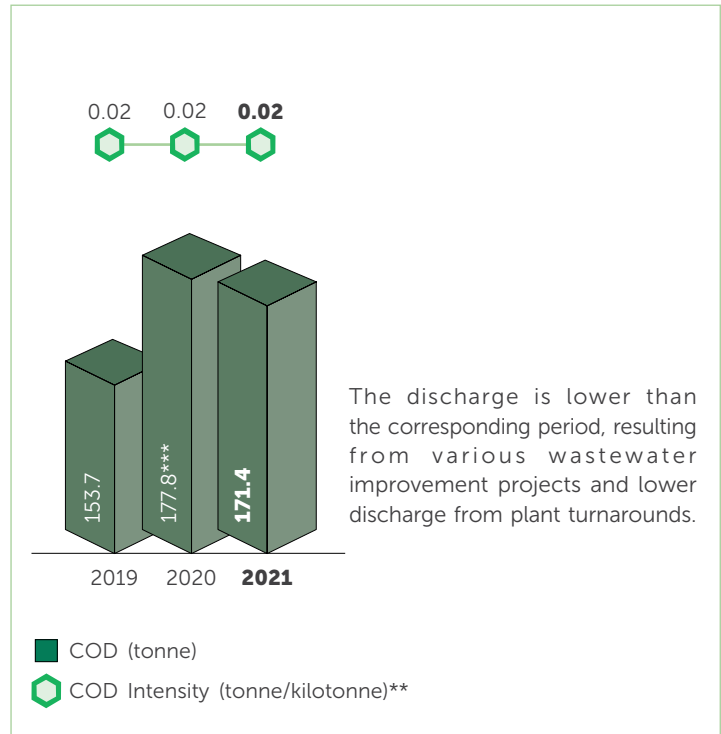
ecoCare programme
Rehabilitated a total land area of more than **14,000 m²** within a span of 15 years.

Water Consumption
Reduced raw water consumption at PC **Methanol by 16%**.

Freshwater Withdrawal



Wastewater Discharge



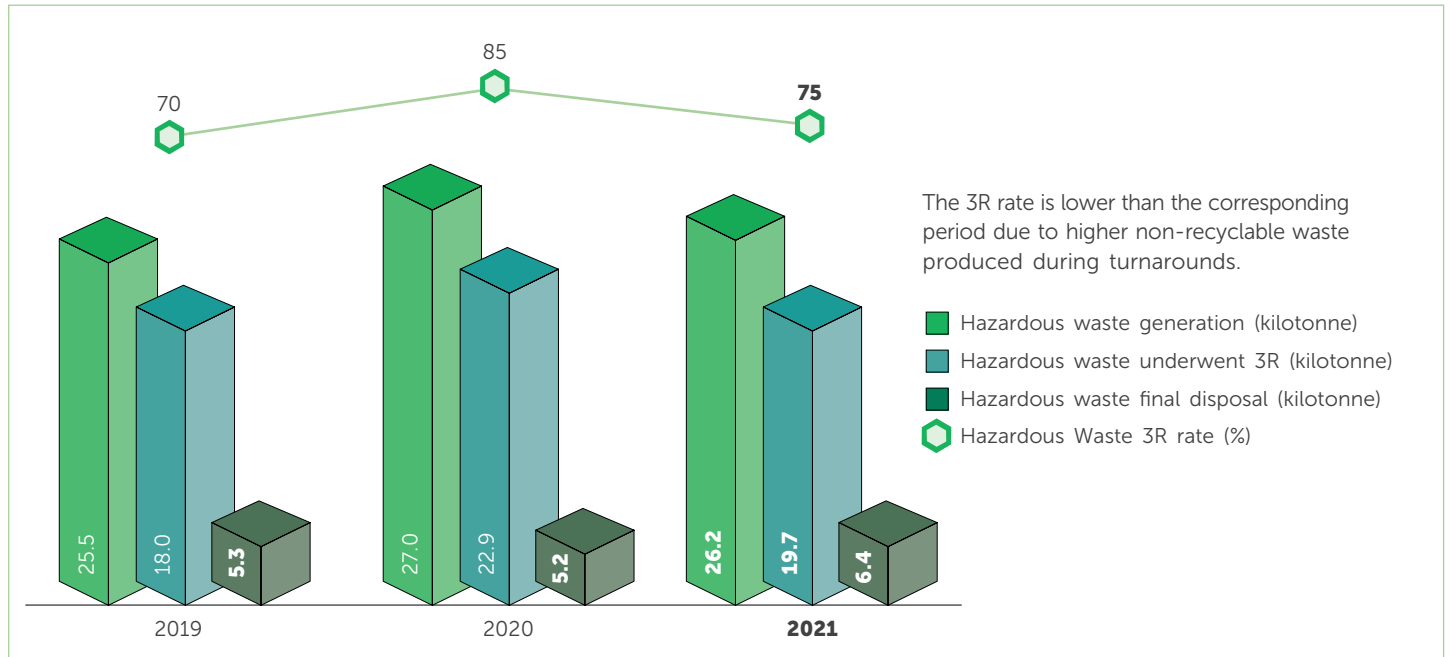
* Above USD100,000 materiality threshold

** The intensity calculation is now based on an improved calculation approach, i.e: to reflect the efficiency of each production unit in relation to the indicator. The denominator applied has been changed to Production Volume, replacing the previously applied Sales Volume

*** Revised based on change of calculation method

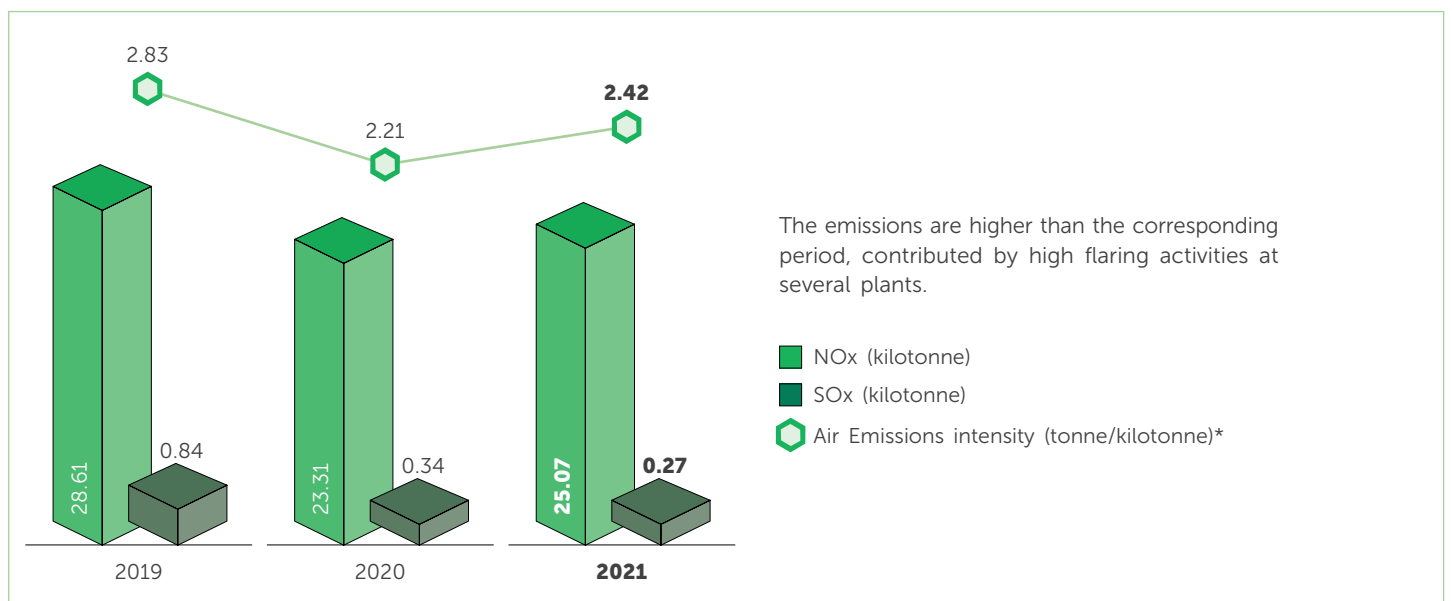
ENVIRONMENTAL STEWARDSHIP

Hazardous Waste



Indicators	Target	Results
Increase 3R rate for hazardous waste (%)	82 (by 2024)	75

Air Quality



* The intensity calculation is now based on an improved calculation approach, i.e. to reflect the efficiency of each production unit in relation to the indicator. The denominator applied has been changed to Production Volume, replacing the previously applied Sales Volume



EMPOWERING PEOPLE & COMMUNITIES

Our people are at the heart of everything we do at PCG. From our employees and suppliers to the communities surrounding our operations, they are what keep us running. Our employees play a significant role in creating an engaged, skilled and productive workforce. As one of the leading chemical players in a rapidly changing industry, we are dedicated to future-proofing our employees, which includes motivating and empowering them to thrive now and far into the future. Employee safety is also tantamount to our business, as a strong safety track record ensures operational productivity and business continuity. Above all, it ensures the protection of our valued employees from accidents and injuries.

