Our Reference:- GL/GSBG/LST/ADMIN/COMM/CORR/2021/123

19 April 2021

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,

23rd ANNUAL GENERAL MEETING ("AGM") OF PETRONAS CHEMICALS GROUP BERHAD ("PCG" or "the Company") TO BE HELD ON 22 APRIL 2021

In reference to your letter dated 6 April 2021 on the above, we thank you for taking the time to send us the list of questions following your review of our Integrated Report 2020. 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 2021.

Operational & Financial Matters

1. **It was stated in the MD/CEO's Review, the crash in oil prices impacted the petrochemical industry, as petrochemical prices are strongly linked to the crude oil price (page 35 of Integrated Report (IR) 2020). In FY2020, the Group revenue decreased by 12% to RM14.4 billion, lower than the previous year, due to lower product prices (page 36 of IR 2020).**

   a) **The Group sales performance is highly correlated to global crude oil price movement, particularly for the Olefins and Derivatives segment, what is the Company's view on the outlook for petrochemical prices in 2021?**

      Since the second half of 2020, petrochemical product prices have improved due to economic recovery, improving manufacturing sector and higher crude oil prices.

      We expect average petrochemical product prices to be higher in FY2021 as compared to FY2020, supported by the overall stronger demand for chemicals amid continued economic recovery growth on the back of effective COVID-19 containment. However, we remain cautious on the outlook and proactively observe potential disruptions that could negatively impact global economy and business activities.

b) **Revenue from Olefins and Derivatives segment & Fertilisers and Methanol segment have declined by 17.6% and 13.8% respectively in FY2020 (page 116 of IR 2020). What are the Company's view on the recovery of sales volume and market demand for its products in 2021?**

FY2020 Group revenue decreased mainly due to lower petrochemical prices. As mentioned above, average petrochemical product prices have since shown strong recovery. We expect demand for our products to be robust in FY2021 and sales volume to be comparable to FY2020.

2. **In 2020, the Group achieved Final Investment Decisions on three projects, namely establishing a silicone blending facility in Gebeng, Pahang; expanding a Da Vinci Group plant in the Netherlands; and entering a partnership for liquid chemical distribution in Indonesia (Page 39 of IR 2020).**

   What is the status of each of these three projects? What are their respective contributions to the Group?

   - Da Vinci Group (DVG) expansion:
     (i) the silicone blending facility in Gebeng, Pahang is currently under construction and start-up is expected to be on time in the second half of 2021;
     (ii) expansion of Netherlands plant is also currently in the construction phase, targeted for start-up in the first half of 2022.

     These projects are estimated to increase DVG's future Earnings Before Interest, Tax, Depreciation & Amortisation (EBITDA) by 15%.
   - We entered into partnership with PT AKR Corporindo Tbk (PT AKR) in August 2020 through the formation of a joint venture company, PT Anugerah Kimia Indonesia, which was operationalised in the first quarter of 2021. This is a strategic partnership as the joint venture will give us greater market access in Indonesia via PT AKR's extensive distribution network across Java, Sumatra, Borneo and Sulawesi.

3. **In relation to its sustainability commitment, PCG is actively pursuing a bio-agenda for future growth. The Group is investing in the world's first direct conversion technology, from biomass to a renewable product (page 39 of IR 2020).**

   a) **What is the total investment cost for the bio-based chemical plant? When is it expected to come on stream?**

   The investment for the pilot plant to convert biomass to renewable product i.e., Bio-MEG, is estimated at RM50 million. The plant is targeted to come on stream in early 2022.

b) **What are the Group's objectives and plans for renewable products? Please elaborate further on the market opportunities for renewable products that would benefit the Group in the next 1-2 years.**

The global bio-based chemicals market is estimated to grow at a compounded annual growth rate of 16% to reach a market size of USD24 billion in 2025 (*(Source: Bio-based News 2017, Inkwood Research Press Release: Global Bio-Based Chemicals Market Forecast 2017-2025).*

Among the market opportunities that could benefit PCG are in personal care product application as well as bioplastics, particularly for packaging.

c) **What are the other initiatives in the pipeline to further promote the bio-agenda in FY2021?**

In promoting the bio-agenda, we are pursuing several opportunities to develop bio-based products that support a low carbon economy through in-house research as well as technology licensing. For instance, we are working on three (3) Research and Technology projects for the development of bio-based specialty chemicals for applications in personal care products.

4. **The Group will expand further in the downstream value chain by venturing into derivatives and specialty chemicals business (page 72 of IR 2020).**

a) **The Company has assessed 60 potential acquisition targets, and 5 specialty chemical companies were examined in FY2020 (page 92 of IR 2020). Please elaborate further on your evaluation of specialty chemicals investment opportunities. Have any targets been identified?**

We have a robust set of criteria for opportunity screening and due diligence process in assessing potential acquisition targets. This includes assessment on strategic fit, fair valuation, risk, potential value creation and post-acquisition plan.

In evaluating opportunities, we focus on eight (8) prioritised end-markets i.e., construction, paint & coatings, personal care, healthcare, food & nutraceuticals, electronics, automotive and oil & gas.

We are actively evaluating actionable acquisition targets to strengthen our specialty chemicals portfolio. Announcements of any acquisition transactions will be made by the Group when appropriate.

b) **How much of the current production volume and sales of the Group comprise specialty chemicals? What is the projected volume and sales for FY2021?**

In FY2020, specialty chemicals contributed to approximately 5% of PCG Group's production and sales volumes. The projected production and sales volumes for FY2021 are expected to be comparable to FY2020.

