

The background is a deep blue gradient. On the right side, there are several overlapping geometric shapes: a large light blue triangle pointing downwards, and several smaller, semi-transparent hexagons and polygons in shades of blue and green. These shapes are interconnected by a network of thin lines and small dots, resembling a molecular or chemical structure. The overall aesthetic is modern and scientific.

# **PETRONAS CHEMICALS GROUP**

Corporate Presentation

**INVEST MALAYSIA UK**  
**13 - 16 June 2022**

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# PCG is a leading integrated chemicals player in the region

## QUICK FACTS

- 1** Started 1st plant in 1985, in Bintulu, Sarawak
- 2** Manufacturing and sales of a wide range of chemical products with current total production capacity of 12.8 million MTPA
- 3** Three major product segments consist of:
  - Olefins & Derivatives (4.9 million MTPA)
  - Fertilisers & Methanol (7.8 million MTPA)
  - Others
- 4** Made up of more than 50 subsidiaries, joint ventures and associated companies
- 5** Top 10 in FBM KLCI, FBM Emas Shariah and a 4th year constituent Bursa Malaysia FTSE4GOOD Index
- 6** Headquartered in the Kuala Lumpur, Malaysia
- 7** PCG is a constituent of key sustainability indices:
  - DJSI World
  - DJSI Emerging Market

## 3 MAJOR SEGMENTS

### Olefins & Derivatives

*Olefins, intermediate, basic and high performance chemicals, and polymer*

**4.9 million MTPA**

### Fertilisers & Methanol

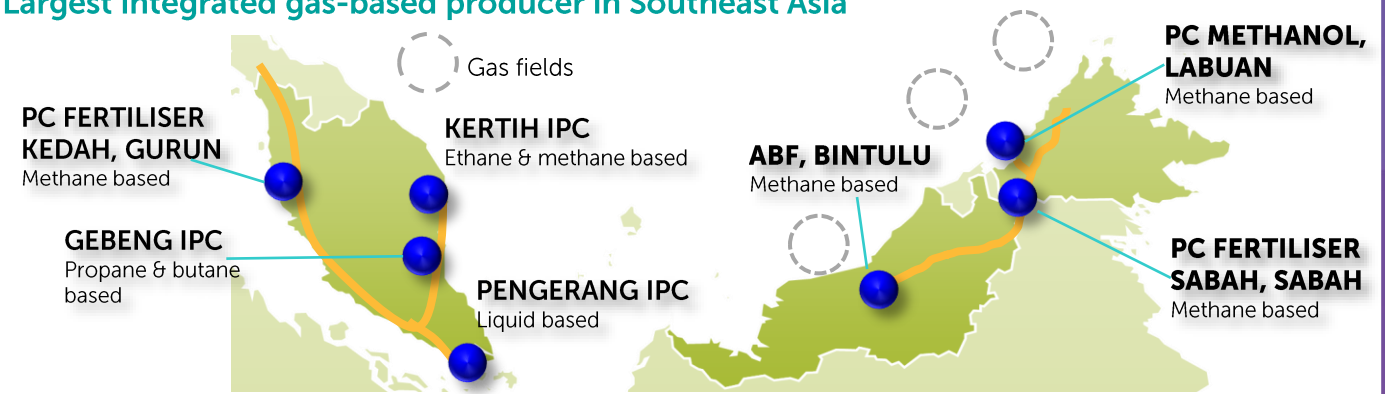
*Methanol and a range of nitrogen, phosphate and compound fertilisers*

**7.8 million MTPA**

### Others

*Operations related to investment holding company and port services and specialty chemicals such as the BRB Group*

## Largest integrated gas-based producer in Southeast Asia



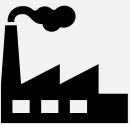
FULLY INTEGRATED FACILITIES AND INFRASTRUCTURE RESULTING IN LOWER COST, OPTIMUM YIELDS AND GREATER FLEXIBILITY

# Long term resilience proven by established business model and management strategy

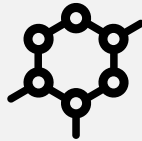
## COMPETITIVE ADVANTAGE



**Secure and competitive feedstock** supply



**Fully integrated** facilities and infrastructure



**Competitive world scale plants** with **diversified product portfolio**



Proximity to **key growth markets**



Portfolio expansion with **leading edge technology**



**Strong returns** and **capacity to fund growth**

### Operational Excellence

- **Safe operations** at a high level of productivity
- **Disciplined practices in HSE** & manufacturing program
- **Efficient** feedstock supply management