Beyond the business' internal operations, we also look externally to empower the communities in the areas PCG operates. It is important to give back to the communities, allowing us to actively participate in community development and foster a deeper sense of unity and trust.





HUMAN RIGHTS



WHY IS THIS IMPORTANT?

Human rights are the fundamental rights and freedoms entitled to every individual. They are based on the principles of dignity, fairness, respect and equality. Human rights include non-discrimination, freedom of association, the right to education and safety, and access to clean air and water. This refers to the fair and humane treatment of all employees, starting with treating everyone with respect and having zero tolerance for discrimination, harassment or bigotry. With that, it is imperative we maintain fair employment, fair remuneration and diversity at PCG. These practices foster a productive work environment and healthy work culture, inspiring trust among employees, suppliers, and other stakeholders. Protecting human rights also makes space for creativity and innovation as employees feel safe and encouraged to thrive.

WHAT IS OUR APPROACH?

PCG believes in upholding and promoting human rights and fair labour practices within our operational facilities. We operate our business in the support and respect of the observance of human rights, which offer a framework to understand society's common expectations and thus, deliver value to stakeholders. Our human rights commitment standards and guidelines are in alignment with PETRONAS' Human Rights Commitment, which is in line with the United Nation (UN) Guiding Principles on Business and Human Rights. The objective of our commitment is to ensure our activities are governed by human rights principles, laws, best industry practices and standards to manage the impact in our areas of operation.

This commitment applies to all employees, contractors and any third parties within our premises performing work and/or on behalf of PCG. We also respect the rights of local communities and other stakeholders we interact with across our operations. Furthermore, this includes complying with the Code of Conduct and Business

Ethics (CoBE) and all its relevant labour laws and employees' rights, such as providing competitive salaries and benefits. Our non-executive employees' rights are also protected through unions, of which its collective bargaining agreement process is led by PETRONAS' Group Industrial Relations together with unions and management representatives. In the active promotion of gender diversity, the collaboration with PETRONAS Leading Women Network (PLWN) is to inspire and motivate women to grow their leadership capabilities within the organisation.

HOW DID WE CREATE VALUE?

1 Human Rights

- Continued to educate employees and increase their awareness on human rights with our e-learning module, highlighting our commitment to human rights principles.
- Embarked on a collective bargaining agreement process with employee unions, led by PETRONAS' Group Industrial Relations and representatives from various Operating Unit heads.
- Conducted Social Risk Assessment (SRA) to assess the impact and mitigate the social risk, especially human rights risks, to manage both the positive and adverse impacts created through our business activities, including through relationships with partners and contractors. The SRA is based on our internal guidelines and standards, which align with the UN Guiding Principles on Business and Human Rights, the International Petroleum Industry Environmental Conservation Association, and other industry best practices. The assessments emphasise four salient areas in accordance with PETRONAS Human Rights Commitments:
 - Labour and Working Conditions
 - Responsible Security
 - Community Well-Being
 - Supply Chain Management

HUMAN RIGHTS

2 Employee Benefits

- Provide 'Spousal Assistance with Leave Without Pay (LWP)' for up to 36 months for employees on overseas assignments. This provision is added to the current LWP allowance of 365 days.
- Medical benefits for unionised employees upon the collective agreement, which includes:
 - Medical benefit which covers outpatient general practitioner and specialist, including paediatric care, hospitalisation and surgery.
 - Maternity benefit up to five delivery occasions including antenatal and postnatal treatment.
 - Standardised the definition of dependent children of all unionised employees to be comparable with other categories of employees.

3 Diversity & Inclusion

- In the active promotion of gender diversity, the collaboration with PLWN is to inspire all women to grow in the organisation and support them in building their leadership qualities. In this regard, they guide women employees to strengthen their confidence and professional development through participation in international conferences such as the Women Global Leadership Conference in Energy, the largest women's event in the energy industry. The conference covers the industry's environmental, economic, professional, and human capital issues.
- Supported the establishment of the PETRONAS childcare centre, which was part of the initiative by PETRONITA, an association of wives and female employees of PETRONAS to help working mothers.
- Established a flexible working arrangement for pregnant employees in their 28 weeks (seven months) to leave work one hour earlier than the prescribed working hours.
- Equipped the workplace with nursing rooms and complete facilities, i.e., a fridge for temporary storage, sofas and power supply cable.
- Implemented maternity leave with full pay for a total of 90 consecutive calendar days as compared to the minimum statutory requirement of 60 consecutive days.

- Implemented paternity leave of five working days, although it is not part of the statutory requirement.
- Implemented pilgrimage leave of up to a maximum of ten consecutive calendar days, to support employees of all religions and faiths to perform religious pilgrimage and rituals.

4 Employee Welfare & Well-Being

- Implemented special working arrangements for employees with dependant(s) affected by contagious diseases.
- Implemented a new working arrangement during COVID-19, where work-from-home is the default working arrangement unless the nature of the job requires mandatory presence on-site.
- Conducted regular union engagement to strengthen our relationship and address operational matters.
- Implemented daily FLEXWARE (smart casual attire) to provide a positive, flexible, and inclusive work environment for all employees.
- Conducted a series of wellness and well-being programmes for employees.
- Implemented the Employee Assistance Programme (EAP), a worksite-based programme designed to support employees in dealing with issues that may adversely impact their health, work performance and well-being.
- Ran upskilling sessions for managers on Industrial Relations (IR) at the workplace and CoBE refresher training.

5 COVID-19 Assistance

- Provided assistance for employees and/or employee's dependent(s) affected by COVID-19, which includes:
 - Medical treatment at private facilities
 - COVID-19 testing at private facilities
 - Quarantine at private facilities
 - COVID-19 Vaccination Special Paid Leave
- Reimbursed quarantine cost for staff going for or returning from business travel.
- Created a 'green bubble' that isolates critical employees during plant turnarounds to ensure employee safety and business continuity during the COVID-19 pandemic.
- Implemented workplace COVID-19 prevention measures, which includes:
 - Self-testing prior to coming to the office
 - Strict adherence to standard operating procedures, such as physical distancing and usage of personal protective equipment and hand sanitisers
 - Office sanitisation
- Set up a temporary Vaccine Administration Centre to facilitate employees' vaccination at Gebeng, Pahang and Kertih, Terengganu.

WHAT WERE THE ACHIEVEMENTS?



Almost 100% vaccination rate for PCG employees.

Human Rights and CoBE Training Sessions:

- General IR at workplace
- Integrity briefings and training
- Refresher on CoBE at workplace

Union members

Indicators	2019	2020	2021
Percentage of union members out of total support staff (%)	74.3	76.0	75.0

Gender Diversity

Indicators		2019	2020	2021
Distribution of workforce by gender (%)	Female	17.4	17.2	17.3
	Male	82.6	82.8	82.7
Senior management (%)	Female	25.2	24.0	18.2
	Male	74.8	76.0	81.8
Management Committee (%)	Female	36.4	36.4	25.5
	Male	63.6	63.6	74.5
Board of Directors (%)	Female	25.0	25.0	22.2
	Male	75.0	75.0	77.8

Parental Leave

Indicators		2019	2020	2021
Total number of employees who took parental leave	Female	61	56	66
	Male	386	412	375
The return to work rates of employees who took parental leave (%)	Female	100	100	100
	Male	100	100	100

Human Rights Assessment

Indicators	2021 Target	2021 Results	Mid-Term Target (2022-2026)
Human Rights Assessment activities (%)	100	100	
Human Rights Assessment – Gap closure (%)	100*	100	100**

* For 2019-2020 assessment

** For 2021-2022 assessment



WORKPLACE AND OCCUPATIONAL SAFETY & HEALTH (OSH)






A strong health and safety culture at the workplace sets the foundation for our business to thrive. It underpins both our financial success and moral obligation. Occupational Safety & Health (OSH) also protects the company against financial, operational and legal ramifications. This safeguards our employees and assets, maintains trust with stakeholders, and secures our license to operate. Additionally, our high safety standards and compliance to regulations ensures operational continuity and efficiency.

A good OSH reputation helps attract and retain top industry talent, as well as brands PCG as a safe and reputable manufacturer. Upholding a solid health and safety culture allows our employees to work more efficiently, boosts morale and productivity while reducing costs. In turn, this can reliably deliver products to meet our customers' needs. As we commit further to developing our health and safety culture, we strive to become a company where OSH excellence is a major tenet of how we do business.

WHAT IS OUR APPROACH?

Our utmost priority is to upkeep the health and safety of our employees, suppliers and vendors, and other contractors. By establishing a stringent HSE framework, we inculcate a generative culture that continuously strives to keep safety incidents at zero. These efforts rest on the foundations of culture, compliance and competency

– where culture reinforces leadership and personal accountability in the overall work environment; compliance intensifies efforts to strengthen the adherence to HSE systems and procedures; and competency enhances the system's capabilities in driving HSE excellence.

