# Borealis Facts & Figures 2019-2020



## Content

- Borealis' mission and strategy
- Borealis at a glance
- Highlights 2019
- Workforce
- Values
- Key financial and sustainability figures
- Executive Board
- Ownership structure
- Borealis worldwide
- History

- Products
- Sustainability
- EverMinds™
- Project STOP
- Polyolefin producers
- Polyolefin market
- The plastics value chain
- Fertilizer market in Europe
- Melamine market & value chain



# **Borealis Group Strategy 2035**

## The new strategy is built on three key pillars

## Life demands progress – We are re-inventing for more sustainable living

### **Geographical expansion**

Leverage core to become fully global partner to customers for high-value material solutions

#### **North America**

Grow through M&A or selected build projects to strengthen the global footprint

#### **MEA**

Build on ADNOC partnership to capture further growth with assets in Abu Dhabi and in Asia

#### **Transformation**

Evolve to fully customer-centric approach to offer sustainable high-value and circular material solutions

#### **Circular Economy**

Lead the transformation to a truly circular economy across all applications

#### Value Add

Acquire adjacencies to complement and accelerate value creation through innovation

## Leading from the core

Build on safety, values and culture to sustain strong integrated margins in high-value polyolefin solutions

#### Sustainability

Improving environmental footprint and sustainable use of resources in areas where we operate

#### **People**

Drive impactful leadership in a highperforming, diverse and mobile organisation and a purposeful work place

#### **Excellence**

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





## **Borealis at a glance**

#### Worldwide



Head Office in Vienna, Austria.
Operating on five continents
in 120 countries

#### **Market Position**



**#2** among polyolefin producers in **Europe** 

#### **Employees**



More than 6,900 employees

#### **Line of Business**



Production and distribution of polyolefins, base chemicals and fertilizers

#### **Ownership Structure**



**64%** Mubadala, United Arab Emirates / **36%** OMV, Austria

#### **Financial figures**



Net profit 2019 – **MEUR 872** Net sales 2019 – EUR 8.1 billion

#### **Joint Venture**



Borouge – the world's largest integrated polyolefin complex in Ruwais, UAE

#### **Joint Venture**



Bayport Polymers – brings Borstar® technology to American polyethylene markets

#### Circularity



Two polyolefin recycling operations in Europe

#### **Patents**



**120 priority patents** filed in 2019





# **Highlights 2019**

## **January-December 2019**

**Safety first:** Continued focus on safety with a **TRI rate of 1.6** in 2019

Generation of 28 GWh power by windmills connected directly to internal grid at Borealis facilities in Kallo, Belgium.

Borealis becomes **Core Partner of the New Plastics Economy** initiative led by the Ellen MacArthur Foundation.

Launch of circular economy-related product innovations at K 2019 in Düsseldorf, Germany.

Introduction of **new Borcycle™ brand** delivers pioneering circular solutions for demanding applications.

Record number of 120 priority patents filed.

Scaled-up **Project STOP** receives prestigious **ADIPEC** award.

Publication of "10 Codes of Conduct for Design for Recyclability" to promote plastics circularity in the industry.

**ReOil collaboration with OMV** advances chemical recycling of post-consumer plastics.

**Strategic co-operation with Neste** to produce **renewable polypropylene**.

Production capacity increased by 60% at plastics recycling facility in Wildon, Austria, after strategic investment.

Groundbreaking ceremonies in Kallo for world-scale propane dehydrogenation plant and in Texas, USA, for new Borstar® polyethylene unit.

Inauguration of polypropylene (PP) compounding plant in North Carolina, USA, strengthens commitment to North American automotive industry.

Memorandum of Understanding (MoU) with ADNOC, Adani and BASF to evaluate collaboration on chemical production complex in Mundra, India.

**Resolution of tax case** in Finland by way of Mutual Agreement Procedure between Austrian and Finnish tax authorities.

Borealis **honoured as best European PP producer** in 2019 by Polymers for Europe Alliance.



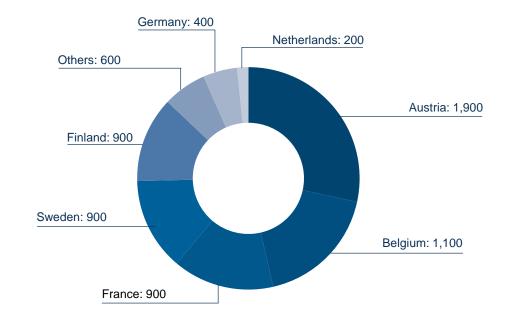


## **Employing a skilled workforce worldwide**

Around **6,900 employees** run Borealis production sites, innovation centres and customer centres around the globe.

