

# Accelerate Sustainability

Sustainability Report 2019



We are OXEA – a global chemical company with a core competency in the production and sale of oxo chemicals. OXEA's portfolio includes over 70 products supplied to customers. These products are used for the production of coatings, lubricants, cosmetics, printing inks, and much more.

**As of May 15, 2020 OXEA officially changed to OQ Chemicals and belongs to the OQ Group, an integrated energy company.**

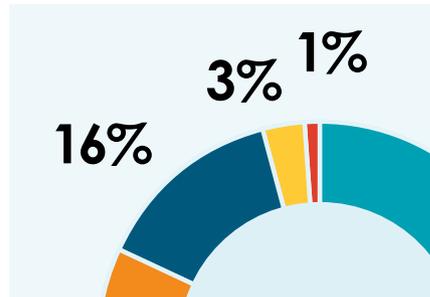
As the reporting period for the Sustainability Report is the year 2019 and OXEA was operating under this name at this time, the company is referred to as OXEA in this report. All information and data refer to OXEA and 2019.



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# FOREWORD

## Dear Readers,

2019 was another exciting yet challenging year, not only with regard to global economic and geopolitical developments, but also in terms of company-related programs and activities. We have been very active in our business endeavors combined with the next steps on our sustainability journey: aiming for long-term success in the field of specialty chemicals.

One important part of our journey in 2019 was our support of the integration program of Oman Oil and the Orpic Group. This program aimed to bring together the two companies owned by the Sultanate of Oman and their affiliated companies with a view to creating an integrated energy company called OQ. On May 15, 2020, we celebrated our new name – OQ Chemicals – and becoming an official part of the OQ group, and I take great pleasure in inviting you to read all about our journey in our company profile and in the chapter “The creation of OQ”.

The story “Acids that Accelerate Sustainability” aims to give you a little insight into our carboxylic acids growth projects. For example, carboxylic acids form the basis for producing lubricants for environmentally friendly air-conditioning and cooling systems and are also used to raise animals without the use of antibiotics. With this investment, we feel that we are ideally prepared for sustainable business growth.

Last but not least, we would like to guide you through the different initiatives and activities throughout the company, covering different areas, such as governance processes, environmental programs and sustainability-specific aspects – to name but a few.

We hope that you find this an enjoyable read.

Oliver Borgmeier

**“At OQ Chemicals  
we accelerate our  
sustainability journey:  
aiming for long-term  
success in the field  
of specialty chemicals.”**



**Dr. Oliver Borgmeier**, Chief Operating Officer,  
responsible for the Downstream International Assets at OQ



# COMPANY PROFILE

OXEA is a global chemical company with a core competency in the production and sale of oxo chemicals. OXEA's portfolio includes over 70 products supplied to customers. These products are used for the production of coatings, lubricants, cosmetics, printing inks, and much more.

There have been changes at OXEA since 2020: the company now belongs to the OQ Group, an integrated energy company. How did this come about?

Since as far back as December 2013, OXEA has been part of the Oman Oil Company (OOC), a company wholly owned by the Government of Oman. The integration of the two Omani companies, Oman Oil Company and Orpic, together with their respective subsidiaries and equity interests, has been taking place since December 2018. This included OXEA as one of the core companies. You can read more about this on page 7.

As the reporting period for the Sustainability Report is the year 2019 and OXEA was operating under this name at this time, the company is referred to as OXEA in this report. All information and data refer to OXEA and 2019.

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**1.3** million tons  
of production capacity

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Headquartered in  
**Monheim,**  
Germany

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**70**  
products  
shipped to all continents

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Annual  
revenue of  
**1.2** billion euros

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**6**  
production sites

---

**1,400**  
employees  
globally

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# LOCATIONS



- Production sites
- Administrative offices

## Production Sites

**Bishop**  
approx.  
35 employees

**Bay City**  
approx.  
180 employees

**Amsterdam**  
approx.  
25 employees

**Oberhausen**  
approx.  
850 employees

**Marl**  
approx.  
70 employees

**Nanjing**  
approx.  
50 employees



# THE CREATION OF OQ

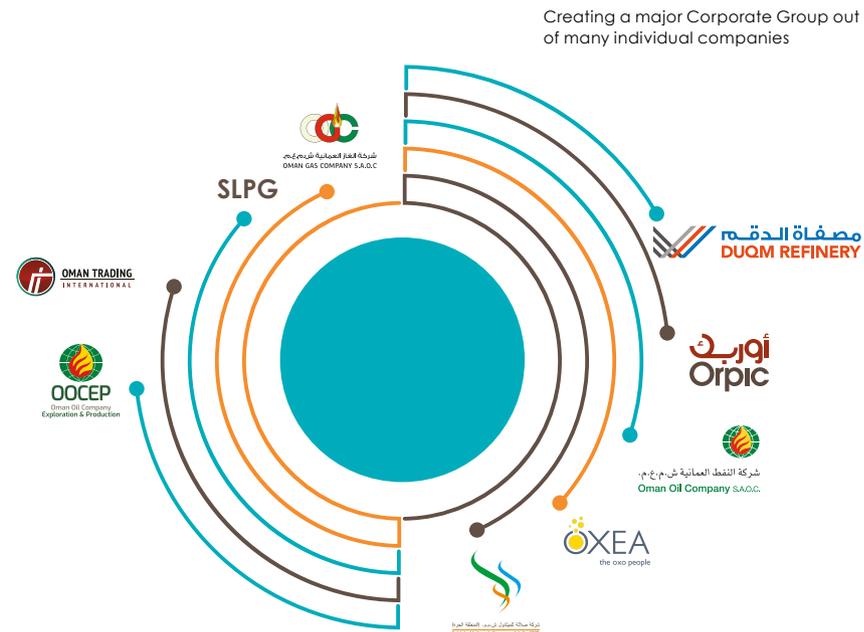
In 2019, OXEA was a key component in an integration program between Oman Oil and the Orpic Group. This program aimed to bring together the two companies owned by the Sultanate of Oman and their affiliated companies with a view to creating an integrated energy company called OQ.

Since as far back as December 2013, OXEA has been part of the Oman Oil Company S.A.O.C. (OOC), which belongs to the Sultanate of Oman. When the integration of the two companies, Oman Oil and Orpic, and their affiliated companies began, the integration program was also initiated to help optimize the structure of the Group and is scheduled for completion by the end of 2020. Since May 2020, OXEA has been trading under the brand name OQ with the add-on "Chemicals". OXEA's current business processes remain unchanged during the ongoing integration phase. This gives rise to new development opportunities for colleagues based in Germany, the Netherlands, China, Japan, Singapore, Mexico or the USA. The OXEA Leadership Team and the Works Council for all German locations were involved in the integration process. In 2019, many OXEA colleagues also worked on the future organization and on questions regarding specialist areas in order to position themselves optimally.

The organizational structure of OQ will consist of six major business areas: Finance & Strategy, People & Culture, Project & Technology, Commercial, Downstream, Upstream. OQ wants to mature into a leading worldwide

energy company with a view to securing a stronger position in the global value chain for hydrocarbons and to generating further growth.

OQ launched an integration program to form one company from nine core assets: Orpic, Oman Oil Company, Oman Oil Company Exploration and Production, Oman Gas Company, Duqm Refinery, Salalah Methanol Company, Oman Trading International, OXEA, and Salalah Liquefied Petroleum Gas.





# OXEA'S VALUE CHAIN

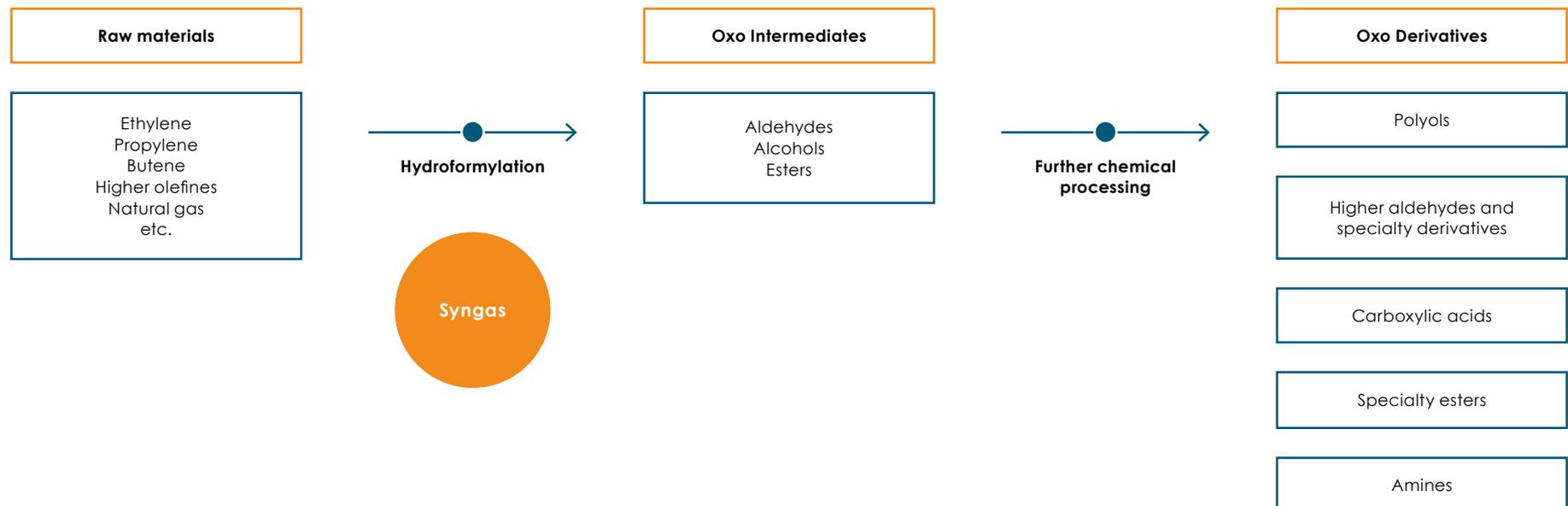
OXEA produces and sells more than 70 products worldwide. Our products can be found in a wide variety of everyday applications and market segments, such as raw materials for coatings and ingredients for personal care formulations, but also as a component of safety glasses in the automotive industry, in lubricant formulations for cooling systems, and for the manufacture of printing inks.

OXEA's highly integrated production platform is based on the oxo process invented in 1938 by Otto Roelen at our site in Oberhausen. The oxo process, otherwise known as the hydroformylation process, transforms olefins, which are unsaturated hydrocarbons such as propylene and ethylene, to aldehydes by adding syngas.

These aldehydes are either sold externally or are used internally (i.e., captive requirements) as precursors for other Oxo Intermediates and Oxo Derivatives such as carboxylic acids, polyols, amines, and specialty esters (see graphic below).

Due to the chemical nature of the molecules, application areas are widely spread. The following graphic presents our core competencies along the oxo chemicals value chain and also shows applications and market segments in which OXEA's products are used.

## Oxo Process





# APPLICATIONS

This overview shows applications and market segments in which OXEA's products are contained.

## Oxo Intermediates

**Aldehydes**

**Applications:**  
Lacquers,  
polymer additives,  
flotation reagents,  
flavors & fragrances

**Alcohols**

**Applications:**  
Surface coatings,  
lacquers & paints,  
polymer additives,  
lubricants, solvents,  
disinfectants,  
printing inks

**Esters**

**Applications:**  
Chemical intermediates,  
cosmetics,  
paints & coatings,  
printing inks,  
pharmaceuticals,  
solvents

## Oxo Derivatives

**Higher aldehydes**

**Applications:**  
Chemical intermediates,  
flavors & fragrances

**Polyols**

**Applications:**  
High solids coatings,  
powder coatings,  
cosmetics,  
lubricants,  
polymer additives

**Carboxylic acids**

**Applications:**  
Lubricants,  
siccatives,  
flavors & fragrances,  
polymer stabilizers,  
feed additives,  
corrosion inhibitors

**Amines**

**Applications:**  
Agrochemicals,  
rubber chemicals,  
polymer additives,  
pharmaceuticals,  
surfactants,  
dye intermediates,  
specialty chemicals,  
corrosion inhibitors

**Specialty esters**

**Applications:**  
Plasticizers,  
lubricants,  
coalescing agents

**Higher alcohols**

**Applications:**  
Plasticizers,  
lubricants,  
flavors & fragrances,  
surfactants



# PRODUCT OVERVIEW

The product range of OXEA comprises more than 70 chemicals, which are subsequently processed by the industry. This diagram provides an overview of our general product portfolio (excluding customer-tailored products).

Oxo Intermediates	Oxo Derivatives					
Aldehydes / Alcohols / Esters	Carboxylic acids	Polyols	Amines	Higher aldehydes	Higher alcohols	Specialty esters
Propionaldehyde n-Butyraldehyde Isobutyraldehyde n-Butanol Isobutanol n-Propanol n-Propyl acetate n-Butyl acetate Isobutyl acetate 2-Ethylhexanol	Propionic acid (AF) n-Butyric acid (AF) Isobutyric acid Valeric acid (HP) 2-Methylbutyric acid 3-Methylbutyric acid Heptanoic acid (HP) 2-Ethylhexanoic acid Pelargonic acid (HP+HALAL) Isononanoic acid Isopentanoic acid	1,3 Butylene Glycol TCD Alcohol DM Nepopentyl Glycol (NPG) Trimethylolpropane (TMP)	Propylamines Butylamines 2-Ethylhexylamines n-Octylamine 3-Methylbutylamine Dimethylbutylamine	n-Undecanal n-Nonanal 2-Ethylhexanal C13/C15 Aldehyde Isovaleraldehyde Isononanal Valeraldehyde Propionaldehyde	2-Methylbutanol 3-Methylbutanol n-Heptanol n-Nonanol 3,5,5-Trimethylhexaisanol (Isononanol) TCD Alcohol M	OXSOF 3G8 OXSOF TOTM LE OXSOF TOTM ST LE OXSOF GPO OXFILM 351 OXLUBE L9-TMP



# STRATEGY – VISION AND GOALS

True to our vision and strategy of a sustainable business growth by being the partner of choice for high-quality oxo chemicals and services, we have focused on our priorities set for 2019.

2019 was an economically challenging year that even strengthened OXEA in following our strategic path: building on our base business whilst evolving into a specialized solution provider for our partners to balance out economical cyclic progression and support long-term growth.

As reported last year, we have identified several “star products” (outstanding products) and focus areas (among others) that are being reviewed on a constant basis:

- Propyls in the packaging and printing industry
- Carboxylic acids as building blocks in lubricants and the animal feed industry
- TCD Alcohol DM as a versatile copolymer in various industries
- 1,3 Butylene Glycol in personal care formulations

## Our Focus Products and Developments

With our expansion in the areas of Propyls, which went live in July 2018, we have set a milestone for the printing industry, thriving to lower the consumption of solvents and thus reduce any burden on the environment (please refer to our Sustainability Report 2018).

The year 2019 was another eventful one regarding expansion projects: In the area of carboxylic acids the decision for a major investment was taken that affects several carboxylic acids in the OXEA portfolio, various market segments and OXEA production sites – you can read all about this in this year's report in this year's feature story.

Furthermore, a significant investment to increase the TCD Alcohol DM capacity has been approved by the Board. Additional capacity is targeted to be operational in Q4 2021.

With several capacity expansions in the past years for 1,3 Butylene Glycol, another step has been taken in 2019 to increase the output of 1,3 Butylene Glycol for the personal care industry.

## Company Scorecard and Integration

Detailed company goals covering the areas of “Safety”, “Finance”, “Operations”, “Strategic Initiatives” and “Group integration” have been set with defined KPIs, and are monitored via the Company Score Card (CSC). Achievement levels are covered in the individual reporting sections.

In December 2018, OXEA as a part of the Oman Oil Company & Orpic Group joined eight other companies in a process to create a new, integrated energy company which now trades under the brand name ‘OQ’. The integration is described in the section “The creation of OQ”.



Entrance of the Oberhausen site

# BOARD OF DIRECTORS

## Strong Industrial Know-How Thanks to New Board Members

The Board of Directors, as the supreme operational decision-making authority of OXEA, appoints a CEO/COO, who is responsible for the day-to-day management of the business, in line with the strategy and long-term objectives approved by the Board.

In 2019 there were personnel changes; Chairman Musab Al Mahruqi and Nazar Al Lawati are no longer on the OXEA Board. The new Chairman is Ahmed Al Jahdhami.