 <p>CULTURE Reinforce the role of leadership and instill personal accountability at all levels in amplifying a generative culture.</p>	<p>We aim to nurture a Generative HSE Culture where all employees take responsibility for their own safety and of others.</p>
 <p>COMPLIANCE Reiterate efforts to strengthen compliance to establish HSE systems and procedure.</p>	<p>We require compliance with all HSE regulations by all employees as it is crucial to ensure zero incidents at the workplace.</p>
 <p>COMPETENCY Enhance asset capabilities, both human and systems, in driving HSE excellence.</p>	<p>We work continuously with our employees, suppliers and vendors to ensure a high level of safety standards and work processes are upheld.</p>

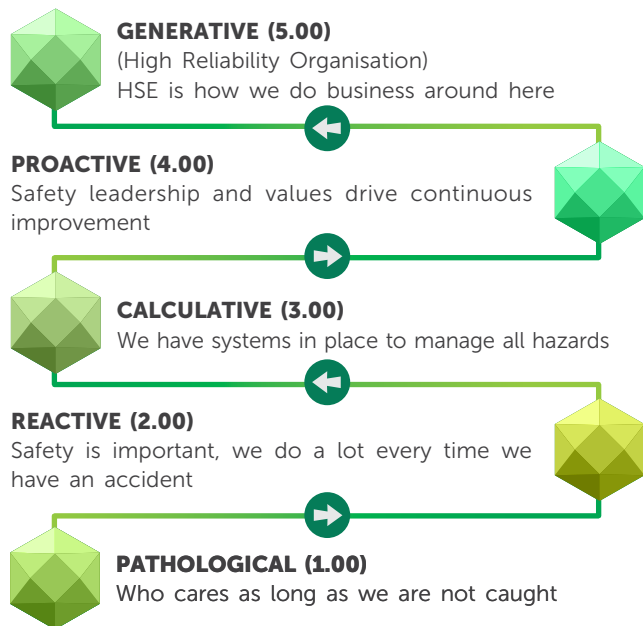
Our approach to Workplace and OSH is governed by the aspiration to sustain world-class HSE performance, while achieving our goal to inculcate a culture of HSE excellence and striving for zero incidents.

WORKPLACE AND OCCUPATIONAL SAFETY & HEALTH

HOW DID WE CREATE VALUE?

1 Culture

- Enhanced focus on reflective learning of past HSE and Process Safety Incidents that occurred in PCG Operating Units (OPUs).
- Standardised the HSE implementation across PCG to circumvent the potential violations from employees and contractors.
- Structured a housekeeping programme across all facilities.
- Focused on achieving HSE Generative Culture through the strengthening of the FELT Leadership Program, rejuvenating Focused Learning (Learning from Incident) and implementation of HSE Balance of Consequence.
- Implemented the '8 Golden Rules of Process Safety' which were derived based on learnings from PETRONAS Downstream's and PCG's major process safety incidents that will emphasise good practices and act to reduce unsafe acts and conditions leading to process safety incidents.
- Conducted the HSSE Culture Maturity Survey to gauge HSE culture in PCG according to the culture maturity ladder.



2 Compliance

- Strengthened the implementation of HSE Balance of Consequences (BOC) to ensure effective implementation, deter non-compliance and encourage positive behaviour.
 - Implemented several modules under the Road Transport Operational Guideline (RTOG) focusing on leadership management, vehicle management, journey management as well as weekly virtual coaching as part of the focused activities to increase the RTOG understanding among contract owners, as well as hauliers.
 - Completed Noise Risk Assessment, Chemical Health Risk Assessment and exposure monitoring at our facilities.
 - Heightened compliance to Operating Procedure (OP) and Management of Change (MOC) to manage process hazards effectively and prevent process safety incidents.

3 Competency

- Continued coaching, personnel upskilling and implementation of RTOG modules on leadership management, vehicle management and journey management in ensuring effectiveness towards safe product deliveries.

4 COVID-19

- Established and implemented the PCG Pandemic Preparedness Response Team (PPRT) to continue business operations during COVID-19, working closely with Downstream COVID-19 Taskforce and PETRONAS PPRT.
- Set the standard guides, procedures, directives, memos and COVID-19 case managements throughout PETRONAS. All communications were delivered via the company Intranet and email blast.
- Activated directives to ensure business continuity and the safety of employees, focusing on:
 - New working arrangements
 - Travelling employees for business and work trips
 - Events and gatherings
 - Entry requirements into premises
 - Requirements for employees
 - Contractors and visitors with a history of travel to affected areas
 - Mask requirements
 - Requirements for facilities within the premises (e.g., hall, meeting room and cafeteria)
- Successfully managed to keep crucial plant operations running, including during turnarounds, ensuring both our people and assets were safe.

WHAT WERE THE ACHIEVEMENTS?



Scored 4.06 on the HSSE Culture Maturity Survey 2021, which signifies that we are proactive and on the right track towards achieving HSE Generative Culture. With the challenges of operating during COVID-19 restrictions, we view this as a commendable achievement.

WORKPLACE AND OCCUPATIONAL SAFETY & HEALTH

Occupational Safety & Health

Indicators	2019	2020	2021
Fatalities (Number of cases)	0	0	0
Lost time injury frequency (Number of LTIs per million man-hours)	0.08	0.14	0.07
Lost time injury (Number of cases)	2	3	2
Total Recordable Occupational Illness Frequency (Number of cases per million man-hours)	0.18*	0.30*	0.09
Total Recordable Case Frequency (Number of TRCs per million man-hours)	0.29	0.23	0.28
Total recordable injuries (Number of cases)	7	5	8

* Revised based on change of calculation method

Tier-1 Process Safety Event

Indicators	2019	2020	2021
Tier-1 Process Safety Event	2	3	1





TALENT DEVELOPMENT



WHY IS THIS IMPORTANT?

Driving PCG's strategies and growth forward are our committed and talented employees. It is essential to attract, develop and retain high-performing employees, and subsequently future-proof them with the right skills they would need to thrive in the long term. This begins with a talent pool of competent leaders at the helm, helping employees realise their full potential and building their own career progress.

Talent development focuses on enhancing competencies and planning, selecting, and implementing development strategies. As the landscape is rapidly changing, creating an inclusive and diverse workforce culture to achieve business success is also essential. A nurturing and empowering work philosophy would improve work agility and efficiency. This ensures effective employee development programmes and attracts top-quality industry talent.

WHAT IS OUR APPROACH?

With our aspirations to become a specialty chemicals company, we recognise the vital role talent development plays in delivering quality performance and achieving growth. Our aspirations for talent acquisition requires considerations for a specific workforce, including a strategy that incorporates trends in human capital development, such as generating purposeful work. We continue to enhance our future talent pipeline, which is implemented to nurture employees' leadership competencies to fill critical positions within the company. In securing PCG's future success, the integrated development programmes are comprehensive and efficient succession plans that serve as recruitment efforts for scarce or niche roles.