Borealis' success is the result of hard work put in by dedicated employees.

#### **Employees worldwide**





# Our values guide our business decisions and drive every action we take









We strive for **zero incidents** in health and safety.

We consider our **local** and **global responsibility** for the environment in our decisions.

We do business according to **high ethical standard** and lead by example.

We **trust** and **involve** people and communicate **openly**, **respectfully** and in a timely manner.

We **collaborate**, **support** and **help each other** to develop for the best of Borealis.

We build on diversity for better results as "One Company".

We win through Excellence and deliver beyond expectations.

We commit to making **joint decisions** and follow through.

We give feedback and make "Connect-Learn-Implement" and "Continuous Improvement" a natural way of working.

We are fit, fast and flexible and seek smart and simple solutions.

We encourage decisions on all levels of the organisation to increase ownership and speed to realisation.

We welcome change and manage it to shape our future.





# **Key financial and sustainability metrics 1/2**

#### **Total Recordable Injuries (TRI)**



1) Includes own employees and contractors

### Total Sales 1)



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

#### **Net Sales**



Gearing



**Net Profit** 



ROCE







# **Key financial and sustainability metrics 2/2**

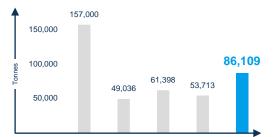
#### **Total Recordable Injuries (TRI)**



1) Includes own employees and contractors

#### **EU ETS Co<sub>2</sub> Emissions**





2017

2018

2019

2016

### **Energy Consumption**



#### Flaring Performance



#### Water Withdrawal

2015

**Waste Generation** 







## **Our Executive Board**





- Chairman of the Executive Board
- Human Resources
- Communication
- Procurement
- Legal
- Strategy & Group Development
- Group HSE and Quality



**CFO** 

- Business Support
  - Business Finance
  - IT & Services
  - Internal Audit
  - Business Intelligence
  - Group Tax
  - Treasury & Funding
  - Group Controlling
- Melamine & Fertilizer
- Group Quality, Programme & Project Management Office



Foufopoulos

## EVP Polyolefins & Innovation & Technology

- Polyolefins
- Circular Economy Solutions
- Innovation & Technology
- Commercial Excellence
- Borealis regions
  - North-America
  - Latin-America
  - Asia-Pacific



EVP Base Chemicals &

- Base Chemicals
- Operations Polyolefins and Base Chemicals

**Operations** 

- Technical Development & Engineering
- Plant Availability & Turn-Around
- Manufacturing Excellence and Improvement

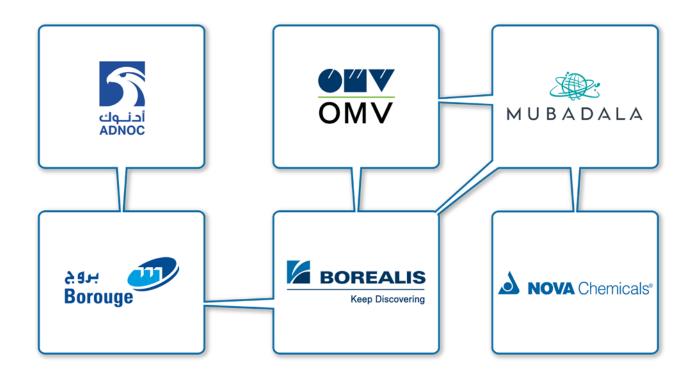


EVP Middle East & Growth Projects

- Borouge JVs
- Growth Projects
- Technical Support
- Borealis ME Representative Office



# A solid ownership structure provides a reliable foundation for the future







## **Borealis worldwide**

#### **Borealis Locations** •

#### **Head Office**

Borealis AG
Wagramer Strasse 17-19
A-1220 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, Sweden, The Netherlands, United States

