Our Reference:- GSBG/CSDL/PCGB/ADMIN/COMM/CORR/2022/65

20 April 2022

Minority Shareholders Watch Group
Tingkat 11, Bangunan KWSP
No. 3 Changkat Raja Chulan
Off Jalan Raja Chulan
50200 Kuala Lumpur

Attention: Mr. Devanesan Evanson
Chief Executive Officer

Dear Mr Devanesan Evanson,

24TH ANNUAL GENERAL MEETING ("AGM") OF PETRONAS CHEMICALS GROUP BERHAD ("PCG" OR "THE COMPANY") TO BE HELD ON THURSDAY, 21 APRIL 2022

In reference to your letter dated 8 April 2022 on the above matter, we thank you for taking the time to send us the list of questions following your review of our Integrated Report 2021. The responses are provided below. The same will be included in our AGM agenda and will be made publicly available on our corporate website www.petronaschemicals.com from 20 April 2022.

OPERATIONAL & FINANCIAL MATTERS

1. **PCG posted record performance in FY2021 with revenue of RM23.025 billion (FY2020: RM14.26 billion) and net profit of RM7.34 billion (FY2020: RM1.63 billion), fueled by robust market demand and higher product selling prices.**

   (a) **In view of current challenges and market environment, will the Group be able to replicate similar performance in FY2022**

   The FY2021 financial performance was largely driven by the high petrochemical product prices amid strong demand and tight supply environment. The prices also typically move in tandem with crude oil prices, which are, in turn, affected by global economic and geopolitical conditions. These are external factors that may impact PCG's financial performance.

In FY2022, we will continue to focus our efforts on Operational Excellence, Commercial Excellence and Growth Delivery Excellence, all of which fall under the Economic pillar of our Sustainability Agenda. Our capable talents, effective management system and cost optimization are in place to ensure that we are able to maximise opportunities while navigating uncertainties to maintain our strength and resilience.

(b) Are the elevated product prices expected to continue in FY2022 based on the current supply and demand dynamics?

The elevated crude oil prices, combined with the continuous demand recovery for petrochemicals products have strengthened prices. We expect prices for FY2022 to moderate and we remain cautious of several risks such as, increased supply from new capacities and softening demand due to inflationary pressures, geopolitical risks and possible disruption of economic recovery.

2. Through its strategy, PCG aims to achieve 50% improvement in cash flow by 2025, 30% additional revenue from non-traditional business by 2030, and net-zero carbon emissions by 2050 (page 39 of Integrated Report 2021).

(a) Is PCG referring to operating cash flow or free cash flow? Though there are several ways of improving cash flow, what is the way that is being considered?

PCG aims to achieve 50% improvement in cash flow from operations.

We aim to improve cash flow through the following levers:

(i) Increase revenue through focus on operational excellence for higher production volume and commercial excellence via increase in sales volume at competitive pricing.

(ii) Optimise cost through:
- operational excellence by increasing efficiency & productivity;
- commercial excellence by optimising cost-to-serve to customers; and
- continuous cost management.

(iii) Improve working capital management by minimising inventory level at period end, efficient payment collection for trade receivables and timely payment to vendors etc.

(b) **What are the types of non-traditional business, and do they yield higher margin? What has been the achievements in this area to date?**

Non-traditional business includes derivatives and specialty chemicals which are new to our current portfolio. Specialty chemicals yield higher margins and are less affected by market cyclicality compared to commodity chemicals.

We have started our journey of derivatives and specialty chemicals portfolio through our assets in PETRONAS Chemicals Derivatives Sdn Bhd (PC Derivatives) and BASF PETRONAS Chemicals Sdn Bhd (BPC). We have expanded our portfolio with "extend value chain" projects such as specialty ethoxylates and polyols. We have also built a specialty platform through our acquisition of BRB International B.V. (BRB) via Da Vinci Group in 2019, a leading silicones and lube oil additives and chemicals producer.

These are among the growth projects we have embarked on to diversify our portfolio into specialty chemicals. We are in various stages of feasibility studies for several more investment opportunities which we shall announce in due course.