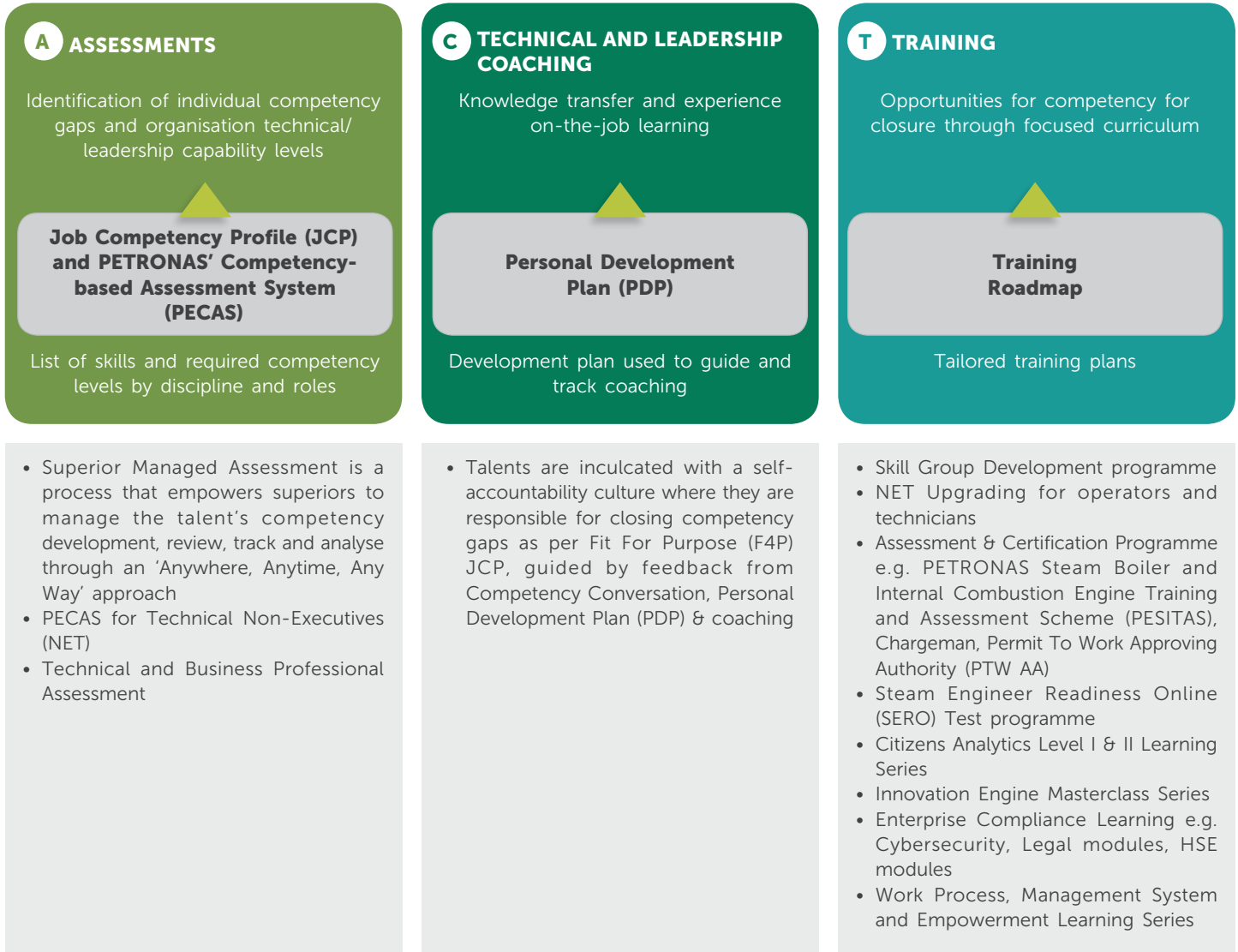
Our learning and development model for employees subscribe to a 70-20-10 Model, whereby 70% of talent development takes place through on-the-job developmental experiences, focused on the employee's current job and projects. 20% is through relationship-based developmental experiences such as coaching and mentoring, and the remainder 10% is through formal development activities, such as coursework and training. Our formal talent development programmes cover a broad range of learning and development areas anchored on Assessment, Coaching and Training (ACT). These include conceptual and skill-based development programmes, personal growth development programmes, feedback-based development interventions, and action-focused development interventions offered by our world-class technical and leadership training. We have a range of ACT programmes available across all organisation levels.

HOW DID WE CREATE VALUE

Talent Development Programmes

- Designed to enhance technical and leadership competency through skills and behaviours while anchoring on a blended and continuous just-in-time development approach that contributes to superior performance. ACT approach is based on three key building blocks leveraged on technologies and an emergent ecosystem.

TALENT DEVELOPMENT



- Established the Leadership Development in Action (LDA) for Potential Leaders, a structured programme for potential leaders to go through a defined period to get involved in cross-functional business routines. The programme was developed in collaboration with subject matter experts from manufacturing, commercial and strategy. Each participant will be assigned a coach to maximise their learning experience.
- Develop employees through the Innovation Engine (IE) Masterclass programme that aims to build a "Sustainable Culture of Innovation" by empowering employees with the right tools, capability and ecosystem to drive innovation forward. The goal is to enable the organisation to continuously create new opportunities and revenue streams to generate 30% revenue by 2030 from non-traditional business and net-zero carbon emissions by 2050.

WHAT WERE THE ACHIEVEMENTS?



>90% and >80% and Technical Professional (TP) and Technical Trade Specialist (TTS) positions filled (against 90% and 85% target).

42 employees attended the Innovation Engine Masterclass.

TALENT DEVELOPMENT

Indicators	2019	2020	2021
Average training per employee (man-days)	7.9	3.3	3.0
Training investment per employee (RM)	8,481	3,981	1,564
Success rate of Technical Professionals developed (%)	25	51	37
Total investment in employee training and development (RM million)	44.4	17.6*	6.9*

* Due to more online and e-learning training

Indicators		2019	2020	2021
Capability assessment (%)	Target	100	80	80
	Results	95	95	96
TPs developed (number)	Target	15	15	15
	Results	26	20	14
Ready talent to critical position (ratio)	Target (CCP)*	2.4:1	2.7:1	2.9:1
	Results (CCP)*	2.6:1	2.9:1	3.0:1
	Target (BCP)**	3.0:1	2.8:1	3.5:1
	Results (BCP)**	3.5:1	3.3:1	3.7:1

* CCP: Corporate Critical Position

** BCP: Business Critical Position



COMMUNITY ENGAGEMENT

WHY IS THIS IMPORTANT?

The beginnings of any community engagement require a lot of trust before achieving any growth or change. It is an acknowledgement of the communities in the areas where we operate and a chance to contribute to their well-being and empowerment. Additionally, our contributions reinforce our commitment to social development and corporate responsibility. To strengthen our sustainable social commitment towards the well-being of these societies, giving back to the community also means we can take an active role in community development, learn to work together and foster a sense of unity.

These Corporate Social Responsibility (CSR) programmes create value and sustainable impact, via effective partnerships and collaboration. It also provides community's insight into the efficient execution of key sustainability projects, such as the New Plastics Economy (NPE).

WHAT IS OUR APPROACH?

PCG's CSR programmes are devised with a lot of thought and intention, as we carefully make strategic investments when it comes to community projects. This is designed to support PCG's

sustainability agenda under the Social Responsibility focus areas. In our efforts to focus on key signature CSR programmes, we have streamlined our projects to align with PCG's business strategy.

Our community engagements adopt the three pillars of Yayasan PETRONAS CSR Framework: Education; Community Well-being & Development; and Environment. Collaborations and partnerships are instrumental in our approach, as this cannot be executed alone. Our strength is in the dedication of our team to create sustainable community solutions through ongoing, long-term interventions. PCG's community work aims to create value for all parties involved, including NGOs, collaborators, local government, and society. With that, employees are encouraged to take the initiative to participate in CSR programmes and contribute volunteer hours.

In 2019, we set a target to reach 100,000 community members cumulatively in the areas we operate in by 2024. We have achieved more than 385,000 community members within the first three years, exceeding the target. With the recent pandemic, giving back to the community has become more important. We are fortunate to be a part of the community with the ability to make a change and collectively lessen the burden together.



COMMUNITY ENGAGEMENT

PCG CSR Strategy

FOCUS AREAS	Environment	Community Well-being and Development	Education
OBJECTIVES	Better the environment through conservation, rehabilitation and preservation of the environment through education and awareness programmes.	Better the standards of living for communities in our area of operations through community health and safety improvement.	Sharing of knowledge on 3R and plastic education and the importance of sustainability in support of the New Plastics Economy.
PROGRAMMES	<p>NPE Clean Up Programme</p> <p>Be Green</p> <p>Forest Rehabilitation & Biodiversity Conservation Programme</p> <p>ecoCare</p>	<p>Safety Programme</p> <p>Safe Handling of Chemicals at School (SHOC4School)</p> <p>Community Relief Programme</p> <p>PCG COVID-19 Relief</p>	<p>NPE Education Programme</p> <p>Plastic, Sustainability & You Education (PSYE)</p>

HOW DID WE CREATE VALUE?

1 Education

- **Plastic, Sustainability & You Education (PSYE) Programme:** Conducted nine webinar sessions, involving 130,000 teachers, students, government officers, industry players, the public and internal PETRONAS employees nationwide. The webinars aim to support NPE and educate the audience on sustainability and responsible plastic management.

2 Community Well-being & Development

- **Safety Programme:** Delivered safety education via digital posters to secondary schools nationwide encouraging the safe handling of chemicals at school. It reached 2,400 schools, increasing the capabilities and skills in chemicals handling and first aid skills via Safe Handling of Chemicals for School Programme (SHOC4School).
- **PCG COVID-19 Relief Programme:** Executed the COVID-19 Relief Programme, a community relief drive at six PCG operation areas, focusing on the low-income group. The programme supports and eases the burden of the underprivileged affected by the Movement Control Order (MCO). The programme:
 - Benefitted 6,000 families.
 - Protected frontliners via the Frontliner Relief Package, which provided face masks, personal protective equipment (PPE), gloves and others.
 - Supported the national vaccination programme by lending logistical assistance to open a vaccination centre via the *Pusat Pemberian Vaksin* Relief Package.

3 Environment

- **PCG Be Green:** Implemented the digital Be Green education programme, and held a recycling competition at home. This initiative is to encourage community members to practise Reduce, Reuse and Recycle and support PCG’s overall business and NPE.
- **ecoCare:** Increased the total number of mangrove trees and seedlings planted via the planting and education programme. This initiative is to preserve the natural environmental landscape and encourage volunteerism for nature.