### Commercial Excellence

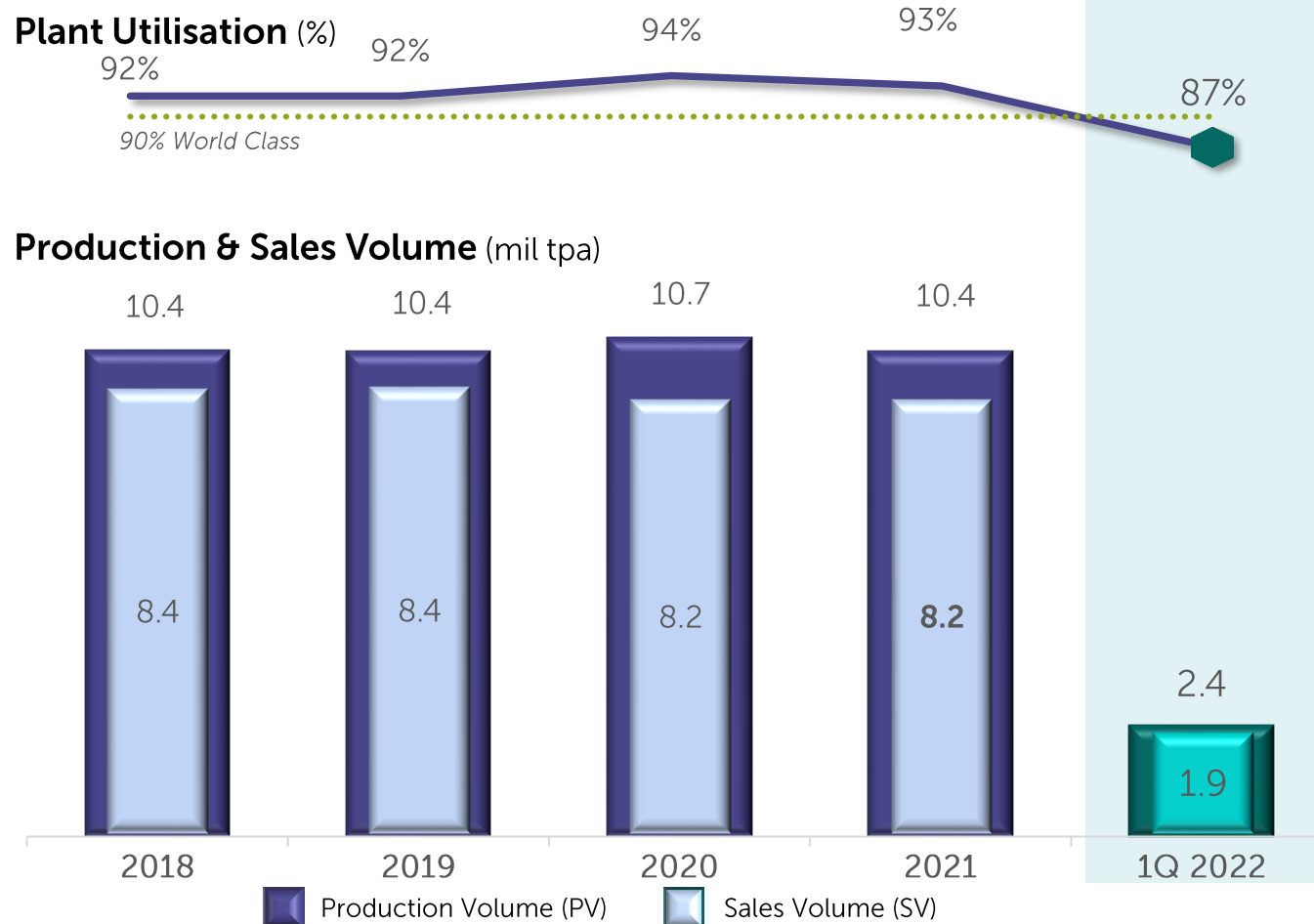
Additional value through competitive marketing, providing **innovative products and solutions** to create a **customer centric business**

### Growth Delivery Excellence

- **Capacity Growth and portfolio expansion** into derivatives and specialty chemicals
- Commitment to **sustainable investments**

