

Borealis AG responses to customer questionnaires regarding management systems

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1) Scope and purpose

The purpose of this document is to provide answers to frequently asked questions directed to Borealis from its customers in regards to the Borealis approach to Sustainability including (or with special focus on) Ethics and the Borealis’ quality and environmental management systems.

Further information can be found on the company website under www.borealisgroup.com.

2) General information

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Our Executive Board Members:

 <p>CEO Mark Garrett</p>	 <p>CFO Mark J. S. Tonkens</p>	 <p>EVP Polyolefins Alfred Stern</p>	 <p>EVP Base Chemicals Markku Korvenranta</p>	 <p>EVP Operations, PTS & HSE Martijn van Koten</p>
Strategy & Group Development	Group Controlling	PO Business Centre	Hydrocarbons & Energy	OPS Polyolefins
Human Resources	IT & Services	Energy	Melamine	OPS Base Chemicals
Communications	Business Finance	Automotive	Fertilizers	Technical Development & Engineering
Legal	Treasury & Funding	Consumer Products	Business Development	Plant Availability & Turn-Around
Procurement	Internal Audit	Pipes & Fittings		Group HSE
Asia Growth & Commercial Excellence	Group Tax	New Business Development		Projects & Technical Support
Middle East & Asia	Business Intelligence	Supply Chain		OPEX Programme
Borouge Joint Ventures	Group Quality & Programme Office	Innovation & Technology		

Further information on the shareholders of Borealis and its Executive Board Members can be found on the [Corporate Website](#) under the respective tabs “Structure and Owners” and “Executive Board”.

3) Business activities and applications

Borealis is a leading provider in the fields of polyolefins, base chemicals and fertilizers. The polyolefin products manufactured by Borealis form the basis of many valuable plastics applications that are an intrinsic part of our daily lives. Borealis works closely with its customers and industry partners to provide innovative and value-creating plastics solutions that make end products safer, lighter, more affordable and adaptable. Advanced Borealis polyolefins have a role to play in saving energy along the value chain and promoting more efficient use of natural resources. Borealis provides services and products to customers around the world in collaboration with [Borouge](#), a [joint venture](#) with the [Abu Dhabi National Oil Company \(ADNOC\)](#). The areas of polyolefins applications are wide-ranging and diverse. At Borealis, these areas are called Energy, Automotive, Consumer Products, and Pipe. New Business Development explores novel and potentially significant polyolefin products and applications. More information can be retrieved on our [website](#), tab “Polyolefins”.

Borealis produces a wide range of base chemicals, including melamine, phenol, acetone, ethylene and propylene for the in numerous and diverse industries, as well as fertilizers and nitrogen products. Fully committed to international Base Chemicals activities as the solid foundation of its overall business, Borealis will continue to develop this profitable area with its unique feedstock capabilities, logistics and integration strength. Borealis' Base Chemicals business consist of three units: Hydrocarbons & Energy, Melamine and Fertilizers. More information can be retrieved on our [website, tab "Base Chemicals"](#).

Borealis serves customers in over 120 countries with approx. 6,500 employees running Borealis production sites, innovation centres and customer centres around the globe. The employee segmentation per country can be found on [Annual Report](#) on page 124.

All Borealis activities, from new technologies to services and solutions, are rooted in a clear strategy:

- ✓ Grow our PO business with a focus on advanced applications and differentiated products, strengthen our European base and ensure cost competitiveness from feedstock to customer.
- ✓ Pursue excellence and optimise Borouge in the Middle East and Asia, including leveraging into Europe.
- ✓ Continue to maximise the value of Base Chemicals, with a focus on growth in Fertilizers and strengthening the cracker asset base with increased feedstock flexibility.
- ✓ Realise growth opportunities in other geographies/related businesses.
- ✓ Pursue operational excellence and a Goal Zero mind-set.
- ✓ Achieve a step change in innovation.
- ✓ Exceed in serving our customers with a focus on quality and reliable execution.
- ✓ Continue to develop our cross-cultural organisational capability and a learning organisation.
- ✓ Drive sustainability, explore and realise business opportunities from the circular economy.