From left to right: Dr. Salim Al Huthaili, Jennifer Midura, Hilal Al Kharusi, Monika Engel-Bader, Ahmed Al Jahdhami (Chairman), Patrick Quarles, Luis Fernandez, Martin Lundin

# OXEA'S LEADERSHIP TEAM



**Dr. Oliver Borgmeier**  
Chief Operating Officer,  
Executive Vice President  
Global Operations



**Markus Hoschke**  
Executive Vice President  
Global Sales & Marketing



**Stefan Schmidt**  
Chief Financial Officer,  
Executive Vice President  
Finance & IT



**Hans-Peter Imkamp**  
Executive Vice President Legal,  
Insurance, Trademarks



**Cristobal Ascencio**  
Executive Vice President  
Strategy & Innovation



**Ashraf Al Mamari**  
Executive Vice President  
Global Human Resources  
& Communications  
(Effective August 1, 2019)



**Jan Hille**  
Executive Vice President  
Global Supply Chain



# Acids that Accelerate Sustainability

Carboxylic acids are the hidden champions of the chemical industry. They are used for many different applications and in various market segments – either as a reactant or an end product. For example, they form the basis for the production of lubricants for environmentally friendly, low GWP<sup>1</sup> air conditioning and cooling systems and are used as key raw material for non-antibiotic feed additives. As many companies need these acids for the development of solutions for a more sustainable future, demand is increasing rapidly. OXEA is supporting that growth with the construction of a new facility in Oberhausen, Germany. It will increase the company-wide production capacity for carboxylic acids by more than 30% as of 2021.

<sup>1</sup> GWP = Global Warming Potential





Farmers and meat producers around the world might still remember the moment of horror they experienced on December 11, 2018. That was the day that a major fast-food chain announced that in the future they were only willing to process beef from suppliers who limited the use of antibiotics to a minimum. That measure was one of many steps the company had taken as a reaction to the bad publicity of the preceding years and changing consumer demand. In that context, the company is currently testing the prospects for success of plant-based burgers in Canada. In addition, since 2019, all European outlets have only been using chicken from birds that do not receive any antibiotics reserved for humans.

These measures have given an important signal to the industry because they demonstrate that excessive use of antibiotics to accelerate growth is no longer a marginal issue. If meat producers want to enjoy continued success, there is now additional pressure on companies in the meat industry to use suitable replacements in non-antibiotic animal feed.

#### n-Butyric Acid AF:

##### Assisting non-antibiotic animal feed

Meat producers do not have to look far for an “assistant” for non-antibiotic animal feed. That is because it already exists, in the form of the carboxylic acid n-butyric acid AF. Animal feed manufacturers use its salts and esters, called butyrate and butyrin, in their products for feeding calves, pigs, poultry and aquacultures. Absorption of nutrients from animal feed, and thus growth of the animals, is supported by n-butyric acid AF.



— Kyle Hendrix, Global Commercial Director for Carboxylic Acids and Derivatives, OXEA

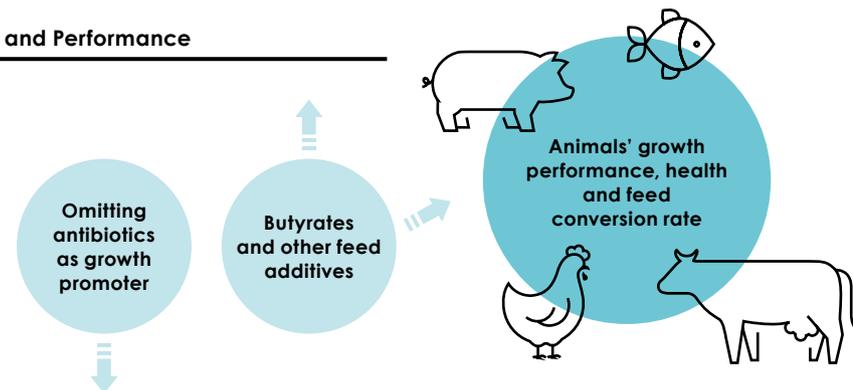
**“Our n-butyric acid AF helps the animal feed industry develop sustainable solutions that allow farmers to reduce the use of antibiotics to a minimum without harming productivity.”**

OXEA is among the world’s biggest producers of animal-feed-grade (AF) n-butyric acid, which is not only good for the health of livestock, but also of people. Why? In many countries, antibiotics are primarily used not to heal sick animals, but as a cost-effective growth promoter that ensures quick weight gain and prevents sickness among animals kept in close proximity to each other. However, the side effects of this “therapy”, which is now heavily regulated in the EU, are very dangerous – primarily for the global population. According to figures from the EU Commission, each year more than 700,000 people worldwide die of infections whose causes have now become resistant to certain antibiotics.

“Our n-butyric acid AF helps the animal feed industry develop sustainable solutions that allow farmers to reduce the use of antibiotics to a minimum without harming productivity,” explains Kyle Hendrix, Global Commercial Director for Carboxylic Acids and Derivatives at OXEA.

#### Rebalancing Animals’ Health and Performance

While the use of antibiotic growth promoters is declining, negative impact on performance and health of farm animals has to be compensated by key raw materials for feed additives like n-Butyric Acid derivatives.





### Acids that Accelerate Sustainability

This is due to specific characteristics of the butyric acid derivatives that have a positive effect on animal well-being – and thus support quick weight gain. Added to animal feed, they have an anti-inflammatory effect, which prevents nutrition-related illnesses and salmonella infections. At the same time, they improve intestinal flora and thus also nutrient absorption. Furthermore, there are no known interactions with other additives. This means that the salts and esters of butyric acid reduce the risk of unwanted side effects or production downtime.

The meat producers, too, are increasingly convinced by these benefits. In that context, the use of antibiotics in farming in the European Union and the USA decreased by around 15% between 2015 and 2017, and continues to be on a downward trend. "In Asia and America in particular, we are noticing increasing demand for n-butyric acid AF," says Kyle Hendrix.

#### New Production Facility Supports Sustainable Growth

OXEA is accompanying this growth through targeted expansion of production capacity for carboxylic acids. In this way, the company is following a selective growth strategy concentrating on the production of replacements for ingredients that are classified as harmful or are heavily regulated.

In order to improve the global supply situation, OXEA initially ensured rapid production expansion at the German site in Marl with cost-effective measures that also reduced the ecological footprint of the plant there. For this purpose, an unused tank with a capacity of around 10,000 liters was reactivated, which allows the production period of the relevant carboxylic acids to be extended. The effects: reduced flushing losses,

***“Our aim was to quickly and cost-effectively expand production in Marl by 15% – and we managed exactly that.”***



— Stefan Frentzen,  
Marl Site Manager, OXEA



In Marl an important milestone was achieved through product optimization and further capacity increases.



Acids that Accelerate Sustainability

fewer changeover days, and therefore also reduced downtime. In addition, product changes are no longer carried out manually, but rather are automated via process control systems and secured switching valves, which prevent possible contamination and increase process security. "Our aim was to quickly and cost-effectively expand production in Marl by 15% –

and we managed exactly that," says Site Manager Stefan Frentzen.

The new construction of a state-of-the-art large-scale plant at the Oberhausen site, less than 40 kilometers (25 miles) away from Marl, is also playing an important role in the expansion of OXEA's carboxylic acid pro-

duction. Once it goes into operation in early 2022, the plant will increase the company-wide production capacity for carboxylic acids by more than 30%. "The expansion of capacity makes an important contribution to the security of supply for our customers, who want to continue to grow with environmentally friendly solutions," says Operations Manager Klaus Schmid.



— Klaus Schmid, Head of Operations Oberhausen

**+ 30%**

The plant in Oberhausen will increase the company-wide production capacity for carboxylic acids.



### Isononanoic Acid: the Raw Material for a Healthier Climate

One of the carboxylic acids whose production is being considerably expanded in Oberhausen is isononanoic acid. Like n-butyric acid AF, it is one of the carboxylic acids with great potential for the environment – but in a very different area of application.

Isononanoic acid serves as raw material for synthetic lubricants that are required for smooth operation of compressors in state-of-the-art air conditioning and cooling systems. These next-generation systems work without environmentally damaging coolants and play an important role in the implementation of various climate agreements, especially the Kigali Amendment, which has been in force since January 2019. Through it, 197 countries and communities of states agreed to gradually reduce the use of hydrofluorocarbons (HFCs) by up to 85%. In contrast to the long-since banned chlorofluorocarbons (CFCs), HFCs do not damage the ozone layer, but these coolants do have greenhouse gas potential with an effect up to 14,800 times stronger than that of CO<sub>2</sub>.

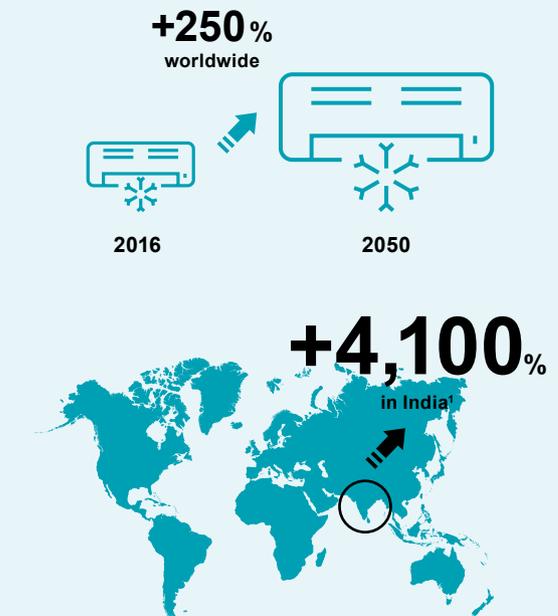
“Due to strict regulatory requirements, the demand for synthetic lubricants for environmentally friendly cooling technology has increased considerably,” explains Kyle Hendrix. “That is unlikely to change much in the future, because the growing economic prosperity of people in countries like India and China will further increase the demand for ecological solutions for air conditioning in buildings and cooling in industry.”

**“Due to strict regulatory requirements, the demand for synthetic lubricants for environmentally friendly cooling technology has increased considerably.”**

— Kyle Hendrix, Global Commercial Director  
for Carboxylic Acids and Derivatives, OXEA

A study by the International Energy Agency (IEA) shows how significant growth potential in the next 30 years could be: It predicts a global increase in demand for room air conditioning systems of 250% by 2050, compared to 2016. According to the IEA study, the biggest jump will come in India, where demand is expected to grow by 4,100%.

#### Global Increase for Room Air Conditioning Systems



<sup>1</sup> <https://www.iea.org/data-and-statistics/charts/global-air-conditioner-stock-1990-2050>



**“Speed is an essential success factor.”**

**Dr. Christoph Balzarek** is responsible for the further development of manufacturing processes and the product and application portfolio at OXEA. The main tasks for the chemist and experienced business manager include systematic management and technical implementation of customer-centered innovations such as the current expansion of acid production.

**Dr. Balzarek, the new large-scale facility in Oberhausen for the production of carboxylic acids will start operation in early 2022. Are you feeling impatient already?**

**Christoph Balzarek** — Yes, absolutely, even though we are well on track. The speed factor nevertheless plays a decisive role in the expansion of our production capacities. The demand for carboxylic acids is developing in a highly dynamic way. That means: speed is an essential success factor. That is why we are putting our foot to the floor in order to be able to support the further growth of our customers through increased availability of our products.

**The biggest growth markets for synthetic lubricants and animal feed for non-antibiotic growth accelerants are currently in the USA and Asia. So why did OXEA opt for Oberhausen?**

**CB** — At first glance, it seems logical to drive forward the expansion of acid production where the end users are located. But that is just one of the many aspects we analyze when selecting a location. For example, we also consider climate risks, as well as the level of training and number of staff members available. Waste management together with high availability of and short transport routes for raw materials are equally

important. In the end, it turned out that Oberhausen offers the best conditions. Thanks to the well-developed infrastructure, we can expand our acid capacity in Oberhausen far quicker than we could in China, for example. Furthermore, here we can achieve the required economies of scale.

**“The acid business area is a key growth driver for us.”**

**How do you evaluate the sustainability of your investment in expanding acid production?**

**CB** — The acid business area is a key growth driver for us. Expanding capacity in Oberhausen therefore not only makes an important contribution to securing the location, but is also an example of our selective growth strategy in markets with particular potential. In that context, we are talking about a long-term perspective of far more than ten years, because with the acids we provide, we are supporting the development of urgently required innovative solutions in markets that are increasingly regulated and characterized by growing ecological sensitivity among consumers. All that makes our expansion of acid capacity a sustainable investment in a number of ways – both economically and ecologically.



**In 2019, we made considerable progress on our journey towards greater sustainability – in both our large- and small-scale activities.**

**As well as setting our direction and establishing strategic targets and large-scale projects to tackle current and long-term challenges, we turned our attention to everyday working life at OXEA in order to raise awareness for sustainability in all its dimensions.**



# SUSTAINABILITY AT OXEA

## Sustainability at OXEA – Key Highlights 2019

Sustainability and Corporate Social Responsibility (CSR) play an important role in all OXEA processes as well as our everyday work life and are reflected in many different ways.

In 2019, we have reached Gold Status on the Ecovadis platform – a notch up compared to the Silver Status in 2018. Particularly in the area of Environment, the company's positive rating owes much to its ISO 50001 certification in Europe and ISO 14001 certification in the USA. Among other things, OXEA's revised Code of Conduct also improved its rating in the Labor & Human Rights area.

At OXEA, we support the Sustainable Development Goals (SDGs) of the United Nations and have identified four SDGs that we have an impact on with our core business activities. OXEA is also a listed member of the Responsible Care initiative and adheres to its guiding principles.

For an update of the company's material topics, we have conducted a materiality analysis in 2019, taking into account the requirements of the GRI (Global Reporting Initiative) Standards and the CSR-RUG (Directive Implementation Law). In combination with the relevant SDGs, the analysis sets the framework for future activities of the company.

Our financial, environmental and social activities and targets are described in the different reporting sections.

## Implementation of the SDGs at OXEA

At OXEA we have identified four SDGs that we actively contribute to:



**SDG 4:** Quality Education: OXEA invests in training & education of employees throughout the company. In the city of Oberhausen, OXEA is one of the most important employers in the community with our offers of vocational training for young people in industry-related occupations.



**SDG 8:** Decent Work and Economic Growth: The management structure of the company is set for economic success and sustainable growth based on defined procedures and processes. We adhere to a Company Code of Conduct that objects any form of discrimination, child or forced labor.



**SDG 12:** Responsible Consumption and Production: At OXEA, we entertain safe and efficient processes. As the founder of the oxo synthesis, we are experts in our processes. Our goals are to maximize output whilst minimizing input. All our products are labeled and supplied with the correct documents to guarantee a safe handling by the recipient.



**SDG 13:** Climate Action: As a manufacturer of chemicals, we acknowledge our responsibility and impact on the environment. We continuously work on the improvement of our energy balance and greenhouse gas emissions worldwide and have set ourselves short-term, mid-term and long-term goals.

>> please refer to section [Global Climate Change](#)



# MATERIALITY ANALYSIS

## Material Topics of OXEA – a Three-Dimensional View

In 2019, OXEA has re-evaluated its material topics to evaluate its targets, related concepts and activities. A materiality analysis builds the basis for the sustainability strategy of the company. It was conducted in a multi-step approach, covering the following different stages:

- Generation of a short list of material topics
- Material topics evaluation by OXEA employees
- Validation of material topics through Leadership Team
- Results of the materiality analysis

### Details on the Process

#### Generation of a Short List of Material Topics

Based on the GRI Standards 2016, a peer review and relevant topics for the chemical industry, a short list of topics of general business relevance for OXEA was created covering the following matters:

#### Material Topics Evaluation by OXEA Employees

The short list of topics was due for a three-dimensional evaluation on a seven-point scale determining:

- OXEA's impact on the topic
- Stakeholder relevance of the topic
- Business relevance of the topic

OXEA experts, covering 15 different business areas, were free to add material topics or change. As relevant stakeholder groups the following groups were identified (listed in alphabetical order): consumers, customers, OXEA employees, government/regulators, investors/owners, media, NGOs and suppliers.

OXEA employees evaluated the importance of topics according to the three dimensions and also took a stakeholder perspective in the evaluation process. All stakeholders were seen as equally important in this step.

#### Validation of Material Topics through Leadership Team

The initial results of the materiality analysis were validated by the Leadership Team in a one-day workshop:

**Step 1:** Evaluation of business relevance and OXEA's impact (per topic). Initial results per topic were replaced by the average results of the Leadership Team evaluation.

**Step 2:** Rating of relevance of each stakeholder group. The relative relevance was incorporated into the results using the seven-point scale.