# Operational Excellence initiatives have resulted in world class manufacturing capabilities amid heavy turn around

## OPERATIONAL PERFORMANCE

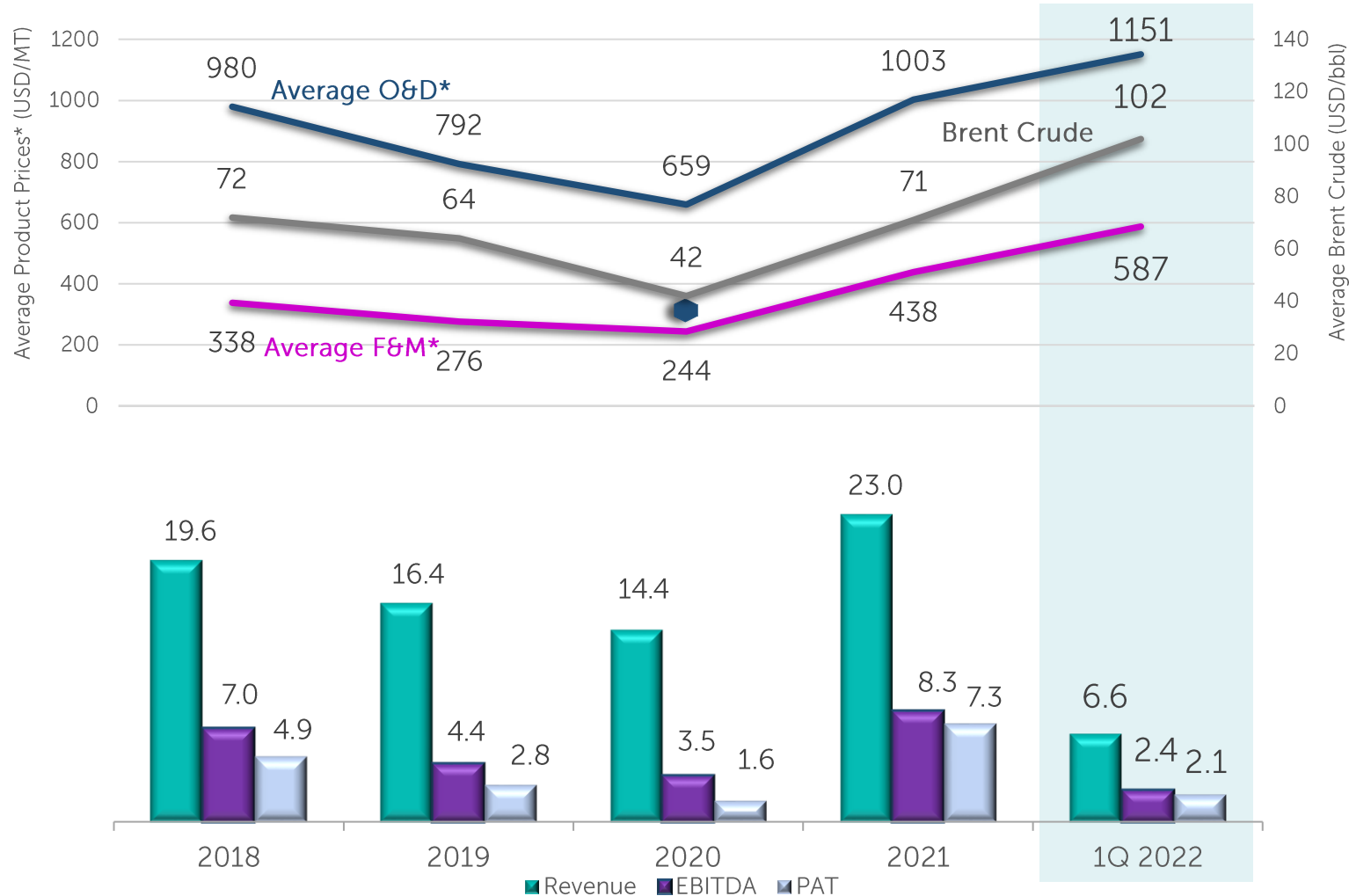


## Operational Excellence

- **Plant utilisation** is commendable despite heavy turnaround activities
- Sustainable operations with **stable feedstock supply** through close relationship with suppliers
- Improved earnings with **higher production efficiency**



# Robust planning and management of business operations result in profitability and stable financial performance despite market volatility and supply chain disruption



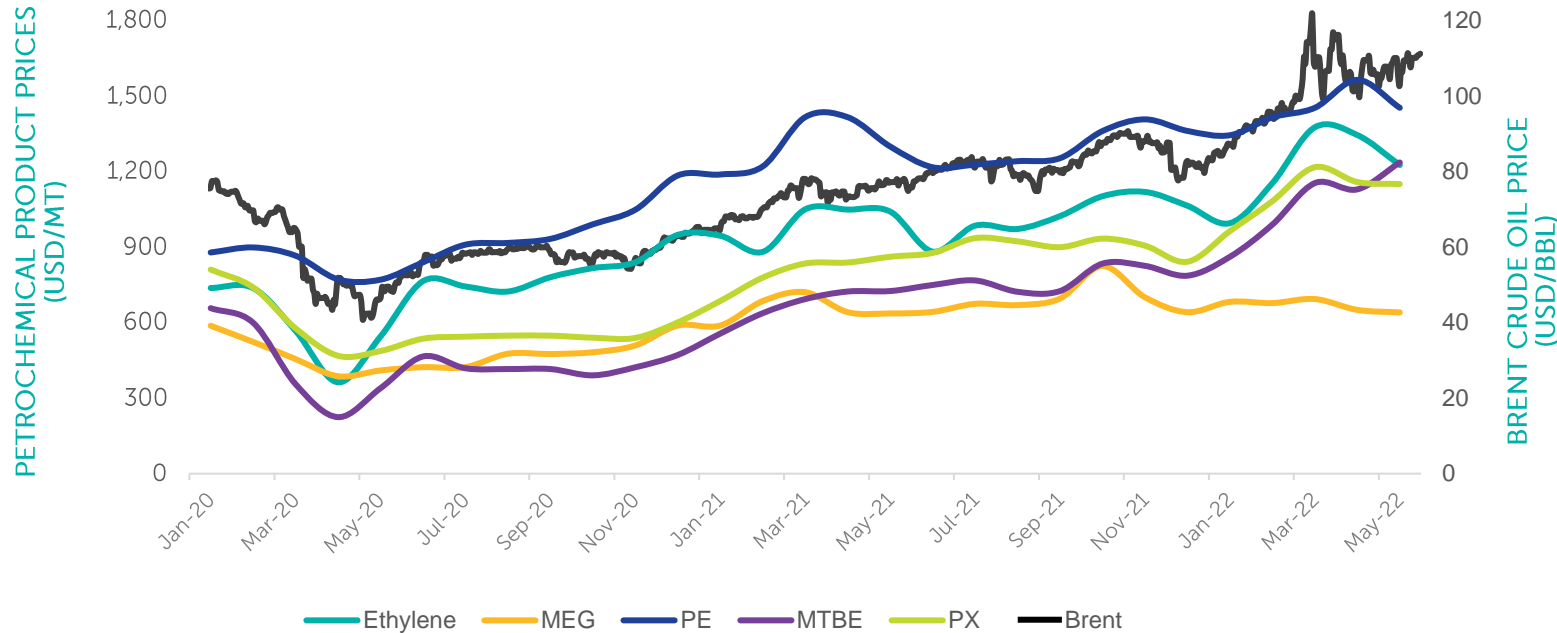
**Continued focus on executing growth strategy while maintaining financial fundamentals through:**

- Business growth
- Prioritised capital investment
- Cost discipline & optimisation
- Risk management & governance practice
- Inventory management
- Foreign exchange management
- Management of working capital & liquidity

**61%**

Dividend Pay-out Ratio for FY2021  
(FY2020: 59%)

# Olefins & Derivatives Outlook: Stable but feeling the impact of China's lockdown



## Immediate outlook:

**Ethylene** : Balanced supply with regional cracker TA in Q2, while demand is hampered by China's Zero COVID-19 Policy

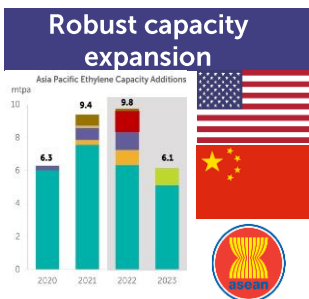
**MEG** : Balanced supply amid weak demand due to China's lockdown