#### **Borouge Locations** •

#### **Head Offices**

Singapore, UAE

#### Innovation/Application Centres

China, UAE

#### **Production Plants**

China, UAE

#### Sales Offices/Representative Office

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

#### **Borealis L.A.T Locations**

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

#### **Borealis Rosier Locations\***

Belgium, The Netherlands

#### Sales Offices/Representative Offices

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

#### **Logistics Hubs**

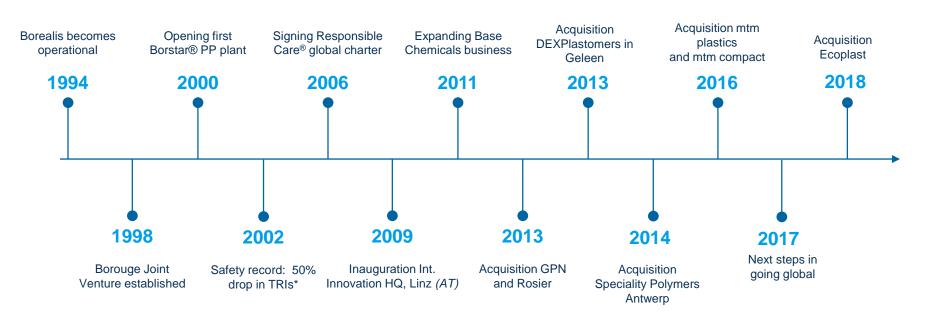
China, Malaysia, Singapore, UAE







# Aware of our history, ambitious about the future, dedicated to fulfil our potential



<sup>\*</sup>Total recordable injuries (TRIs) per million working hours drop to 4.0 from 8.4





# Borealis provides pioneering solutions in three business areas



Borealis works closely with its customers and industry partners to provide innovative and value-creating plastics solutions that increase end-product safety, reduce weight, lower costs and enable integration of parts.



Borealis continues to develop its profitable Base Chemicals business building on unique feedstock technology, logistics and integration strengths.



Borealis is a leading fertilizer and melamine company in Europe with strong ambitions for further growth in selected markets worldwide.

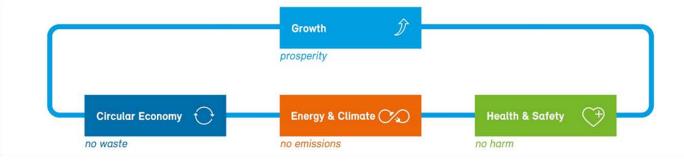
Borealis supplies fertilizers and technical nitrogen products via its Borealis L.A.T distribution network.





## **Borealis Sustainability Ambition**

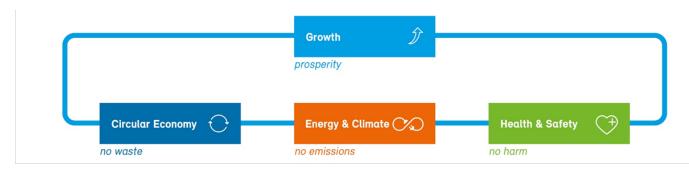
We are committed to create a world where there is **no waste** of resources, **no emissions** into the environment and **no harm** to society, while delivering **prosperity** for Borealis and our stakeholders







# **Borealis Sustainability Strategic Framework**



Enhance sustainability in our operations and supply chain

- Strive towards Zero Pellet Loss
- Optimise renewable feedstock for PO and explore chemical recycling of plastics
- Reduce packaging and waste
- Increase Borealis' energy efficiency and reduce flaring
- Leverage opportunities to use locally produced renewable energy
- Reduce CO<sub>2</sub> emissions in transportation

- Implement a pro-active strategy for chemicals safety and substitution planning
- Ensure occupational health & safety and process safety

# Support profitable business growth

- Lead the transformation of the industry to a Circular Economy
- Enhance PO product portfolio to increase the use of renewable energy, improve energy efficiency and reduce emissions
- Launch innovations that enhance safety in food packaging, automotive, healthcare, and water, sanitation, energy and communication infrastructure



## The EverMinds™ platform – thinking circular

## Connecting Borealis' circular economy-related activities

#### What EverMinds™ is about

- A platform to heighten the visibility of plastics circularity
- As the polar opposite of a dismissive "never mind" attitude, establishes a more circular mind-set
- Serves to streamline all Borealis circular economy related activities and boost their impact:
  - Innovation
  - Commercial offerings
  - Corporate initiatives
  - Value-chain initiatives
  - Industry associations & memberships
- Sparks interaction and exchange with stakeholders
- Acts as a catalyst to inspire innovative circular polyolefin solutions
- Represents people who challenge the status quo, are smart, mindful and progressive