WHAT WERE THE ACHIEVEMENTS?

1,477.5kg total recyclable waste collected.

Reached ~295,000 people in 2021, with 18,000 people through the **COVID-19 Relief Programme**.

1,200 mangrove trees and 1,445 seedlings planted.

COMMUNITY ENGAGEMENT

Indicators	2019	2020	2021
CSR Spending – Community Investment (%)	15	30	39
CSR Spending – Commercial Initiatives (%)	20	15	6
CSR Spending – Charitable Donations (%)	65	55	55
Volunteer hours by employee	3,400	834.5*	732
Number of people reached**	20,000	~70,000	~295,000

* Revised due to adjusted hours from COVID-19 Relief Programme and Safety Programme

** Target cumulative number of people to be reached by 2024 is 1,000,000

ENHANCING SOCIAL WELL-BEING

The following table summarises our various community development projects:

Focus Areas	Activity	Timeline	Areas
Education	PSYE Karnival Sains Sabah	2021	Sabah
	PSYE Comms Academy	2021	Kuala Lumpur
	PSYE Teachers	Since 2019	Nationwide
	PSYE Secondary Students	Since 2019	Nationwide
	PSYE Primary Students	Since 2019	Nationwide
	PCG PSYE	2021	<ul style="list-style-type: none"> • Kuala Lumpur • Kertih • Kuantan • Gurun • Bintulu • Labuan • Sipitang • Pengerang
	PSYE Prime Minister's Office (PMO)	2021	Putrajaya
	PSYE PETRONAS Upstream	2021	Kuala Lumpur
	PSYE brief AFPI APF Regional Meeting	2021	<ul style="list-style-type: none"> • Bangladesh • China • India • Indonesia • Japan • Malaysia • Myanmar • Philippines • Singapore • Sri Lanka • Thailand • Vietnam
Community Well-being and Development	PCG COVID-19 Relief Programme	2020 – ongoing	<ul style="list-style-type: none"> • Kuantan • Kertih • Gurun • Bintulu • Labuan • Sipitang
	Safe Handling of Chemicals for School (SHOC4School)	2015 – ongoing	Nationwide
Environment	ecoCare Programme	2005 – ongoing	Kertih
	PCG Be Green	2013 – ongoing	Nationwide



STRENGTHENING ETHICS & INTEGRITY

Upholding the values of ethics and integrity comes with our commitment to our stakeholders. In a climate of increased regulations and public awareness, it is vital to have a clearly defined system of ethics and integrity to guide the way. The foundation of ethical behaviour helps create long-lasting positive effects for the business, fostering strong business relations and empowering employee productivity. This would then extend to attracting and retaining talented individuals to build and maintain a positive reputation among stakeholders. These standards are governed from the top-down. As the business is run ethically, creating stronger bonds between stakeholders and instilling stability within the company would invariably follow.

**Corporate
Governance**
100% Compliance to
operating laws and
regulations



CORPORATE GOVERNANCE



WHY IS THIS IMPORTANT?

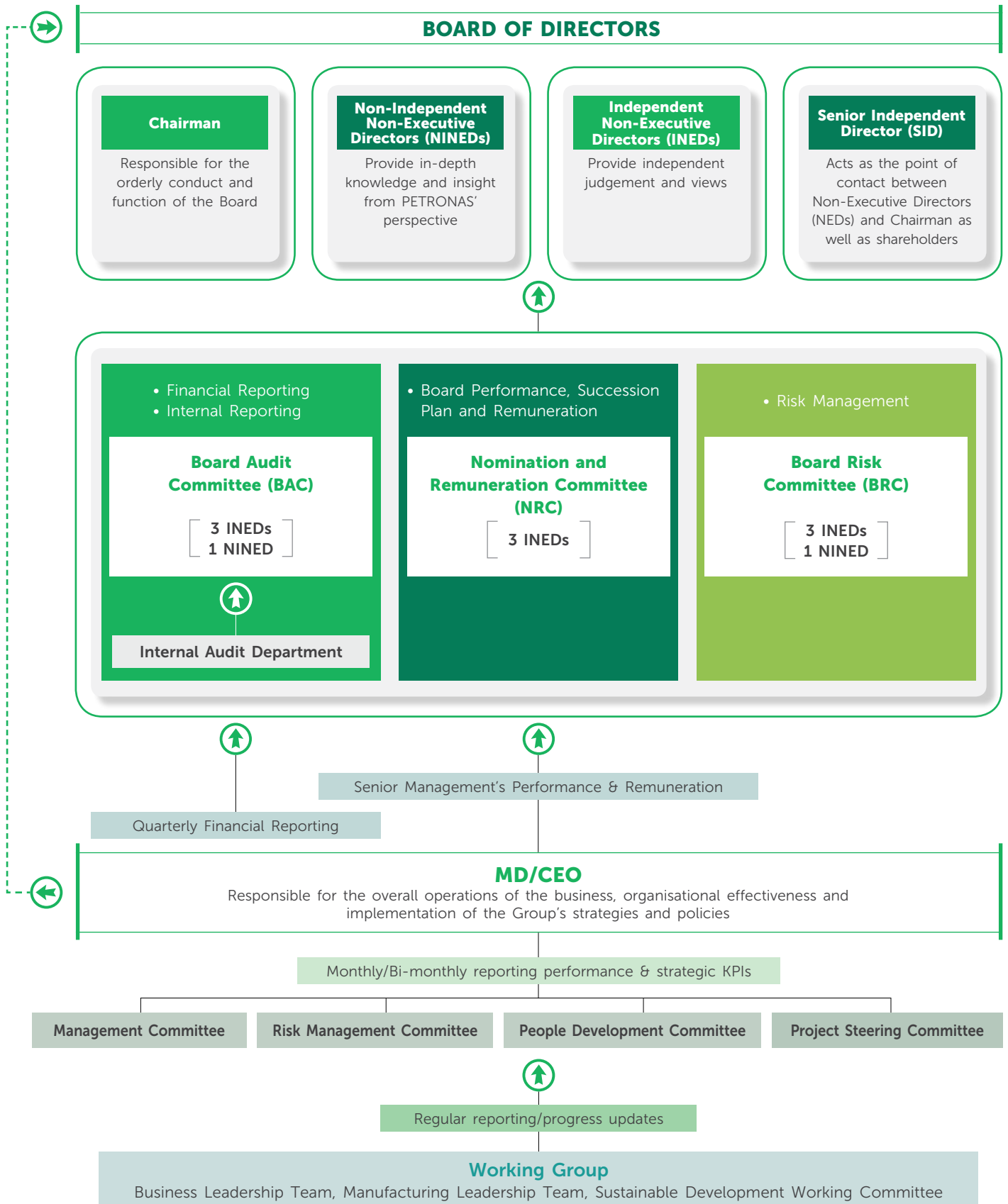
A strong governance system protects the interests of both the business and stakeholders. In PCG's commitment to a well-defined and effective system of governance, we maintain the highest level of business ethics and compliance. We need to build trust and communicate transparently with stakeholders, as integrity and trust in our company are critical to our business success. This enhances our credibility and company reputation, reinforces the confidence of our stakeholders in us, and ultimately allows us to effectively assess, adapt to and manage risks.

In ensuring we align with the best practices, we continue to strengthen our governance processes so that our approach to disclosure remains timely and transparent. A culture of transparency and responsible governance is central to sustainable growth. This encourages a high-performance work environment, resulting in efficient business plans and strategy execution. On the flip side, a breach in corporate governance, such as corruption and misconduct, would result in reputational damages, regulatory penalties or, at its worst, complete business closure.

WHAT IS OUR APPROACH?

PCG adheres to the Malaysian Code of Corporate Governance (MCCG), and subsequently to the relevant guidelines in other jurisdictions where we operate. Ensuring consistent compliance via the PETRONAS Integrity Compliance Framework, we conduct our business according to the PETRONAS Code of Conduct and Business Ethics (CoBE). Good governance from the Board is more than just strong leadership and guidance; it also ensures an ethical and transparent corporate culture across the business. Clear-eyed direction from the Board sets the right priorities, places the appropriate management team members in place, self-reflects on our progress, and regularly communicates with all our stakeholders. This has been particularly important in navigating the past two volatile years. Given that focus, the management team executes the strategy while managing risks. With that, we endeavour to increase the representation of Independent Directors of the Board to align with Practice 5.2 of MCCG.

CORPORATE GOVERNANCE



Decision-making process

CORPORATE GOVERNANCE

HOW DID WE CREATE VALUE

1 Corporate Governance Framework

- Enhanced our governance framework to support long-term value creation, which includes strategies on economic, environmental, social (EES) and governance considerations to strengthen the integration of sustainability in PCG's operations.
- Identified sustainable practices for PCG to become more resilient and create durable and sustainable value while maintaining the confidence of its stakeholders simultaneously.