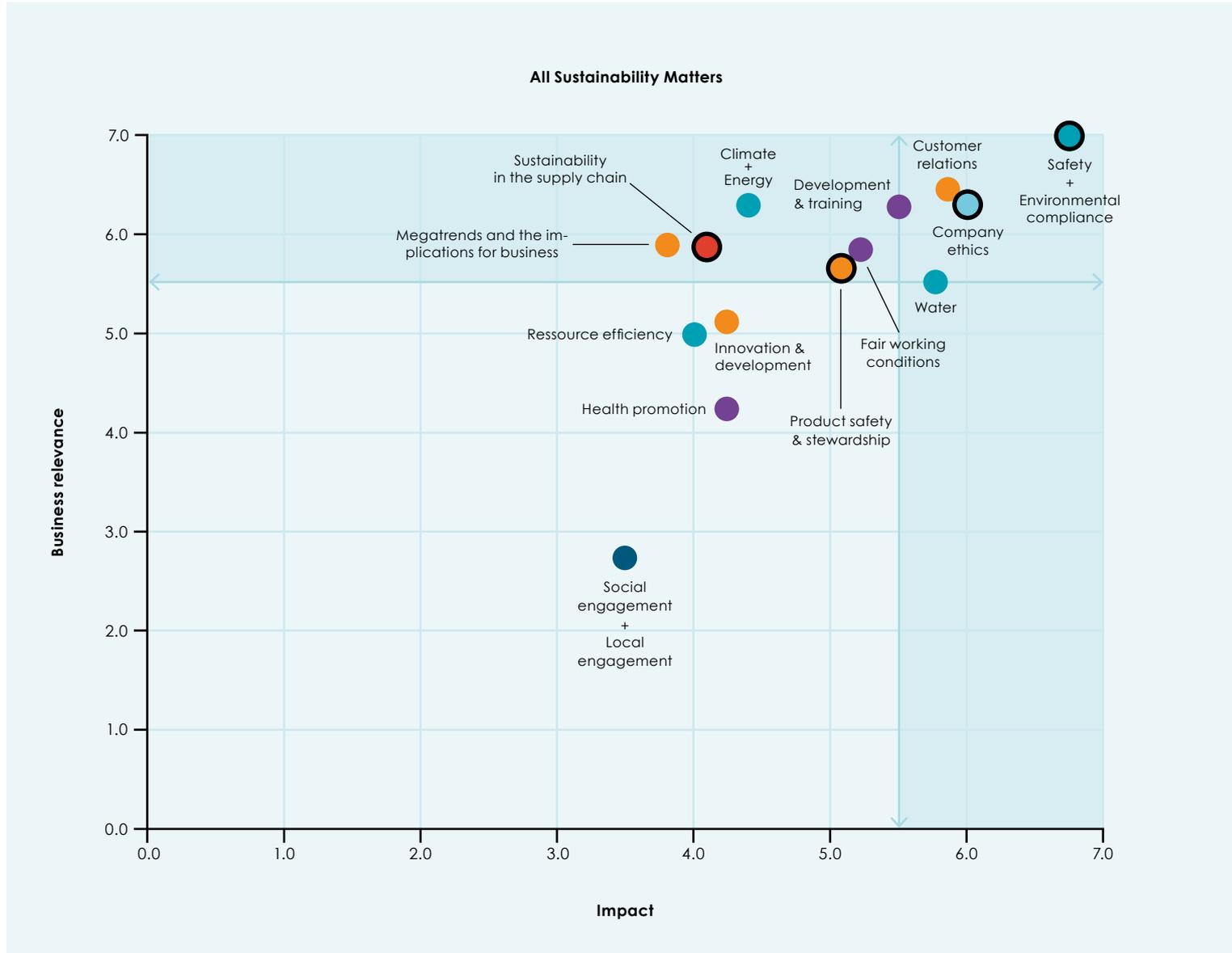
**Step 3:** Check of the top three material topics for each stakeholder. The top three topics chosen by the Leadership Team were given a relatively higher score in comparison to the former top three ones. No further adjustments were applied.

#### Most Important Topics for OXEA

In the following reporting section you can read all about the approach of our material topics.

#### Most Important Topics for OXEA

Environment	Employee topics	Value chain	Corruption & Bribery	Sector-specific
<ul style="list-style-type: none"> <li>• Safety</li> <li>• Environmental compliance</li> <li>• Climate &amp; energy</li> <li>• Water</li> </ul>	<ul style="list-style-type: none"> <li>• Fair working conditions</li> <li>• Development &amp; training</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainability in the supply chain</li> </ul>	<ul style="list-style-type: none"> <li>• Company ethics</li> </ul>	<ul style="list-style-type: none"> <li>• Product safety &amp; stewardship</li> <li>• Customer relations</li> <li>• Megatrends</li> </ul>



 stakeholder relevance >= 5.5

**Relevant Stakeholders:**  
Customers, investors / owners, government / regulators, OXEA employees, suppliers, media, NGOs, consumers



Topic	Description / Scope
Climate & Energy	<ul style="list-style-type: none"> <li>• CO<sub>2</sub> and other greenhouse gas emissions</li> <li>• Further air emissions</li> <li>• Energy consumption (incl. source)</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• Process safety</li> <li>• Occupational safety &amp; health</li> <li>• Transportation safety</li> </ul>
Environmental compliance	<ul style="list-style-type: none"> <li>• Compliance with all applicable environmental standards and regulations</li> </ul>
Water	<ul style="list-style-type: none"> <li>• Water consumption (incl. source)</li> <li>• Water use (e.g. in production and products)</li> <li>• Wastewater volume and emissions</li> </ul>
Fair working conditions	<ul style="list-style-type: none"> <li>• Non-discrimination, diversity and equal opportunities</li> <li>• Work environment (e.g. work-life balance, employee satisfaction /loyalty and employee retention)</li> <li>• Wages and benefits</li> </ul>
Development & Training	<ul style="list-style-type: none"> <li>• Recruiting and formal training</li> <li>• Development of employees along the job</li> </ul>
Customer relations	<ul style="list-style-type: none"> <li>• Customer relations (complaints management, relationship management and collaboration)</li> <li>• (Product/Process) Quality</li> </ul>
Product safety & stewardship	<ul style="list-style-type: none"> <li>• Transparency, communication and labeling</li> <li>• Product safety for people and the environment</li> </ul>
Megatrends & business implications	<ul style="list-style-type: none"> <li>• Mobility, digitalization, urbanization, economic power shift, demographic changes and globalization and their impacts on business</li> </ul>
Sustainability in the supply chain	<ul style="list-style-type: none"> <li>• Human rights and other sustainability aspects (social and environmental) along the value chain upstream and downstream</li> </ul>
Company ethics	<ul style="list-style-type: none"> <li>• Anti-corruption and bribery</li> <li>• Donation and sponsoring</li> <li>• Transparency</li> <li>• Corporate governance, corporate growth and profitability</li> </ul>



# SUSTAINABLE GOVERNANCE

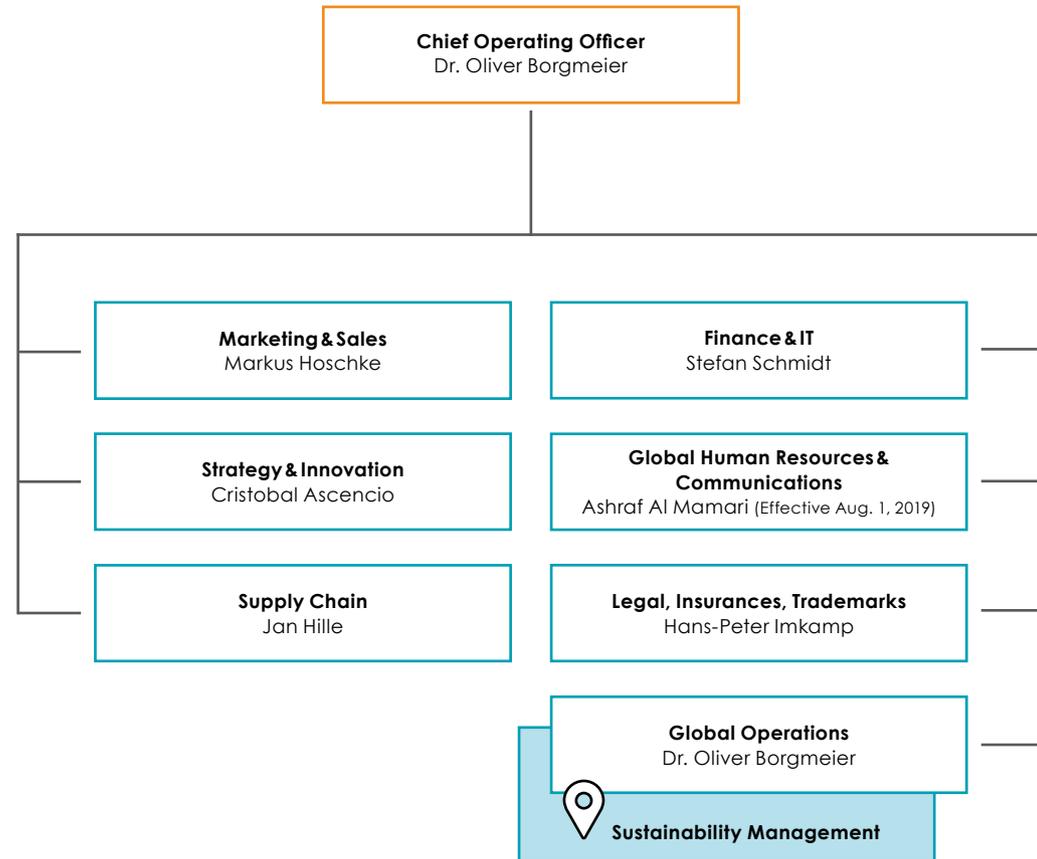
OXEA's Leadership Team consists of seven members heading the different organizations. They form the hypermost senior management level and report to the COO (Chief Operating Officer). The Leadership Team is responsible for the strategic and operative governance of the company.

Dr. Oliver Borgmeier represented the main point of contact to the Board of Directors in 2019 as COO.

Leadership Team meetings are held on a frequent basis and are led by the COO. Various reporting tools and business meetings across all organizations ensure a constant flow of information and allow for global monitoring of all OXEA-related activities and strategy.

Information on all levels of authority and responsibility can be found in OXEA's Manual of Authorities, which is accessible to all employees (intranet publication).

The Sustainability Management operates within the Global Product Stewardship, Quality Management, and Analytics organization (PSQ) as part of the Global Operations organization. The PSQ organization functions as interface with all departments ensuring that quality standards are met. The advantages of this function build the basis for a strategic and holistic approach of sustainability and a smooth roll-out of operative measures. The Manager Sustainability reports to the Vice President of PSQ and is the contact person for all sustainability-related matters within the company.





### Integrated Management System (IMS)

Since its foundation in 2007, OXEA has implemented an Integrated Management System (IMS). The OXEA management system serves to put the company policy and strategy guidelines in the context of the organization's legal and standards requirements as well as to put the concerns of interested parties into practice.

The IMS is described in the available management manual, which is appended to the process descriptions and working instructions of all organizational units.

The IMS ensures a common understanding of processes and responsibilities throughout the company and documents them.

The Leadership Team carries out a review of the effectiveness and performance of the Integrated Management System periodically (at least once a year). The preparation and documentation is carried out by the appointed Global Management Officer of the company.

### Company Scorecard (CSC)

The Company Scorecard (CSC) of OXEA serves as an overarching monitoring and steering tool displaying the overall performance of the company. The CSC is updated on a monthly basis and shows the relative performance according to the different key performance indicators (KPIs) for the fiscal year.

The KPIs for 2019 entailed those for the EHS (environment, health and safety), financial, operational excellence and strategic performance, as well as a new KPI documenting the progress of documenting the integration process.

The goals and KPIs for the different areas were determined by the Leadership Team together with the Board for the fiscal year 2019. The CSC provides the guidance for the individual performance targets.

### Company Ethics – Compliance Management and Ethical Business Practices

Per legal definition, compliance means "the combination of all measures to avoid violations of the law," and therefore builds the basis for every long-term successful business. Adherence to legal requirements is mandatory for all OXEA employees.

OXEA has a Compliance Council, in which representatives of all functions are represented, i.e., Marketing & Sales, Customer Relations, Supply Chain, Procurement, HR, Quality Management, Finance & IT, EHS, Production & Engineering, and the Legal department in a consulting role. This group holds regular meetings in order to assess legal risks, coordinate preventive measures, discuss potential compliance violations, and continuously improve processes. The meetings are recorded and these records are kept by a dedicated member of the council.

OXEA's Code of Conduct is publicly accessible (via internet). Every new employee receives the Code of Conduct and corresponding training depending on the exposure level of the employee's role. Refresher training on the Code of Conduct and compliance guidelines is to be conducted every two years – also depending on the exposure level of the employee.

In 2019, an e-learning system has been developed for the Code of Conduct for roll-out in 2020.

The Compliance Council reviews national and regional corruption indices on a yearly basis to identify possible areas of risk. Sales Representatives at OXEA are being contacted regularly for the discussion of sensitive matters by the Legal department.

In 2019, employees with an increased external exposure received an antitrust training (bi-annual rhythm). In Europe, twenty employees received a training (two are still pending), as well as twenty employees at our US locations.

All OXEA organizations are subject to regular audits according to the IMS and to processes defined in the related risk and internal audit management processes. Every employee is encouraged to report possible breaches of company policies anonymously via various channels (in English and/or German).

The members of the Compliance Council are available for all questions related to the Code of Conduct and in the event that a violation of the Code of Conduct needs to be reported. Contact details are available on the OXEA intranet.

Additionally, a Compliance Hotline under the e-mail address [oxea.compliance@wwwmailer.de](mailto:oxea.compliance@wwwmailer.de) or the phone number 00800/80050606 can be reached for questions or reports of violations. In this case, the report is sent to a reliable telecommunications provider who assumes the function of accepting the report and forwarding it to the OXEA General Counsel anonymously.



Failure to comply with the Code of Conduct will most likely include disciplinary / legal measures, which could possibly lead to the termination of the employment. Illegal behavior will be prosecuted in a court of law.

For 2019, no violations were reported.



### ProMOTIV – Turn Ideas into Innovation

One of the focus activities in 2019 was the overhauling of a funnel-stage-gate process for idea and innovation management, for which the so-called ProMOTIV tool serves as a platform. The tool was originally introduced in 2017, got an update in 2019 and is undergoing continual improvements. Based on the experience of the two previous years, decision processes and stages were adjusted where necessary and sped up. All project ideas, from technical, productivity, EHS and administrative to marketing projects or logistics etc., are managed through the ProMOTIV process. The target is to prioritize and accompany projects along their life cycle, to manage programs, to budget resources and to enhance knowledge and information transfer in between different organizations. The process enables the organization to understand at any time if the project pipeline functions properly.

In 2019, the number of submitted suggestions exceeded the total numbers of ideas of 2017 and 2018 combined, as we intensified the creative process through the introduction of workshops.

By December 31, 2019, a total of 257 suggestions and 85 active projects were registered in ProMOTIV, the average time span from entry to the first gate was 22 days.

### Supply Chain Management

The purchasing of raw materials is part of an integrated planning approach (S & OP process = Sales & Operations Planning process).

The procurement budget entails the costs of raw and support materials, maintenance and repair operations payments (MRO), and logistics costs. Around 55% of the budget is spent at the production sites in Europe. OXEA has more than 1,900 suppliers globally – the majority providing MRO services.

Major raw materials >> **please refer to section OXEA's value chain** for the production of Oxo Intermediates and Oxo Derivatives are olefines (ethylene, propylene, higher olefines), syngas and natural gas. Around 70% of the raw materials are sourced locally, close to our production sites.

In general, the qualification process of a new supplier follows a defined process with the focus on the supplier's capability, quality and safety standards.

OXEA also employs a "supplier evaluation tool" for the rating of its suppliers in the respective Procurement organizations. This supplier rating consists of different

parameters referring to quality and safety aspects, as well as to environmental parameters.

The supplier evaluation allows for a ranking of suppliers and subsequently has an influence on the preference and selection of suppliers. Over 95% of our suppliers (based on volume and spending) hold ISO certifications.

To ensure sustainable procurement practices throughout the value chain, OXEA has developed and rolled out its own Supplier Code of Conduct in 2019 covering human rights aspects in alignment with the OXEA Code of Conduct. Related procedures and documentation were set up in the IMS. The process was developed in alignment with the European Procurement organization, Sustainability Management and the Legal department.

In 2019, all raw material suppliers to European production sites have been screened regarding their CSR / sustainability performance based on publicly available information (risk analysis). Results were documented in the Procurement department (bi-annual reassessment targeted). 96% of OXEA's raw materials suppliers (based on total number of suppliers) are based in OECD countries and disclose extensive information on business ethics and practices. Only a minority of 4% are not OECD-based and do not publish information on their business practices.

These non-OECD-based suppliers have to provide sufficient proof for company ethics (like own code of conduct) or receive OXEA's Supplier Code of Conduct for signature.



In case a supplier either fails to sign or is suspected of not fulfilling the requirements, an escalation process with the ultimate step of termination of business relationships will be started. Every new raw material supplier is screened when commencing a supply relationship.

In the next step, the process is to be rolled out to the US Procurement organization.

#### Data Management

As a company that takes responsibility for the protection of its customers, employees, and others, OXEA works to comply with all data security laws and avoids unauthorized transfers of personal information.

No complaints were issued regarding data protection.

#### Risk Management & Internal Audit Approach

The goal of risk management is to identify and evaluate risks at the earliest possible stage and to limit such risks through adequate measures, as well as to avoid any risk that might jeopardize our ability to continue our business sustainably.