#### The EverMinds™ values



Mindfulness
We take action to shift towards
a circular mindset



Pioneering
We are constantly innovating
our product portfolio; the reason
our clients choose us



Quality
We strive to deliver premium performance whilst caring for the environment



Collaboration
Only together we can shape a better tomorrow





# A city-partnership project co-founded by Borealis and SYSTEMIQ

## **Project STOP**

supports cities to design and implement low-cost, sustainable and more circular waste management models

## **Three Objectives:**

- ✓ Zero leakage of waste
- ✓ Driving circularity
- ✓ Community Benefits

Strategic partners

Supporting and technical partners



















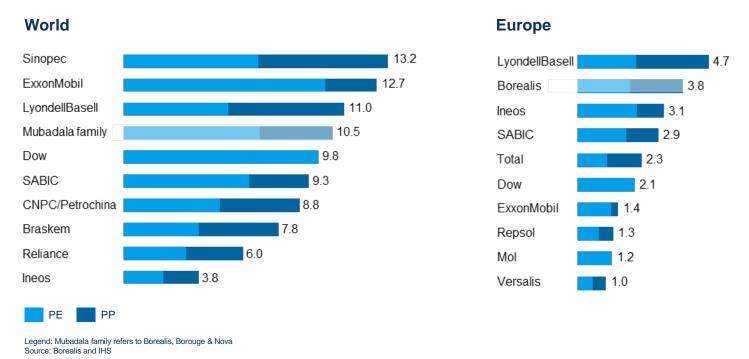






# Polyolefin Producers: Mubadala family & Borealis JVs command top positions

Capacities year-end 2018 in MT, based on ownership share

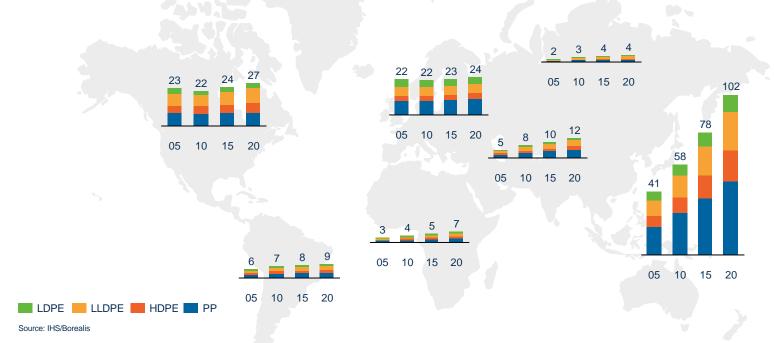






# **Growth in polyolefin demand 2005-2020**

## Regional PE and PP market development (MT)







## **Key drivers of the polyolefin market**





# Translating challenges into opportunities in the global polyolefin market

Key challenges Key opportunities

Advantaged production capacity in the Middle East and North America in future

**Competitiveness** of European-based production assets

Continuing market volatility (e.g. feedstock, prices)

Sustainability of **global demand** growth (especially in Asia)

Increasingly strict **environmental legislation** (e.g. REACH)

Competition for talent and resources

Strengthen own resources and partnerships in the Middle East

Leverage deep expertise to drive lean manufacturing processes

Ensure **flexible processes** and an **efficient organisation** 

Capture potential in other **growth regions** (e.g. Turkey, N. Africa, Americas, CEE)

Reposition the **image** of the chemical / plastics industry

Drive **operational excellence** across the organisation to deliver results



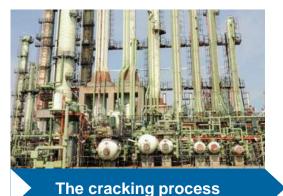
# The plastic value chain (1/2)



Polyolefins begin with oil and natural gas, most of which is exploited for energy. Only 4% becomes plastic raw material.



In the refinery the oil and gas mixture is separated into different products by distillation.



Cracking modifies hydrocarbon molecules into new molecules, including the gases ethylene and propylene. Borealis operates its own crackers and produces most of the olefins it needs.

## The plastic value chain (2/2)



The polymerisation process

Polymerisation is a chemical reaction caused by a catalyst. Borealis produces PE and PP at its polymerisation plants across Europe and with its JV partner Borouge in the Middle East.



