

# Borealis Group

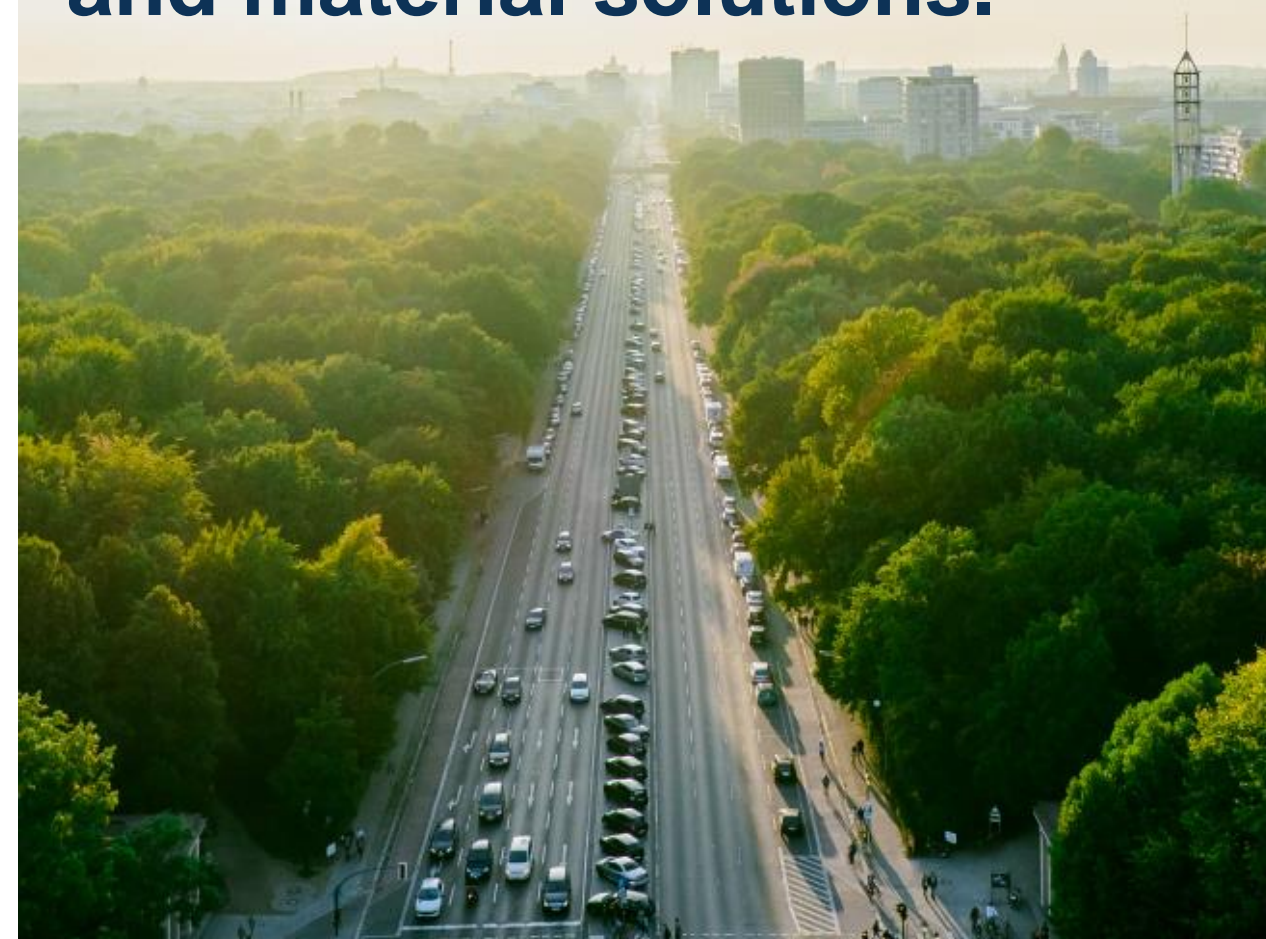
## Debt Investor Presentation

# Borealis' Debt Investor Presentation

What guides us and all our actions is to become..



**A global leader in  
advanced and  
sustainable chemicals  
and material solutions.**



# Borealis at a glance

Who we are

# Borealis at a glance

120

Countries. Head Office  
in Vienna, Austria

7,600

employees  
worldwide



**Production and distribution**  
of advanced and circular  
polyolefins solutions, base  
chemicals and fertilizers

Ownership structure:

75%

OMV, Austria

25%

ADNOC, UAE



**Our JV's: Bayport Polymers  
(Baystar™)** – brings Borstar®  
technology to American polyethylene  
markets



**Our JV's: Borouge** – one of  
the world's largest integrated  
polyolefin complexes (Ruwais,  
UAE)

BBB+

Strong **investment  
grade** credit rating

#2

Among polyolefin  
producers in Europe

2,111 mEUR

net profit

128

Priority patents filed  
in 2022

3

Polyolefin recycling  
operations in Europe

# Highlights 2022



**Safety first** – new “B-safe” programme kicked off to further improve safety performance



Launch of **Borealis Strategy 2030**, an evolution centred on sustainability, geographic expansion and company transformation



**Borouge IPO** was the largest ever on the Abu Dhabi Securities Exchange, raising over USD 2 billion in gross proceeds for a 10% flat

ADNOC acquired **25% stake** in Borealis deepening and extending a strong partnership

Projected six-fold increase by 2025 in **production capacity of circular products** enabled by investments and solutions



**Global growth projects progressed:** ground-breaking Borouge 4, start-up Borouge PP5 and Baystar ethane cracker



Launch of **groundbreaking Borstar® Nextension Technology** for tailored, performance-based PO



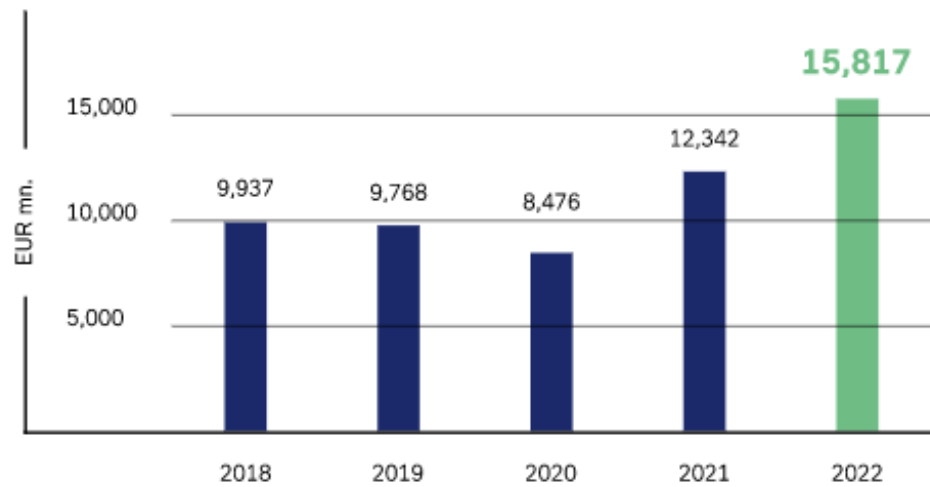
Ambitious **decarbonisation efforts** boosted via new PPAs for wind, PV and hydropower