2 Board Diversity & Competency

- Ensured an appropriate mix of diversity, skills and experience for the Board to discharge its responsibilities effectively. The Board comprises nine highly dedicated individuals from various nationalities, with various backgrounds and expertise with notable careers in their respective fields.
- Supported the country's aspirations of 30% female representation at the Director level, and remained committed to sourcing the right mix of talent, expertise and knowledge to strengthen the current membership.

3 Policies & Guidelines

- Continued to implement the following stringent policies and guidelines to uphold integrity and ethical practices:
 - PETRONAS Code of Conduct and Business Ethics (CoBE)
 - Provides policy statements on the standards of behaviour and ethical conduct expected of employees of the Group and others performing work or services for or on behalf of the Group.

- Anti-Bribery and Corruption Policy
 - Deals with improper solicitation, bribery and other corrupt activities that may arise in business.
- PETRONAS Whistleblowing Policy
 - Offers an avenue for employees and other stakeholders to safely report misconduct within the Group.
- Insider Trading
 - Prohibits the Board and Principal Officers from trading securities based on knowledge acquired under their positions. Directors and Principal Officers are also reminded not to deal in the company's shares when possessing price-sensitive information relating to the Group.
- PETRONAS Tenders & Contracts Administrative Manual
 - Conducts an independent review on evaluating bidders' proposals to ensure tendering activities are carried out based on technically acceptable and commercially attractive bids.
- Corporate Disclosure Guide
 - Describes the disclosures and conduct on the dissemination of information. The guidelines are based on the Bursa Malaysia's Main Market Listing Requirements (MMLR), promoting transparency and accountability in communicating and disseminating material information to the public.

WHAT WERE THE ACHIEVEMENTS?

22% of Board members comprising women.



Indicators	2021 Target	2021 Results	Mid-Term Target (2022-2026)
Number of internal audits conducted	14	14	16 (for 2022)
Compliance to operating laws and regulations (%)	100	100	100
Closure of audit issues as planned (%)	100	100	100

INDEPENDENT LIMITED ASSURANCE REPORT

TO THE MEMBERS OF PETRONAS CHEMICALS GROUP BERHAD

REGISTRATION NO: 199801003704 (459830-K)
(INCORPORATED IN MALAYSIA)

Independent Limited Assurance Report to PETRONAS Chemicals Group Berhad and its subsidiaries ("the Group") on the Selected Non-Financial Material Matters for the year ended 31 December 2021 as published in the Integrated Annual Report 2021

We, KPMG PLT ("KPMG"), were engaged by the Board of Directors of the Group to provide limited assurance on the Selected Non-Financial Material Matters, the ("Subject Matter"), listed below, for the year ended 31 December 2021 as published in the Integrated Annual Report 2021 ("the Report"), in the form of an independent limited assurance conclusion as to whether the Subject Matter is in all material respects in accordance with International <IR> Framework by the International Integrated Reporting Council ("IIRC") (hereafter known as the International <IR> Framework), as well as the Group's definition and calculation methodologies which are disclosed in the Report including any significant inherent limitations, the ("Applicable Criteria").

Subject Matter

The Selected Non-Financial Material Matters covered by our limited assurance engagement are:

- (i) Effluent Pollution Loading – Chemical Oxygen Demand ("COD");
- (ii) Greenhouse Gas Emissions Scope 1 & Scope 2;
- (iii) Lost Time Injury Frequency ("LTIF");
- (iv) Total Recordable Occupational Illness Frequency ("TROIF");
- (v) Total non-renewable energy consumption;
- (vi) Total weight of NOx and SOx emissions from the selected operating sites;
- (vii) Total municipal water supplies (or from other water utilities); and
- (viii) Tier 1 Process Safety Event ("T-1 PSE").

The boundary of the limited assurance engagement by KPMG represents the Group's operations at the Group level (located at PETRONAS Chemicals Group Berhad headquarters at PETRONAS Twin Tower 1, Kuala Lumpur City Centre) and two (2) of its wholly-owned subsidiaries being PETRONAS Chemicals Ammonia Sdn Bhd ("PC Ammonia") and PETRONAS Chemicals LDPE Sdn Bhd ("PC LDPE") located in Kertih, Terengganu (collectively known as the operating units or OPU) for the site level data testing, and the remaining to PETRONAS Chemicals Group Berhad's wholly-owned subsidiaries or OPU for the group level consolidated data testing.

Board of Directors and Management's Responsibilities

The Board of Directors and Management of the Group are responsible for the preparation and presentation of the Subject Matter in accordance with the Applicable Criteria, and the information and assertions contained within it; for determining the objectives in respect of sustainable development performance and reporting, including the identification of stakeholders and material issues; and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

The Board of Directors and Management of the Group are responsible for the prevention and detection of fraud and error mainly through the implementation and continued operation of an adequate system of internal control.

The Board of Directors and Management of the Group are also responsible for ensuring that staff involved with the preparation and presentation of the description of the Subject Matter and the Report are properly trained, information systems are properly updated and that any changes in reporting encompass all significant business units.

The Board of Directors and Management of the Group are responsible for disclosing to us their knowledge of: (i) known, actual or possible non-compliance with laws or regulations that have or may have a material effect on the Subject Matter and the Report; and (ii) allegations of or suspected fraud or dishonesty committed against the Group.

The Board of Directors and Management of the Group are responsible to make available to us draft the Subject Matter and the Report and any other information timely to facilitate the completion of the engagement within the required time frame.

The Board of Directors and Management of the Group are responsible for disclosing to us facts that may affect the Subject Matter and the Report, of which they may become aware during the period from the date of the assurance report to the date the Subject Matter and the Report are issued.

Our Responsibilities

Our responsibility is to carry out a limited assurance engagement and to express a limited assurance opinion based on the work performed and evidence obtained.

We conducted our engagement in accordance with International Standard on Assurance Engagements ("ISAE") 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information and ISAE 3410, Assurance Engagement on Greenhouse Gas Statements, as adopted by the Malaysian Institute of Accountants ("MIA"). ISAE 3000 (Revised) requires that we comply with the requirements of the By-Laws (On Professional Ethics, Conduct and Practice) of the MIA including independence, and implement quality control procedures that are applicable to the individual engagement in accordance with the requirements of International Standard on Quality Control ("ISQC") 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements* as adopted by the MIA and plan and perform our engagement to obtain limited assurance that nothing has come to our attention that causes us to believe that the Subject Matter, in all material respects, is not prepared in accordance with the Applicable Criteria.

INDEPENDENT LIMITED ASSURANCE REPORT

We have complied with the independence and other relevant ethical requirements of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (*including International Independence Standards*) ("IESBA Code"), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Those standards require that we comply with ethical requirements. We exercise professional judgement and maintain professional scepticism throughout the audit.

Procedures Performed

Our limited assurance engagement on the Subject Matter consists of making enquiries, primarily of persons responsible for the preparation of the Subject Matter presented in the Report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures included:

- Enquiries of management to gain an understanding of the processes for determining material issues for key stakeholder groups;
- Interviews with senior management and relevant staff at group level and selected business unit level concerning sustainability strategy and policies for material issues, and the implementation of these across the business;
- Interviews with relevant staff at the corporate and business unit level responsible for providing the Subject Matter in the Report;
- Interviews with sites, selected on the basis of a risk analysis including the consideration of both quantitative and qualitative criteria;
- Identify the risks of material misstatement of the Subject Matter and the Report, whether due to fraud or error, design and perform limited assurance procedures to address those risks, and obtain limited assurance evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the engagement in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- Compare the Subject Matter presented in the Report to corresponding information in the relevant underlying sources on a sample basis to determine whether all the relevant information has been appropriately included in the Report;
- Evaluate the Subject Matter presented in the Report to determine whether they are in line with our overall knowledge of, and experience with, the sustainability performance of the Group;
- Evaluate the remainder of the Report to determine whether there are any material misstatements of fact or material inconsistencies based on our understanding obtained as part of our assurance engagement.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Inherent Limitations

Due to the inherent limitations of any internal control structure it is possible that errors or irregularities in the information presented in the Report may occur and not be detected. Our engagement is not designed to detect all weaknesses in the internal controls over the preparation and presentation of the Report, as the engagement has not been performed continuously throughout the period and the procedures performed were undertaken on a test basis.

Conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Based on the limited assurance procedures performed and evidence obtained, as described above, nothing has come to our attention that would lead us to believe that the Subject Matter included in the Report of the Group for the year ended 31 December 2021, in all material respects, is not prepared in accordance with the Applicable Criteria.

Purpose of our report

In accordance with the terms of our engagement, this report on the Subject Matter has been prepared for the Group and for no other purpose or in any other context.

Restriction of use of our report

Our report should also not be regarded as suitable to be used or relied on by any party wishing to acquire rights against us other than PETRONAS Chemicals Group Berhad, for any purpose or in any other context. Any party other than PETRONAS Chemicals Group Berhad who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk. To the fullest extent permitted by law, we do not accept nor assume responsibility and deny any liability to any party other than PETRONAS Chemicals Group Berhad for our work, for this report, or for the conclusion we have reached.

