



TAKING ACTION TODAY, BUILDING FOR TOMORROW

Ir. Mohd Yusri Mohamed Yusof Managing Director/





I am pleased to report that PCG has produced a commendable set of results as we remained resolute in delivering our value creation objectives while charting sustainable growth trajectories.

In the first half of 2022, crude oil and petrochemical prices remained at elevated levels following a sharp rise in prices as the Russia-Ukraine conflict created immense uncertainty in energy and commodity markets. As the crisis dragged on, importers scrambled to find alternative sources to Russian oil following embargoes implemented by the European Union and the United States. China's persistent zero-COVID policy also added another element of uncertainty as the lockdowns weighed on consumer demand. For most of 2022, average prices of ammonia and urea were at premium levels whereas

prices of other chemicals were comparable to 2021. However, the prices of derivatives and other downstream products were pressured by the high costs of feedstock amid softened demand. With higher cost of operations stemming from increased costs of feedstock, energy and logistics, the industry was faced with compressed margins.

In the year under review, we demonstrated operational resilience through stable utilisation rates. Despite heavy turnaround activities in the first half of the year, production and sales volume were comparable to the previous year. Underpinned by higher product prices, we produced a solid financial performance which provided a strong base for our growth initiatives.

Against this backdrop, PCG delivered a solid performance in 2022, with Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA) of RM8.1 billion.

We also progressed further in our Sustainability Agenda, forging new strategic partnerships focused on the circular economy that augur well for the Company as they will help us advance our low-carbon ambitions. Finally, PCG was able to realise a key growth objective with the landmark acquisition of Perstorp Group, a leading sustainability-driven company based in Sweden, which has now positioned us strongly in the specialty chemicals arena, essentially paving the way for PCG to move to the next stage of its growth journey.

DELIVERING ON OUR STRATEGY

Guided by PCG's Two-Pronged Strategy, we have continued to create meaningful and sustainable value for all our stakeholders. This strategy is underpinned by three strategic thrusts, namely Operational Excellence, Commercial Excellence and Growth Delivery Excellence. These thrusts represent PCG's mindset and approach to value creation. We are committed to ensuring a strong operational platform, generating and maximising revenue potential within existing businesses and then capitalising on new opportunities to diversify into other areas such as derivatives and specialty chemicals.

In 2022, the landmark acquisition of Perstorp Group marked a major milestone for PCG in establishing a key platform to diversify into specialty chemicals and capture new growth opportunities, while enabling us to future-proof our business against market cyclicality and volatility. It has also elevated our own sustainability journey, which will enhance our value creation abilities and catalyse PCG's growth.

OPERATIONAL EXCELLENCE

At PCG, we are committed to Operational Excellence as it is the core enabler of our business. This starts with our people, by making sure we prioritise their health and safety as it is key to improved plant reliability and performance. We advocate a strong generative HSE culture that instils discipline in compliance and promotes greater awareness. In 2022, our efforts resulted in ZERO Fatality, ZERO Major Fire and a better Lost Time Injury Frequency (LTIF) of 0.17 in comparison to the industry average of 0.22, as recorded by the International Association of Oil & Gas Producers (IOGP).

In demonstrating our commitment to HSE Excellence, we continue to strengthen our efforts to further enhance our HSE practices. For example, Focused Learning sessions were conducted for specific groups on lessons learnt based on past HSE incidents and the implementation of HSE best practices, especially during turnaround activities such as the usage of the artificial intelligence surveillance camera and drones. Efforts to strengthen HSE compliance among staff and contractors via continuous surveillance and campaigns will continue into 2023 to meet the aspiration of 'Strive for ZERO, ZERO is Possible'.

Leadership Messages

MD/CEO'S REVIEW

MD/CEO'S REVIEW

In the first half of 2022, we successfully completed major turnaround activities for several plants. In total, four plants were shut down comprising two Olefins and Derivatives (O&D) plants in the first quarter followed by two Fertilisers and Methanol (F&M) plants in the second quarter. However, we experienced operational challenges at ASEAN Bintulu Fertilizer (ABF), PC Methanol and PC Aromatics during post-turnaround start-up which delayed the resumption of production. Despite the heavy turnaround activity and challenges, PCG successfully delivered production volumes of more than 10 million tonnes per annum (tpa) in 2022 from its Malaysia and international operations.