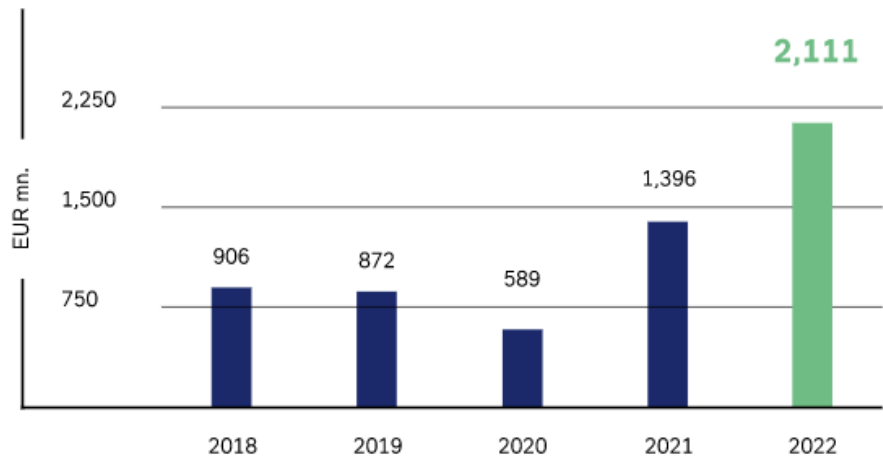
Who we are

# Our key financial metrics

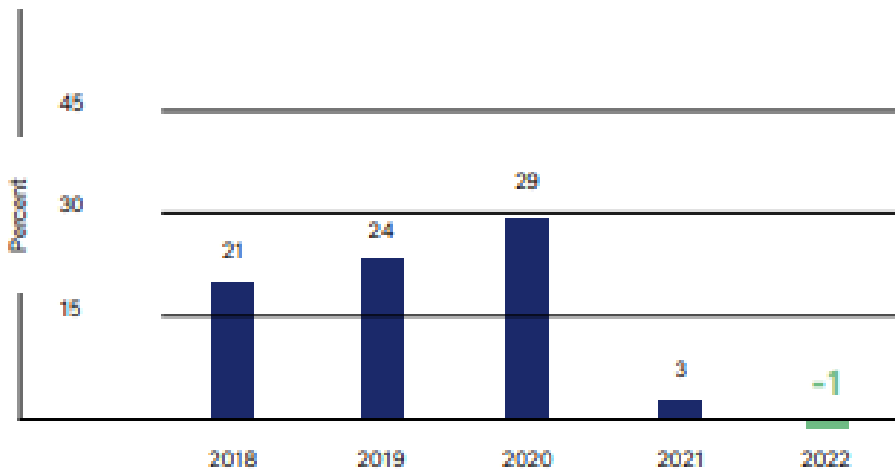
## Total Sales <sup>1)</sup>



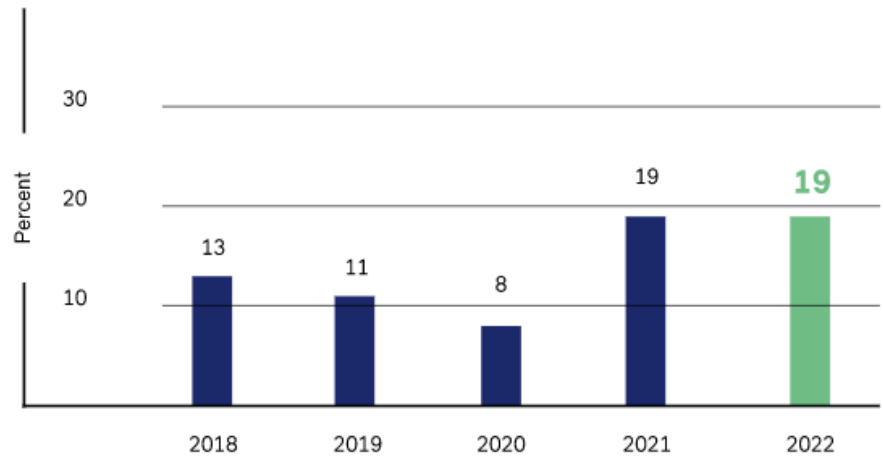
## Net Profit



## Gearing

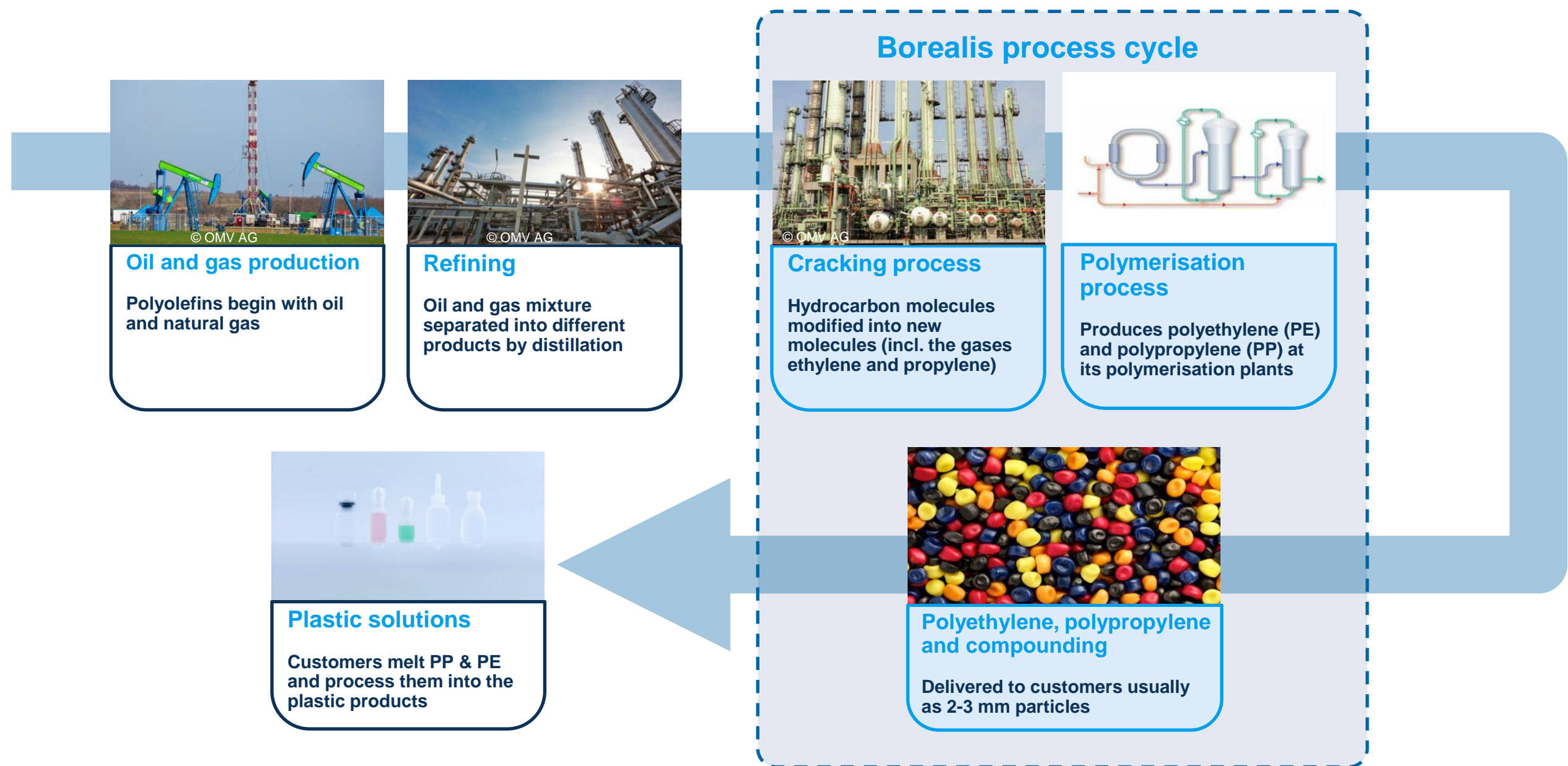


## ROCE



1) Total net sales of Borealis and pro-rata sales of at equity-consolidated companies.

# Borealis in the plastic value chain



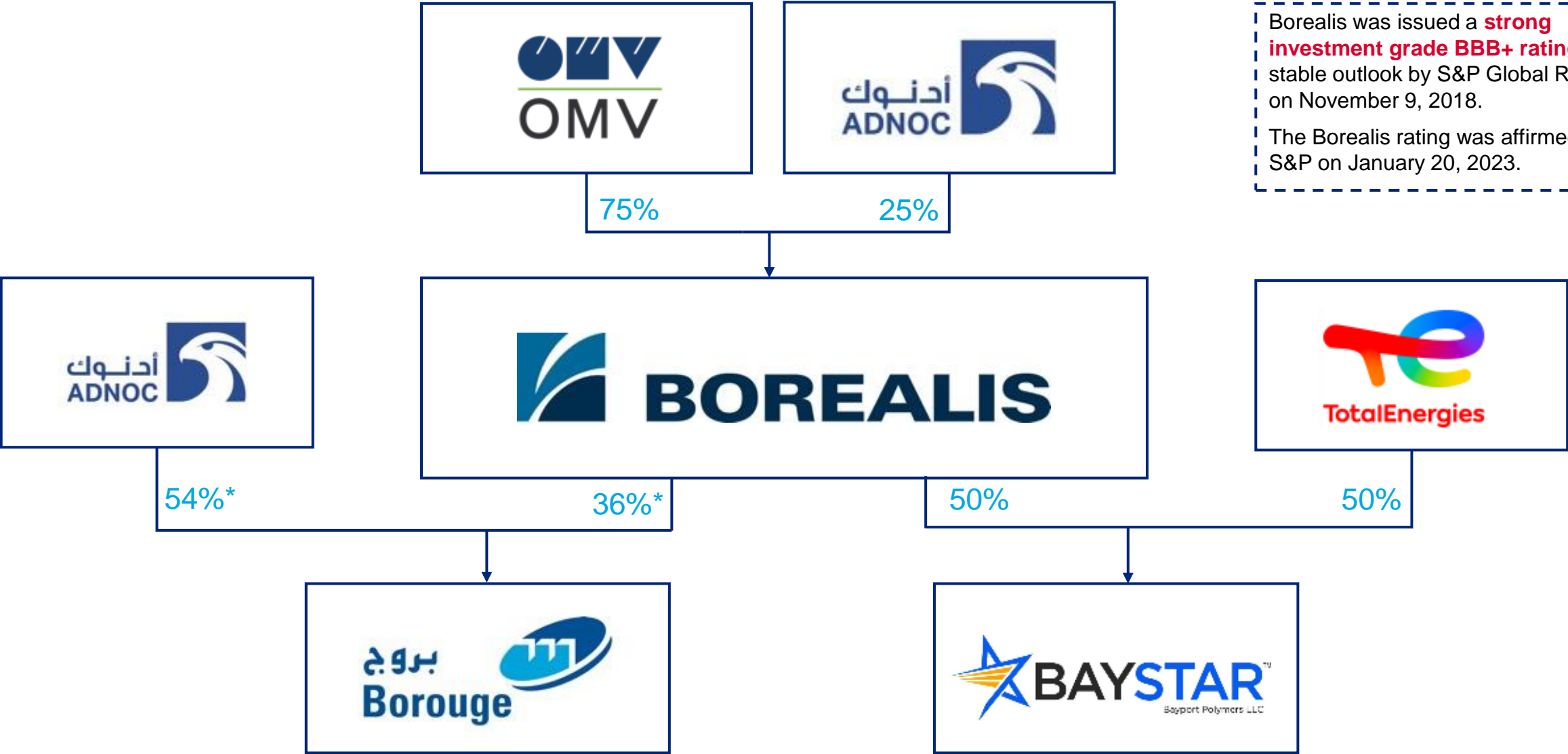
Who we are

# Strong shareholders, with long-term visions

**S&P Global**  
Ratings

Borealis was issued a **strong investment grade BBB+ rating** with stable outlook by S&P Global Ratings on November 9, 2018.

The Borealis rating was affirmed by S&P on January 20, 2023.







Who we are

# Where to find us:

## Borealis Locations ●

### Head Office

Borealis AG  
Trabrennstr. 6-8  
A-1020 Vienna, Austria  
Tel. +43 1 22 400 300  
Fax + 43 1 22 400 333  
www.borealisgroup.com  
info@borealisgroup.com

### Customer Service Centres

Austria, Belgium, Brazil, Finland,  
France, Hungary, Turkey,  
United States

### Production Plants

Austria, Belgium, Brazil, Finland,  
France, Germany, Italy, South Korea,  
Sweden, The Netherlands,  
United States

### Sales Offices/Representative Office

Argentina, Chile, China, Colombia,  
Czech Republic, Denmark, France,  
Hong Kong, Mexico, Morocco, Poland,  
Russia, South Africa, Spain, Turkey,  
UAE, UK, United States

### Borealis L.A.T Locations

Austria, Bulgaria, Croatia,  
Czech Republic, France, Greece,  
Hungary, Romania, Serbia, Slovakia

### Borealis Rosier Locations\*

Belgium, The Netherlands

## Borouge Locations ●

### Head Offices

Singapore, UAE

### Innovation/Application Centres

China, UAE

### Production Plants

China, UAE

### Sales Offices/Representative Offices

China, India, Indonesia, Japan,  
Singapore, Thailand, UAE, Vietnam

### Logistics Hubs

China, Malaysia, Singapore, UAE



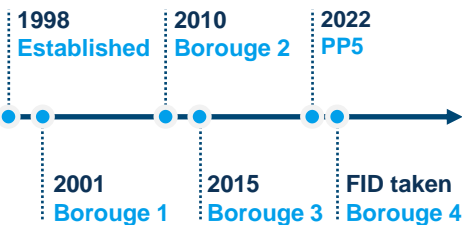
The purpose of this visualization is of representational nature only. Though it was prepared with the greatest possible attention to detail, simplified illustrations may have been applied.