In 2019, OXEA established a dedicated risk Management function with a holistic approach to reach out to all levels of the company. To ensure the capturing and monitoring of all risks – bottom-up and top-down –, OXEA is using a web-based risk management system (based on R2C = Risk to Chance) where all departments globally (represented by dedicated risk owners) are invited to enter and update their risks regularly. The process is embedded in OXEA's Integrated Management System. Additionally, all relevant changes are provided automatically by the change management system.

The risk management is based on the COSO framework, supported by the rules of the German Corporate Governance Code (GCGC), as well as the Corporate Sector Supervision and Transparency Act (KonTraG) and the German Commercial Code (HGB). The OXEA Management Team is committed to act responsibly and to address (business) risks that could negatively impact the OXEA Group in order to safeguard the assets of OXEA.

OXEA's Risk Manager oversees all risk entries and reports directly to the Management Team. Furthermore, relevant risks are submitted to the Board and the Audit and Risk Committee of the OXEA Group quarterly, where counter measures are decided upon.

Areas of risk for OXEA include (please also refer to the Annual Report 2019 by the Oman Oil Holding Europe B.V.):

#### Operating Risks

OXEA is striving to provide a safe and secure workplace to our employees, neighbors and partners and to protect our environment at any time. We are following high safety standards for the operation of our plants and have established a clear Code of Conduct and company principles. Organizational measures are established to avoid illegal acts or noncompliance with guidelines. As a producer of chemicals, our profits are highly related to our asset performance. We conduct regular maintenance inspections of our equipment and take major efforts to ensure safe and sustainable operations.

#### Financial Risks

Financial stability is a key factor to ensure sustainable operations across all areas of OXEA. Compliance with

the requirements set out in the financing contracts is regularly ensured through stringent contract management and forecasting of the agreed financial covenants. In order to ensure short reaction times, financial risks are monitored regularly. There are several measures in place, e.g. to mitigate currency risks or bad debt risks.

#### Market Risks

As a global producer of chemicals, OXEA underlies both general economic conditions as well as market-specific risks. General economics are continuously monitored to react early to changes in global or regional economic conditions. In order to mitigate risks concerning our customers, OXEA maintains a broad Customer Relationship Management. We are aware that company growth usually comes along with risk. In order to keep the risk at a reasonable level, market and technological trends are continuously monitored and measures are taken to proactively develop risk-mitigating strategies and translate them into concrete action.

#### Commodity Price Risks

OXEA does not consume crude oil and is therefore not directly exposed to the price volatility of this commodity. However, several of the raw materials purchased by OXEA are directly or indirectly related to naphtha or other crude derivatives. As feedstock cost is one of the primary drivers for raw material price developments, along with supply and demand changes and exchange rate developments, OXEA is exposed to fluctuation in raw material prices as well. OXEA maintains purchasing contracts with major suppliers to ensure secure supplies at contract market conditions, in order to avoid spot price risks.



**Risks Based on Climate Change**

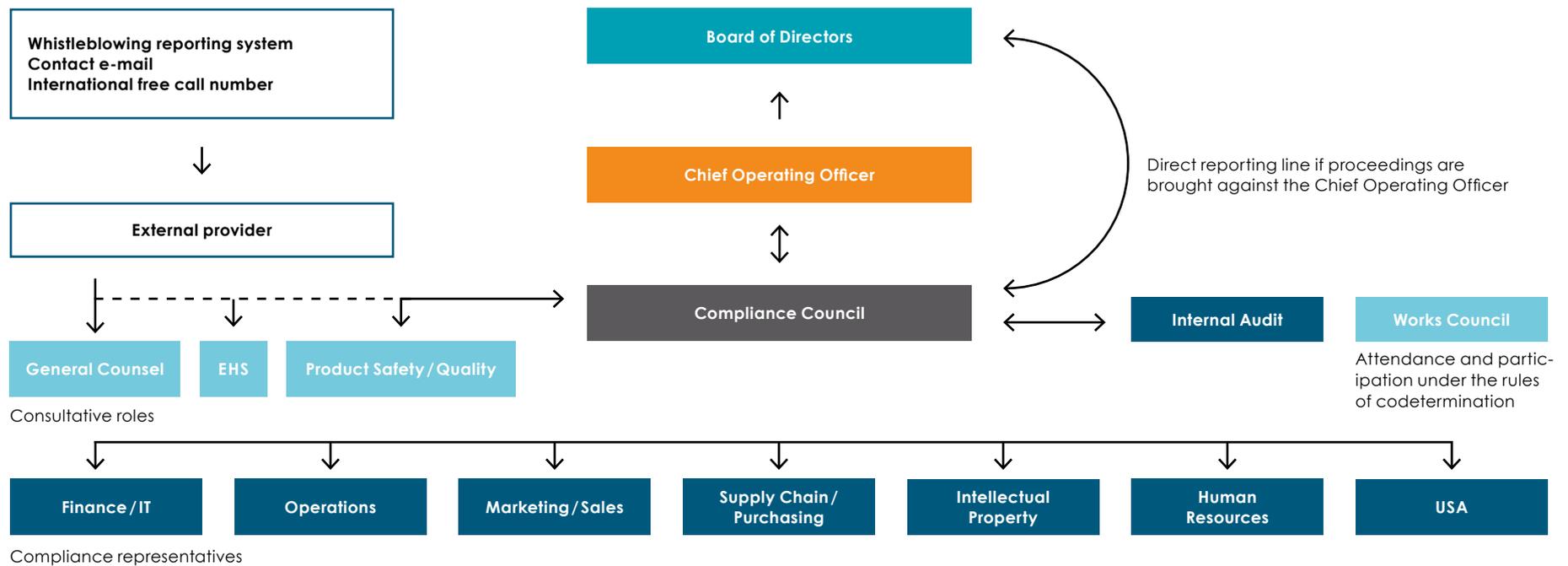
OXEA is part of a crude-oil-based and energy-intensive industry sector. There are many corporate and social risks related to climate change: an increasing demand for ‘green’ materials and value chains, the need for energy-efficient supply chains, as well as emission pricing are only a few of the challenges climate changes provide to our industry.

Besides those challenges, OXEA also feels socially responsible to contribute to the limitation of consequences related to climate change and global warming. Therefore we are among others working on emission-reducing solutions across our facilities and are striving to optimize our value chain in terms of sustainable material sourcing and formulation.

In 2019, we have explicitly worked on the material topics of energy and emissions and have defined long-term goals for respective reductions – taking into account our customer needs, potential regulatory

changes, financial impacts and, of course, our responsibility to society.

At the same time, we have set up a project that deals with the impact of energy and emission reductions on different levels and stages of our value chain – from raw materials to end markets where our products are used. With a global cross-functional team we develop scenarios and solutions for our value chain in a carbon neutral environment. >> please refer to section **Global Climate Change**





### Risks Based on Megatrends

OXEA monitors risks and chances that relate to so-called megatrends. OXEA has identified two areas as particularly relevant: digitalization of production sites and demographic changes.

For efficient production processes supported by digital tools and measures, analyses were run at the production sites and measures implemented. The Oxolution program at our biggest production site in Oberhausen specifically focuses on organizational models tackling demographic changes and digitalization.

In our facilities in Bay City and Bishop respective projects are also run that deal among others with modernization and digitalization in process control. Demographic changes and an aging society influence the overall age structure of employees at OXEA.

>> For more information on our initiatives, please refer to sections [Oxolution](#), [Turnaround 2019 at the Bay City site](#) or [Digitalization in Bishop](#)

### Internal Audit Approach

The Internal Audit function is supporting the Audit and Risk Committee as well as the Management Team on a global basis in monitoring all organizations and potential risks and opportunities (internal & external). Internal audit is an independent, objective assurance and consulting activity designed to add value to and improve an organization's operations reporting to the Audit and Risk Committee. It helps an organization accomplish its objectives by providing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and gover-

nance processes. OXEA's Internal Audit function provides internal audit work in compliance with the International Professional Practices Framework of the Institute of Internal Auditors.

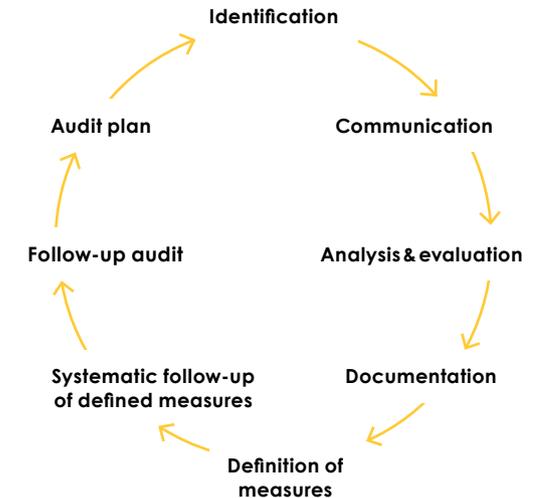
The main objective of OXEA's Internal Audit function is to assist the Audit and Risk Committee (ARC) and OXEA's (Senior) Management in achieving the company's objectives. Additionally, the internal audit function supports them in their oversight responsibilities by providing objective insights, assurance and advice.

In 2019, a new component was added to the audit procedure: in addition to fact-based evidence collection during an internal audit, opinion-based evidence was collected and reported to OXEA's Management Team, such as working atmosphere etc. This improved the quality of advice and corrective measures. Furthermore, as part of audit planning, audit execution and effective follow-up management, Internal Audit uses mass data analytics to provide state-of-the-art assurance.

The timeframe for setting up the audit report and the corrective measures plan was limited to two weeks – fostering a smooth and quick implementation of an improvement plan where necessary.

The Audit and Risk Committee, as appointed by the Board of Directors, meets at least on a quarterly basis and reviews the effectiveness of the internal audit work including governance and risk management processes and outcomes.

### Internal Audit's Risk Management Process





## Stakeholder Engagement

A constant exchange with our stakeholders is a key to OXEA's sustainable success.

The key stakeholders of OXEA are customers, investors/owners, OXEA employees, government/regulators and suppliers (as identified in the material analysis).

Local communities play an important role as direct neighbors to our production sites, as well as media and NGOs.

A transparent and consistent information flow is key for trusting relationships. At OXEA, we employ different channels throughout the different organizational levels; the most important one being direct contact. In the following section, specific examples are mentioned.

### Customers

Conferences, tradeshows and fairs, regular customer visits, surveys and special events like roadshows and OXEA's website are some of the channels we use to communicate closely with our business partners. A strong customer orientation and an excellent communication with our suppliers play essential roles for our business.

In 2019, OXEA has introduced a state-of-the-art Customer Relationship Management (CRM) tool that supports a bundling of know-how, data and information flow, so that the customers' needs can be covered efficiently. The CRM tool was implemented globally.

In the timeframe of October 31, 2018 until January 11, 2019, a global customer satisfaction survey was con-

ducted via an online platform (bi-annual rhythm). 214 customers based in Europe, Asia and the USA were invited to participate in the survey, whereof 108 customers participated, and 88 customers completed the survey. Questions covered the areas of customer relations, sales, logistics, complaint management and product responsibility. OXEA's performance was evaluated in comparison to the competition supplying similar products and services. OXEA obtained outstanding results in all areas with better or significantly better performance than the competition.

Detailed results of the survey build the basis for an evaluation of existing processes, and adjustments are implemented where necessary. For example, in the area of communication, a customer relations tool was introduced in 2019, which further strengthens a timely and consistent communication to the customers.

Key topics in general: product safety & quality, process safety, (environmental) compliance, supply reliability, pricing, relationship management.

### Customer Relation Highlights

*OXEA was evaluated better than the competition*

Communication: **98%**

Order management: **96%**

Sales communication: **98%**

Logistics: **94%**

Complaint management: **97%**

Consumers (end users of products) are important stakeholders for OXEA – consumers have the most important impact on products needed in the end market. As a manufacturer of mainly base chemicals, OXEA's direct involvement with consumers is limited and occurs indirectly via OXEA's customers.

### Investors/Owners

In 2013, OXEA was acquired by the former Oman Oil Company (S.A.O.C. (OOC)), a commercial company wholly owned by the Government of Oman. The dialog with the parent company is guaranteed by regular board meetings. The exchange was intensified last year based on the integration program. >> **please refer to the section The Creation of OQ** In addition, the integration program has also strengthened the exchange with the other merger companies in order to benefit from synergies and to build an integrated company. Different workstreams work together in a co-creation process and develop the design of the new organization.

### Government/Regulators

Legal compliance has the highest priority and is mandatory for the company and its employees. The direct dialog with the government/regulators occurs through different channels and is maintained according to the different requirements. Through the membership in various industry-relevant associations like the CEFIC (Conseil Européen des Fédérations de l'Industrie Chimique), VCI (Verband der Chemischen Industrie), REACH consortia and TCC (Texas Chemical Council), OXEA is also communicating with regulatory bodies.

Key topics in general: corporate governance and (environmental) compliance, product and process safety.



### OXEA Employees

OXEA stays close to its employees via the intranet, regular newsletters, the publication of an OXEA journal, regular townhall meetings, surveys and other related tools as performance reviews and formats tailored to the organization.

The IMPULSE online-tool invites OXEA employees to submit ideas for improvement in all areas. These suggestions are collected and evaluated by defined and qualified OXEA employees on a regular basis. In 2019, 391 ideas were collected (70 more than in 2018), 50 ideas have been realized, 159 are under evaluation and 96 were rejected. For every successfully implemented idea, the responsible employee is rewarded.

In 2019, a global employee survey was conducted addressing every OXEA employee to evaluate and rate the company culture with specific focus on the integration into a new corporate structure. 35% of the OXEA employees participated in the survey. Topics evaluated comprised (amongst others): trust, transparency, diversity, teamwork, customer focus etc. You can read more about the results of the survey in the Social Performance section. Results of the survey are published on the intranet and are under revision by the OQ Senior Management. Focus workshops with employees are part of the next steps to develop measures for the areas in need of improvement. Employees with different backgrounds are invited to give their feedback and develop solutions, which are fed back to Senior Management.

Key topics in general: fair working conditions, development & training, occupational health and safety, in-house changes, compliance and values, employee satisfaction, business development.

### Suppliers

OXEA entertains long-term and trusting relationships with our suppliers. The supplier base globally entails raw material suppliers, as well as maintenance, repair and logistics suppliers (MRO). >> **please also refer to section Supply Chain Management** A close dialog with suppliers is maintained via direct contact, industry-related conferences and meetings, tradeshow and fairs.

In November 2019 as part of this year's EHS Day, service providers and suppliers were invited to the production site in Oberhausen. The day was spent on an exchange of best practice, various presentations around proper safety equipments and practical exercises.

Examples for supplier topics addressed: product safety and quality, supply reliability and timing, pricing, (environmental) compliance.

### Local Communities

OXEA's impacts on local communities are multiple; OXEA represents an important employer, especially in Oberhausen and Bay City, where our major production sites are located, and offers job opportunities and apprenticeships. As a manufacturer of chemicals, OXEA also has a high responsibility for its impact on the environment, health and safety.

We involve local communities via regional media social events – like Open House Days, allowing our neighbors to get an insight into our current activities. Furthermore, we engage ourselves in various local organizations with representatives, e.g. the Texas Chemical Council – Outreach committee or as an active member of the "Emschergenossenschaft" in Oberhausen, where OXEA actively contributes to the ecological restoration

project of the Emscher river. In the local organizations, OXEA and its stakeholders work together on the respective projects.

Examples for topics addressed: process & product safety, (environmental) compliance, OXEA as an employer, local contributions.

### Media and NGOs

For OXEA, it is very important to have a transparent and open dialog with media and NGOs to show what is happening behind the scenes of our chemical plant. Especially local media are an important stakeholder. For example, if OXEA plans to build a new unit or if a turnaround is coming up (involving a lot of maintenance work), which will likely have an impact on local residents, many neighbours obtain their information through the local press. Therefore, the media representatives are regularly informed about important topics via press releases, background discussions or interviews.

OXEA is also in contact with NGOs or associations located in the neighborhood of its production sites. Depending on the project, OXEA organizes its own information events or maintains direct contact with the associations.

Examples for topics addressed: process & product safety, (environmental) compliance, local projects, in-house changes.



# ECONOMIC PERFORMANCE

For a detailed insight into the Group's financial performance, please refer to the Annual Report 2019 by the Oman Oil Holding Europe B.V.

## Global Economic Development<sup>1</sup>

After decreasing sharply in the last three quarters of 2018, the pace of global economic activity remained weak throughout 2019. In particular, momentum in manufacturing activity weakened substantially. Rising trade and geopolitical tensions increased uncertainty about the future of the global trading system and international cooperation in general, taking a toll on business confidence, investment decisions and global trade.

Among advanced economies, the decrease has been widespread, affecting major economies and smaller advanced economies in Asia. In the USA, the economy maintained momentum in the first half of the year. Although investment remained sluggish, employment and consumption were buoyant. In the euro area, weaker growth in foreign demand and a drawdown of inventories have kept a lid on growth since mid-2018.