4) Borealis commitment to Ethics

Borealis clearly acknowledges its corporate responsibility and ethical business conduct and strives to observe the International Bill of Human Rights, relevant International Labour Standards issued by the International Labour Organization and the OECD Anti Bribery Convention when doing business.

The Borealis Executive Board has issued a code of conduct named [Borealis Ethics Policy](#), which incorporates the above-mentioned principles and standards. Borealis follows a zero-tolerance principle when it comes to corruption. Borealis has a comprehensive anti-bribery program in place, which covers the compliance with the FCPA, UK Bribery Act, the UK Modern Slavery Act, and other applicable laws wherever we do business. Borealis has also established a Responsible Sourcing Policy for its strategic suppliers. Both, the Borealis Ethics Policy and the Responsible Sourcing Policy can be found on the [Corporate Website](#) under the respective tabs.

5) Borealis commitment to Sustainability

Borealis understands [Sustainability](#) not only as a question of responsibility, but a business imperative, and an opportunity to grow. Sustainability at Borealis is rooted in the [company's values](#) (Responsible, Respect, Exceed, Nimblivity™) and strongly linked to Borealis' vision and mission of value creation through innovation.

Borealis has developed a sustainability strategy focusing on 3 areas: (1) Circular Economy (2) Energy & Climate and (3) Health & Safety with a clear action plan and programme defined to ensure advancements in these materiality areas, all coming along with target setting.

Borealis monitors numerous environmental and social parameters such as air emissions, energy consumption, safety incidents, labour practices etc. in all of the company's operations and reports them on a yearly basis in its [Annual Report](#) published on the company's website.

Concerning the carbon footprint of our products across the value chain, we do not engage into providing either product or site-specific footprint or Life-Cycle Assessment (LCA) data. Information about the Eco-Footprint of Polyolefins can be retrieved from [Plastics Europe](#), information about Fertilizers from the [Cool Farm](#) website.

Borealis participates in the yearly EcoVadis sustainability assessment. In this assessment, the company's performance on Environmental, Social and Economy aspects as well as on Supply Chain Management is being evaluated using 21 criteria, based on internationally recognised sustainability standards. In the 2017 EcoVadis assessment, Borealis achieved the "Gold Recognition Level". In case you are interested in getting access to the assessment result, please contact [EcoVadis](#).

6) Borealis commitment to Quality

Borealis' Quality Policy states [quality and customer satisfaction](#) are the responsibility of all Borealis employees. Borealis strives to consistently meet or even exceed customer expectations and requirements by serving customers and markets with high quality plastic and base chemical solutions and offering reliable services in accordance with the Group Strategy.

Integral part of ensuring high quality solutions is our document management system which captures all controlled documents. The Quality department is owner and ensures accessibility and that all documents are frequently reviewed and updated and changes are implemented by a formal approval process on the documents.

Borealis locations comply with the ISO9001 and ISO14001 requirements. Depending on the product application or legal requirements, the particular Borealis locations are additionally certified according to ISO50001, ISO/TS16949, ISO17025, OHSAS18001, Fertilizer Europe Product Stewardship, FAMI QS, Kosher, FSSC22000 and ISCC. The most

recent certificates can be downloaded from our [company website](#), tab “Standards and Certifications”.

7) Borealis Health, Safety, Environmental & Energy Management

Borealis is signatory of the declaration of support to the [Responsible Care® Global Charter](#), outlining [our commitment](#) to be a leader in the environmental performance and product stewardship. This commitment is supported by an annual process of HSE&Q target setting and reporting.