# Borouge – a very successful joint venture



## Evolution

Abu Dhabi, United Arab Emirates

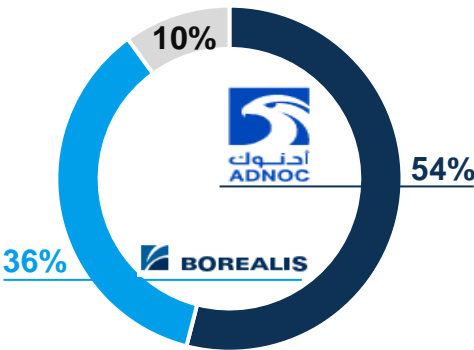


## Facilities

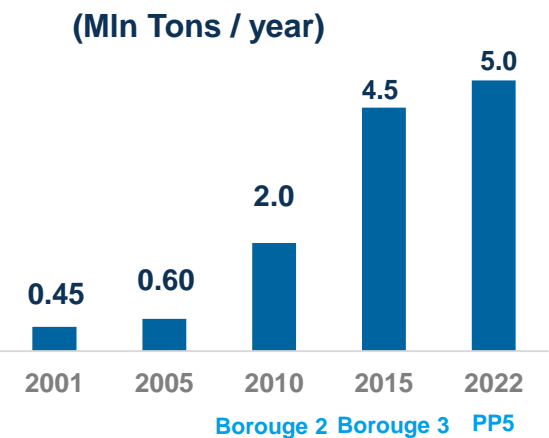
**Biggest** integrated ethylene complex (3,600 kt per year)

**Largest** polyolefin site (19 operating units, 13 shift supervisors, & 180 operators per shift)

## Ownership



## Polyolefins production



## Employees



**+3,500 employees** (170 secondees in Abu Dhabi, Singapore, & Shanghai)

## Net Profit (2022)



**Net profit after tax of USD 1.5 billion**



*In November 2021, ADNOC and Borealis reached a final investment agreement to build Borouge 4 in Ruwais, United Arab Emirates (UAE), which will produce 1.4 million tons of polyethylene per annum.*

*The expansion project includes construction of a 1.5 million tonnes ethane cracker, two state-of-the-art Borstar® polyethylene plants and a cross-linked polyethylene plant.*

# Our strategy

An aerial photograph of a wide city street, likely in New York City, flanked by dense green trees. The street is filled with cars, and the city skyline is visible in the background under a clear blue sky.

What's next?

**Where do we go  
from here?**



### WHAT IS OUR VISION

**A clear vision for our transformation journey**

**A global leader in advanced and sustainable chemicals and material solutions**

### HOW WE WANT TO TRANSFORM

**Key pillars of our strategy 2030 for the challenges ahead**



### WHAT WE WANT TO ACHIEVE

**Commitments 2030 we set ourselves and what to be judged by:**



1.8 million tonnes of circular products and solutions



100% of electricity used of renewable origin



< 2 million tons of Scope 1 & 2 emissions\*

*\* Scope 1 and Scope 2, compared to base year 2019*



# Key pillars of our strategy 2030

## Geographical expansion

**Become a fully global partner to our customers**

We grow through M&A and selected builds in NAM, Middle East and Asia. We leverage Borouge's market presence for in-Asia growth.

## Transformation

**Evolve to a fully customer-centric approach to offer advanced and sustainable material solutions**

**Circular economy**

We lead the transformation to a truly circular economy across all our applications.

**Value add**

We invest in compounding and adjacencies to accelerate value creation through innovation.

## Sustainability

We significantly reduce our CO<sub>2</sub> footprint

## Safety

Goal Zero guides our strategic aspiration to be among the safest companies in the industry.

## People & Culture

People make it happen. We shape an experience where everyone can perform at their best and make a difference.

## Innovation & technology

Accelerate circularity, drive specialty growth and create more value in licensing & catalyst technology.

## Performance excellence

We focus on excellence across all activities. Utilise technology and digitalisation to drive efficiencies.

## Strong foundation

**Build on safety, people & culture, innovation & technology and performance excellence to sustain strong growth.**



# OMV Strategy 2030

Become a leading sustainable fuels, chemicals and materials company – with a strong focus on shareholder value

Net zero by 2050 in scope 1, 2 and 3

Strengthen, expand and diversify chemicals & materials portfolio

Become a leading European producer of sustainable fuels

Establish a global leadership position in circular economy solutions

Reduce fossil production and processing

- High cash flow generation
- Clear investment criteria
- Progressive dividend policy



- Changed product portfolio will increase profitability and deliver higher quality earnings
- Strong financial performance of existing businesses drives transition
- Strategic portfolio management to transform business at speed
- Growth options to be implemented in a targeted and disciplined manner
- Progressive dividend policy continues to deliver attractive shareholder returns with significant upside



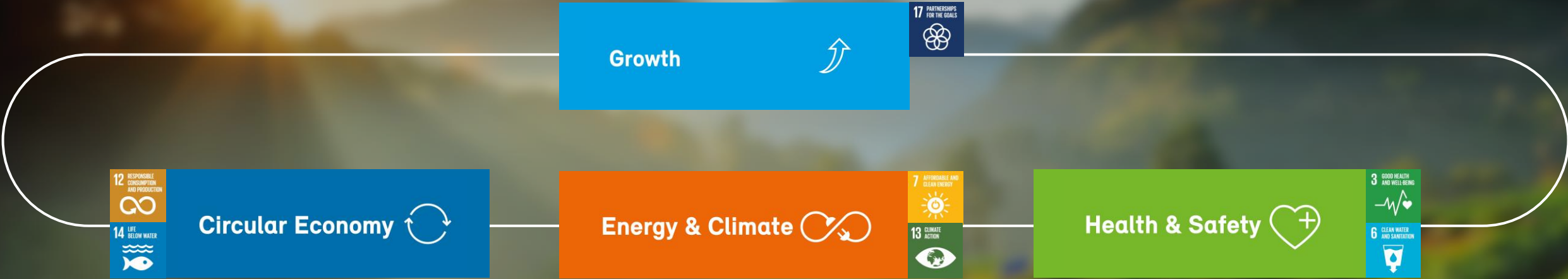
A close-up photograph of an adult's hand holding a child's hand. The adult is wearing a dark, textured knit sweater. The child is wearing a pink, textured knit sweater. They are standing outdoors at sunset or sunrise, with a warm, golden light in the background. The text is overlaid on the image.

Our commitment to the future

**Placing sustainability  
at the core of  
everything we do.**



# Our commitments in line with our ambition to be a sustainable leader




## Our goals

**ZERO**   
Pellet loss

**ZERO**   
work-related **incidents or accidents**

**ZERO**   
non-emergency **flaring**

**ZERO**   
harmful substances in **our products** according to REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals)

## until 2030

**100%**   
of electricity from **renewable** sources

**1,800**   
Kilotons of **circular products** and solutions by 2030

**+20%**   
**Energy efficiency** improvements (vs 2015)

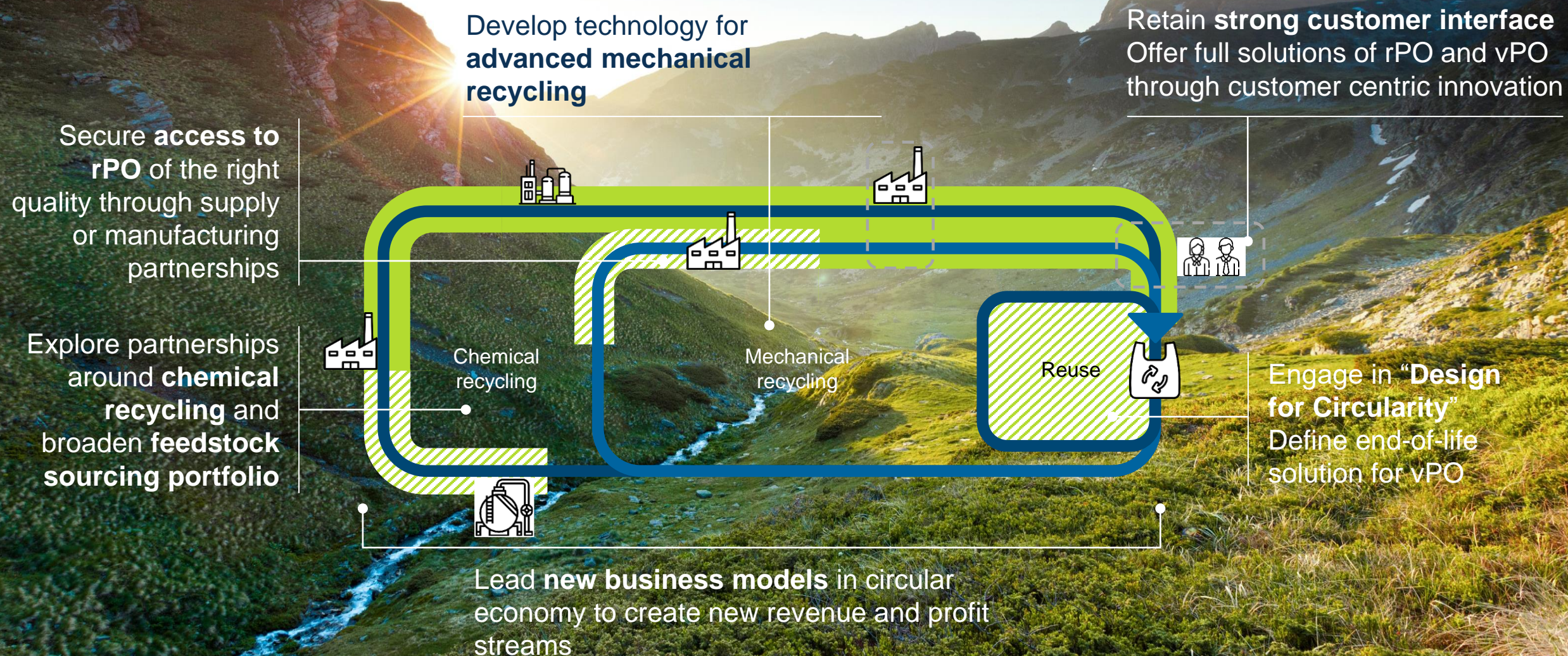
**< 2**   
million tons of **Scope 1 & 2 emissions\***

\* From 5.1 million tons in 2019 including the nitrogen business. The divestment process for the Borealis nitrogen business which comprises fertilizers, technical nitrogen, and melamine has been ongoing since February 2021. Scope 1 are direct GHG emissions that occur at the source and are controlled by Borealis. Scope 2 are GHG emissions stemming from the generation of energy purchased by the company.