The decrease in activity has been even more pronounced across emerging markets and developing economies.

In China, growth weakened amid escalating trade tensions and global uncertainties. Frontloading of exports in the second half of 2019 ahead of expected new rounds of tariffs increased supported industrial production, but the rebalancing from investment to consumption reduced the demand for imported capi-

tal goods and raw materials. Greater domestic production of inputs also contributed to weaker import demand. Consumption remained robust, based on steadily rising disposable incomes. Business investment growth has remained stable, in particular in services, though manufacturing investment growth slowed significantly.

Growth for global gross domestic product (GDP) for 2019 declined to 3.0%, compared to 3.7% in 2018.

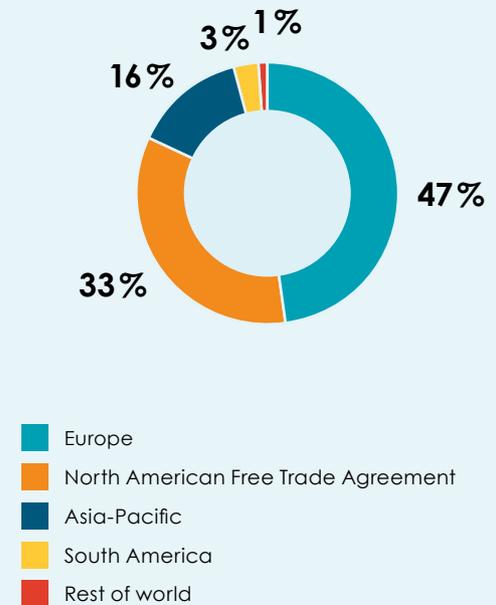
## Business Development at OXEA

After a successful 2017 and 2018, the Group results were hit by worsening external market conditions and business sentiment in 2019. EBITDA reached €169.2 million (previous year: €193.5 million), which was 12.6% below the previous year's level.

Key factors for worse than expected performance were primarily the slowing export markets (mainly in Turkey and China) and global economic downturn, the increased uncertainty in the European Union (Italy and BREXIT) with unfavorable development of supply / demand in the regional market. Furthermore, the trade tension between USA and China and the regional raw material cost disadvantage and difficulties in passing through to customers due to lack of demand and price erosion in Oxo Intermediates contributed to the weak performance.

## Revenue by Region

Share of sales



<sup>1</sup> OXEA's analysis of the global economy is based on figures and forecasts provided by renowned institutions, such as the Organization for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF).



Due to the above factors, the sales volume declined to 968.1 kt, which is 13% below the previous year's sales level. At the same time, the variable margin per ton was strong – increasing by 9% –, partially compensating the low volumes. As a consequence, the variable margin declined by 5% to €439.3 million.

The biggest hit was taken by Oxo Intermediates, where volumes strongly declined, especially on the European markets. Thanks to OXEA's strategy of balancing out cyclic effects, Oxo Derivatives volumes increased by 6%, driven by our strong carboxylic acid portfolio. Similarly, the variable margin per ton also improved at Oxo Derivatives, driving the overall margin per ton higher.

At the beginning of the year, OXEA's Senior Management already initiated several optimization steps to mitigate the negative impact arising from the weakening external market conditions and increasing labor costs. As a consequence, the operating expenses remained stable compared to 2018.

Risks and chances related to climate change for OXEA's business performance are documented and monitored through risk management. >> [please refer to section Risk Management](#)

Resulting strategic targets and measures form part of our integrated business strategy. The definition of long-term environmental goals forms a direct result of this process.

### Results of Operations

€ million	2018	2019
Net revenues	1,453.6	1,255.4
Cost of sales	(1,293.6)	(1,118.6)
Gross profit	160.0	136.8
SG & A	(78.0)	(84.2)
R & D	(9.1)	(8.7)
Other operating income (expense)	11.2	0.5
Operating result	84.2	44.5
Net income	13.4	12.4
<b>EBITDA</b>	<b>193.5</b>	<b>169.2</b>

Despite the lower than planned EBITDA, cash flow remained stable. Cash at the end of the year increased to €76.8 million, while fully financing our CAPEX program and the increasing working capital needs of the Group.

The rating of the Group remained unchanged during the year with a credit rating of B at Standard & Poor's Global Ratings (S & P) and B2 at Moody's Investors Service.

OXEA is steering and monitoring its business performance throughout the year. Relevant KPIs for the business performance (amongst others) are EBITDA, sales and EBITDA margin.



# ENVIRONMENT, HEALTH AND SAFETY

Environmental protection, health and safety (EHS) are collectively ranked our first priority amongst the OXEA core values.

It is OXEA's policy to design, build, run, and maintain our production units and processes with a focus on high environmental and safety standards. OXEA is committed to the protection of the environment, the reduction of adverse environmental impacts and meeting all environmental compliance obligations crucial to our industry. Our products are developed, evaluated and documented in a responsible manner, so that our employees, customers, the public, and the environment are protected from avoidable risks.

Our activities meet compliance requirements. We ensure that all employees receive appropriate training, thereby enabling them to effectively contribute to EHS performance and EHS improvement processes. Neighbors, customers and authorities are informed on our activities including possible risks through direct dialog, media, and various communication channels.

>> please also refer to [Stakeholder Engagement](#)

OXEA's EHS management and standards are documented in our IMS. >> please also refer to [Sustainable Governance section](#) Our standards are based on the requirements of national regulations, the requirements of ISO 14001<sup>1</sup>, ISO 9001<sup>1</sup>, ISO 50001<sup>1</sup> and OXEA

internal policies. Requirements of ISO 45001<sup>1</sup> serve as guideline for our occupational health and safety system worldwide. The Nanjing site started its preparations for certification according ISO 45001 in 2020 as first OXEA site.

All our sites are ISO 9001 certified. With the targeted ISO 14001 certification of Nanjing in 2020, all sites will be ISO 14001 certified. The energy management at our sites in Bay City, Bishop and Nanjing follows core principles of ISO 50001.

Certificates	ISO 9001:2015	ISO 14001: 2015	ISO 50001:2018	ISO 45001:2018	SCCP	GMP+ B1
<b>Europe</b>						
Marl	X	X	X			
Monheim	X	X	X			X
Oberhausen	X	X	X		X	
Amsterdam	X	X	X			
<b>North America</b>						
Bay City	X	X				
Bishop	X	X				
Houston	X	X				
<b>Asia</b>						
Nanjing	X	X <sup>2</sup>		X <sup>2</sup>		

<sup>1</sup> ISO (the International Organization for Standardization) sets standards and norms for all areas except for electronic-related matters. ISO 9001 is the internationally recognized standard for quality management, ISO 14001 for environmental management, ISO 50001 for energy management, ISO 45001 for occupational health and safety.

<sup>2</sup> Certification obtained in 2020



### Global EHS Organization

Within the organization of OXEA, Global EHS provides proposals to Senior Management to revise and update existing EHS principles, policies and strategies, which are coordinated with all OXEA EHS departments.

Global EHS is involved in setting of EHS goals and key performance indicators. Global EHS develops EHS programs and initiatives and assures that best practices are shared between the sites and organizational units of OXEA worldwide.

The Global EHS group is part of the Global Operations organization. >> [please refer to Sustainable Governance](#)

### EHS at the OXEA Sites

Each OXEA site has one or more assigned EHS responsibilities. Our two biggest sites in Oberhausen and Bay City have EHS site organizations in place with dedicated personnel. The smaller sites have assigned employees who are responsible for EHS topics (e.g. the site directors). They are supported by experts from Global EHS or site EHS experts.

EHS responsibilities consult and support – in cooperation with the EHS organization – leadership and employees to solve EHS-related problems and to improve EHS performance and culture. By auditing and controlling, they support to ensure compliance with national regulatory requirements as well as with OXEA's EHS standards and policies. They also support a global cross-site and cross-functional exchange on EHS topics and best practices. Environmental, safety and health-related risks based on OXEA operations and services are evaluated according to defined processes and docu-

mented in the risk data base. >> [please refer to section Risk Management](#) At OXEA, environmental protection and safety is understood to be the responsibility of each employee. With the "I-Safety initiative" (also named "Safety=I initiative") OXEA ensures that proposals, observations, concerns and any other EHS-related input of each employee are well received and considered. The I-Safety initiative supports role model behavior – of supervisors and employees.

EHS-relevant topics cover in general:

- Environmental protection (water and waste management, energy and emissions (air, noise and light), soil protection, remediation, emission trading)
- Occupational safety, industrial hygiene, health care and medical services
- Process safety
- Fire protection
- Permits
- Security

For all matters of product safety >> [please also refer to section Product Safety](#) and quality management the Global Product Stewardship, Quality Management and Analytics organization (PSQ) is responsible. Site EHS organizations and PSQ are part of the Global Operations organization.

### EHS Committees & Councils

Each OXEA site has established dedicated EHS committees or councils, consisting of site leadership team, EHS experts and employee representatives, who jointly work on EHS topics. At the German sites legally required "Arbeitsschutz- und Umwelt-Ausschüsse" work

on EHS programs. At our sites in the USA, China and the Netherlands similar councils are established, as e.g. the Employee Safety Councils in the US.

### EHS Performance

Our ambitious key goal within OXEA is to achieve zero EHS incidents<sup>1</sup>.

An incident is an "unexpected adverse event that may be associated with a damage". The damage is categorized as environmental, fire and explosion incident or (personal) injury.

All EHS incidents (including near misses) are reported by using the OIS (OXEA incident system). Incidents are investigated and if indicated, measures are derived from the identified causes. The OIS database is used for the documentation including the categorization and classification of environmental, health and safety as well as process safety incidents worldwide. The database also serves as information platform.

<sup>1</sup> Environmental incidents include all incidents in all areas of the company (e.g. production facilities, warehouses, workshops, office buildings, infrastructure facilities or transport routes) that have an impact on air, water, soil, noise, waste, sewage, light or human health.

The category Fire and Explosion (F&E) covers all incidents where fires, explosion and smouldering fires (smoke) have occurred as a result of unintentional release of flammable substances or unintentional ignition of flammable materials.

The Personal injury category is assigned to all incidents in which the physical integrity of a person has been compromised or endangered.

Near misses are incidents that fortunately did not happen. Nevertheless, they are also reported and investigated like incidents. The results are incorporated into processes and programs.



The overall EHS performance is reflected in the Company Scorecard (CSC).

OXEA has been using lagging indicators for environmental, health and safety performance (tracking of incidents and near misses) since the late 1990s and introduced leading indicators in 2018.

The following table depicts the EHS performance (lagging Indicator) in 2019, 2018 and 2017 within each category:

#### Number of incidents

	2017	2018	2019
<b>Environmental</b>			
K1 – Major	0	0	0
K2 – Serious	2	3	0
<b>Injuries</b>			
K1 – LTI <sup>1</sup>	5	4	3
K2 – IWLT <sup>2</sup>	3	3	1
<b>Fire and Explosion</b>			
K1 – Major	0	0	0
K2 – Serious	0	0	0

<sup>1</sup> LTI = Lost time incident

<sup>2</sup> IWLT = Incident without lost time

#### Incident rates

	2017	2018	2019
OIR <sup>1</sup>	0.65	0.58	0.34
LTI rate <sup>2</sup>	0.41	0.33	0.25
TMQ <sup>3</sup>	4.44	2.67	2.6

<sup>1</sup> Operational incident rate = respective incidents per 200,000 working hours

<sup>2</sup> LTI rate = Lost time incidents per 200,000 working hours

<sup>3</sup> Thousand man quota = reportable injuries per thousand employees

In 2019, there were no serious or major environmental or fire and explosion incidents.

The OSHA (Occupational Safety and Health Administration) regulations serve as an internationally applied standard for classifying work-related injuries. The KPIs improved slightly in 2019.

Typical incidents at OXEA are "slip, trip and fall" incidents, as well as cuts and bruises. Incidents directly linked to contact with chemicals, which might be understood to be typical for the chemical industry, are in general less common.

We have been showing a very good safety performance, which we could maintain or slightly improve over the past years. There were no deadly accidents on our premises in 2019.

Global safety incident rates will be reported in the Sustainability Report 2020.

Leading indicators are "before incident measurements" – in contrast to lagging indicators, which evaluate the performance of the past. Safety-related matters are measured to obtain indications on how to improve EHS-related issues in the future. Leading indicators serve to improve the EHS performance, the management system and in the end OXEA's EHS culture.

The related key performance indicators (leading indicator KPIs) are targeted to have an impact on the overall EHS performance (= number and severity of incidents). For 2019 they were quantified as number of EHS management walkthroughs, EHS trainings and EHS moments.

Leading indicators will be followed for the minimum period of one fiscal year and are decided upon by the Leadership Team.

The 2019 goals of our Global EHS leading indicators program, intended to support and intensify proactive EHS work, have all been met and exceeded.

>> please refer to graphic **Leading Indicator**

The incidents in 2019 decreased not only in total number, but also in severity – a consequence of the intensified program.



### Leading indicator

	Stretch target [number of]	Achievement [number of]
EHS moments	600	982
Leadership walkthroughs	450	1,434
EHS trainings	16,800	19,856

### Environmental Protection

As OXEA we have and will continue to incur substantial ongoing capital and operating expenditures for environmental protection measures.

In 2019, we invested 7,549,143€ in environmental protection, compared to 7,546,384€ in 2018 and 4,700,000€ in 2017. The sum includes dedicated EHS activities and projects (e.g. waste management, emission control, ecological restoration of Emscher river) and singular cost items, that can be linked to a direct impact on OXEA's footprint.

Spending in 2019 was on the same high level as in 2018 (and significantly higher than in 2017 and 2016), since OXEA continued the path to invest into modernization projects, e.g. in the production units, in order to operate more energy-efficiently.

Costs for REACH, the energy efficiency program, ISO site (re-)certifications and general PSQ-related costs etc. are not included in the environmental spending.

There were no incidents related to non-compliance with regulations or environmental laws in 2019.

### Initiatives and Highlights 2019

#### I-Safety initiative (or Safety=I) – Successful through Safety, Environmental Protection and Health Care

An important corporate initiative involving every employee is the "I-Safety initiative" that was started at the end of 2014 and has been developed year by year.

With the I-Safety initiative (also known as "Safety=I initiative") OXEA ensures that proposals, observations, concerns and any other EHS-related input of each employee are well received and considered. The I-Safety initiative challenges every single employee to ask him-/herself: What can I contribute to improve safety, environmental protection or health care?

This initiative comprises various projects and aspects tailored to the needs of different organizations and has become a solid part of every OXEA employee's

daily life. The single elements are adapted to the needs of the respective sites.

The I-Safety initiative comprises e.g. the monthly conduction of SIP-meetings (Safety Involvement Program) at the European sites. A monthly SIP agenda for review is being distributed to all departments and consists of statistics, different operational environmental, health and safety topics and can be adapted as needed. Each employee is expected to be provided with periodic SIP meetings by his/her supervisor. Participation is documented and kept in the respective department. The I-Safety initiative supports role model behavior – of supervisors and employees.

The focus topics covered by I-Safety in 2019 changed over the course of the year, one being e.g. the Global EHS Day 2019.

#### Health Care – Pandemic Prevention Plan

In June 2019, OXEA implemented a version of the so-called "Pandemic Prevention global policy". This directive describes general rules for prevention and emergency planning in the event of a pandemic according to the phases defined by the WHO (World Health Organization). In order to be prepared for a pandemic situation, each of the production and the administrative sites in Monheim and Houston (Dallas) must name a staff member in charge of pandemic planning. This staff member is supervised by the respective site manager, who determines additional team members. Site managers also coordinate pandemic planning. The Pandemic Prevention Plan describes responsibilities as well as the process and measures for pandemic prevention.



### Oxolution – Competitive. Attractive. Safe. Sustainable.

...these are the four core topics of the project "Oxolution" at the Oberhausen site. The initiative's goal is to shape the future of the site and improve overall performance and efficiency in the operations and engineering sector. The project includes many different facets that are bundled in four different blocks as described in the following paragraphs.

"Safety Culture" covers all sub projects related to safety improvements. The I-Safety initiative will continue to play a central role; in addition, the development of new mission statements to "lead by example" >> **please refer to Focus on Safety Culture** were key activities in 2019.

A second area is the improvement of maintenance processes, which focuses on the transfer of learnings gained during the turnaround in 2018 into improvements of preparations for the next big turnaround in 2023. Other tasks cover project management in general.

"Process Optimization & Digitilization" centers around new technologies for engineering and operations departments to improve process workflows and centralized data systems. Areas for process efficiencies and stability will be addressed, thus automation of control systems is covered as well.

"Organization" describes changes in working culture and structure. In 2019, the focus was the change from the former four- to a five-shift-system, allowing for a better work-life balance of the shift operators and contributing to a healthier shift rhythm.