PE, PP and compounding

Borealis PE and PP polymers are designed for specific applications and are delivered to customers in the plastics converting industry, usually as 2-to-3-millimetre particles.



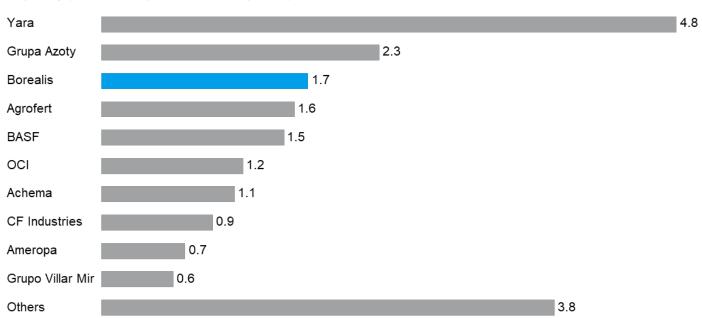
**Plastic solution** 

Borealis' customers melt Borealis PP and PE and process them into the plastic products for everyday use (e.g. packages, bags, film rope).



# **Borealis – a leader in the European fertilizer business**

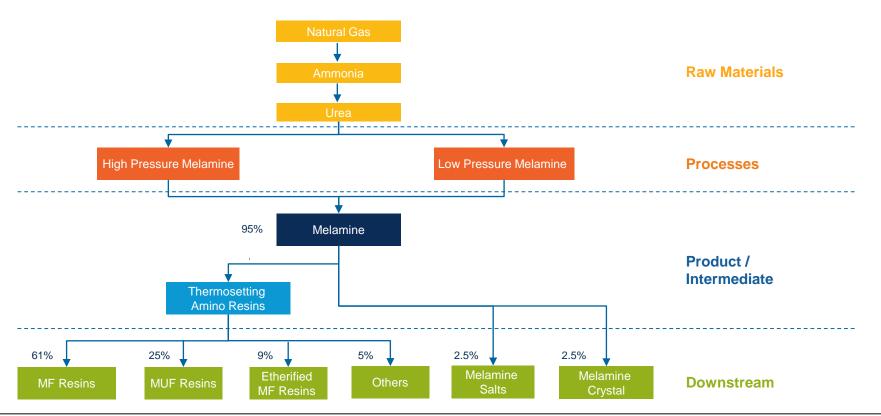
#### Capacity per owner (million tonnes) – Top 10



European Fertilizer Market 2018 in million tonnes (MT), nameplate production capacities in the EU, non-EU Balkans and Norway. Source: Borealis and Fertilizers Europe. Includes AN, AS, ASN, CAN, CAN, CAP, MAP, NP, NPK, OSTRN, OSTPH, PK, Solut, SSP, TSP, Urea



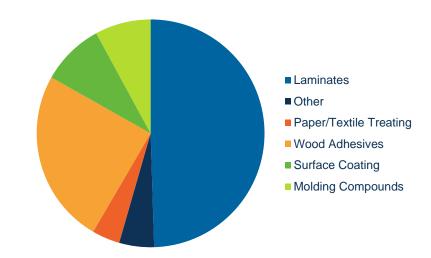
# Melamine: the product value chain



## Melamine market by end use ...

- Global consumption is approximately 1.6 million tonnes
- About 75-80% of melamine consumption can be ascribed to the wood-working industry
- Share of applications expected to remain constant until 2020

### Consumption by application in 2018 (%)

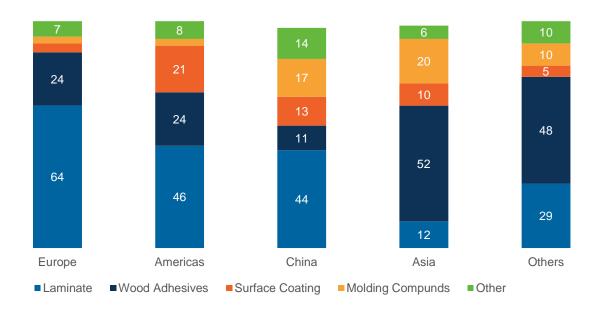


Sources: Borealis Agrolinz Market intelligence



# ... and by region

### Consumption by application in 2018 (%)



Sources: Borealis Agrolinz Market intelligence





# Thank you