# Borealis Group Strategy 2035

Borealis aims to take the lead in transforming the industry by targeting “Plastics Neutrality”







Borealis addresses global challenges



# Borealis product range

## Base Chemicals

### Melamine



#### Wood based panels

- Laminates
- Plywood
- Particle board (PB)



#### Laminates

- Laminate flooring
- Furniture tops
- Kitchen counter tops
- Wall cladding



#### Melamine Coatings

- Vehicle body
- Household appliances
- Drink cans



#### Moulding Compounds

- Table & picnic-ware
- Children dinnerware
- Handles for pans and other utensils



### Hydrocarbons & Energy

- Feedstock, olefins, & co-products
- Phenol & Acetone
- Energy

## Polyolefins



### Circular Economy Solutions

- Mechanical recycling
- Design for recyclability (DfR)



### Polymer Solutions

- Polymer Modifiers
- Foam solutions
- Reinforced polyolefins for structural parts

--- With our advanced polyolefins for virgin and circular economy solutions we serve these industries: ---



### Consumer Products

- Flexible packaging
- Rigid packaging
- Fibres
- Appliances (washing machines, dish washers, fridges/freezers, vacuum cleaners, coffee makers, microwave oven etc..)



### Energy

- AC/DC extra high, high, medium & low voltage
- Fibre optic & data network cable
- Automotive, building, photovoltaic, & industrial cables



### Healthcare

- Medical pouches
- Syringes
- Sachets
- Medical devices
- Bottles



### Infrastructure

- Water & Gas
- Sewerage & industrial
- Plumbing & heating
- Oil & gas



### Mobility

- Bumpers & body panels,
- Exterior & interior trims,
- Dash-boards & central console
- Door cladding
- Under body shielding,
- Cooling systems & battery tray

# PO Portfolio to accelerate the move to plastics circularity

Non-virgin like / Non-food

Virgin like / Food



**Recyclates**  
Commercial



**First  
generation  
launched**



**First  
generation  
launched**

**The  
Bornewables™**  
Commercial



# Recyclable, reusable, renewable

In action today:



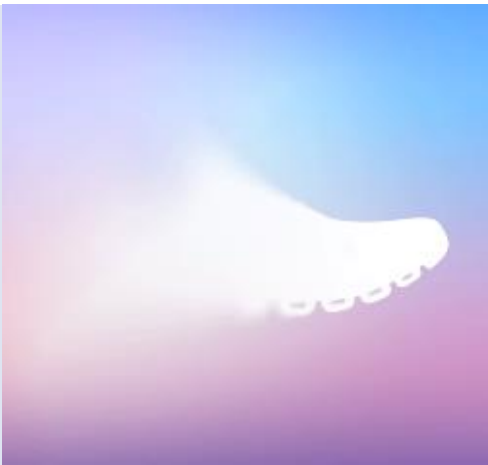
## Reuse and Bockatech

**Reusable** plastics solutions, such as polypropylene beverage cups we developed together with **Bockatech**, replace single-use applications.



## DFR 10 codes of conduct

Borealis' 10 Codes of Conduct promote **Design for Recyclability** in consumer packaging



## On Shoes

**Capturing and utilising carbon:** Turning carbon emissions into running shoes in cooperation with ON shoes LanzaTech.



## ISCC Plus

**ISCC Plus certified** renewable and chemically recycled polymers

# Consumer Products



**Stand-up pouches designed for recycling (DFR) so it can be collected, sorted, and recycled**

**Daploy HMS PP 100% recyclable HMS PP foam developed for food service (cups), automotive, and construction**



# Energy



**Polyolefin compounds solutions for high voltage cables (HVC) for long-distance and sub-sea energy transmission**

**Encapsulant film and backsheet compounds for long-term photovoltaic module performance and reliability**





# Healthcare



**Reliable solutions for medical and pharmaceutical applications that add value to healthcare**



**Borealis Bormed™ products are a valuable addition for rigid and flexible products in the healthcare industry**



**Shielding against pollution and viruses with protective face masks – made possible with plastics**

The demand for face masks is only intensifying, whether for the healthcare industry, protecting against air pollution, or in offering a barrier against any bacterial and viral threats, such as for instance the currently ongoing coronavirus outbreak. **Advanced plastics solutions, such as meltblown fibres, play a vital role in face mask applications.**