Borealis is striving for a group-wide 10% improvement in energy efficiency by 2020 compared to 2015. The company monitors and reports within the framework of the Responsible Care® programme numerous environmental parameters such as air emissions, energy efficiency and water consumption in all of the company’s operations. Detailed information about our environmental performance can be found in our [Annual Report](#).

Concerning the carbon footprint of our products across the value chain, we do not engage into providing either product or site-specific footprint or Life-Cycle Assessment (LCA) data. Information about the Eco-Footprint of Polyolefins can be retrieved from [Plastics Europe](#), information about Fertilizers from the [Cool Farm](#) website.

8) Borealis commitment to Fertilizer Europe Product Stewardship

As a member company of Fertilizer Europe, Borealis is fully committed to [Product Stewardship Program](#) for fertilizer companies. The program specifies best practice operations for management of safety, health, environment and security in sourcing of fertilizer materials, fertilizer production and storage, and in the supply chain to the farmer. It covers mineral fertilizers, their raw materials and intermediate products. The term “Product Stewardship” is for Fertilizers Europe to a large extent the same as “Responsible Care” and covers many aspects of “Sustainable Development”. It takes account of the whole life cycle of a product from product development to application. Fertilizers Europe Product Stewardship Program qualifies to the most advanced level of product stewardship programs established by the [global International Fertilizer Industry Association](#) and its implementation is verified by regular third party audits organized by Fertilizers Europe.

9) Borealis commitment to REACH

Borealis aims to ensure a high level of protection for human health and the environment from the risks that can be posed by chemicals. Thus, [Borealis is fully committed](#) to fulfil its legal obligations and is in full compliance with REACH. The company has taken on a leadership role and is an active member of the PlasticsEurope REACH team (RIPPLE). Borealis works closely with its customers and suppliers and its experts share their

experience at REACH conferences and assist small and medium-sized companies in meeting their REACH obligations.

10) Supply Chain Management in Base Chemicals

Borealis has established forums and systems to manage customer requirements, complaints and feedback. A target setting process is well integrated to ensure that targets are set, measured, reviewed and corrective actions taken. To ensure customer satisfaction the Borealis order-to-delivery process is continuously improved:



a) Manage Raw Materials

- Borealis uses only raw materials with pre-defined and approved raw material specifications.
- Borealis uses only approved suppliers for raw material deliveries.
- Borealis regularly evaluates its suppliers.
- Incoming raw materials are evaluated and approved prior to the use.

b) Production of Base Chemicals

- Borealis' internal product specifications (IPS), describe sampling points and sampling frequencies, quality control characteristics as well as production settings and dosing parameters.
- Measurement equipment is controlled via calibration plans.
- Preventive maintenance plan ensure appropriate conditions of the facilities.
- After production, a representative sample is taken. Characteristics defined in the control plan are measured. Final products are classified based on the quality control results.
- Samples and analytical results are retained as described in the quality procedures.

c) Pack & Store products

- Packaging and storage of finished goods are done according to product and customer specifications, pest control systems are in place.
- Borealis utilizes SAP to follow up the storage locations and product movements.

d) Allocate customer order

Customer orders are allocated via SAP.

e) Load, transport & Deliver Products

- Borealis uses only approved hauliers with defined requirements.
- Defining loading instructions, printing of certificates and managing of the transportation chain are done via SAP.

11) Supply chain management in Polyolefins

Borealis has established forums and systems to manage customer requirements, complaints and feedback. A target setting process is well integrated to ensure that targets are set, measured, reviewed and corrective actions taken. To ensure customer satisfaction the Borealis order-to-delivery process is continuously improved:



a) Management of Raw Materials

- Borealis uses only raw materials with pre-defined and approved raw material specifications.
- Borealis uses only approved suppliers for raw material deliveries.
- Borealis regularly evaluates its suppliers.
- Incoming raw materials are evaluated and approved prior to the use.