To ensure sustainable plant efficiency and reliability, we intensified the implementation of our equipment reliability strategy. Digital monitoring tools were used to enhance visibility of potential threats to our critical equipment. The overall reliability improvement programme is monitored by special working groups comprising experts from relevant disciplines.

DELIVERING VALUE

In delivering Commercial Excellence, we collaborated and worked closely with all stakeholders to optimise value creation and fulfil our customers' needs through what was a challenging year. In the year under review, customer orders were consistently and continuously fulfilled, despite the heavy turnaround activities. PCG recorded sales volume of 8.3 million tpa, comparable to the previous year.

PCG also remains committed to meeting the needs of our customers through new and enhanced products and solutions. In the year under review, we launched a more cost-effective fertiliser, i.e., Compacted NPK, which is mainly targeted at the palm oil sector. In addition, we launched a new polymer grade for roto mould application that is suitable for complex design for caps and closure producers.

This year, we started offering Roundtable on Sustainable Palm Oil (RSPO) Certified product, Fatty Alcohol Ethoxylates, thus enabling us to support customers in their sustainability journey through the provision of responsibly-sourced biobased feedstock.

DELIVERING GROWTH

We remain committed to staying on course with our growth ambition by extending our value chain and venturing into derivatives, specialty chemicals and solutions to future-proof the business against market cyclicality and volatility. While we had looked forward to the commencement of



petrochemical operations at the Pengerang Integrated Complex (PIC), we regret that it has been delayed due to a fire incident in October 2022 involving PIC's utilities interconnecting pipeline. Fortunately, there was no damage to our petrochemical facilities. However, the integrated nature of the whole complex necessitated a temporary shut down to ensure the well-being of our employees, workers and surrounding communities. The repair work began immediately and was completed in December 2022. We have gradually resumed the start-up of the petrochemical plants following complete rectification of the affected pipeline. We target to achieve commercial readiness in the second half of 2023.

In the year under review, we achieved Final Investment Decisions (FID) on two projects. The first is the development of a melamine plant within the PETRONAS Chemicals Fertiliser Kedah (PC FK) complex in Gurun, Kedah. Aimed to optimise value of the facility, the plant is expected to come onstream in 2024. With a capacity of 60,000 tpa, PCG will be the sole melamine producer in Southeast Asia, a market with healthy demand growth which currently imports all its melamine from China. Currently, the project is in its construction phase.

Our second FID is an expansion of the 2-Ethylhexanoic Acid (2-EHA) plant in Gebeng, Pahang through our JV company, BASF PETRONAS Chemicals Sdn. Bhd. (BPC). The annual production capacity of the plant will increase from 30,000

to 60,000 metric tonnes by 2024. 2-EHA is a chemical intermediate used as a compound in the production of synthetic lubricants as well as oil additives. The project is currently in the engineering stage, and it is progressing according to project milestones.

We also made progress in growing our specialty portfolio with the launching of BRB Group's new lube oil additives manufacturing facility at Echt, Netherlands. This facility will serve as a Lube Oil Additives and Chemicals (LAC) hub for PCG to serve the global market. BRB Group expanded its presence with the operationalisation of its South Korean subsidiary and plans to set up another in the United Kingdom. Closer to home, we continued to maximise the production of the new silicone blending facility in Gebeng, Pahang. BRB Group also obtained halal certification in 2022, a significant step forward in our ability to tap into the halal market, especially in the personal care segment which is growing strongly.

Perstorp Group, our latest acquisition, has an industry-leading sustainability strategy and is renowned for its Pro-Environment products and solutions that are used by and required for the sustainable transformation of many industries and end-products. Perstorp Group's holistic and innovative approach is to become Finite Material Neutral by switching to abundant and/or renewable resources or closing loops by recycling or reusing finite materials. These approaches are in line with PCG's goal to make positive environmental and social contributions and we are confident that together we can accelerate our sustainability journey towards a circular economy.