# Infrastructure



**Polyolefin solutions for water and gas supply, waste water and sewage disposal, in-house plumbing and heating**



**Coated steel pipes for several applications, including the oil & gas industry**



# Mobility

VW Tiguan side panel & wheel arch trim



**Exterior Solutions for OEMs, including side panes, bumpers, front-grills**

Audi A1 Door Cladding



**Interior Solutions, including Door Claddings, Trunk Trims, Tail-gate Cladding, etc.**

C-Class Low density front grills

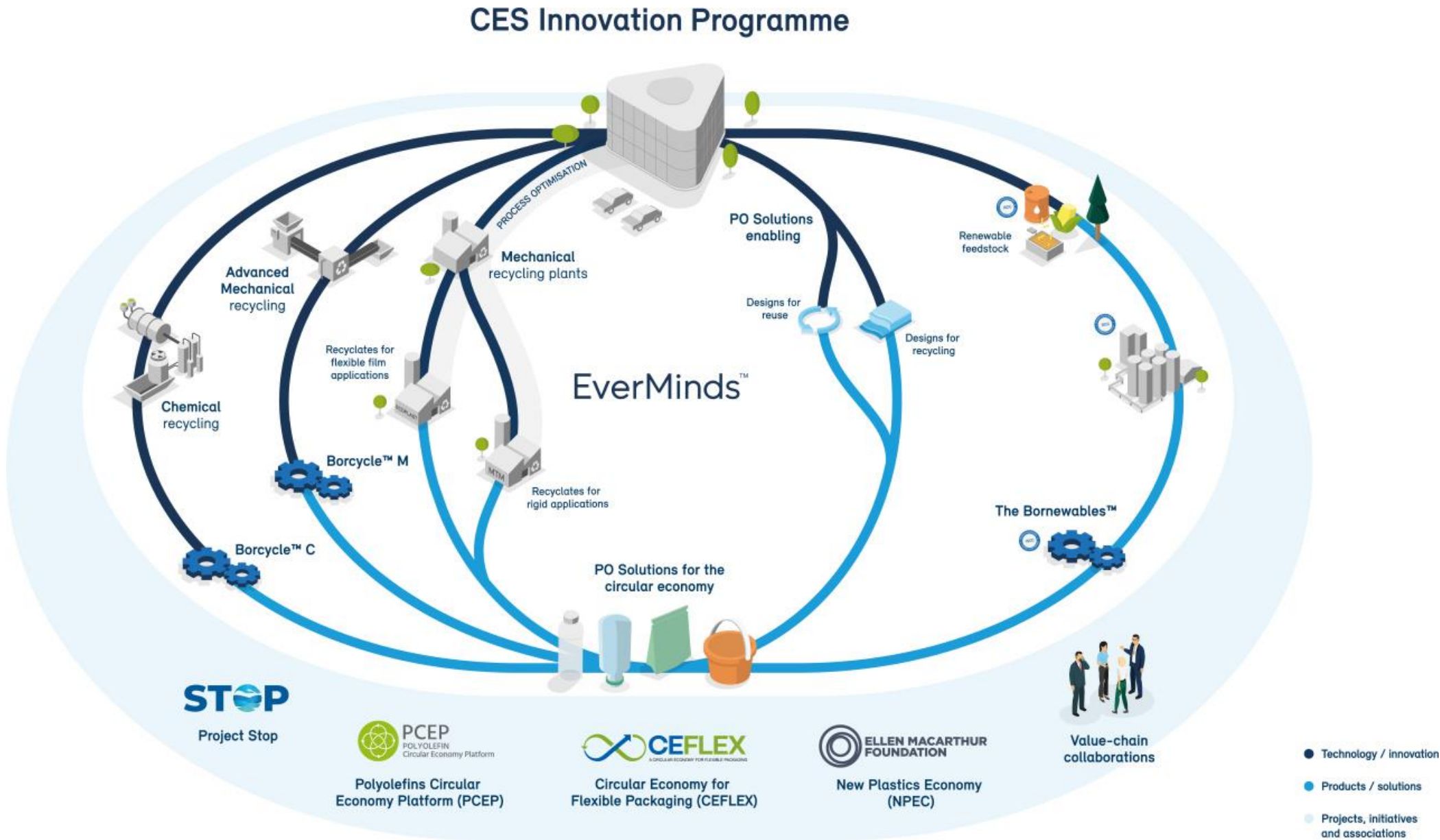


Skoda Karog Trunk Trims



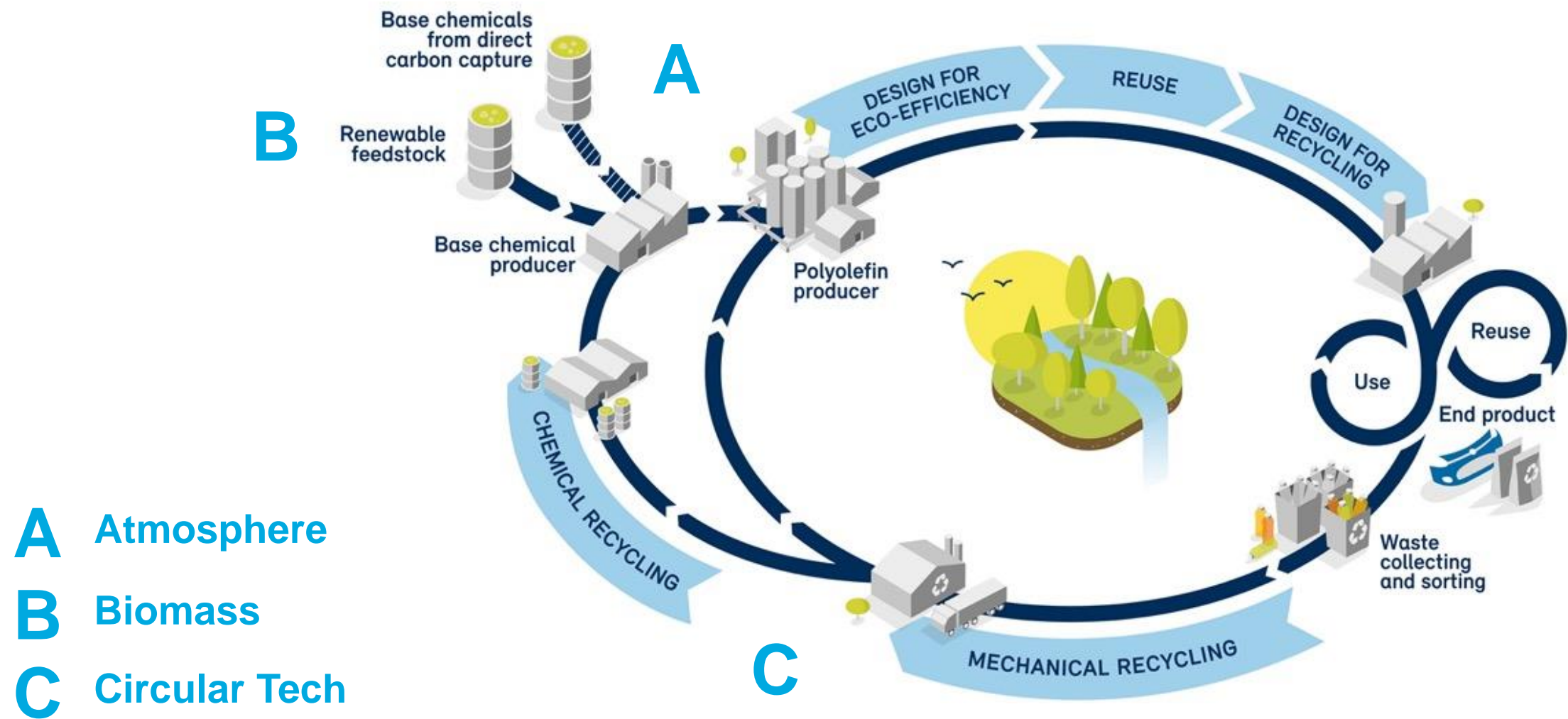
# Borealis offers a well-rounded mixture of circular PO solutions

Future Positive Revolution



# To build up a Circular Economy, Borealis takes a wider view on the value chain

Future Positive Revolution



# The journey to climate neutrality



# Plastics accelerate the shift to renewable & efficient energy sources



# Where and how do we make an impact?



## Renewable power transportation

Borlink™ technology ensures reliable wind and other renewable power transportation



## Optimise solar energy

Advanced photovoltaic films optimise the production of renewable solar energy



## Reduce emissions

Plastics provide for efficient Electric Vehicle system components and reduce emissions in transportation

# We will reduce our direct emissions



## Greenhouse gas (GHG) emissions

Reduction of Scope 1 and Scope 2\* emissions from 5.1 million tons (base year 2019) to less than 2 million tons by 2030

- Energy efficiency improvements
  - Carbon capture projects
- Divestment of NITRO business



## Energy consumption

Increase the share of renewables in the electricity mix to 40% by 2025 and further to 100% by 2030

\* Scope 1 are direct GHG emissions that occur at the source and are controlled by Borealis. Scope 2 are GHG emissions stemming from the generation of energy purchased by the company.



# Our journey to climate neutrality features numerous efforts



● Belgium

9-year power purchase agreement with Axpo covering the entire output of two wind farms



● Belgium

Collaboration in the Antwerp@C project to investigate CCUS in the Port of Antwerp



● Belgium

Heat recovery with revolutionary Qpinch technology, Antwerp. Electricity + steam from waste-to-energy plant in Beringen



● Stenungsund, Sweden

10-year power purchase agreement for the output of Kronoberget wind farm in Sweden



● Porvoo, Finland

8-year power purchase agreements for renewable electricity from new windfarms operated by Fortum



● Monza, Italy

Solar panels using our proprietary Quentys™ technology installed at our Compound plant in Monza, Italy

# Borealis is a Pioneer in Converging Prime Material Market with Recycling

Way forward is clear: quadruple our recycled plastics volume by 2025



- Founded in **1994, part of the Borealis group since 2016**
- Leading European **post-consumer recycler for rigid polyolefins** with 70 kt output
- Two sites in **central Germany**
- Niedergebra site is **one of the biggest European post-consumer recycling sites** with 50 kt output



- Founded in **1989, part of the Borealis group since 2018**
- Leading European **post-consumer recycler for flexible polyolefins**
- Production site in **Wildon, Austria**
- On-going expansion project will increase **output to over 30 kt**



- Founded in September 2020, Renasci is a Belgian company **innovating in the waste management through plastics recycling**
- Borealis **acquired a majority stake of Renasci N.V**
- Renasci is a provider of recycling solutions and **creator of the Smart Chain Processing concept (SCP)**

# Key projects & growth



## Growth

# Growth journey continues in Europe and beyond transforming Borealis into a global business partner

US  
50%  
Baystar

- Ethane cracker (started-up 2022)
- Borstar PE plant (start-up 2023)

Belgium  
100%  
New PDH Kallo

PDH plant  
(start-up 2025)

UAE  
36% / 40% \*  
Borouge 4

- Ethane cracker
- Two Borstar PE plants
- Cross-linked PE (XLPE)
  - A hexane-1 unit
  - Start-up 2025



 **Borouge** (Borealis /ADNOC JV)

## Growth

# Continuous investments in Europe underpin our leading position in the European market

● Porvoo, Finland

● Stenungsund, Sweden

● **Kallo, Belgium**



## One of the largest and most efficient facilities in the world

- Construction of a new, world-scale propane dehydrogenation (PDH) plant in Kallo, Belgium
- Scheduled to start up in 2025
- Targeted production capacity of 750,000 tonnes per year



## Growth

# Continuous investments underpin our leading position in the Middle East & Asia



## Borouge is one of the world's largest integrated polyolefin complexes

- Production capacity 5 million tonnes
- New Borouge **Borstar PP5** plant is integrated with the existing Borouge 3 complex and producing 480,000 tonnes per year; started-up in 2022
- Upon completion of Borouge 4, the overall production capacity of Borouge will be **6.4 million tonnes annually**.
- **Borouge Innovation Centre** in Abu Dhabi
- **Logistics hubs** in Abu Dhabi, Singapore, Shanghai and Guangzhou in China
- Compounding Manufacturing Plant and R&D Application Centre in Shanghai, China

## Growth

# Growth project status Borouge 4



**Borouge 4 will play a significant role in meeting the projected growth of customers' demand for polyolefins in the Middle East, Africa and Asia**

- Final investment decision for the Borouge 4 expansion taken in November 2021
- One 1.5 mio tons pa ethane cracker
- Two Borstar PE plants, each with a production capacity of 700 kta
- One 100 kto cross-linked PE (XLPE)
- One hexene-1 unit, producing comonomers for certain PE grades
- In progress: in-depth study for carbon capture unit that would reduce CO2 emissions by 80%



## Growth

# Growing in the US with Baystar

● Texas, US

## Baystar becoming a fully integrated polyethylene company

- 50/50 joint venture with Total Petrochemicals & Refining USA, Inc.
- 1 mio tonnes per annum ethane cracker in Port Arthur
- 625 kilotonnes per annum Borstar® polyethelene (PE) plant in Pasadena (construction ongoing)
- Borealis Borstar – technology, which will be used in North America for the first time – will allow Baystar to produce enhanced polyethylene products for the most demanding applications

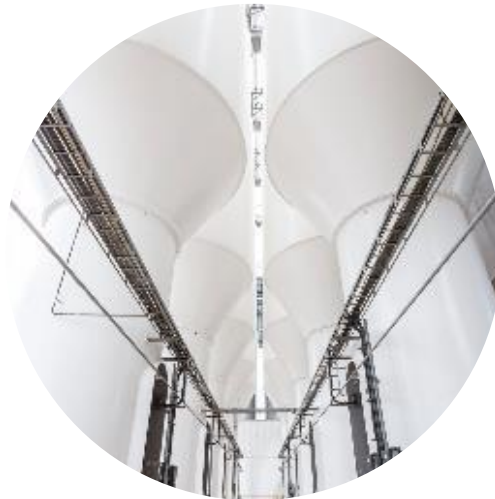
# We are creating solutions of tomorrow:

Our technologies pave the path for achieving our vision



## **Borstar®**

multi-modal proprietary technology  
for manufacturing polyethylene and  
polypropylene