Our report is released to PETRONAS Chemicals Group Berhad on the basis that it shall not be copied, referred to or disclosed, in whole (save for PETRONAS Chemicals Group Berhad's own internal purposes) or in part, without our prior written consent.



KPMG PLT (LLP0010081-LCA & AF 0758)
Chartered Accountants
Petaling Jaya,
4 March 2022

APPENDIX

EMPLOYEE DATA

Number of Employees

Indicator	2019	2020	2021
Total number of employees	4,424	4,714	4,585

Employees by Age Group

Indicator	2019	2020	2021
29 and below	490	798	439
30 – 39	2,142	2,180	2,276
40 – 49	1,286	1,253	1,386
50 – 59	491	452	434
60 and above	15	31	50

Employees Attrition and Turnover

Indicator	2019	2020	2021
Employee attrition rate (%)	3.3	3.0	5.9
Employee turnover rate (%)	0.7	0.8	1.9

Employee New Hire Rates by Gender

Indicator	2019	2020	2021
Female (%)	15.0	25.0	20.0
Male (%)	85.0	75.0	80.0

GLOSSARY OF TERMS, ABBREVIATIONS AND ACRONYMS

Abbreviation	Full Terms/Definitions	Abbreviation	Full Terms/Definitions
3R	Reduce, Reuse, Recycle	GRI	Global Reporting Initiative
AA	Advanced Analytic	HSE	Health, Safety and Environment
ABC	Anti-Bribery and Corruption	ICP	Internal Compliance Program
ACT	Assessment, Coaching and Training	IFA	International Fertilizer Association
AFPI	ASEAN Federation of Plastic Industries	INED	Independent Non-Executive Directors
APF	Asia Plastics Forum	IPCC	Intergovernmental Panel on Climate Change
APM	Asset Performance Management	IPIECA	International Petroleum Industry Environmental Conservation Associations
BAC	Board Audit Committee	IR	Industrial Relations
BCP	Business Critical Position	JCP	Job Competency Profile
Bio-MEG	Bio-Monoethylene Glycols	JVs	Joint ventures
BRC	Board Risk Committee	KASA	Ministry of Environment and Water
BoC	Balance of Consequences	KDPNHEP	Ministry of Domestic Trade and Consumer Affairs
CBAM	Carbon Border Adjustment Management	KIPC	Kertih Integrated Petrochemical Complex
CBS	Competency Bench Strength	KPIs	Key Performance Indicators
CCUS	Carbon Capture, Utilisation and Storage	LCA	Life Cycle Analysis
CE	Commercial Excellence	LDA	Leadership Development in Action
CIF	Cost, Insurance, Freight	LDAR	Leak Detection and Repair
CRP	Corporate Risk Profile	LTI	Lost Time Injury
CSS	Customer Satisfaction Survey	LTIF	Lost Time Injury Frequency
CCP	Corporate Critical Position	LRA	Legal & Regulatory Assessment
CG	Corporate Governance	LWP	Leave Without Pay
CO₂	Carbon Dioxide	MaSPA	Malaysia Sustainable Plastic Alliance
CO₂e	Carbon Dioxide equivalent	MC	Management Committee
CoBE	PETRONAS' Code of Conduct and Business Ethics	MCCG	Malaysian Code on Corporate Governance
COD	Chemical Oxygen Demand	MCF	Mandatory Control Framework
CoCHR	Contractors Code of Conduct on Human Rights	MCO	Movement Control Order
CIM	Chartered Institute of Marketing	MI	Methanol Institute
CRM	Customer Relationship Management	MITI	Ministry of International Trade and Industry
CSBIA	Cybersecurity Business Impact Assessment	MMLR	Main Market Listing Requirements
CSR	Corporate Social Responsibility	MoC	Management of Change
CWC	Chemical Weapons Convention	MOE	Ministry of Education
DJSI	Dow Jones Sustainability Indices	MPA	Malaysian Petrochemicals Association
ECSGF	Enterprise Cyber Security Governance Framework	MPC	Malaysian Productivity Centre
EES	Economic, Environmental and Social	MPMA	Malaysian Plastics Manufacturers Association
EMS	Environmental Management System	MSOSH	Malaysian Society for Occupational Safety & Health
F4P	Fit for Purpose	MTBE	Methyl Tertiary Butyl Ether
FMM	Federation of Malaysian Manufacturers	NADMA	National Disaster Management Agency
FIAM	Fertilizer Industry Association of Malaysia	NGO	Non-Governmental Organisation
FRP	Frontliner Relief Package	NINED	Non-Independent Non-Executive Director
FAQ	Frequently Asked Questions	NOx	Nitrogen Oxide
FTSE4Good	Index Series designed to measure the performance of companies demonstrating strong ESG practices	NPE	New Plastics Economy
GHG	Greenhouse Gas	NRC	Nomination and Remuneration Committee
GJ	Gigajoule		



GLOSSARY OF TERMS, ABBREVIATIONS AND ACRONYMS

Abbreviation	Full Terms/Definations
NZCE	Net Zero Carbon Emissions
OE	Operational Excellence
OE R2	Operational Excellence Result 2
OFR	Order Fulfilment Reliability
OHSMS	Occupational Health and Safety Management Systems
OP	Operating Procedure
OPU	Operating Plant Unit
OSH	Occupational Safety & Health
PC ASB/ PC Ammonia	PETRONAS Chemicals Ammonia Sdn Bhd
PC Aromatics	PETRONAS Chemicals Aromatics Sdn Bhd
PC DSB/ PC Derivatives	PETRONAS Chemicals Derivatives Sdn Bhd
PC ESB/ PC Ethylene	PETRONAS Chemicals Ethylene Sdn Bhd
PC FKS/ PC Fertiliser Kedah	PETRONAS Chemicals Fertiliser Kedah Sdn Bhd
PC FSS/ PC Fertiliser Sabah	PETRONAS Chemicals Fertiliser Sabah Sdn Bhd
PC GSB/ PC Glycols	PETRONAS Chemicals Glycols Sdn Bhd
PC LDPE/ PC LDPE	PETRONAS Chemicals LDPE Sdn Bhd
PC MSB/ PC Methanol	PETRONAS Chemicals Methanol Sdn Bhd
PC MTBESB	PETRONAS Chemicals MTBE Sdn Bhd
PC OSB/ PC Olefins	PETRONAS Chemicals Olefins Sdn Bhd
PC PSB/ PC Polyethylene	PETRONAS Chemicals Polyethylene Sdn Bhd
PCG or the Group	PETRONAS Chemicals Group Berhad
PEMSB	Polyethylene Malaysia Sdn Bhd
PCC	PETRONAS Carbon Commitments
PCG or the Group	PETRONAS Chemicals Group Berhad
PDP	Personal Development Plan
PECAS	PETRONAS' Competency-based Assessment System
PESITAS	PETRONAS Steam Boiler and Internal Combustion Engine Training and Assessment Scheme
PET	Polyethylene Terephthalate

Abbreviation	Full Terms/Definations
PIVOT	PETRONAS Integrated Vision for Operational Excellence Transformation
PL	Potential Leaders
PLWN	PETRONAS Leading Women Network
POINT	Plant Operations Integrated Tools
PPRT	Pandemic Preparedness Response Team
PPVRP	Pusat Pemberian Vaksin Relief Package
PSYE	'Plastic, Sustainability & You' Education
PTW AA	Permit To Work Approving Authority
PTCAM	PETRONAS Tender and Contracts Administrative Manual
PU	Plant Utilisation
QMS	Quality Management System
R&D	Research & Development
R&T	Research & Technology
RM	Ringgit Malaysia
RoSPA	Royal Society for the Prevention of Accidents
RTOG	Road Transport Operational Guidelines
SDGs	Sustainable Development Goals
SDS (1)	Safety Data Sheets
SDS (2)	Sustainable Development Scenario
STEPS	Stated Policies Scenario
SDWC	Sustainable Development Working Committee
SID	Senior Independent Director
SERO	Steam Engineer Readiness Online
SMEs	Small and Medium-sized Enterprises
SOPs	Standard Operating Procedures
SOx	Sulphur Oxide
SRA	Social Risk Assessment
SWCorp	Solid Waste Management and Public Cleansing Corporation
tCO₂e	Tonnes of CO ₂ equivalent
TP	Technical Professionals
TCFD	Task Force on Climate-related Financial Disclosures
TROIF	Total Recordable Occupational Illness Frequency
TTS	Technical Trade Specialist
tpa	Tonnes per annum
TRCF	Total Recordable Case Frequencies
TVAR	Total Vehicle Accident Rate
UN	United Nations
UHPM	Ultra-High Purity Methanol
VDP	Vendor Development Programme
WAPS	Guidelines on Water Practices

GLOBAL REPORTING INITIATIVE (GRI) CONTENT INDEX

The PCG's 2021 Sustainability Report has been prepared in accordance to the GRI Sustainability Reporting Guidelines: Core Option. The following table presents the GRI Content Index for the period of 1 January 2021 to 31 December 2021.