**PE**: Limited supply due to prolonged logistic issues balanced by bearish demand following Ramadhan month and Eid

**MTBE**: Stable, tracking the crude oil and gasoline prices.

**Paraxylene**: Limited supply due to plant TA amid slow demand following downstream PTA plant TA

## Long term factors:

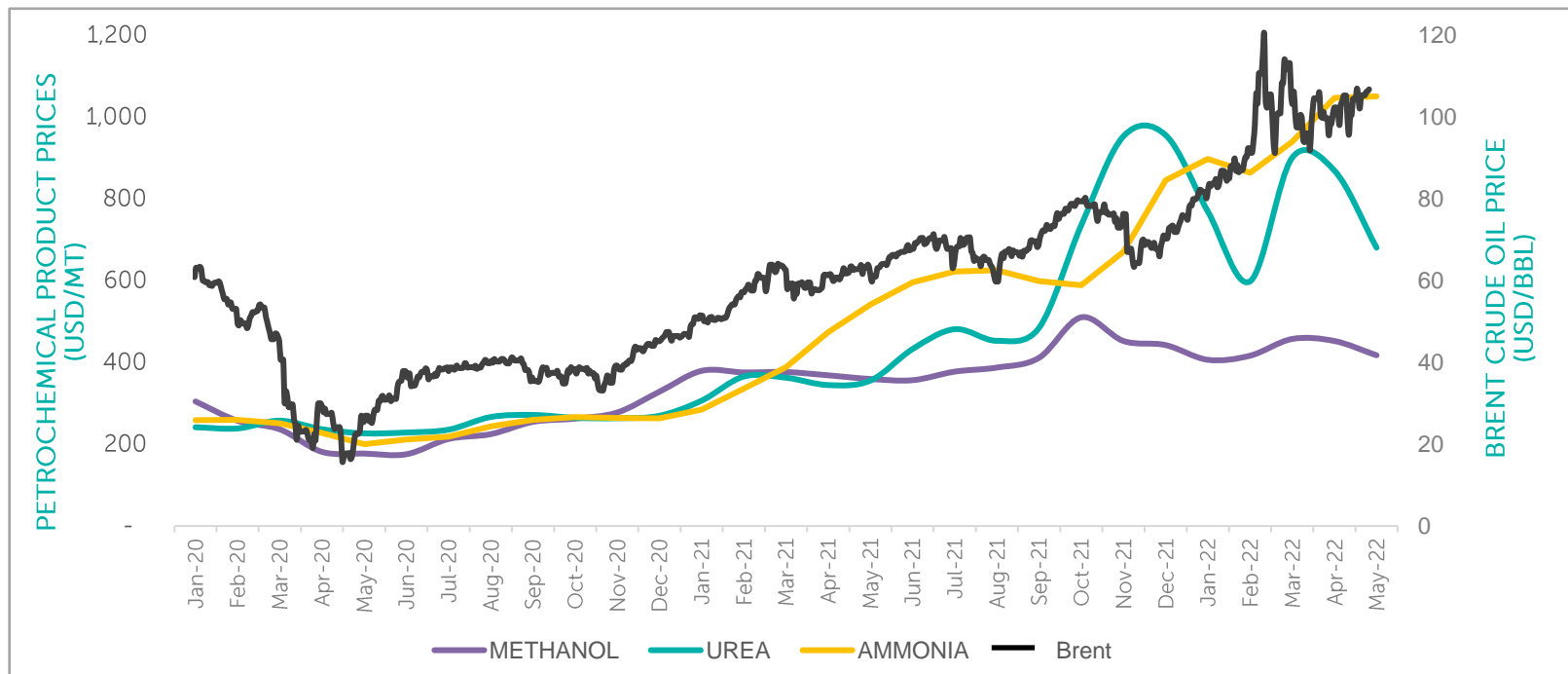


## Immediate concerns:

- Continued lockdowns in various parts of China
- Geopolitical concerns



# Fertilisers & Methanol Outlook : Urea and Methanol seeing correction



## Immediate outlook:

### Urea :

- Limited supply globally due to ongoing Russian sanctions
- Muted demand with buyers waiting on the sidelines

### Ammonia :

- Scarce spot availability on top of limited Russian supply
- Demand is mainly supported by term commitment

### Methanol :

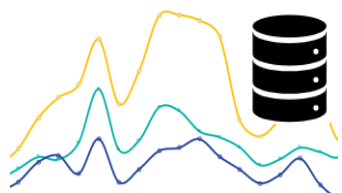
- Tight supply due to planned shutdown in SEA
- Stable demand

