## **2018 SUSTAINABILITY REPORT / EXECUTIVE SUMMARY**

### **ABOUT OUR BUSINESS**

LyondellBasell (NYSE: LYB) is one of the largest plastics, chemicals and refining companies in the world. Driven by our employees around the globe, LyondellBasell produces materials and products that are key to advancing solutions to modern challenges like enhancing food preservation and safety through lightweight and flexible packaging, protecting the purity of water supplies through stronger and more versatile pipes, improving the safety, comfort and fuel efficiency of many of the cars and trucks on the road, and ensuring the safe and effective functionality in electronics and appliances. LyondellBasell sells products into more than 100 countries and is the world's largest producer of polypropylene compounds and the largest licensor of polyolefin technologies.

FOR LYONDELLBASELL, SUSTAINABILITY MEANS ADVANCING SOLUTIONS TO ADDRESS GLOBAL CHALLENGES WHILE MEETING OUR STAKEHOLDERS' NEEDS AND THE HIGHEST OPERATIONAL STANDARDS. OUR COMMITMENT TO SOCIETY AND THE ENVIRONMENT IS EMBEDDED IN OUR COMPANY VISION TO BE THE BEST OPERATED AND MOST VALUED COMPANY IN OUR INDUSTRY, TODAY AND TOMORROW.



## OUR COMMITMENT TO SAFETY



Achieved our **best safety performance** with a total recordable injury rate of **0.18** 

Achieved a **40%** process safety **incident rate improvement** compared with 2017

The safety of people and operations is our top priority. Our safety standards apply to everyone involved in our business, including employees, contractors and suppliers.

Eight LyondellBasell manufacturing sites were recognized for exemplary safety performance in 2018 by the American Fuel and Petrochemical Manufacturers (AFPM). Three sites received the top Distinguished Safety award, two were awarded the Elite Gold award and three achieved Silver Elite awards. Since 2017, 17 of our plants have received AFPM safety awards, recognizing industry-leading performance.

# HELPING TO END PLASTIC WASTE IN THE ENVIRONMENT



We were one of the driving forces behind the formation of the **Alliance to End Plastic Waste**, the first global, cross-value chain initiative dedicated to developing waste infrastructure, advancing new recovery and recycling technologies, educating and mobilizing communities, and cleaning-up plastic that is already in the environment.



In our own operations, we continue to target zero pellet loss to the environment, and we committed to the more rigorous OCS Blue program.

## **CLIMATE CHANGE**

OUR GOAL IS TO ACHIEVE A 15% REDUCTION IN CO<sub>2</sub>e EMISSIONS PER TON OF PRODUCT PRODUCED BY 2030 COMPARED WITH 2015 LEVELS.

We are investing in projects to improve reliability and reduce energy consumption at our manufacturing sites. In 2018, we reduced energy use by a total of 3.5 million gigajoules. Through our joint venture with Covestro, we are investing in a circular steam project at the Maasvlakte site in the Netherlands that will result in an overall reduction of approximately 140,000 metric tons CO<sub>2</sub> emissions and 0.9 petajoule of energy annually.

<sup>&</sup>lt;sup>1</sup> Safety data includes newly acquired A. Schulman sites as of Aug. 21, 2018

# ADVANCING SUSTAINABLE AND CIRCUI AR PRODUCTS

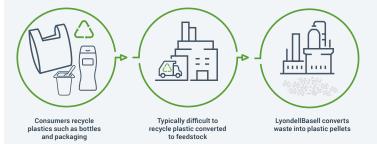


#### MECHANICAL RECYCLING

In 2017, we partnered with SUEZ, a global leader in smart, sustainable resource management, to acquire Quality Circular Polymers (QCP), a premium plastics recycling company located in the Netherlands. QCP uses mechanical recycling technology to transform post-consumer plastic waste into high-quality polymers that can be used to make new products. Throughout 2018, we continued to build capacity at the QCP plant and by Q2 2019, we added 33 new circular grades to LyondellBasell's product portfolio. Our goal is to increase the recycling capacity of the plant to 50,000 tons by 2021, and expand the number of end-use applications. We will seek opportunities to grow mechanical recycling in other parts of the world

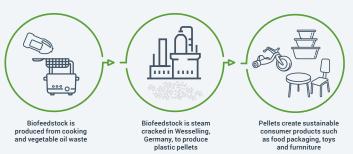
#### MOLECULAR RECYCLING

We are collaborating with the Karlsruhe Institute of Technology (KIT) in Germany to advance the efficiency and scalability of molecular recycling. This emerging technology converts plastic waste into molecules that can be used as feedstock in the manufacturing process, producing new plastic from waste instead of fossil fuel. We aim to find optimum process conditions to make the technology scalable to a semi-industrial proof-of-concept plant by 2021.



#### **BIOPLASTICS**

In 2018, we began developing bio-based feedstocks as an alternative to feedstocks from non-renewable, fossil-derived resources. In June 2019, LyondellBasell introduced Circulen grades of bio-based polypropylene and low density polyethylene made from renewable biomass.



### **OUR PEOPLE**

Our success as a company is tied to the passion, knowledge and talent of our global team. To achieve our vision of being the best operated and most valued company in the industry, we must attract top performers and equip them with the tools needed to continuously grow and leverage their potential. We believe in honesty, diversity, fairness and teamwork, and we focus on creating a work environment that is safe, respectful and inspires employees to strive for excellence.

#### THE VOICE OF OUR EMPLOYEES

We seek and receive input from our employees in many ways, including through the biennial employee engagement survey. Approximately 70% of employees responded to the 2018 survey.<sup>1</sup>

82% of respondents are satisfied with LyondellBasell as a place to work	80% of employees feel proud to work for LyondellBasell
79% would recommend LyondellBasell as a good place to work	79% are excited about the company's future

<sup>&</sup>lt;sup>1</sup> Conducted prior to the acquisition of A. Schulman in August 2018.

REGION	NUMBER OF EMPLOYEES
	As of December 31, 2018
North America	8,900
Europe	8,100
Rest of the world	2,450
Total	19,450

Less than 2% of our employees are part-time.

## ADVANCING OUR COMMUNITIES

Being a responsible, good neighbor in the communities in which we operate is embedded in our mission. We provide jobs that create economic value and we hire locally where possible. We also support economic growth and job creation throughout our supply chain by purchasing goods and services locally.

#### IN THE LAST THREE YEARS, WE HAVE DONATED:



\$9 | million+



46,000 volunteer hours



to 1,200 charities