### Global EHS Day 2019 – Core Topic "Sustainability"

As part of the I-Safety activities, OXEA's Global EHS Day 2019 was held (as in 2017 and 2018) at all OXEA production sites and offices, inviting all employees to participate. The core topic covered in 2019 was "Sustainability". The program at the sites and offices was accompanied by presentations, videos, posters and different activities to raise awareness for the economical, ecological and social aspects of sustainability. The impact of OXEA on these matters in "the big picture" was focused on. Likewise, the program centered on topics that all employees can contribute to in everyday life to foster a sustainable lifestyle, both at work and in private. All employees were invited to share their proposals and thoughts about "Sustainability".

### Focus on Safety Culture – Development of New Mission Statements in Europe

As part of the I-Safety initiative and the Oxolution project, new mission statements and values for the European sites Amsterdam, Marl, Oberhausen were developed with the goal to decrease and prevent incidents at the sites. Central focus and starting points were "Role Model & Leadership". Managers from the Operations departments like shift supervisors, plant managers, engineers, maintenance managers and their assistants took part in ten workshops throughout 2019. The participants developed the value missions in order to guide working and to create an increased awareness culture.

In total, over 130 people participated in the workshops and worked out four value statements including guiding principles that cover participation, error culture, communication and leadership in the operational units. Managers are asked to carry over these values

into their organizations and reenergize them to keep up a high level of awareness despite of low incident rates. Clear mission statements and values are essential to guide organizations successfully. Key performance indicators are the level of incidents and near-misses.

### S.O.U.L. – a New Spirit for the EHS Team in Bay City

In 2019, the EHS team in Bay City started its S.O.U.L. initiative with a goal to strengthen the performance of the EHS team and share its benefits with all departments in Bay City in the daily interactions. S.O.U.L. stands for: Selflessness, Ownership, Unity and Larger Purpose<sup>1</sup>. EHS adopted its principles to enhance the ability to work together successfully as an overall EHS team. The S.O.U.L. initiative enhances the ability of the team to understand issues and solve problems. An example is the impact S.O.U.L. can have on the I-Safety initiative of OXEA by sharing the principles during area walk-throughs, direct communication (one-on-one and e-mail updates), trainings and support to all departments at Bay City. S.O.U.L. has been communicated to operations, maintenance, lab and technical leads for awareness and consideration.

### Level 2 – Safety Certificate of Nanjing Plant

In March 2019, OXEA Nanjing plant officially obtained the Level 2 Certificate of Work Safety Standardization. It is the fundamental guarantee for the enterprises to establish long-term work safety mechanism and to realize a stable improvement of work safety.

<sup>1</sup>"The Soul of a Team: A Modern-Day Fable for Winning Teamwork" by Tony Dungy, Nathan Whitaker, published January 22, 2019 by Tyndale Momentum.



The establishment of standardization of safe production aims to formulate specific norms and standards to our production and operation activities from various aspects, such as management systems, rules, standards, operations and inspections. The goal is to improve our safety awareness, safety management quality, and finally to strengthen safety supervision.

#### **Turnaround 2019 at the Bay City Site – an Accelerator for Energy Efficiency, Safety and Digitilization**

From April 22 until May 21, 2019, OXEA carried out the largest turnaround in the history of its Bay City site. Every five years a major turnaround is conducted at the Bay City site following process safety requirements. Most of the work performed centered around preventive maintenance measures. In addition, there were 25 projects integrated into the schedule many of which targeted to increase e.g. electrical energy efficiency and the level of overall stability and safety.

Digitilization for modern process control played an important role in these projects. Part of the energy efficiency measures was the exchange and upgrade of switchgears, overhead line optimization and the replacement of lightning arresters. Electromechanical relays were replaced in switchgears with microprocessor relays for improved coordination and event recording to monitor and troubleshoot issues. Switchgear upgrades also entail new relays and are also programmed with maintenance switches to reduce the arc flash category.

The turnaround was successfully completed without any reportable incidents.

#### **Digitalization in Bishop – a Milestone for Efficiency and Safety Gains**

In 2019, the Bishop site took important steps to use digitalization in Maintenance, Operations, Administration, Laboratories and Engineering. The goal of this increased level of digitalization is to improve productivity, reliability and real-time document control and document history.

OXEA Bishop has exploited ingenious ways to embark in the digitalization era. In November 2019, the Operations Distributive Controls System (DCS) was upgraded. The new system allows advanced process control strategies and enhanced levels of process security and troubleshooting. The improvements are expected to improve the raw material efficiency by 1%. The modern consoles offer excellent ergonomics for the operators.

Operations has implemented electronic tools for daily inspection rounds, training modules and personnel accountability making this information more accessible and useful for stimulating improvement. During the daily rounds, data is collected electronically with tablets, which means that training is more detailed and tracked automatically. An electronic sign-in system allows Operations to check accountability at a glance. Maintenance inspections and checklists are kept electronically for improved documentation leading to an enhanced analysis of equipment issues and time savings.

#### **Global Climate Change**

Global climate change and its consequences represent one of the greatest challenges of our time.

>> please also refer to our materiality analysis

In 2015, targets for the reduction of greenhouse gas emissions were agreed at the UN climate conference in Paris with the goal to limit global warming well below 2°C, if possible even below 1.5°C.

In order to achieve this global goal, Germany has agreed with the other European states to reduce greenhouse gas emissions in Europe by at least 40 percent by 2030 compared to 1990, part of the so-called "European Green Deal".

The major task for OXEA in 2019 was to translate these directions into long-term global targets and programs for OXEA that are at the same time meaningful, achievable but also visionary. As a company, we have understood that, for a quantum leap, we have to look at matters differently than before.

OXEA has defined global targets for the areas of energy, emission and waste reduction: three matters, that are strongly interlinked in our set-up.

Cross-functional teams were established and congregated under one project group in 2019 and have started their project work with focus on separate areas, such as operational process optimization, break-through technologies (e.g. alternative feedstocks), the alternative use and reduction of waste streams, and the impact of emission reductions on market segments served by OXEA. Key target of the project is the development of options to lower energy consumption and related emissions accordingly.



## Energy

In an energy-intensive industry, the efficient usage of energy is essential to reduce the carbon footprint. In 2019, we have set ourselves the following mid- to long-term reduction goals:

**OXEA targets to reduce its energy consumption globally by 10% until 2025 by increasing its energy efficiency and /or reducing its absolute consumption where applicable (base year 2017)<sup>1</sup>.**

The scope for the implementation of appropriate measures includes the production sites globally, with a focus first on Europe, specifically Oberhausen. At our largest site, we operate our own power plant – thus a key opportunity for the realization of OXEA-driven changes and improvements with a significant impact. The most important fuels for the generation of energy at OXEA in Oberhausen are liquid wastes, exhaust gas, distillation residues, and to a minor extent natural gas – therefore the re-use of waste (residues from the production units) in a closed cycle represents by far the largest share of energy generation.

Key areas for the optimization of OXEA's energy profile in Oberhausen – and subsequently the CO<sub>2</sub> emission profile – lie in an increased energy efficiency and lower energy consumption based on operational process optimization, a reduction of waste and a related change of fuel mixture for the power plant (leading to lower emissions).

<sup>1</sup> Energy consumption: All energy consumption related to the production units. It does not include energy for transportation in between facilities, nor electricity usage in pure administrative offices.

### Energy Consumption [GWh]

	2017	2018 <sup>1</sup>	2019
<b>Total energy consumption</b>	<b>2,280</b>	<b>2,405</b>	<b>2,386</b>
Energy consumption from fuel	2,611	2,839	2,795
Electricity consumption from external sources	317	335	324
Heating consumption from external sources	0	0	0
Cooling consumption from external sources	0	0	0
Steam consumption from external sources	733	708	670
Electricity sold	-238	-170	-187
Heating sold	-162	-235	-210
Cooling sold	0	0	0
Steam sold	-982	-1,071	-1,006

<sup>1</sup> Total energy consumption in 2018 differs from previous year's reported value based on updated data basis

OXEA's power plant is the main provider of energy for the whole Oberhausen site. The power plant is also an important provider of district heating to the "Energieversorgung Oberhausen AG" (evo), contributing to an overall reduction of direct CO<sub>2</sub> emissions in the municipal area.

Despite the focus being on Europe first, the energy efficiency and reduction project is set to be rolled out globally.

The short-term goal for the European sites of an increase of OXEA's total energy efficiency by 2.5%<sup>1</sup> until the end of 2020 (base year 2017) has remained. OXEA has overachieved the interim set goal for 2019 and already reached energy efficiency gains of 2.46% by the end of 2019.

Main contributors in 2019 were multiple smaller energy efficiency and process optimization measures in the production units. A thermal oil system optimization at our Amsterdam site represented a significant contribution to energy efficiency gains.

An increased awareness for energy-related reduction potentials was induced by the establishment of targets for 2020 and has fueled the establishment of additional projects – leading to the overachievement in 2019.

OXEA has factored in these results and established an ambitious basis for the mid-term to long-term targets.

At our site in Bishop, a multi-year project was finalized in 2019. The goal was to standardize on three types of LED lighting throughout the operation units, admin-



istrative buildings and outlying areas. The new LED lighting replaces older lighting systems and provides significant energy, maintenance, waste disposal and time savings. The quality of the light is also enhanced, contributing to better visibility and safety. The replacement brings about savings of 200 MWh of power and 500 man-hours of maintenance time.

Though the overall impact of energy consumption at our administrative sites is comparatively low, our headquarters in Monheim is powered by 100% certified "Ökostrom" electricity (electricity from renewables), taking into account a higher electricity price than for the "normal" residual mix.

In 2019, OXEA's global energy consumption remained on a comparable level as 2018. In Oberhausen, the energy efficiency gains based on the steam turbine exchange at the end of 2017 were partly offset by more unfavorable run rates of the units in 2019 and a decrease in demand and production, especially in the fourth quarter of 2019. In Bay City, the second largest site, the overall energy consumption decreased slightly in 2019 due to the site turnaround, but the effect was balanced out based on high run rates of the propanol 2 unit for the remainder of the year.

### Energy Efficiency Network (EEN) / Greenhouse Gas (GHG) Emissions

OXEA is a member of the "Energy Efficiency Network" consisting of now fourteen companies of the chemical and paper industry based in the Rhine-Ruhr area. The EEN started its work in 2016 with originally eleven members and was in its second two-year program in 2019 (program circle finishes in September 2020).

The initiative is based on the agreement between industry associations and the Federal Government to reduce energy consumption by the end of 2020, following the German Federal Government's goal to reduce greenhouse gas (GHG) emissions by 40% by 2030 based on the year 1990.

The EEN is set to share experiences, best practices and to support each other across industries to drive energy efficiency projects and a reduction in consumption. OXEA contributes with its knowledge in energy and process management.

Up until mid-2018, the network's cumulative energy consumption was reduced by 158 million kWh per year.

The target of the current two-year period is an overall

energy consumption reduction of 176 million kWh per year, which is 2.91% of the total energy consumption of the network members and represents the energy consumption of around 50,000 households in Germany per year.

OXEA's energy targets represent OXEA's contribution targets for the network. OXEA reports its savings achieved in the different projects into the EEN.

### Emissions to Air

The generation of greenhouse gas (GHG) emissions and the related climate change with all its possible impacts through global warming has become one of the major concerns globally. CO<sub>2</sub> belongs to one of the primary greenhouse gases contributing to global temperature rise.

#### Emissions to Air [metric tons]

	2017	2018	2019
Direct CO <sub>2</sub> Emissions (Scope 1 <sup>1,2</sup> )	528,480	551,085 <sup>4</sup>	546,928
Indirect CO <sub>2</sub> Emissions (Scope 2 <sup>1,3</sup> )	–	181,499	182,291
NOx	502	639 <sup>5</sup>	614
SOx	5	5	3
VOCs	–	369	393
Particulate matter	–	54	63

<sup>1</sup> Main reference for the determination of GHG emission factors are the TEHG (Treibhaus-Emissionshandelsgesetz) and Bundes-Umweltamt, United States Environmental Protection Agency (EPA) and Defra conversion factors 2019 (Department for Business, Energy & Industrial Strategy)

<sup>2</sup> includes OXEA business relevant emissions, as well as third-party energy supplies

<sup>3</sup> Scope 2 emissions are determined using the market-based approach for the European sites and the location-based approach for Bay City, Bishop and Nanjing.

<sup>4</sup> Value differs from the reported value in the sustainability report last year due to an update of the Bay City data.

<sup>5</sup> Value differs from the reported number for 2018 due to a correction of the metrics.



Main contributors to direct CO<sub>2</sub> emissions generated by OXEA's activities are the production of energy at Oberhausen and the Bay City site based on distillation residues, off-gas and natural gas. At the Bay City site the generation of synthesis gas (CO/H<sub>2</sub>) for the hydroformylation process also contributes to direct CO<sub>2</sub> emissions.

In order to contribute to the effort to reduce greenhouse gas emissions, OXEA has established short-, mid-, and long-term targets in 2019 for a reduction of CO<sub>2</sub> emissions at our production sites globally:

**OXEA targets to reduce its absolute CO<sub>2</sub> emissions globally by 6% until the end of 2020, by 18% until the end of 2025 and by 30% until the end of 2030 (base year 2017).**

**OXEA also aims to reduce its product-specific emissions by 10% until the end of 2020, by 25% until the end of 2025 and by 40% until the end of 2030 (base year 2017).**

CO<sub>2</sub> emission reductions described include both direct emissions (Scope 1 according to GHG protocol) and indirect emissions (Scope 2 according to GHG protocol).

The initial scope of our emission reduction project has its focus on the lowering of CO<sub>2</sub> emissions at our production site in Oberhausen. >> **please also refer to section Energy** The CO<sub>2</sub> reduction program will subsequently be rolled out globally.

In 2019, the basis for the related project, as described in the section "Global Climate Change", was laid out. Based on planned operational process optimization,

#### Global Water Withdrawal<sup>1</sup> [m<sup>3</sup>]

	2017	2018	2019
<b>Total water withdrawal</b>	<b>8,514,545</b>	<b>8,343,438<sup>2</sup></b>	<b>10,670,199</b>
Surface water		4,355,891	6,828,342
Ground water		35,313	25,399
Rain water		185,069	53,467
Wastewater		364,458	386,286
Municipal water supplies or other water utilities		3,402,707	3,376,704

<sup>1</sup> entails water withdrawal for Bay City and Oberhausen site including site partners

<sup>2</sup> Value differs from previous report due to a data update (Bishop site)

the possible implementation of break-through technologies (e.g. alternative feedstocks) and the alternative use and reduction of waste streams, the energy and subsequent emission reductions are targeted. Direct CO<sub>2</sub> emissions are the main contributor to GHG emissions by OXEA.

#### Water Consumption

OXEA's approach is to use water in a responsible and efficient manner. OXEA ensures that water is recycled, recirculated and not contaminated with other substances whenever possible. OXEA views water consumption as a topic of high relevance, becoming even more important in the future due to changing climate conditions around the globe.

OXEA uses water mainly for cooling purposes in the production units. Wherever the heat of the production

process cannot be used for energy recovery or steam production, it is cooled by recycled cooling water systems, mostly with cooling towers. The water is re-used and recycled multiple times in closed cooling cycles within our production processes.

Another major usage area of water is the generation of steam. Only a minimum of OXEA's water consumption is used as production process water or cleaning water.

OXEA's main source for water is surface water derived from rivers close by to our production sites. OXEA cooperates with local or regional providers for the supply of water.

<sup>1</sup> Tool Applied: Aqueduct Water Risk Atlas, Subcategory: Water stress 2019: Baseline water stress measures the ratio of total water withdrawals to available renewable surface and groundwater supplies. Water withdrawals include domestic, industrial, irrigation, and livestock consumptive and nonconsumptive uses.



OXEA's production sites are located in areas rated as low-risk water stress<sup>1</sup> locations.

In 2019, water consumption increased due to an increased water consumption at the Bay City site. The reasons for this increase were high ambient temperatures and the addition of the propanol 2 unit to the site.

### Effluents & Waste

Wastewater treatment and waste handling are performed differently at each of our sites according to the applicable requirements and general conditions. The contamination status and subsequent treatment of wastewater varies locally depending on the value chain.

In Nanjing, the wastewater pre-treatment facility is operated by a contractor company. After pre-treatment, the low-concentration wastewater will be drained to the NCIP wastewater pipe network for further treatment.

In Bay City, OXEA runs wastewater treatment units, which comprise physical and biological cleaning steps. Clean water is then released back into the Colorado river.

At the Oberhausen site, OXEA currently operates a physical wastewater treatment for a part of the effluents. Furthermore, the wastewater is biologically treated at the wastewater treatment plant of the "Emschergenossenschaft (EG)".