In creating optionality for growth through internal Research & Technology and corporate venture capital (CVC), our first Bio-Monoethylene Glycol (Bio-MEG) pilot plant is currently in operation with samples being processed further to achieve polyester-grade Bio-MEG. We have also made progress in the CVC space with the inking of a Distribution and Manufacturing Service Agreement with Anuvia, a start-up company with technology to convert organic waste to bio-waste chemical fertiliser.

ADVANCING SUSTAINABILITY

As we push ahead with our Sustainability Agenda, we are cognisant of the dynamic environment that requires us to adapt to evolving stakeholder expectations, a maturing sustainability landscape and growth in our business. This is why we enhanced our Sustainability Agenda in the year under review, to ensure that we continue to address all topics that are material to PCG, and more importantly our stakeholders.

The enhancements will create a more strategic and forward-looking approach within the Sustainability Agenda. The Risk Management Committee was restructured to the Sustainability and Risk Management Committee to effectively steer the implementation of the enhanced agenda.

In the year under review, we pursued a climate-focused agenda with our operational units implementing initiatives to realise our Net Zero Carbon Emissions (NZCE) 2050 Roadmap. As at end 2022, through various efforts such as process optimisation and catalyst upgrades, we have achieved a reduction of more than 108,000 tCO₂e. This has surpassed our short-term target of reducing our Scope 1 and Scope 2 GHG emissions by 100,000 tCO₂e by 2024.

We also published our first Task Force on Climate-Related Financial Disclosures (TCFD) standalone report which outlined our long-term climate-related risks and opportunities.

Our climate ambitions are further supported by our efforts in preserving the biodiversity, where we collaborate with the Malaysian Nature Society (MNS) in mangrove conservation. One of the activities conducted in 2022 was the monitoring of mammals and birds in the impact radius area, which found several species of mammals and birds that are part of the International Union for Conservation of Nature Red List.

Leadership Messages

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PCG is also closely monitoring climate risks that may impact our ability to create long-term value for our stakeholders. As climate change disrupts weather patterns, causing extreme weather events, there is increased risk of unpredictable water availability, contaminated water supplies and exacerbated water scarcity. As such, to address future water risks, we have piloted a project at our PC Methanol plant which has managed to reduce freshwater intake by 20%, with a target to reduce intake by more than 60% by 2027.

On the matter of plastic waste initiatives under PCG's New Plastics Economy (NPE) agenda, we continue to support the Malaysia Plastics Sustainability Roadmap 2021-2030. To accelerate our progress in this area, we established partnerships with both domestic and international organisations, which will also contribute to building long-term value from the transition towards a circular economy. In this context, PCG aspires to recover 100% of plastic waste equivalent to domestic polymer sales. Our efforts, which began in 2019, received a significant boost in 2022 with the signing of memoranda of understanding (MOU) with KDEB Waste Management, One Biosys Sdn. Bhd., Alam Flora Environmental Solutions Sdn. Bhd. (AFES) and E-Idaman to obtain plastic waste from these waste management companies.



This plastic waste will be reprocessed to produce circular polymers for food packaging, healthcare and industrial applications, thereby reducing the amount of plastic waste ending up in landfills. PCG also fosters collaborations to evaluate opportunities for the development of waste segregation facilities to improve plastic waste segregation. To further strengthen our efforts towards achieving circular economy, PCG signed an MOU with ExxonMobil to assess the potential for the industrial-scale implementation of advanced plastic recycling technology at a PETRONAS-owned facility.

In giving back to our communities, PCG activated its Community Relief Programmes targeting areas of our operations by contributing food aid to 1,450 B40 families as well as victims of climate-related disasters across selected regions in Malaysia.

We continuously strive to create a positive impact on the society and the environment by initiating community-driven programmes. This includes our Be Green programme, where we educate the public on responsible waste management, coupled with our Plastic, Sustainability & You module education series which has successfully reached over 300,000 stakeholders, including students as well as the community.