## Immediate concerns:

- High crude oil prices & geopolitical concerns

## Long term factors:

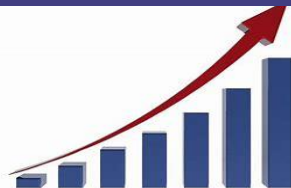
### Volatile energy and feedstock price



### High capacity additions



### Growth in non-fuel and MTO demand

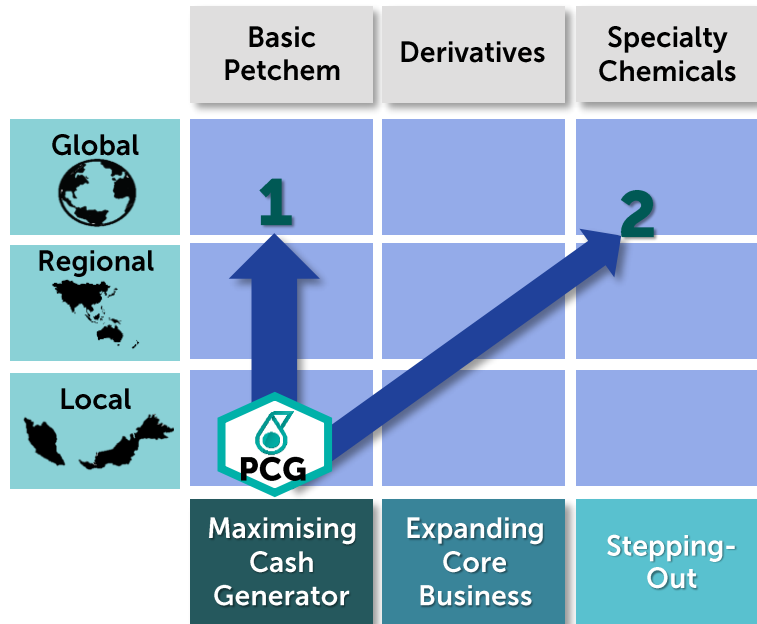


### Heightened food security



# PCG has a clear strategy to grow our specialty chemicals portfolio and future-proof the business

## 2-Pronged strategy



1. Sustain strength in basic petrochemicals
2. Selectively diversify into derivatives, specialty chemicals and solutions

Diversify into derivatives, specialty chemicals and solutions to future-proof the business

### Expanding Core Business



**Extend Value Chain (EVC)**

via **downstream investment**

### Stepping-Out



**Build Specialty Platform**

via **Merger & Acquisition (M&A)**



**Create Optionality for Growth**

via **Technology Research** and **Corporate Venture Capital (CVC)**

# Pengerang Integrated Complex: Refinery re-started, 8th May 2022



## Pengerang Petrochemicals Complex Sdn Bhd

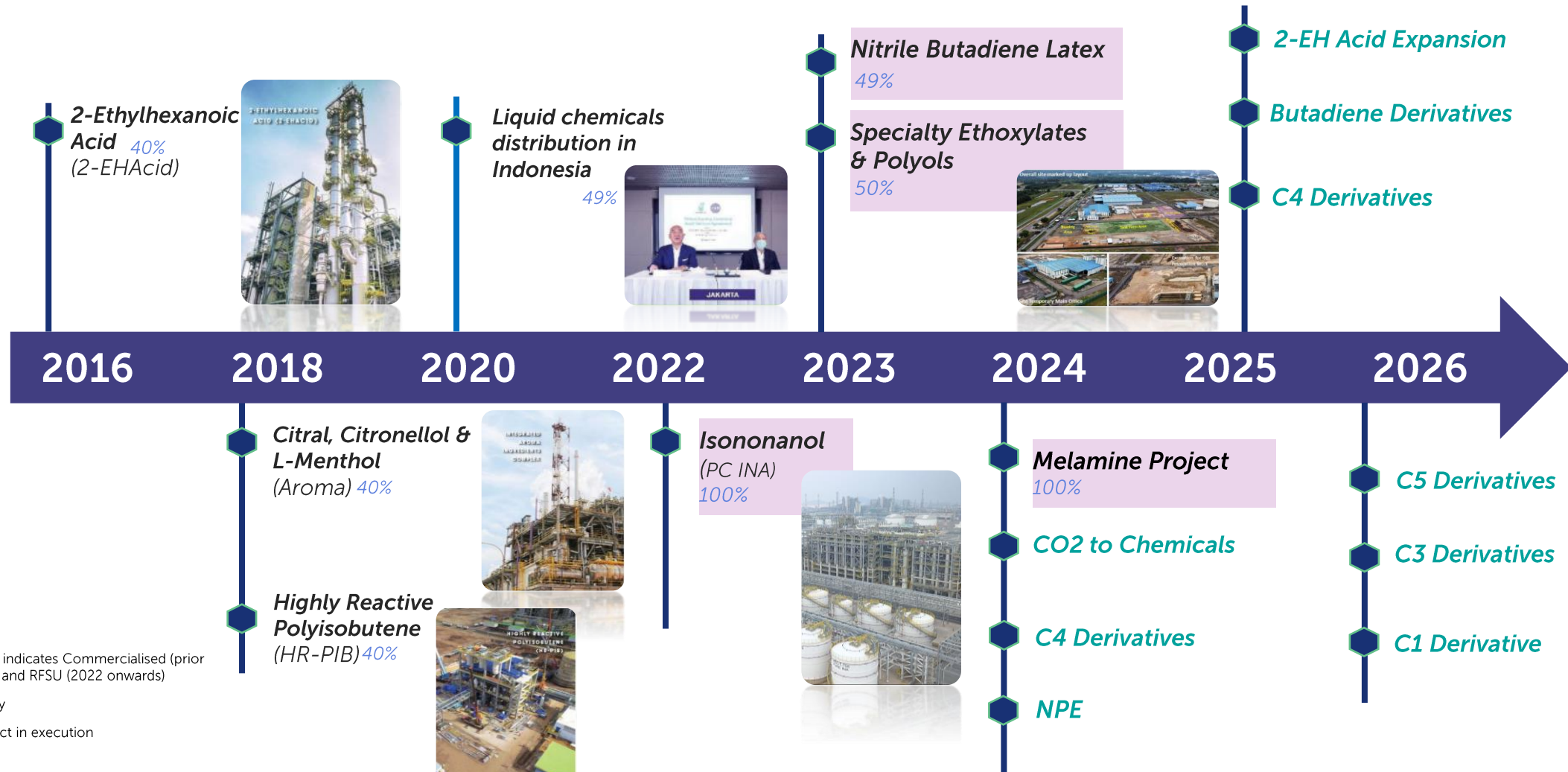
Location : Pengerang, Johor  
 Ownership : 50-50, PCG & Saudi Aramco  
 Capacity : 3.050 million tonnes combined  
 Products : LLDPE, HDPE, Polypropylene, Glycols