b) Polymerisation & Pelletizing

- Borealis' Internal Product Specifications (IPS), describe sampling points and sampling frequencies, quality control characteristics as well as production settings and dosing parameters.
- Measurement equipment is controlled via calibration plans.
- Preventive maintenance plan ensure appropriate conditions of the facilities.

c) Batch Classification

- Every batch receives a unique batch number.
- During and after production of a batch, representative samples are analysed according to the product specifications. Based on the conformity of quality control test results the batch will be classified.
- Samples and batch results are retained as described in the respective Borealis Management System (BMS) quality instructions.

d) Pack & Store Products

- Packaging and storage of finished goods are done according to product and customer specifications, pest control systems are in place.
- Borealis utilizes SAP to follow up the storage locations and product movements.

e) Allocate Customer Order to Batch

- Customer orders are allocated to a batch via SAP. The FIFO (first-in/first-out) principle is applied on batch selection for deliveries.
- Quality Control and customer specifications are the basic principle for automatic batch-to-order allocation.

f) Load, Transport & Deliver Products

- Borealis uses only approved hauliers with defined requirements.
- Defining loading instructions, printing of certificates and managing of the transportation chain are done via SAP.

12) Product traceability

Borealis operates a system of product traceability by SAP as a core tool. The effectiveness of this system is frequently evaluated.

13) Customer Complaint Process and corrective and preventive actions

Borealis' established processes are driven by zero defect mind-set and safeguarding delivery of conforming products. Despite of careful examination, we cannot avoid to 100% that a product not meeting the required specifications leaves our premises. Such cases will be handled according to the complaint handling process.

a) Customer Complaint process

Our intent for all customer complaints is to solve the customer's problem and correct the immediate cause of the defect, offer an appropriate compensation for the inconvenience caused when a complaint is justified and take the necessary actions to avoid that defects causing complaints occur again. Any expression of dissatisfaction with Borealis products, packaging or services received from a customer is registered and handled as a complaint according to our customer complaint process. Dissatisfaction linked to specific orders are be registered, whereas problems or requests for improvement of a more general nature are be handled as a technical service request.

b) Continual Improvement – The Borealis Way

Continuous Improvement is a mind-set embedded in the culture of Borealis and ensures a self-learning organization. The core principle of Continual Improvement is the (self) reflection of processes, which leads to the identification, reduction, and elimination of suboptimal processes. The related efforts seek incremental improvement over time or breakthrough improvement all at once.

In Borealis, we use an internally developed methodology called “The Borealis Way”, which bases on the Six-Sigma approach and considers typically the following elements:

- Addressing issues with a simple and structured 5 step The Borealis Way (TBW) process: Define, Analyse, Solve, Implement and Review (DASIR);
- Applying a team-based problem solving technique;
- Involving the organization facilitated by own employees;
- Using a selection of consistent, reliable tools and promoting knowledge sharing.

In this broader sense, all processes & tools, which lead to a sustainable improvement of the company, are included, such as (but not limited to):

- Idea management
- Incident management & near misses
- Waste elimination
- Internal audits
- Customer audits & feedback (including complaint handling)
- Certification & authority audits
- Management System Review
- Improvement/change projects

14) Borealis’ position on responding to third party inquiries

As we maintain numerous contacts with external parties, we receive on a regular basis inquiries to respond or to sign third party code of conducts, reply to sustainability self-assessment questionnaires or to fill in customer forms. Responding to every of these individual inquiries whilst ensuring full reliability and accuracy of the information provided, goes beyond our resource capabilities. Likewise, committing to and signing a third party code of conduct next to our own Ethics Policy would require a full legal upfront assessment of each individual third party Code of Conduct and its possible consequences or impact for Borealis. We therefore trust you understand that we can only submit you with standard information as stated in this document. Further information can be retrieved from the [company website](#) as well as the [Annual Report](#).

Borealis AG
IZD Tower
Wagramer Strasse 17-19
A-1220 Vienna

Concerning the sustainability performance, Borealis achieved the “Gold Recognition Level” in the 2017 EcoVadis assessment. In case you are interested in getting access to the assessment result, please contact [EcoVadis](#) directly.