## **Borceed™**



## **Borlink™**

Wire & Cable  
Technology Platform



## **Borealis Sirius**



## **Borcycle™**

An evolving recycling  
technology



## Innovation Leadership

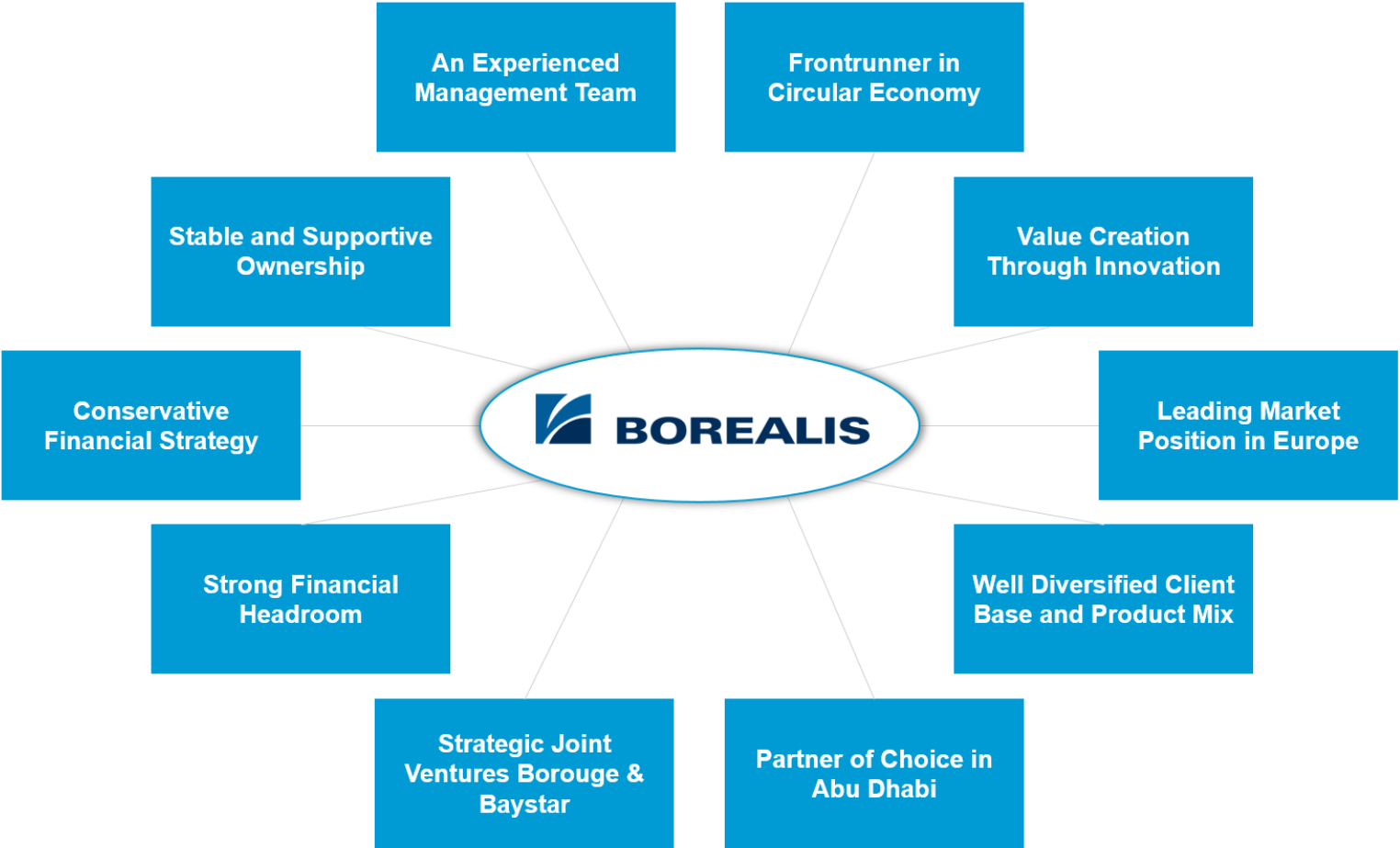
# Our R&D capabilities: Innovation centers that combine state-of-the-art facilities with foresighted thinking



# Financials



# Borealis' value proposition



**BBB+**  
**S&P Global**  
Ratings

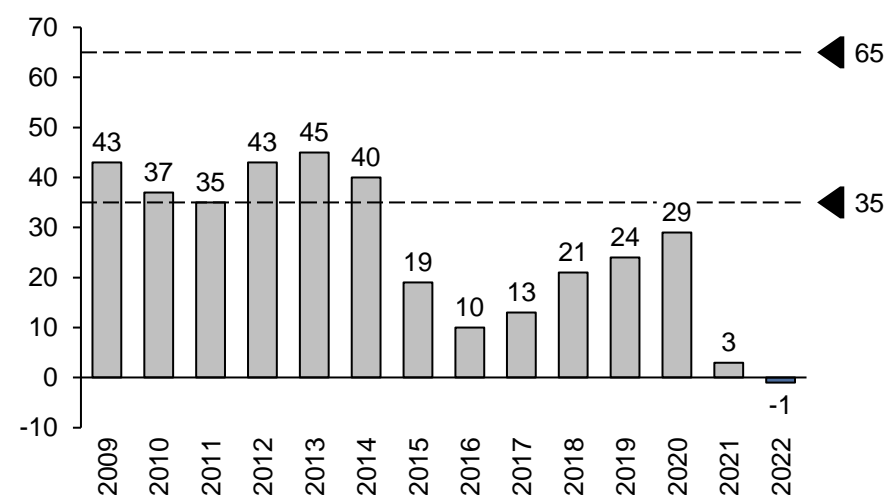
# Solid financials 2009 – 2022

## Borealis delivers solid financial result in a volatile market environment

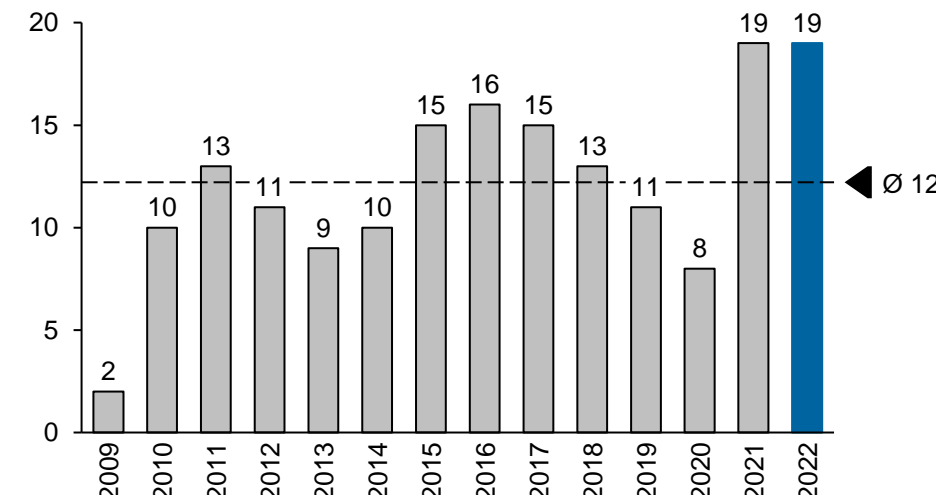
Figures excl. discontinued operation where applicable, for more information refer to the annual report 2022

MEUR	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
												restated		
Net sales	4,714	6,269	7,096	7,545	8,106	8,330	7,700	7,218	7,564	8,337	8,103	5,986	8,592	9,333
EBITDA	260	610	569	432	517	641	1,066	1,338	1,184	953	1,032	703	1,817	1,052
Net results of associated companies and joint ventures	44	120	333	391	351	408	469	487	543	606	386	374	595	397
Net profit	38	333	507	480	423	571	988	1,107	1,095	906	872	589	1,396	2,111

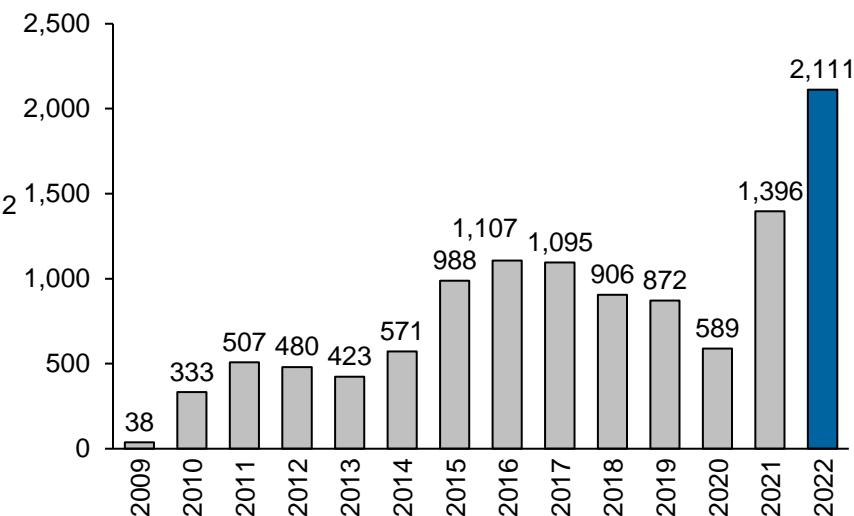
### Gearing (%) target range 35-65%



### Group ROCE (%)



### Net profit (MEUR)



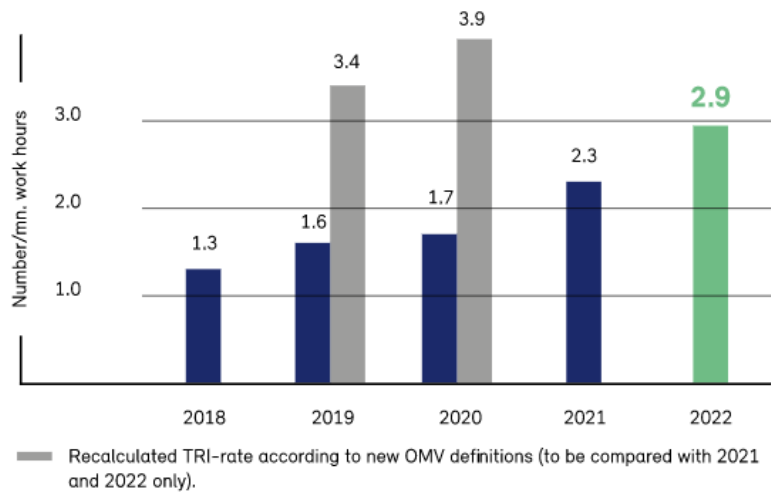
Gearing: defined as current and non-current loans borrowings (i.e. interest bearing short-term liabilities plus interest bearing long-term liabilities) minus cash and cash equivalents divided by total equity.