## PETRONAS Chemicals Isononanol Sdn Bhd

Location : Pengerang, Johor  
 Ownership : 100% PCG  
 Capacity : 250,000 tonnes  
 Product : Isononanol

No.	Product	Volume ('000 MT)	End Market Segment	Target Market
1.	Linear Low Density Polyethylene (LLDPE)	3,050	Biohazard containers, Life jackets	Asia Pacific
2.	High Density Polyethylene (HDPE)		PPE, Pipe	Asia Pacific
3.	Polypropylene (PP)		Electrical appliances, automotive	Asia Pacific
4.	Glycols (MEG, DEG, TEG)		Coolant, textile	Asia Pacific
5.	Isononanol (INA)	250	Lubricants, plasticisers	Asia Pacific

# 12 EVC projects are in the pipeline, undergoing various stages of execution and feasibility studies for startup within the next 5 years



**Note:**  
Timeline indicates Commercialised (prior to 2022) and RFSU (2022 onwards)

x% Equity

Project in execution



# The next M&A for specialty chemicals platform is crucial for our future positioning

## 1st Platform : Silicone



**New Silicone Blending Facility in Pahang**



**BRB Lube oil Additives and Chemical facilities**

Location	: Gebeng, Pahang
Capacity	: 8,000 MT per annum
Market Segments	: Personal care, F&B
Products	: (i) Silicone gum blend; (ii) Silicone antifoam; and (iii) Silicone emulsion
Target markets	: Asia Pacific, Middle East, Africa

## Next Platform

### End markets

- 1 Feed
- 2 Food & Nutrition
- 3 Agriculture
- 4 Automotive
- 5 Construction
- 6 Electronics
- 7 Energy (excl. Hydrogen)
- 8 Oil and Gas
- 9 Paints & Coatings
- 10 Water Treatment
- 11 Healthcare
- 12 Household, Industrial & Institutional (HI&I)
- 13 Personal Care

### Specialty chemicals pathways

1



**Food, Feed and Nutrition**

2



**Industrial Additives**

3



**Surfactants, HI&I and Personal Care**

# Perstorp fits as a growth platform for PCG to expand its Specialty Chemicals portfolio



## MARKET EXPOSURE

- Perstorp's portfolio is within PCG's preferred end markets such as Paints & Coatings, Construction, Automotive, Personal Care, Food, Feed & Nutrition.



## LEADERSHIP POSITION

- Global #1 in Penta & TMP and Top 3 for Neo & Oxo
- Trusted brand with > 100 years history



## TECHNOLOGY OWNERSHIP

- Proprietary process chemistry for various chemical families
- R&D through active collaboration with universities & institutions



## TALENTED PEOPLE

- Experienced management team and employees of Perstorp pivoting towards high margin downstream specialties



## SUSTAINABILITY-DRIVEN

- "Pro-environment" product series
- Low VOC/emission alternatives towards "Finite Material Neutral" ambition
- Green methanol (Project Air)



## GROWTH OPTIONALITY

- High value creation potential with bolt-on acquisitions
- Expansion in APAC and SEA



# Sustainability at the Core of our business

## Economic

### Business Sustenance & Green Initiatives

OE

HSE & Operational Excellence

CX

Commercial Excellence

GE

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



## Governance



FTSE4Good and Dow Jones Sustainability Index (DJSI) benchmarking

# Economic: Business sustenance through growth and responsible product solutions

## Economic

### Business Sustenance & Green Initiatives

**OE** HSE & Operational Excellence

**CX** Commercial Excellence

**GE** Growth Delivery Excellence



#### Bio-MEG for biodegradable packaging



Bio-PET

#### Eco-friendly surfactant for oil & gas



EOR in Oil & Gas

#### Ultra-mild specialty surfactant for personal care



Personal Care



Green Surfactant

#### Polyol ester emollient for personal care



Skin Care



Cosmetics

#### Ultra High Purity Methanol for fuel cells



Fuel Cells

# Environmental: PCG aims to reduce greenhouse gas (GHG) emission through Net Zero Carbon Emissions Roadmap by 2050 (NZCE2050)

## PCG NET-ZERO CARBON EMISSIONS (NZCE) PATHWAYS

### Environmental

#### Environment Stewardship & Resource Efficiency



GHG Emission Reduction



Energy Optimisation



Waste Minimisation



Water Conservation



New Plastics Economy (NPE)