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Base Chemicals production locations

Location	BAM Linz	BAM Piesteritz	Kallo	Porvoo	Stenungsund	Grand-Quevilly	Grandpuits	Ottmarsheim
Company name	Borealis Agrolinz Melamine GmbH	Borealis Agrolinz Melamine Deutschland GmbH	Borealis Polymers N.V	Borealis Polymers Oy	Borealis AB	Borealis Grand-Quevilly	Borealis Grandpuits	Borealis PEC-Rhin SAS
Location Leaders	Jürgen Mader		Johan Van Grootel	Salla Roni-Poranen	Anders Froberg	Sylvain Busnot	Alexandre Gschwind	Ludovic Boulais
Quality Contact	Michael Knesz		Heidi Dewitte	Outi Wiklund	Pal Borgersen	Isabelle Martineau	Christine Perquin	Jean Pierre Emond
Address	St.-Peter-Str. 25, A-4021 Linz-Austria	Möllensdorfer Str. 13, D-0686 Lutherstadt - Wittenberg, Germany	Sint Jansweg 2 – Haven 1568 B9130 Kallo, Belgium	PO Box 330, FI06101 Porvoo, Finland	SE-444 86 Stenungsund - Sweden	30, rue de L'Industrie FR 76121 Grand-Quevilly - France	BP 12 FR 77720 Mormand - France	Route CD 52F, 68490 - Ottmarsheim- France
Yearly nameplate production capacity (ton)								
Melamine	50.000	90000						
Guanidine Carbonate	600							
NPK (Potassium)	410.000							320.000
Ammonia	500.000					425.000	439.000	235.000
Calcium Ammonium Nitrate	690.000					584.000	325.000	
Ammonium Nitrate MD/NP/NS						638.000		
AN Solution	20.000					803.000	68.000	
Nitric Acid	570.000					894.000	400.000	550.000
Alcali	35.000						10.000	10.000
Urea	420.000						400.000	
Benzene				150.000				
Phenol				185.000				
Cumene				230.000				
Acetone				120.000				
Ethylene				380.000	620.000			
Propylene			480.000	230.000	228.000			
Butadiene				25.000				

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Poyolefins production locations

Location	Burghausen	Monza	Schwechat	Porvoo	Stenungsund	Kallo	Antwerpen	Beringen	Geleen
Company name	Borealis Polymere GmbH	Borealis Italia S.P.A.	Borealis Polyolefine GmbH	Borealis Polymers Oy	Borealis AB	Borealis Kallo N.V.	Borealis Antwerpen N.V.	Borealis Polymers N.V.	Borealis Plastomers B.V.
Location Leader	Michael Freutsmiedl	Rudolf Sukal		Salla Roni-Poranen	Anders Fröberg	Johan Van Grootel		Stefan Caluwe	
Q-Management Representative	Urs Pedrazza	Gabriele Poinsett		Outi Wiklund	Pal Borgersen	Heidi Dewitte		Vera Verbinnen	
Address	Haimingerstr. 1, D-84489 Burghausen	Via Ercolano 8/10, IT- 20052 Monza	Danubiastrasse 21, A-2320 Schwechat	P.O.Box 330, FI- 06101 Porvoo	SE-444 86 Stenungsund	Sint Jansweg 2- Haven 1568 B-9130 Kallo	Nieuwe Weg 1 - Haven 1053, B-2070 Zwijndrecht	Industrieweg 148, B-3583 Beringen	Koolwaterstofstraat 1, NL-6161 RA Geleen
Yearly nameplate production capacity (ton)									
PE			490.000	400.000	760.000		120.000		120.000
PP	600.000		435.000	220.000		300.000		390.000	
Compounds		40.000	110.000	35.000	200.000		120.000	93.000	