GRI Standards	Brief Description of the Disclosures	Brief Information on Key Disclosures, Reference	Page Numbers
ORGANISATIONAL PROFILE			
GRI 2: General Disclosures 2021	2-1 Organisational details	PETRONAS Chemicals Group Berhad (PCG)	9
	2-2 Entities included in the organisation's sustainability reporting	All entities are covered by the report in our GFR Financial Statements	refer to GFR
	2-3 Reporting period, frequency and contact point	1 January 2021 to 31 December 2021, unless stated otherwise	6
	2-4 Restatements of information	PCG conducted a materiality assessment during the reporting year, resulting in a change in material matters	20-21
	2-5 External assurance	Independent Assurance The authenticity of this report was verified by an external auditor, KPMG	6 & 77-78
	2-6 Activities, value chain and other business relationships	Overview of PCG – What We Do	10-15
	2-7 Employees	Appendix: Employee Data – Number of Employees	79
	2-8 Workers who are not employees	PCG has a strong network of suppliers (1,607 total)	45
	2-9 Governance structure and composition	Governance Structure	28-29
	2-13 Delegation of responsibility for managing impacts	Governance Structure	29
STRATEGY			
2-14 Role of the highest governance body in sustainability reporting	Governance Structure	28-29	
STAKEHOLDER ENGAGEMENT			
2-29 Approach to stakeholder engagement	Sustainability @ PCG – Stakeholder Engagement	16-19	
2-30 Collective bargaining agreement	Human Rights 75.0% of union members out of total support staff	63	

GLOBAL REPORTING INITIATIVE (GRI) CONTENT INDEX

TOPIC-SPECIFIC DISCLOSURES

GRI Standards	Brief Description of the Disclosures	Brief Information on Key Disclosures, Reference	Page Number
Material Matters – Innovation & Product Stewardship			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	22-23
	3-3 Evaluation of the Management of material topics	Catalysing Economic Performance – <i>Innovation & Product Stewardship</i>	39-41
GRI 417: Marketing and Labelling 2016	417-1 Requirements for product and service information and labelling	We deliver innovative product solutions that meet the regulatory requirements and international safety/quality standards.	39-41
Material Matters – Customer Relationship Management			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	22-23
	3-3 Evaluation of the Management of material topics	Catalysing Economic Performance – <i>Customer Relationship Management</i>	42-43
Material Matters – Supply Chain Management			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	22-23
	3-3 Evaluation of the Management of material topics	Catalysing Economic Performance – <i>Supply Chain Management</i>	44-45
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	63% of total procurement spending is distributed to local suppliers.	45
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	All contractors must meet our robust safety, technical environmental and CoBE requirements.	45
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risks for incidents of forced or compulsory labour	We conduct human rights assessments for our suppliers based on PETRONAS Contractors Code of Conduct on Human Rights.	44-45
Material Matters – Cybersecurity & Digitalisation			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	22-23
	3-3 Evaluation of the Management of material topics	Catalysing Economic Performance – <i>Cybersecurity & Digitalisation</i>	46-47
Material Matters – Strategy Purpose & Financial Resilience			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	22-23
	3-3 Evaluation of the Management of material topics	Catalysing Economic Performance – <i>Strategy Purpose & Financial Resilience</i>	48
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Catalysing Economic Performance – <i>Strategy Purpose & Financial Resilience</i>	48

GLOBAL REPORTING INITIATIVE (GRI) CONTENT INDEX

GRI Standards	Brief Description of the Disclosures	Brief Information on Key Disclosures, Reference	Page Number
Material Matters – Climate Change			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Contributing to the Green Agenda – <i>Climate Change</i>	50-54
GRI 302: Energy 2016	302-1 Energy consumption within the organisation	Contributing to the Green Agenda – <i>Climate Change</i> 102.27 million GJ energy consumed	37
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Contributing to the Green Agenda – <i>Climate Change</i> 5.67 million tonne CO ₂ e	54
	305-2 Energy indirect (Scope 2) GHG emissions	Contributing to the Green Agenda – <i>Climate Change</i> 1.33 million tonne CO ₂ e	54
	305-5 Reduction of GHG emissions	1.4% reduction in total GHG emissions from 2020	54
Material Matters – New Plastics Economy			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Contributing to the Green Agenda – <i>New Plastics Economy</i>	55-56
Material Matters – Environmental Stewardship			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Contributing to the Green Agenda – <i>Environmental Stewardship</i>	57-59



GLOBAL REPORTING INITIATIVE (GRI) CONTENT INDEX

GRI Standards	Brief Description of the Disclosures	Brief Information on Key Disclosures, Reference	Page Number
Material Matters – Human Rights			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Empowering People & Communities – <i>Human Rights</i>	61-63
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	1.9% employee turnover rates, with 20% of new hires being women	79
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Empowering People & Communities – <i>Human Rights</i>	62
	401-3 Parental leave	Empowering People & Communities – <i>Human Rights</i> 66 female and 375 male employees took parental leave with 100% return of work rates after parental leave	62-63
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Empowering People & Communities – <i>Human Rights</i> 22.2% of our Board members and 18.2% of senior management roles are women	63
Material Matters – Workplace and Occupational Safety & Health (OSH)			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Empowering People & Communities – <i>Workplace and Occupational Safety & Health (OSH)</i>	64-66
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Empowering People & Communities – <i>Workplace and Occupational Safety & Health (OSH)</i>	64-65
	403-8 Workers covered by an occupational health and safety management system	We prioritise the health and safety of our staff, contractors and customers, in the conduct of our business, with the stringent Health, Safety and Environment (HSE) framework in place	64-65
	403-9 Work-related injuries	During the year, zero fatality cases were recorded with two (2) LTI cases	66

GLOBAL REPORTING INITIATIVE (GRI) CONTENT INDEX

GRI Standards	Brief Description of the Disclosures	Brief Information on Key Disclosures, Reference	Page Number
Material Matters – Talent Development			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Empowering People & Communities – Talent Development	67-69
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Average hours of training per employee, 3.0 training days per employee times 8 hours=24 training hours	69
	404-2 Programmes for upgrading employee skills and transition assistance programmes	PCG has a range of Talent Development Programmes designed to upskill and develop its employees	67-68
	404-3 Percentage of employees receiving regular performance and career development reviews	As of 31 December 2021, 96% of PCG employees received their capability assessments, against an 80% target	69
Material Matters – Community Engagement			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Empowering People & Communities – Community Engagement	70-72
GRI 203: Indirect Economic Impacts 2016	203-2 Significant indirect economic impacts	Empowering People & Communities – Community Engagement Over 295,000 community members reached through our CSR programmes in 2021	71-72
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programmes	Under Yayasan PETRONAS CSR Strategic Framework, we engaged with local communities through numerous programmes held in 2021	70-72
Material Matters – Corporate Governance			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Material Matters – Materiality Methodology & Materiality Matrix	20-21
	3-2 List of material topics	Material Matters	24-25
	3-3 Evaluation of the Management of material topics	Strengthening Ethics & Integrity – Corporate Governance	74-76
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Our Code of Conduct and Business Ethics (CoBE) and Anti-Bribery and Corruption Policy provide guidance concerning bribery and corruption	74-76

PCG's Sustainability Report 2021 has been produced in line with our theme: **Sustainability at the Core**. Every decision made during publication had to consider its environmental impact. From the materials used and acquired to the design conception and production; everything is intentional.

OPTIMAL PRODUCTION

- Ensuring the production and printing of all reports follow the FSC certified chain of custody. Optimised the use of ink, with one primary colour for each book.
- Combined the Governance section into the IR to reduce the usage of 4c print for the Financial Report.
- Printed on FSC® certified Xtella Brilliant White 256 gsm paper for the cover, while inside pages are printed on FSC® certified Xtella Brilliant White 128 gsm paper.
- Used soy-based ink for a more sustainable approach.



PRINTED SUSTAINABLY

Produced the full report with carbon neutral press machines and eco-friendly materials certified with an ISO 14001 environmental management system in line with minimising environmental impact.



CONCISE LANGUAGE

Encapsulating concepts in a concise yet articulate manner, focusing on the presentation of the content beyond just words.



MINIMALIST PRESENTATION

Exhibiting the entirety of the report in a straightforward and structured package, with unfussy design elements.



SIMPLICITY IN DESIGN

Replacing full-scale photographic images with other graphic representations such as graphs, charts and diagrams.



PETRONAS Chemicals Group Berhad

Tower 1 PETRONAS Twin Towers

Kuala Lumpur City Centre

50088 Kuala Lumpur Malaysia

Tel : +603 2051 5000

Fax : +603 2051 3888

www.petronaschemicals.com