Increase Scope 1 and Scope 2 emissions reduction efforts



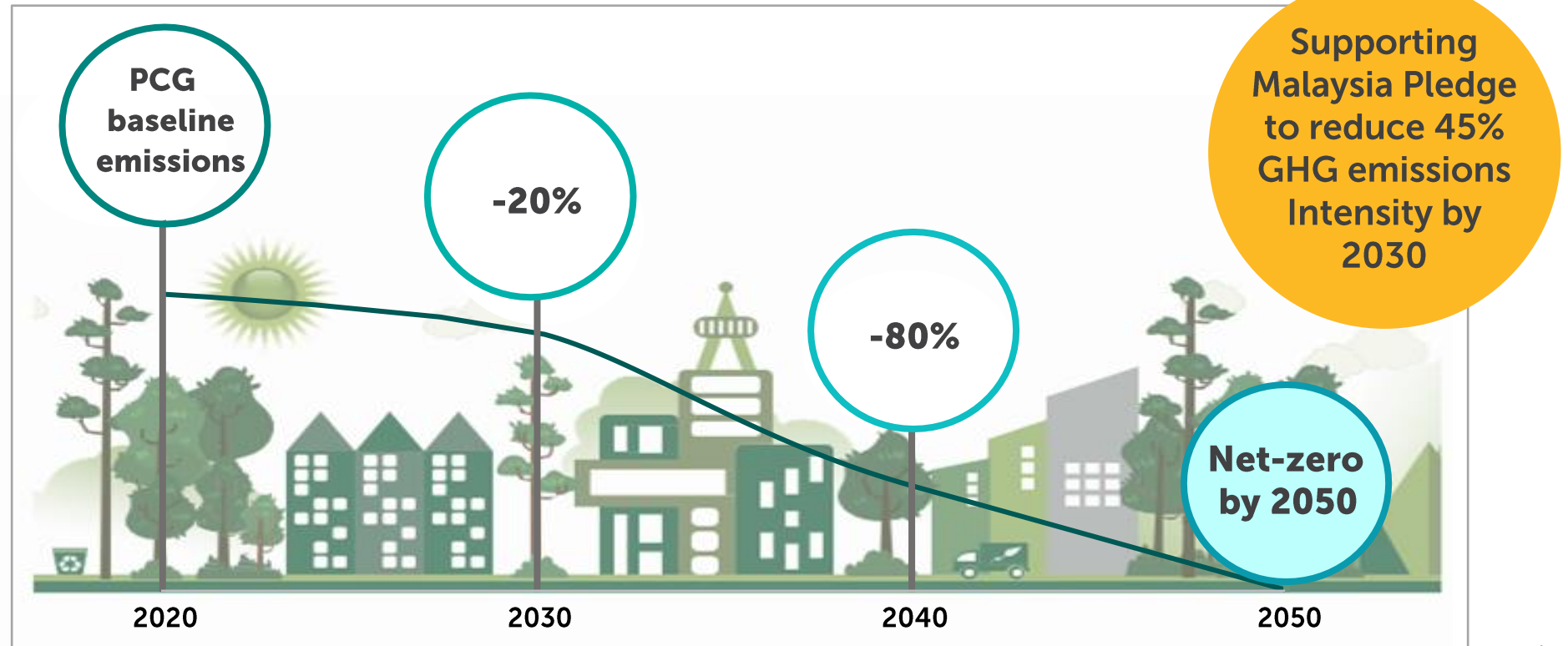
Carbon capture & storage



Scale up renewables and low carbon solutions



Optimise the use of forest-based carbon offset



# Social: Upholding commitments

## Social

### Social Responsibility



Managing Human Rights Risk



Community Well-Being



NPE Education and Clean Up



## Managing Human Rights Risk



**100%** contractor assessed on Human Rights Risk

**13** vendors established via Vendor Development Program

## Community Well-Being



2005



2021

**>23,000** mangrove trees planted

**>20,000** people reached  
Visitor to ecoCare Education Center

**>1,300** student reached on educating safety awareness

## NPE Education & Clean Up



**>240,000** teachers & student reached from webinar series





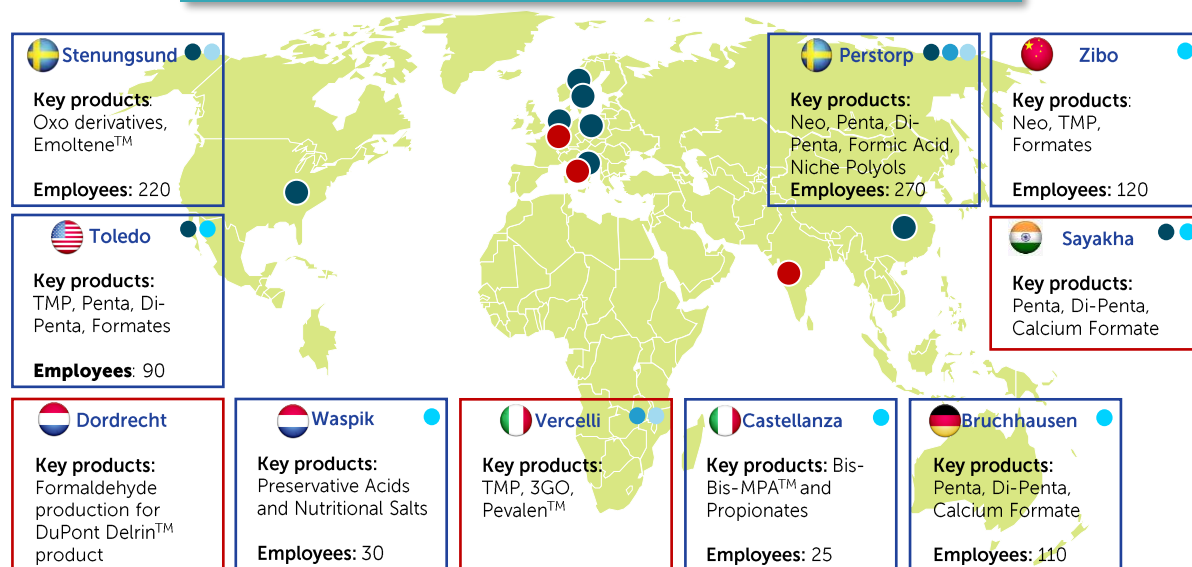
# Thank you

[www.petronaschemicals.com](http://www.petronaschemicals.com)

[petronaschemicals\\_ir@petronas.com](mailto:petronaschemicals_ir@petronas.com)

# Perstorp Holding AB ("Perstorp") is a niche, global specialty chemicals manufacturer with positive exposure to ESG trends

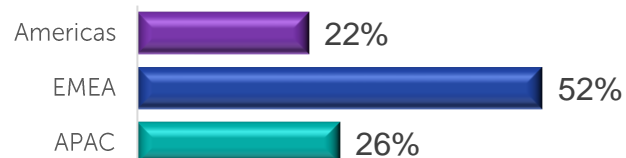
## Perstorp's Global Manufacturing Network