Return on Capital Employed (ROCE) defined as Operating profit, profit and loss from sale of operations, net result in associated companies plus interest income, after imputed tax, divided by average capital employed

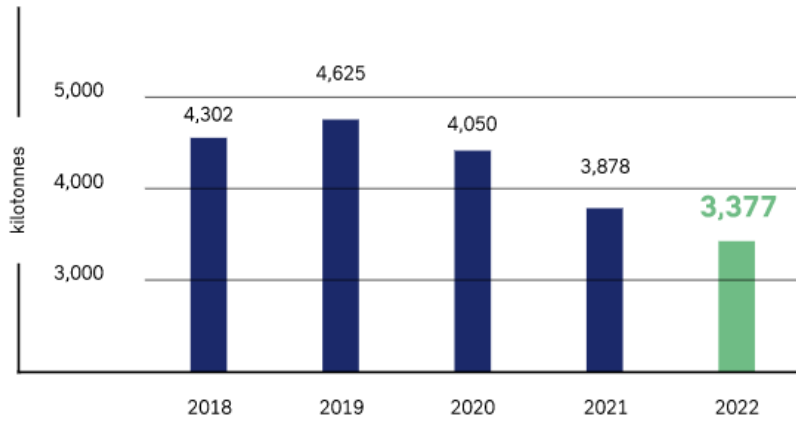


# Key sustainability metrics

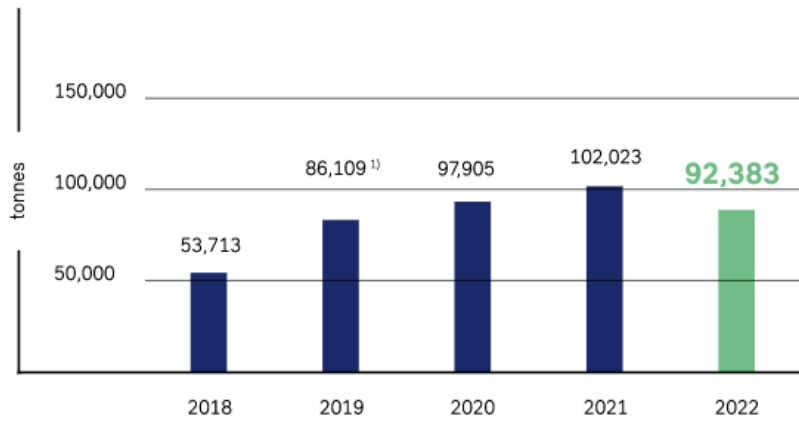
Total Recordable Injuries <sup>1)</sup>



EU ETS CO<sub>2</sub> Emissions

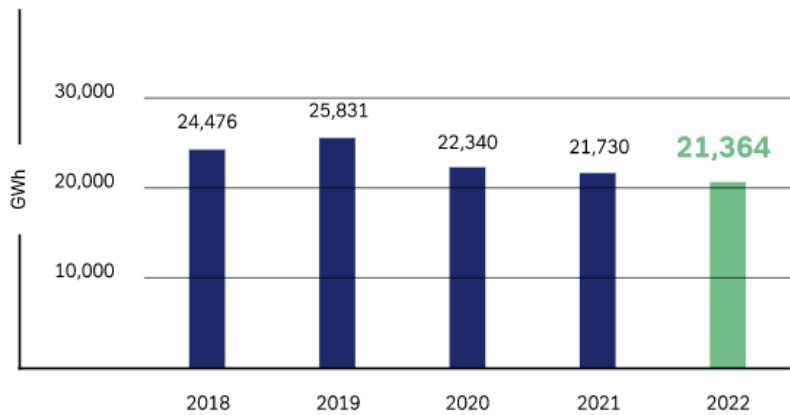


Waste Generation

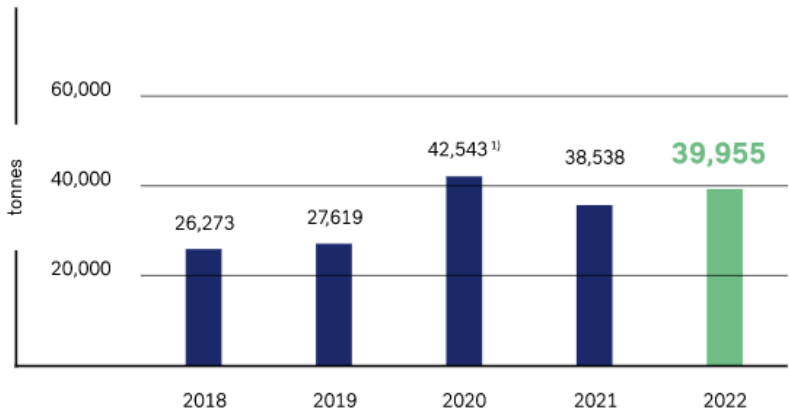


1) The main reason for the increase is the integration of the plastics recycling company mtm plastics GmbH into the monthly group reporting definitions.

Primary Energy Consumption

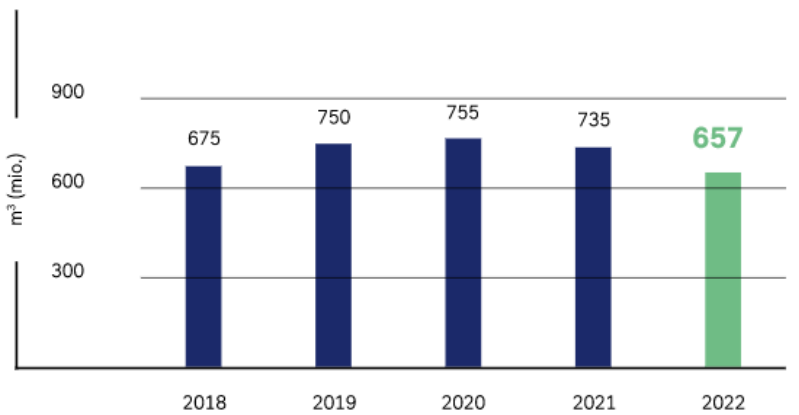


Flaring Performance



1) Severe upsets led to significant emergency flaring during shutdowns; furthermore, there was a lack of recycling capacity.

Water Withdrawal

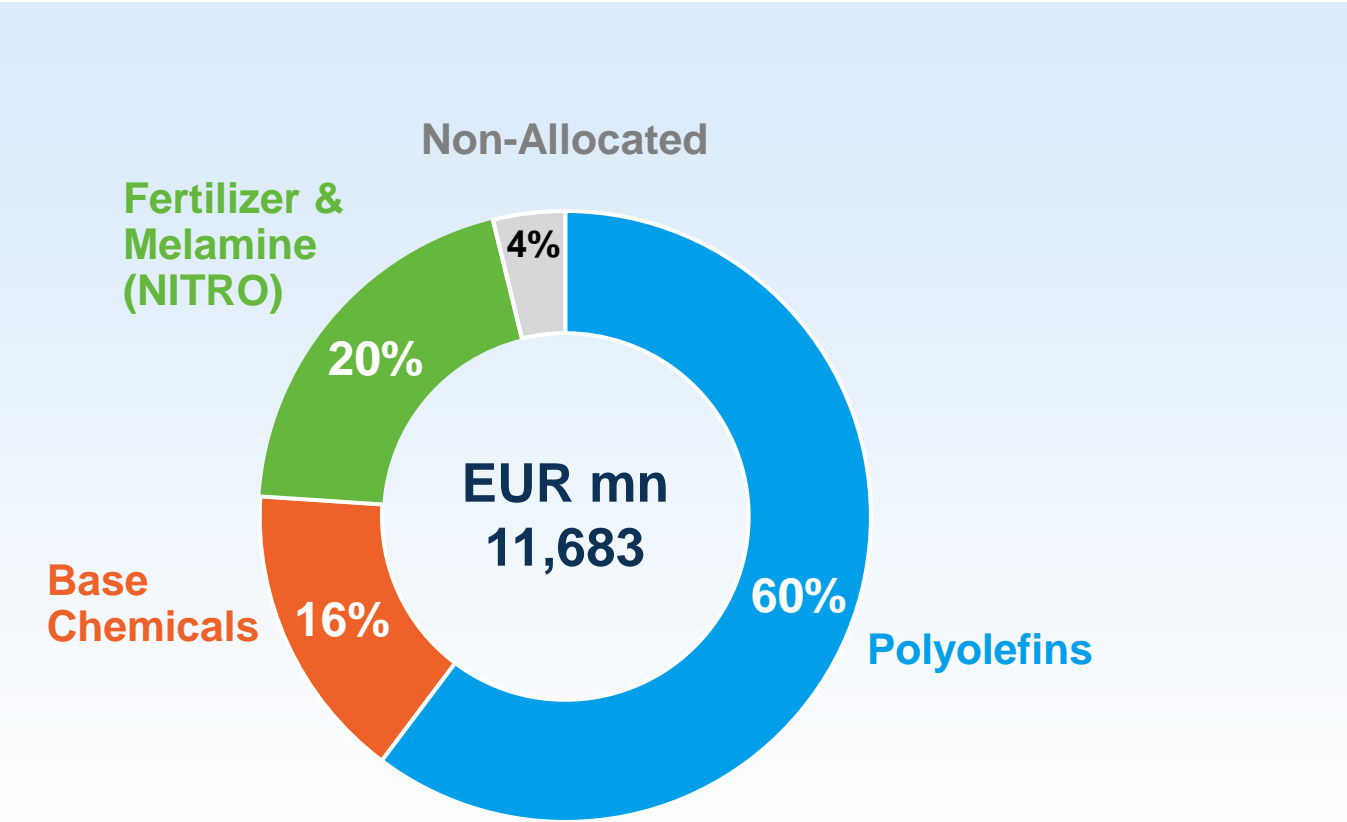


1) Includes own employees and contractors // 2) Definitions were adjusted in 2021 to be aligned with OMV definitions. A comparison to previous years is therefore not possible. // 3) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time of closing of this report. // 4) Severe upsets led to significant emergency flaring during shutdowns; furthermore, there was a lack of recycling capacity. // 5) The main reason for the increase is the integration of the plastics recycling company mtm plastics GmbH and mtm compact GmbH into the monthly group reporting definitions. // 6) Value has been recalculated in retrospect due to ongoing audits and missing third-party data at the time the last report was finalised.