3. **PCG delivers innovative solutions, products and applications that bring added value to their business, resulting in a sales volume of 8.2 million tonnes per annum (tpa) in 2021. Despite volatile commodity prices impacting its costs and margins, it leveraged Enterprise Optimisation to maximise value creation and build resilience against price shocks (page 40 of IR2021).**

   In what ways has PCG leveraged Enterprise Optimisation to maximise value creation and build resilience against price shocks? To what extent can cost escalation be passed on to customers?

   Enterprise Optimisation enabled PCG to prioritise its product slate using contribution margin forecast model across PCG's integrated value chain based on the prevailing macroeconomic scenarios, commercial and technical considerations for a swift decision-making and to maximise value creation.

   Our product prices are benchmarked against prevailing market prices which generally move in tandem with crude oil prices.

   Our selling price includes costs that are directly related to service customers such as freight and packaging. PCG strives to optimise these costs to ensure the best value to customers.

4. **The Group is looking into technology that turns organic waste into sustainable, high-efficiency bio-waste chemical fertiliser. An example was a technology that produces bio-material from fungi. In the space of non-organic technology, it was exploring the conversion of waste plastic into road construction material (page 41 of IR2021)**

   What is the status of these research & technology (R&T) efforts? How likely is it that these research projects would be commercialised?

   One of our growth levers, Create Optionality for Growth, is on taking long-term bets in innovative and emerging technologies through Corporate Venture Capital (CVC) and internal Research & Technology (R&T).

   Under CVC, we are looking into several technologies such as the abovementioned projects. These projects are currently at the incubation stage i.e., validation of technology readiness, business feasibility, market demand and customer acceptance.

   Under R&T, both our bio-chemicals and bio-based specialty surfactant technology development are currently at pilot validation stage.

   These projects must meet our investment criteria in order to proceed to project execution and commercialisation.

   Any material investment decision shall be announced in accordance with the disclose guidelines.

5. **As the biggest producer of polymer resin in Southeast Asia, PCG is committed to accelerating the region's transition to a New Plastics Economy (NPE). This includes converting end-of-life plastic waste into pyrolysis oil, with a targeted end product of certified circular polymer resins (page 42 of IR2021).**

   When is the production of certified circular polymer resins targeted to roll out? Is the product expected to command high margin and which are the targeted industries?

   The New Plastic Economy Project is currently under Detailed Feasibility Study. We are working towards achieving Final Investment Decision (FID) by 2023. Based on the current timeline, the plant is expected to come on stream in the next three (3) years.

   With the increase in demand for these circular polymer grades, circular polymer resins are expected to command better margin compared to conventional non-circular grades. These resins are mainly targeted for consumer plastic packaging, healthcare, household and industrial goods applications.

6. **PCG will diversify and extend its downstream value chain by venturing into derivatives and specialty chemicals. With more specialty chemicals in its portfolio, PCG will continue to move into segments with higher growth potential and less volatility in relation to crude oil prices (page 81 of IR2021).**

   Currently, how many specialty products are in PCG portfolio and what were the revenue contribution of these products? What is the targeted share of Group revenue and timeline?

   Our specialty chemicals products are from PC Derivatives and BRB. On average, this portfolio contributes about 13% to PCG's revenue.

   We aspire to generate 30% additional revenue from the specialty chemicals portfolio by 2030.

7. **The coming onstream of Pengerang Integrated Complex (PIC) in Johor and silicone blending plant in Gebeng, Pahang will fuel PCG's growth and further expansions into derivatives and specialty chemicals (page 115 of IR2021).**

   How would PIC and the plant in Gebeng, Pahang expedite further expansions into derivatives and specialty chemicals in a big way? When will production in both projects roll out?

   Utilising naphtha at PIC is a strategic decision to reduce our dependency on gas. Molecules made available from the naphtha cracker will allow us to produce high value derivatives and expand further downstream, whilst pursuing our specialty chemicals agenda.

   For instance, unlike our current gas-based production, naphtha-derived feedstock in PIC provide the opportunity to produce downstream feedstocks such as butadiene and raffinate for further production into Nitrile Butadiene Latex (NBL) and Isononanol respectively. PIC is now in the final stages of start-up readiness and expected to start-up in second quarter of 2022.

   As part of BRB growth plan, we have invested in a new silicone blending facility in Gebeng, Pahang, bringing additional silicone product offerings such as silicone gum blend, silicone antifoam and silicone emulsion for use the personal care as well as food and beverage industries. The plant achieved commercial operation in December 2021.