In addition, through SEEd.Lab, an end-to-end incubator programme powered by PETRONAS and Tata Consultancy Services (TCS), PCG has, jointly with other investors of the programme, contributed towards creating positive impacts on more than 13,000 lives through eight social enterprises, since its establishment in January 2020. The first of its kind in comprehensiveness in Malaysia, SEEd.Lab tackles social pain points by building self-sustaining social enterprises that forge solutions for specific beneficiaries within communities. Beyond monetary contributions, PCG helped SEEd.Lab's social enterprises by offering business and leadership mentorship.

Cognisant of the important role we play in helping to develop the nation's resources for the benefit of all stakeholders, we continue our collaboration with state governments where we have operations. In August 2022, Terengganu's state-owned company, Mentri Besar Trengganu (Incorporated) or MBI, signed a letter of expression with us and our partner, PCC SE, to acquire a 5% equity stake in our Oxyalkylates plant in Kerteh. In January 2023, we signed a Head of Agreement with the State of Sabah, through its wholly-owned company SMJ Sdn. Bhd. (SMJSB), to divest 25% of our subsidiary in Sabah, PETRONAS Chemicals Fertiliser Sabah Sdn. Bhd. (PC FSSB). These efforts represent our intention to work with the Terengganu and Sabah state governments to sustain and grow the petrochemicals business in their states

In 2022, we adopted a Diversity & Inclusion (D&I) framework that focuses on the four key areas of Gender, Multinational, Culture and Age to provide a foundation for a more diverse and inclusive environment. We believe that diverse ideas, views and backgrounds create a more progressive and creative work environment that delivers better outcomes.

OUTLOOK

The resilience of our operations and the dedication of our people will remain crucial as we move forward to collectively address global challenges. High inflation is expected to continue into 2023 which could decelerate economic activities, dampen demand growth and pressure energy prices.

The global economy is expected to rebound in 2024 as supply chains normalise, inflationary pressures ease and pro-growth policies and fiscal measures continue to be implemented. The long term demand for petrochemicals is anticipated to remain strong, driven by world population and economic growth. The long-term prospects of the specialty chemicals market remain bullish, riding on the wave of continued growth driven by Asia as the next key market for chemicals.

PCG looks forward to another exciting year despite these uncertainties. We will make every effort to sustain HSE Excellence and maintain our world-class plant performance while maximising the value of our sales towards sustaining the business. In terms of growth, we anticipate commercialising our investments in specialty ethoxylates & polyols and nitrile butadiene latex (NBL) plants by the end of 2023 as well as fully integrating Perstorp Group into our operations. We also look forward to the commercial operations of our petrochemical plants at PIC.

From a sustainability perspective, PCG is committed to ensuring that our business practices are in line with global EESG practices, especially as the regulations surrounding sustainability disclosures and commitments become increasingly more stringent. We will also continue pushing beyond what is outlined in our NZCE 2050 roadmap, where we have started mapping out our Scope 3 emissions. This will enable us to strategise on further emissions reduction opportunities and aid efforts to reduce our environmental impact. In tandem with this, we will be transitioning to equity-based accounting which will help to capture our emissions data more comprehensively. I am also excited about the technologies that we have gained as a result of the Perstorp Group acquisition which when applied, will be a great help going forward in significantly lowering overall carbon emissions intensity.



ACKNOWLEDGEMENTS

In closing, I would like to convey my sincere gratitude to all our stakeholders for their unwavering and tireless support, and our Board of Directors for their continued guidance. Most importantly, my deepest appreciation to the employees of PCG for rising up and delivering when it mattered most. Your hard work, sense of duty and diligent work ethic have been the key to our Company's success. I would also like to extend my appreciation to our shareholders for believing in our growth strategies and providing resounding support in the acquisition of Perstorp Group. I believe we can achieve what we have set out to do because with the strength of our mindsets and the determination to accomplish, we are undoubtedly **Transcending to the Next Level**.

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Managing Director/ Chief Executive Officer