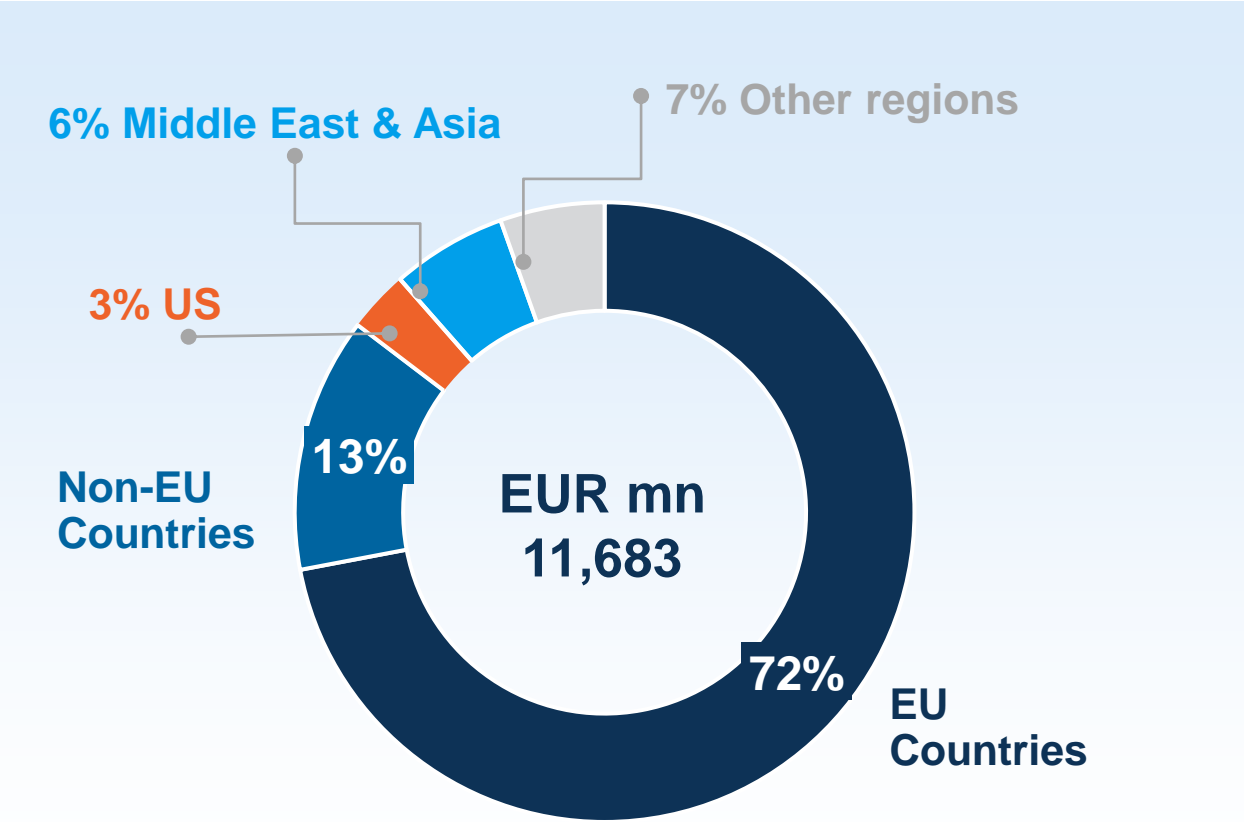
# Sales split by segment and region – FY 2022

Figures incl. discontinued operation

Net Sales by segment, FY 2022



Net Sales by region, FY 2022



Reconciliation of reportable segments to the consolidated income statement	
EUR thousand	
	2022
Total revenue for reportable segments	11,683,280
Elimination of discontinued operation	-2,350,471
Net sales	9,332,809

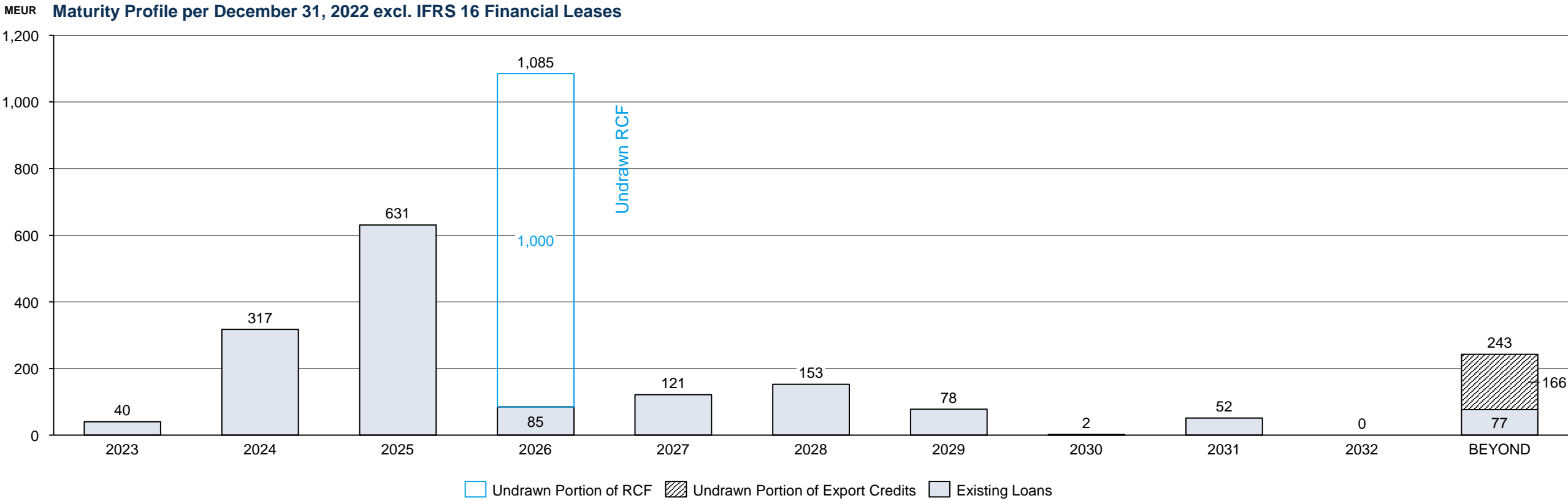


# Financing and Bank Strategy – Debt Portfolio

## Well diversified debt portfolio as basis for a solid financial position

- Revolving Credit Facilities
- OeKB (Austrian ECA)
- R&D Finance
- Corporate Bonds
- Private Placements (USPP, Schuldschein)
- Securitization
- Samurai Loan

## Well balanced maturity profile contributing to financial stability

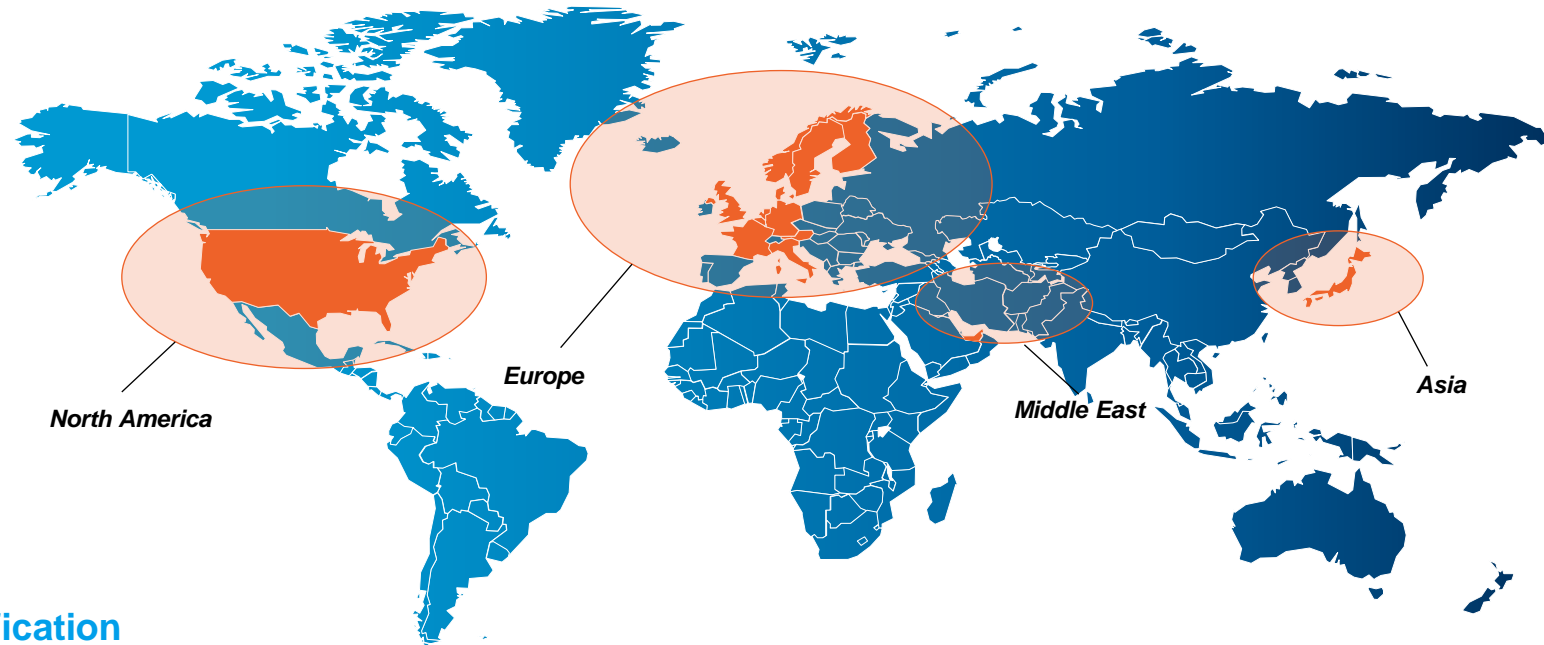


# Financing and Bank Strategy – Diversification

- Active management of maturity profile
- Portfolio approach
- Clear rules for financing approach
- Appropriate measurement & indicators
- Significant headroom under committed lines

## Geographic Diversification

of relationship banks reducing dependency on local financial markets



## Segment Diversification

of relationship banks





Unless otherwise specifically stated, this presentation, any part of it, or any information contained herein may only be copied, disclosed or used within the Borealis group of companies. Borealis AG and its affiliates give no warranty and make no representation as to the accuracy, completeness or fitness for any particular use of the information contained herein.