OXEA is actively involved in the ecological restoration project of the Emscher river as a member of the "Emschergenossenschaft" (EG). Driven by the forma-

### Waste Numbers [metric tons]

	2017	2018	2019
<b>Total hazardous wastes</b>	<b>60,192</b>	<b>58,323</b>	<b>67,397</b>
Hazardous waste recycling		21	31
Hazardous waste energy recovery		52,558	61,468
Hazard waste incineration		4,370	4,662
Hazardous waste other disposal		1,374	1,236
<b>Total non-hazardous wastes</b>	<b>5,594</b>	<b>7,016</b>	<b>6,551</b>
Non-hazardous waste recycling		86	344
Non-hazardous waste energy recovery		2,879	2,556
Non-hazardous waste incineration		15	7
Non-hazardous waste other disposal		4,036	3,644

tion of the coal industry in the Rhine-Ruhr area over 100 years ago, the former unrestrained Emscher river was transformed into an open sewage channel system created by man. The EG wastewater treatment plant located 2 km downstream of the OXEA Oberhausen site cleans the whole Emscher river before it flows into the Rhine. With the introduction of the "EU Water Framework Directive" (2000/60EC) in the 1990s and the goal to achieve a "good ecological and chemical status" of all community waters, the target was set to channel wastewater in closed conduits through the Emscher region and to converse the Emscher river and its tributaries into natural waterways again.

The Emscher conversion project is targeted to be finalized at the end of 2020.

OXEA's target is to avoid or at least to minimize waste wherever possible, and our processes are set up accordingly.

With our extensive experience in the production of oxo chemicals of more than 80 years, OXEA runs its production units most efficiently. Our value chain of Oxo Intermediates and Oxo Derivatives is highly integrated, and the side product of one reaction builds the starting material for another production chain. Therefore, the generation of "waste" as materials for disposal is kept at a minimum in our production processes. OXEA is dedicated to work on further improvements in projects in material efficiency across the value chain – to minimize the input of raw materials and maximize the output of product. We plan, construct and oper-



ate processes to generate either no waste or as little waste as possible. Where possible, OXEA recycles generated waste.

With the set-up of the global project to tackle global climate change, OXEA has established a project team explicitly looking into the alternative use of waste streams generated in our production units, as well as a possible reduction of the latter.

In 2019, OXEA has established the following long-term waste reduction goals:

**OXEA aims to reduce its waste globally, by shifting 5% of the total waste (in metric tons) into a “higher-category” waste section<sup>1</sup> by 2025 (base year 2017).**

For the disposal of waste (solid & liquid), OXEA globally collaborates with qualified and specialized waste disposal companies. Each OXEA site has a waste management system in place. Our sites in Marl and Bishop are connected with the waste management systems of Evonik and Celanese – the same goes for wastewater treatment.

In 2019, several projects were run in Bishop to improve process efficiencies and subsequently reduce waste. One notable contribution was the installation of five continuous flow sample stations that have reduced the discharge of waste materials into the wastewater stream.

<sup>1</sup> Waste hierarchy and sections: 1. Avoidance/Prevention, 2. Re-Use, 3. Recycling/Recovery (energy), 4. Disposal. We focus on waste of the production processes.

In Bay City, a catalyst recycling project was successfully completed, leading to a reduction of related waste.

The overall volume of hazardous waste was higher in 2019 compared to previous years, due to full operation of the Propanol unit 2. The unit went online mid-2018.

The global volume of non-hazardous waste at the OXEA sites was in line with 2017 volumes. In 2018, the turnaround in Oberhausen with its modernization and maintenance projects led to a one-time increase.

#### Product Safety & Labeling

As a manufacturer of Oxo Intermediates and Oxo Derivatives, OXEA is responsible for the safe handling and usage of its sales products. All our sales products are therefore tested accordingly and accompanied by an appropriate documentation and labeling that allows all people in contact with our products a safe handling. The responsibility for accurate documentation and labeling lies within the PSQ department as part of the Global Operations organization.

OXEA's safety data sheets (SDS) entail all safety-relevant information necessary for the identified usage of the product. All SDS are published on the company's website: [www.chemicals.oq.com](http://www.chemicals.oq.com)

Safety data sheets are available for all OXEA sales products; for each sales product either the national or a standard SDS is provided for the countries in which the product is marketed. For national SDS more than 30 languages are supported. Electronic distribution ensures that customers receive the latest SDS before the first delivery of a product or as soon as an SDS

has been updated. In addition, SDS are available on OXEA's website. OXEA's target is to keep all SDS up to date. SDS are therefore re-evaluated at regular intervals (see also REACH).

Since January 2019, OXEA's base oil for lubricants, OxLube L9-TMP, has been included in the Lubricant Substance Classification list (LuSC), the definite list of allowed ingredients in EU Ecolabel-approved lubricants. The product meets the relevant EU Ecolabel criteria for lubricants concerning classification, biodegradability and aquatic toxicity. The listing is particularly relevant for environmentally critical applications with potential loss of lubricant into the environment.

In 2019, no incidents were reported related to documentation and labeling of OXEA products.

#### REACH

As importer and exporter of chemicals into the European Union, OXEA is responsible for the REACH registration of OXEA's end products and intermediates as well as the provision of data regarding product safety and impact on the environment (please also refer to product safety). Responsibility lies with the PSQ department as part of the Global Operations organization.

“REACH (EC 1907/2006) aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. This is done by the four processes of REACH, namely the registration, evaluation, authorisation and restriction of chemical.” (Citation from the ECHA website)



In 2019, one of the focus areas was developing, agreeing to, and updating consortia and SIEF (Substance Information Exchange Forum) documentation to adept operational rules to post-phase-in requirements. 18 dossier updates were submitted either as part of the ongoing program to keep dossiers up to date or to report new data generated in response to e.g. ECHA (European Chemicals Agency) dossier evaluation, substance evaluation or test proposal decisions. OXEA also joined the "CEFIC Action Plan for REACH registration dossiers", placing ongoing activities under the umbrella of this overarching initiative.

In addition, one raw material had been registered for import and one additional product for manufacture, for six products cessation of manufacture was claimed and one submission for product and process-oriented research had been completed. The Group extended the only representative services to other sister companies owned by OQ.

100% of its sales products as well as all interim products or precursors relevant for import and export into and out of Europe are REACH registered. OXEA is the lead registrant for 40% of its sales products.

As a member of CEFIC, OXEA sends one representative to the "Evaluation Network of Experts", a working to group dedicated to the process of improving the quality of the dossiers.

OXEA acts as an active member of the VCI (Verband der Chemischen Industrie) and is represented in the "Arbeitskreis REACH-Umsetzung" dealing with the implementation of the REACH regulatory.

Beyond the requirements of the ECHA, OXEA is proactively checking all relevant product data on a regular basis and is evaluating the correctness of the dossiers submitted to ensure best data quality. OXEA's target is to evaluate 25% of the REACH dossiers per year.

OXEA does not have any sales products in its portfolio that are considered SVHCs (substances of very high concern) or PBTs (persistent, bioaccumulative and toxic).

#### **Biodiversity**

All OXEA production sites are located in established industrial areas. In general, OXEA sites do not include any natural habitats. Our production sites are either surrounded by farmland, inhabited areas, or adjacent to rivers.

On the Oberhausen site, OXEA entertains nesting aids for the peregrine falcon, an endangered bird species, at chimneys. Since 2004 a couple of peregrines is bringing up up to four young birds each year. The project is supported by the plant's fire brigade and the "Wanderfalkenschutz NRW".

At our Bay City facility, the mature forest areas and wastewater ponds attract different bird species like the Belted Kingfisher, as well as other animals. The water quality of the ponds is suitable for the birds to serve as food source.



# SOCIAL PERFORMANCE

## Working at OXEA

### Labor Practices and Performance Management

Our employees form our most important resource. OXEA believes in the value of its employees, as well as the diversity and experience they bring to the organization.

In 2019, OXEA was part of the integration program of Oman Oil and Orpic Group forming the newly branded entity OQ. Many of OXEA's employees were taking part in the integration program, co-creating different processes and functions as well as supporting the change process. With this integration, many new opportunities are arising for our human capital, which OXEA's HR team will put a focus on for its 2020 strategic implementation plan.

Within the scope of the integration program, the incorporation of OXEA's values of safety, trust, communication and respect into the OQ values of Share, Care and Dare has started.

Our goal is to transfer and adapt successful HR processes and concepts of OXEA, and leave less suitable ones for the new corporate structure behind.

In 2019, we have started a modernization program with regard to people management that also concerns the HR organization or – in the future – “People & Culture” organization itself. In this section, we want to give you an insight into the direction we have been taking on the road to form one company.

### Human Resources to Become “People & Culture”

Up until 2019, Human Resources at OXEA worked – suitable for the size of the company – in a model which assigned HR contacts to groups of employees. These HR contacts dealt with all HR matters of the assigned employees. With the modernization of its operating model, the HR organization at OXEA will transform into an organization with dedicated focus areas along the lines of business partnering, i.e., dedicated focal points to the business:

- Strategic partners will be responsible for the alignment of HR activities with the company strategy and have a focus on strategic HR management.
- Administrative partners will be responsible for the efficient conduction of administrative processes and documentation.
- Employee partners will be the dedicated contact point for employees and ensure the commitment and performance capabilities of employees.

In 2019, we have started the process to work on this model and identified relevant contents and tasks. The goal of the new system is to elevate efficiency based on the bundling of tasks and a high grade of specialization focusing on the business areas' needs.



**Smooth Transition from OXEA to OQ Chemicals**

Major next steps to be conducted comprise:

- Adaptation, introduction and implementation of a new leadership model (PICAP model)
- Definition of strategic goals and concepts across the company with regard to people management – addressing societal changes and megatrends

People form the center of the PICAP model. The overarching model thrives to empower employees and supports the development of high-performing teams. Based on different educational backgrounds, various nationalities and business environments, concepts have to be developed and integrated accordingly. In 2019, we have started the process to fill the different topics with "life" for roll-out at the end of the year 2020.

**Adaptation, Introduction and Implementation of a New Leadership Model PICAP**

The PICAP model stands for "People-Centricity, Integrity, Collaboration, Agility and Perform to Transform".





In the course of 2019, a first employee survey evaluated the integration process itself and people-relevant group behaviors like trust, transparency, diversity, teamwork, customer focus etc. >> **please also refer to the section Stakeholder Engagement** Our employees rated integrity and respect as positive and practiced behaviors within the organization and as part of the change process. Behaviors like trust, transparency and diversity (same chances for all employees), however, offer potential for improvement. Topics such as teamwork, innovation, agility and cooperation/collaboration, as well as fair treatment and overall atmosphere were rated as neutral. The survey comprised various questions regarding these different topics, results are published on the intranet.

Focus workshops with employees representing different peer groups at all sites are part of the next evaluation steps. This process aims at receiving more background information on the ratings, working out measures for the areas of improvement and developing of strategies and concepts.

The OXEA HR organization plays an important role in developing, pursuing and implementing these goals. HR functions as a partner of the various OXEA organizations in order to keep the company fit for the future of personnel management.

The HR functions themselves are undergoing a change process in order to better serve internal and external customers (as described before).

### Definition of Strategic Goals and Concepts across the Company

Major future challenges will consist in keeping the attraction, growth and retaining of necessary talent high.

Based on the PICAP model, the integration and development of a “people’s” strategy for OXEA follows a multi-step approach:

#### Set-up of Strategic Goals

- Step 1 = Define material topics
- Step 2 = Focus on top business priorities
- Step 3 = Set measurable targets and establish related programs

### Demographic Changes

The demographic changes of society have an impact on OXEA and are reflected in the age structure of the workforce. Amongst others, there are two focal areas for OXEA: The establishment of working structures and conditions for an aging workforce and the attraction of young people as successors to ensure a smooth operating model and knowledge transfer.

At the largest production site in Oberhausen, the so-called Oxolution program was initiated at the end of 2018.

The project forms a bridge between the four areas of safety culture, improving maintenance processes, process optimization and digitalization, and organization (see graphic).

After an intense examination of the structural and process organization at end of 2018 together with an external partner, first measures were worked out at the beginning of 2019.





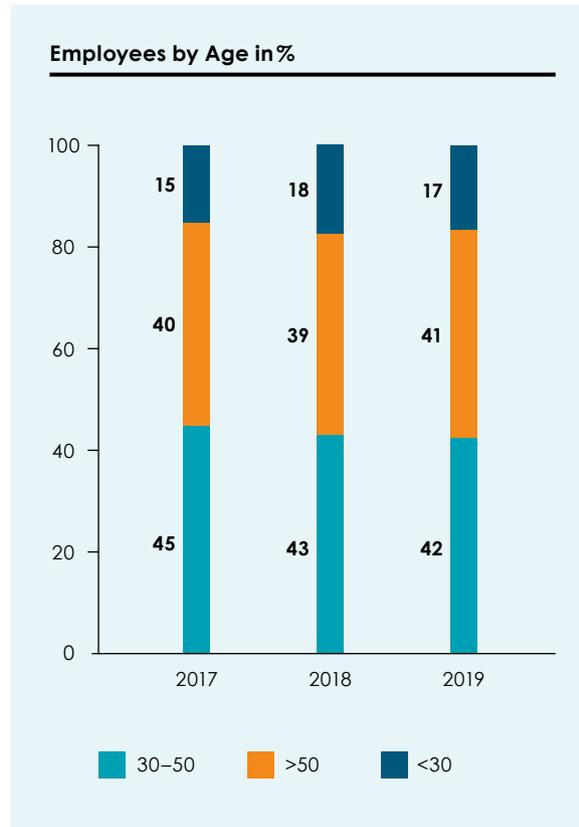
One measure of the item "organization" is addressing demographic changes at the production sites. To foster improved working conditions and higher efficiency, a five-shift system was developed and implemented, replacing the former four-shift system. A five-shift system with shorter shift blocks has been medically proven as better for the health of the operators and therefore represents a model which is favorable for older employees and allows for a better work-life balance.

Another measure to address demographic changes is to establish a harmonized, forward-looking manpower planning. In addition to the new shift system, HR is working on the establishment of a 5-year staffing plan for all areas. Furthermore, a suitable tool and processes to master knowledge transfer efficiently will be set up. In a first step towards managing knowledge transfer more proactively, an e-learning tool especially for the apprentices was purchased.

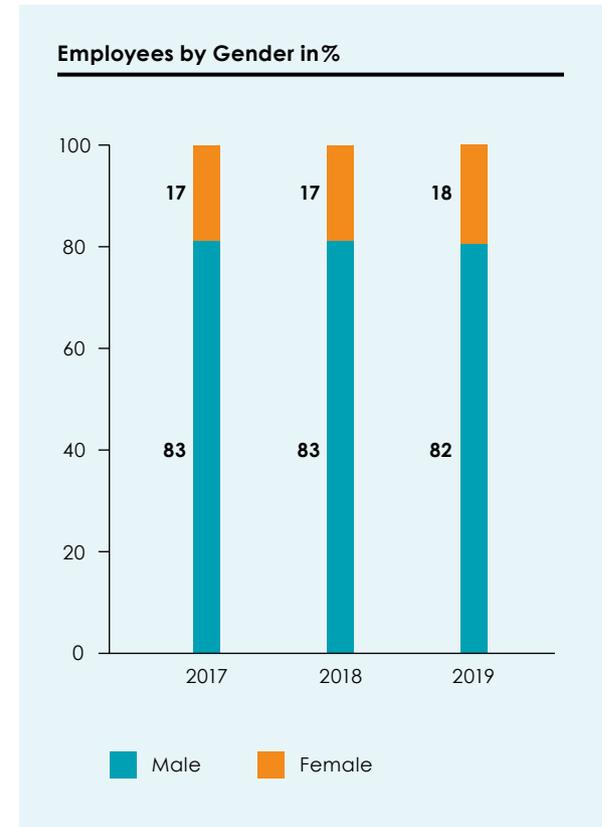
Programs already established to create the workforce pipeline are covered by the apprenticeship program in place at Oberhausen.

**Diversity and Inclusion**

Fair treatment of all employees, like equal opportunities, ethics and non-harassment in the workplace, are of highest importance. OXEA is aware that its success depends on the competency and involvement of each and every employee. For this reason, we will treat every employee with fairness and respect, as well as advance and challenge his or her responsibilities and abilities in accordance with the highest of professional standards.



Above and beyond that, OXEA respects the rights of our employees and is obligated to comply with all laws that prohibit discrimination or harassment in the workplace on the grounds of race, skin color, religion, gender, nationality, sexual orientation, age, physical or mental condition or family status.



During the hiring process, the company determines the qualification of potential employees based on objective, justifiable criteria. The rules prohibiting discrimination apply equally to company decisions with respect to internal promotions, furthering education, compensation, and termination of the employment relationship (please also refer to OXEA's Code of Conduct).



The company is responsible for preserving the principles of equal opportunities and for creating a culturally diverse working environment. Germany's General Treatment Act (or AGG) has a high priority, and similar rules apply under US law.

Any kind of discrimination may be reported anonymously via the whistleblowing hotline (available languages English and German), the Compliance Council, the supervisor or directly to the HR department. >> [please refer to Sustainable Governance](#)  
For 2019, no recordings were listed.

The age structure at OXEA is closely monitored as OXEA faces the challenge of demographic changes. Adequate and measurable targets and concepts in the field of diversity are being worked upon within the integration program.