SUSTAINABILITY MATTERS

1. **PCG's production volume declined from 10.7 million tpa in 2020 to 10.4 million tpa in 2021 (page 8 of IR 2021), while GHG emissions intensity increased to 0.67 tonne CO2 e/tonne in 2021 from 0.66 tonne CO2 e/tonne in 2020 (page 9 of IR 2021).**

   Why did GHG emissions intensity increase despite a lower production volume?

   GHG emissions intensity is measured as follows: Absolute GHG emissions ÷ Production Volume.

   In FY 2021, PCG recorded lower absolute GHG emissions of 7 million tonnes CO2e compared to 7.1 million tonnes CO2e in 2020.

   During the year, a higher number of plants underwent statutory turnaround and maintenance activities compared to 2020, resulting in lower production volume. As a result, the calculated GHG emissions intensity for 2021 increased.

2. **PCG has made a commitment to reach net-zero carbon emissions by 2050.**

   (a) **How much headway has the Group made in GHG reduction and carbon offsets?**

   PCG had set a target in 2018 for the reduction of 100,000 tonne of CO2e by 2024. As of end 2021, we have reached reduction of 80,000 CO2e.

   As part of our commitment to achieve Net Zero Carbon Emissions by 2050, PCG in 2021 has announced the reduction of 20% GHG emissions by 2030 in our journey towards net zero.

(b) **What is the status of achievement in planning to reach net-zero carbon emissions?**

In 2021 PCG has established a Net Zero Carbon Emissions roadmap to provide guidance on the selection of pathways for decarbonisation i.e., through operational optimisation, carbon capture and storage, energy-based offset and nature-based offset.

(i) Operational optimisation - continued efforts to improve energy efficiency and reduce operational GHG emissions through initiatives such as using higher efficiency catalyst and waste gas recovery towards flaring reduction.

(ii) Carbon capture and storage – potential projects are currently being evaluated with PETRONAS.

(iii) Energy-based offset - alternative cleaner energy supply and renewable energy options are currently being assessed at our operating facilities.

(iv) Forest-based offset - PCG is now part of the larger working group providing advice to the government towards establishing a forest-based carbon offset framework and certification in Malaysia.

3. **Customers are also becoming more environmentally conscious. They increasingly prioritise green and natural products, creating an opportunity for PCG to develop innovative sustainable solutions (page 39 of IR 2021).**

What is the headline KPIs, targets and achievements for developing green and natural products?

A key research and technology focus is to convert bio-mass into differentiated value-added chemicals. We continue to mature the conversion process for second-generation palm biomass into sustainable and cost-competitive chemicals.

Our most advanced project, bio-MEG has progressed to a pilot stage with first drop crude bio-MEG achieved in December 2021. With the completion of this technology validation stage, we are now working towards scaling up for commercial scale production.

We are also studying the feasibility of diversifying BRB's personal care portfolio to produce bio-based emollients from oil palm. The pilot plant at BRB is expected to start-up in 2022.
The above efforts are part of Growth Delivery Excellence targeting to achieve 30% revenue from non-traditional business by 2030.

CORPORATE GOVERNANCE MATTERS

1. **As of 31 December 2021, there were two women directors on the Board of PCG, constituting 25% of the Board's composition.**

   As such, the Company has departed from applying Practice 5.9 of Malaysian Code on Corporate Governance (MCCG) which encourages that the board comprise at least 30% women directors.

   The Board targets to apply this practice a year from now. It has identified a suitable woman candidate whose proposed appointment will go through the formal process of selection.

   Given that non-independent non-executive director Freida Amat had expressed her intention to not seek re-election at the forthcoming AGM, would this affect PCG's timeline for adopting Practice 5.9?

   The retirement of Puan Freida Amat does not affect PCG's timeline to adopt Practice 5.9 as we have factored this in our Board Succession Plan.

Should you require further clarification, please contact us at 03 2331 4981. We look forward to your presence at our upcoming virtual AGM on 21 April 2022. Thank you.

Yours faithfully
for **PETRONAS CHEMICALS GROUP BERHAD**

AZIRA MARINI AB RAHIM
Company Secretary

c.c. 1. YBhg Datuk Ir. (Dr.) Abdul Rahim Hashim
Chairman

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

3. Mr. Kang Shew Meng
Joint Company Secretary