5. **The Group assessed its investments according to its near-term returns and its viability in the long run. Following this, it discontinued its butanediol and derivatives plant in Kuantan, Pahang; one of the complexes in the joint venture company, BASF PETRONAS Chemicals Sdn Bhd. The Group is confident that the plant's discontinuation will have long-term strategic benefits for all parties involved (Page 39 of IR 2020).**

   What are the implications and consequences from the plant's discontinuation? What are the long-term benefits for all parties involved?

   The decision to close the butanediol (BDO) plant will have long-term strategic benefits to BASF PETRONAS Chemicals Sdn Bhd (BPC) and its stakeholders, given the shift in business landscape as well as its unfavourable long-term prospect.

   The cessation is part of PCG's ongoing review of its product portfolio focusing on long term sustainable growth and strengthening PCG's strategy to focus more on high value chemicals portfolio. This is also aligned with the strategy undertaken by PCG's partner in BPC, i.e. BASF.

6. **The net share of loss arose from a portfolio rationalisation exercise at a butanediol (BDO) and derivatives plant at BASF PETRONAS Chemicals Sdn Bhd (BPC) in Kuantan, Pahang. Following the BDO plant's discontinuation, the Group expects stronger financial performance from BPC in the years to come (Page 44 of IR 2020).**

   a) **Is BPC expected to turn-around and register good profits in FY2021? What are the key drivers to turn it around?**

      We expect BPC's performance to improve in FY2021 in line with market recovery. Improvements in the manufacturing sector is expected to drive demand for acrylics and oxo-alcohols in FY2021.

   b) **There was an impairment charge and provisions of USD56 million (RM232 million) arising from the cessation of the butanediol and derivatives plant in FY2020 (Note 38, page 145 of Governance and Financial Report 2020). Will there be any further losses from this plant moving forward?**

      The amount mainly relates to asset write-off, provision for decommissioning and dismantling as well as personnel severance cost. Therefore, no further loss is expected from the cessation of the plant.

7. **The Group is committed to supporting PETRONAS' new goal of achieving net-zero carbon emissions by 2050. It strives to continuously reduce its footprint and play its part in combating climate change (Page 40 of IR 2020).**

   a) **What are the key indicators in striving to achieve net-zero carbon emissions? What is the current status?**

   Currently the key indicator towards achieving net-zero carbon emissions is the reduction in Greenhouse Gas (GHG) emissions for which our near-term goal is to reduce 100,000 tonne of carbon dioxide equivalent (CO_2e) emissions by 2024.

   Since 2018, we have reduced more than 50,000 tonne of CO_2e i.e., half of our target. Additionally, we are conducting feasibility studies to convert CO_2, bio-based feedstock and plastic waste into valuable chemicals and products. With these initiatives, we expected to meet our CO_2e emission reduction target.

   b) **What are the major initiatives in combating climate change and the key indicators and achievements?**

   Our major initiatives for climate change are currently on managing the emissions and energy consumption of our plants. These include:

   i. Replacement to a new generation of catalyst which reduces energy consumption in one of our plants in Kertih, Terengganu, where the key indicator is the percentage of reduction achieved. In 2020, we achieved 30% reduction in energy consumption.

   ii. Energy and Loss Management System: We have implemented several projects to optimize energy efficiency group-wide including plant air emission optimisation and waste gas recovery. Key indicators are Energy Intensity, where we have reduced our intensity by 11% since 2014 and Greenhouse gas Intensity which saw a 4% reduction since 2019.

   iii. Under the EcoCare programme, we have been actively planting mangrove trees along Kertih river. This is not just an initiative to monitor our emissions but also to protect our coastal areas against storms and floods. The key indicator for this programme is the number of trees planted, where we have planted more than 11,500 trees since 2014.

8. **Pengerang Integrated Complex (PIC) is targeted to start up in the second half of 2021. PIC will be a liquid-based production, taking feedstock from the naphtha cracker. This alternative reduces the Group's reliance on gas feedstock. With PIC, the Company expects to increase the effective production capacity up to 14.6 million tpa. (page 39 of IR 2020)**

   a) **There have been numerous delays in the start-up of PIC, will the on-going pandemic affect the scheduled commercial operation date? What is the overall project progress as of March 2021?**

   In addressing the pandemic situation, we have implemented strict Standard Operating Procedures (SOP) within the PIC area to minimise the risk of COVID-19.

   As of March 2021, construction of PIC is near completion at 99.9%. The targeted start-up date of the petrochemical facilities remains in the second half of 2021.

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b) **What benefits can accrue to the Group in taking feedstock from the naphtha cracker instead of relying on gas feedstock? To what extent will gas feedstock be replaced or reduced?**

There will be no replacement or reduction in feedstock for our current gas-based operations. Naphtha-based feedstock will be utilised in our new facilities in PIC to widen our product portfolio.

Having naphtha-based production capacity is a strategic decision to reduce our dependency on gas while allowing us to grow and provide us the opportunity to produce other products that are otherwise not available with gas-based plants. This includes feedstocks such as butadiene for our new joint venture project to produce Nitrile Butadiene Latex (NBL) and raffinate for our Isononanol plant in Pengerang. Molecules made available from the naphtha cracker will allow us to expand further downstream and pursue our specialty chemicals agenda.

Should you require further clarification, please contact the undersigned at +603-2331 1562. We look forward to your presence at our upcoming virtual AGM on 22 April 2021. Thank you.

Yours faithfully
for **PETRONAS CHEMICALS GROUP BERHAD**

Hasnizaini Mohd Zain
Company Secretary

c.c. 1. **YBhg Datuk Md Arif Mahmood**
Chairman
PETRONAS Chemicals Group Berhad

2. **YBhg Datuk Sazali Hamzah**
Managing Director/Chief Executive Officer
PETRONAS Chemicals Group Berhad

3. **Mr. Kang Shew Meng**
Joint Company Secretary
PETRONAS Chemicals Group Berhad