The percentage of female employees of 18% lies within the typical range within the chemical industry. The number grew by one percent compared to 2018. OXEA offers individualized solutions to females returning from parental leave.

Within the integration program, strategic initiatives are being evaluated to increase the proportion of women in the company.

In 2019, OXEA participated in the "Girls' Day" event (held throughout Germany) for the 19th time in a row and opened its doors at the Oberhausen facility to 24 females still attending high school. The Girls' Day is specifically aimed at informing females on apprenticeship and job opportunities in supposedly male-dominated technical areas.

### Headcount and Relevant KPIs

The number of people employed by OXEA in the 2019 financial year was 1,416 (recording date: December 31, 2019, number excludes apprentices). At OXEA, we attracted 112 new qualified staff members worldwide. Approximately 76% of our workforce operates in production and engineering.

### Employer Branding – Talent Attraction

For talent attraction, OXEA uses different channels for different employment areas. In Oberhausen, OXEA represents an important employer. By offering apprenticeships in technical and commercial areas, OXEA is the most important provider of industrial apprenticeships in the city. The apprenticeship model is run as "dual education", offering apprentices the opportunity to work and study at the same time.

Nearly 100% of the apprentices are offered a permanent job within OXEA once they finish the program successfully.

Another educational program is the FOX trainee program, tailored specifically for university graduates with a master's degree. Currently, three trainees work and learn on- and off-the-job at OXEA. The program is designed for a period of two years, during which the trainee works in different departments and areas.

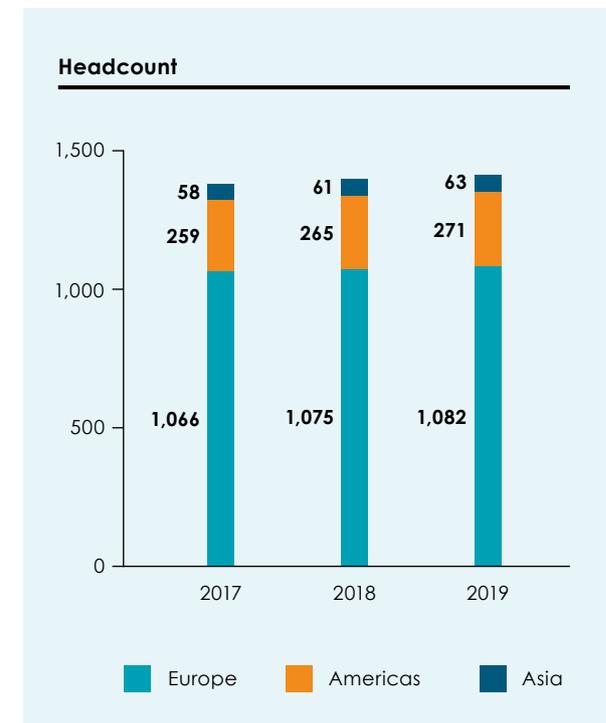
With three trainees and 41 fresh apprentices, a current total of 117 young people work and study at OXEA's own center for vocational education and on the job in 2019.

Moreover, OXEA implements exchange programs in cooperation with the Oman Oil Group (e.g. Oman Oil

Graduate program) and strives for knowledge exchange through mutual secondments as part of the group mobility efforts.

OXEA globally fosters the cooperation with universities in different areas and offers opportunities for graduate students to conduct part of their thesis at or with OXEA.

OXEA introduced a new employer branding function at the end of 2019. Based on the results of the employee survey, a new employer branding concept is being developed.





## Learning and Development

For the development of OXEA employees, training, coaching and personal development are key components of our personnel policy. Through internal training programs, we provide our employees with state-of-the-art individual development and qualification opportunities. Trainings cover a wide variety and range from software trainings over job-specific trainings to OXEA-specific topics and can be conducted internally or externally.

Training needs are usually identified and agreed upon together with the direct supervisor and documented in the performance review.

OXEA's in-house training program with a "mix & match" cross-faculty training block allows for an individualized adaptation of training modules.

The idea is to promote leadership capabilities of individual employees, and to define development goals for each person in the best possible way. Overall, an inspiring atmosphere with possibilities for development, extending the professional network and accepting responsibility are the intended focus.

The consensus at OXEA is that demonstrating leadership is not the same as carrying out a supervisor role. Instead, leadership is something an individual takes on to inspire others and have a positive impact on them.

In the course of the integration program to form OQ, training concepts and strategies are being re-evaluated and redefined to match the global organization's requirements.

### Annual Performance Review 2019

All employees receive yearly feedback, which is usually conducted by the employee's direct supervisor and should be accompanied by two to three intra-year reviews or feedback sessions. One feedback tool of the performance management system is the employee performance review for managers and exempt staff. Respective employees are assessed using predefined categories. An assessment scale is used to grade the achievements of each category's requirements. The results are officially recorded and evaluated by HR, who forward the agreed development measures such as further training activities to HR Development department for scheduling and implementation together with the organizational units.

100% of OXEA employees are covered by the annual performance review and/or feedback sessions.

In 2020, this process will be automated for managers and exempt staff, and covered by OXEA's new HRMS software called SuccessFactors.

### Overview of Mix & Match Seminars at the OXEA Academy





### Compensation & Benefits

Employee compensation is linked to both company and individual performance goals. >> [please refer to Labor Practices and Performance Management](#)

OXEA's benefit system reflects national practices and can vary depending on hierarchy and remuneration level, service years etc.

OXEA offers supplementary health insurance to all employees. Furthermore, OXEA employees can benefit from the following programs in Europe:

OXEA provides a defined benefit that will be paid upon retirement. Employees who are employed for more than six months are included in the collective agreement for single payments and retirement provision according to the company's collective agreement.

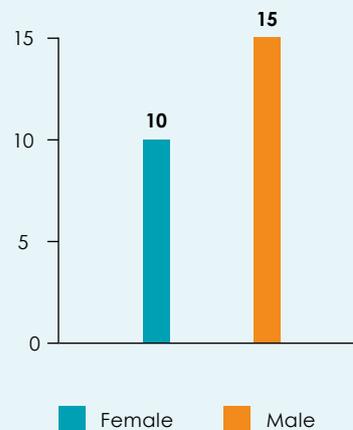
OXEA also offers flexible working hours (respecting core requirements) and long-term accounts for European employees. This model offers to save up parts of the salary or extra work hours in order to retire prematurely from work or schedule a personal break respectively while still receiving salary payments. In addition, private accident insurance is provided. Above mentioned benefits represent an excerpt and are offered to permanent full- and part-time employees.

At the US sites OXEA offers flexible working hours with certain core requirements. Each employee must work 30 hours a week to be considered a full-time employee and eligible for benefits. Employees are eligible for all provided benefits on date of hire, which include medical, dental, life, accidental death & dismemberment,

short- and long-term disability insurances. Employees must be employed for one year to be eligible for long-term disability. OXEA participates in the 401(k) retirement plan where we match up to 5% of employee contributions and contribute an additional 5% of the employee's bi-weekly salary every pay period to the account.

OXEA encourages both paternity and maternity leave models and provides for the employees according to the national regulations of the countries in which OXEA is operating.

**Number of Employees Returning from Parental Leave 2019**



### Collective Bargaining Agreements

OXEA adheres to and supports the right of freedom of association.

All European employees of OXEA are covered by collective agreements and have elected works councils in place. In Amsterdam, employees have elected representatives instead, due to the size of the site. These representatives operate like a works council. In 2019, 73% of all OXEA employees globally were covered by collective bargaining agreements.

In the case of company measures with a direct impact on OXEA employees, a reconciliation of interests is defined with the works council and the Management Team. In addition, a social compensation plan is negotiated between the employer and the Works Council.

### Occupational Safety

Relevant data and program descriptions can be found in the section "Environmental, Health and Safety Performance".

### Corporate Health Promotion Program

Our employees' health and well-being is a priority at OXEA, and the Corporate Health Promotion program is aimed at promoting physical and mental capabilities both at work and in their personal lives. The Corporate Health Promotion program comprises four pillars and covers the areas of mobility, nutrition, prevention and relaxation. Program components vary at different OXEA sites according to needs and topics in focus. Remotely located employees can benefit from individualized offerings and online courses.



The Corporate Health Promotion program is currently established at the German OXEA and US sites. OXEA's site in Nanjing is planning to establish tailored health activities in the course of 2020.

The Corporate Health Promotion program offers a wide range of services, activities and courses from which OXEA employees can benefit – either for zero costs or a minor financial contribution.

These include: physical training & prevention courses (physical fitness, relaxation, smoking cessation trainings, nutritional training), participation in public sporting events, sponsored online courses etc.

At our OXEA sites in Oberhausen and Monheim, we offer medical services for employees including medical check-ups, vaccinations, services of an optician and orthopedist through our own medical team. In Marl, those services are provided by the "Chemical Park".

At our US locations in Bay City, Bishop and Houston, OXEA also offers medical services including vaccinations.

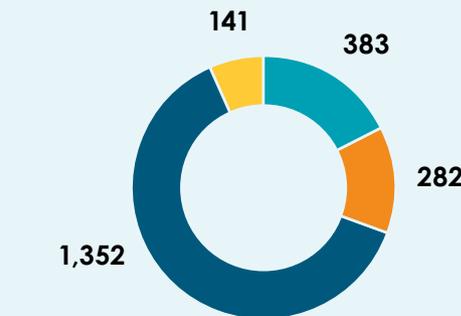
OXEA conducts trainings for first responders at all sites.

**"OXEA macht fit": Digitally, Locally and Individually**  
Health promotion changed for the German locations in 2019 and now takes place via the new health platform [machtfit.de](http://machtfit.de). Each employee can choose from a wide variety of activities according to their interests and preferred locations. Offers are no longer restricted to OXEA locations as before. All courses are supported by a yearly subsidy.

The platform offers sports activities (e.g. boot camps, Pilates and spinal exercises), stress management courses (e.g. relaxation training) and areas of nutrition and addiction cessation. In addition, all company-internal and current offers, such as company runs, can be viewed and booked on the portal. Shift workers will now have more opportunities to participate. They can purchase multiple tickets and participate on their preferred dates.

**2019**

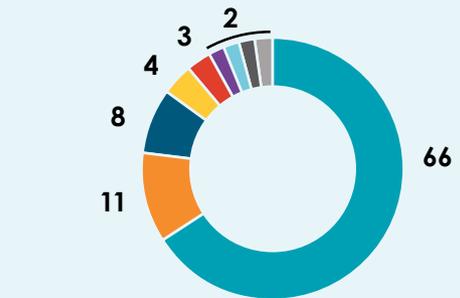
Total number of Medical Appointments at Oberhausen and Monheim



- Preventive medical check-ups
- Doctor's consultations
- Paramedic treatment
- Vaccinations

**Booked Tickets (Category) in %**

Offers that were booked via [oxea.machtfit.de](http://oxea.machtfit.de)



- Fitness training
- Climbing/Bouldering
- Yoga
- Spinal Exercises
- "Aqua Fit"
- Stress management
- Memberships<sup>1</sup>
- Nutritional advice
- Others

<sup>1</sup> E.g. gym



### Wellness Committee in Bay City

In 2019, the Wellness Committee in Bay City established different programs and activities for the Bay City employees to join in order to enhance a healthy and satisfying lifestyle (work-life balance). Focus topics of the committee in 2019 were e.g. to enhance a healthy nutrition, especially at work, and to create awareness for heart diseases. The program has been extended to the Bishop site and Houston office, with volunteers who champion the activities at the respective location.

During the holidays, a weight loss challenge was initiated with the intent to encourage people not to overindulge while celebrating the season. The contest was based on percentages of weight lost, and prizes were distributed at the end of the contest.

Activities also included informative sessions on healthy nutrition. In this context, the team has also started providing the employees with healthy snacks, which have been made available initially in the lobby of the dispensary.

For the "healthy heart" focus, Bay City held a "red ribbon day". Additionally, informative material was shared with the office in Houston and the Bishop site.

## Local Community Engagement

Growth and success require a solid foundation. At OXEA, this means trust and responsibility. We appreciate and nurture the trust that our customers and our neighbors have placed in us. We intend to be recognized as a valuable corporate citizen and make every effort to operate responsibly in our local communities.

We take responsibility for the people who work for OXEA and those who live in the surrounding areas of our sites.

We support projects in cooperation with partners such as communities, associations, local governments, and nearby institutions, and extend financial support to programs covering environmental and social aspects.

Our aim is to be a decisive community partner and a responsible corporate citizen by positively impacting social development. OXEA specifically supports projects and facilities in the surroundings of its sites/offices and concentrates on:

- Social engagement in the field of youth work/ support of children
- Scientific projects of general interest
- Environmental protection
- Community projects

We strive to develop a volunteering work culture and encourage our employees to get involved in activities with a positive impact on society. OXEA fosters "matching gifts", e.g. doubling of employees' donations for projects being initiated or supported by OXEA employees.

Usually, initiatives are being posted on the intranet and in paper form at the different sites and offices. Our general concept is to cover various facilities in the direct neighborhood with smaller support sums, rather than to concentrate on one big project.

OXEA has a guideline in place covering the criteria for donations and sponsoring. Recommendations and ideas can be communicated and handed in by all employees via e.g. the Impulse Tool, the direct supervisor or directly to the HR departments at the US sites and the Global Communications department in Europe. At the end of each fiscal year, donations and supported projects will be communicated to the Management Team and a proposal for next year's activities will be handed in.

In 2019, OXEA donated 28,110€ to facilities in and around Oberhausen, Marl and Monheim. In the USA, OXEA supported initiatives with a total amount of 46,541 US\$ (please see below).

Supported activities cover:

- Educational initiatives (e.g. training at schools and/or institutions of science)
- Open House Days
- Sponsorship of events
- Volunteering work with different focus areas
- Cooperation with local universities and schools; internship and employment options for students
- Donations to medical and social institutions as well as charities
- etc.



In the USA, OXEA employees are active in reoccurring events with specific focus themes: OXEA employees of the Bay City facility regularly participate as volunteers in e.g. the Matagorda Beach Clean-up (twice a year) coordinated by the Texas General Land Office. Trash data (volume and kind) are recorded and help to determine the source and avoidance of waste.

Yearly events are e.g. the Hazardous Household Waste Collection Day and the United Ways Day of Caring, during which OXEA employees are joined by students from local high schools and help with home repairs, lawn work etc. at local residents needing support.

In Europe, we have also opted for a mix of support.

Every two years OXEA supports the MULTI project in Oberhausen. The basic idea of this project is a peaceful meeting of young people from different cultural backgrounds. In common activities young people recognize similarities, but also differences. During the MULTI hundreds of bridges will be built between the young people. The project aims to foster a tolerant and diverse culture.

Another important partner is the Friedensdorf International, an institution OXEA supports annually. Friedensdorf International is a NGO in Oberhausen that brings sick and injured children from war and crisis zones to Germany for medical care. After medical treatment, the children return to their families.

In addition, we support schools, kindergartens and sports clubs next to our production sites with various donations.

You will find an excerpt of our activities in 2019 in the following paragraphs:

#### **Marl: Site on the Move – 18<sup>th</sup>. “Sponsoren Lauffest”**

In 2019, several OXEA employees participated in a race for a youth foundation called WiLLmA. Over 500 participants took part in the event organized by the IG BCE (Industriegewerkschaft Bergbau, Chemie, Energie). OXEA and its team donated 600€. With the total amount gathered multi media equipment was bought to ensure children get access to modern media in order to accompany and support a smooth transition from school to job.

#### **Oberhausen: Waste Collection Day 2019**

OXEA in Oberhausen participated again in the waste collection initiative of the city of Oberhausen. 29 apprentices collected twenty bags of waste around the production site in Oberhausen. With 176 registered activities and around 6,000 participants a total of 20 tons of waste were collected during the 2019 campaign.

#### **“Select-Partner” of the Soccer Club Rot-Weiß Oberhausen**

For the 2019/2020 season, OXEA supports the Rot-Weiß Oberhausen soccer club as a so-called select-partner. As OXEA is particularly committed to projects in the youth sector and at its locations, the club fits very well into our sponsoring portfolio. The soccer club has attracted positive attention because it manages to do a great job through great commitment. In Oberhausen and the surrounding area, the club is well known and an important part of the city. In addition, this partnership offers the opportunity to make OXEA known as an employer to young people.



OXEA supports the Rot-Weiß Oberhausen soccer club as a “select-partner”.



# GRI CONTENT INDEX

This report is oriented to the Sustainability Reporting Standards 2016 of the Global Reporting Initiative (GRI), which is the most established framework for sustainability reporting worldwide. The report covers the OXEA Group of companies (OXEA). The group structure is described in the Annual report 2019 of the Oman Oil Holding Europe B.V.

At the 15th of May 2020, the OXEA Group became OQ Chemicals.

GRI-Standards		Page
<b>GRI 101: Foundation</b>		
<b>GRI 102: General Disclosures</b>		
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