### Legend:

● Engineered fluids 
 ● Animal nutrition 
 ● Resins & Coatings 
 ● Plasticizers 
   Owned 
   Toller

### Net Sales by Geography FY2021 (EUR1.3 billion)

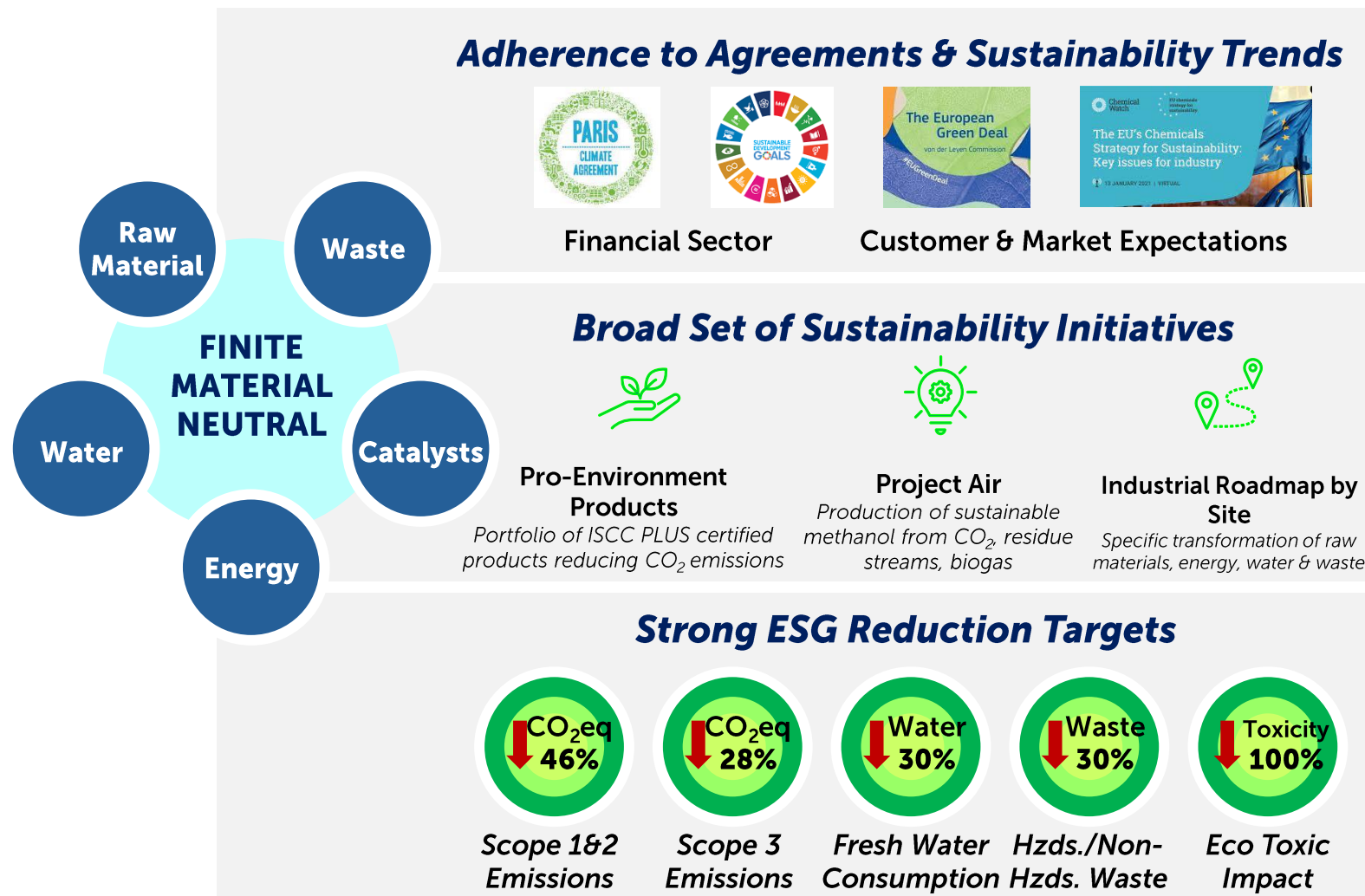


## Quick facts

- ❖ A **niche** specialty chemicals player for **Resins & Coatings, Engineered Fluids** and **Animal Nutrition**
- ❖ A **standalone** entity owned by a **private equity firm**, headquartered in **Malmö, Sweden**
- ❖ FY2021A: Sales of **EUR 1.33bn** and EBITDA of **EUR 248mn** (18.6% margin)
- ❖ **7 manufacturing sites** and **3 R&D centres** globally
- ❖ Presence in **26 countries** inc. US, Europe & APAC
- ❖ **~1,450 employees**
- ❖ **~130 product offerings** within **30 product groups offerings**
- ❖ Serves **~2,600 customers** globally
- ❖ Proprietary oxo and polyol **chemistries**
- ❖ Committed to **sustainability** and **Finite Material Neutral ambition**



# With sustainability-focused transition at the core, the acquisition will accelerate PCG's sustainability efforts



## Portfolio of 20+ Pro-Environment Solutions



**Penta (Voxtar™)**  
**100%** sustainable by 2026  
(from 25% in 2021)



**TMP (Evyron™)**  
**75%** sustainable by 2026  
(from 5% in 2021)



**Neo (Neeture™)**  
**55%** sustainable by 2026  
(from 2% in 2021)

**...and many more<sup>1</sup>**

<sup>1</sup> Curalite™ Ox Pro, Charmor™ Pro, Holtac™ Pro, Pevalen™ Pro, 2-EHA™ Pro, Emoltene™ Pro and Valeric Acid Pro

End