



# CEO's review

**Markku Teräsvasara**  
Annual General Meeting, March 14, 2019

**Outotec**

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1. Outotec today
2. Achievements in 2018
3. Market situation
4. Outotec's opportunities and focus areas
5. Outlook for 2019

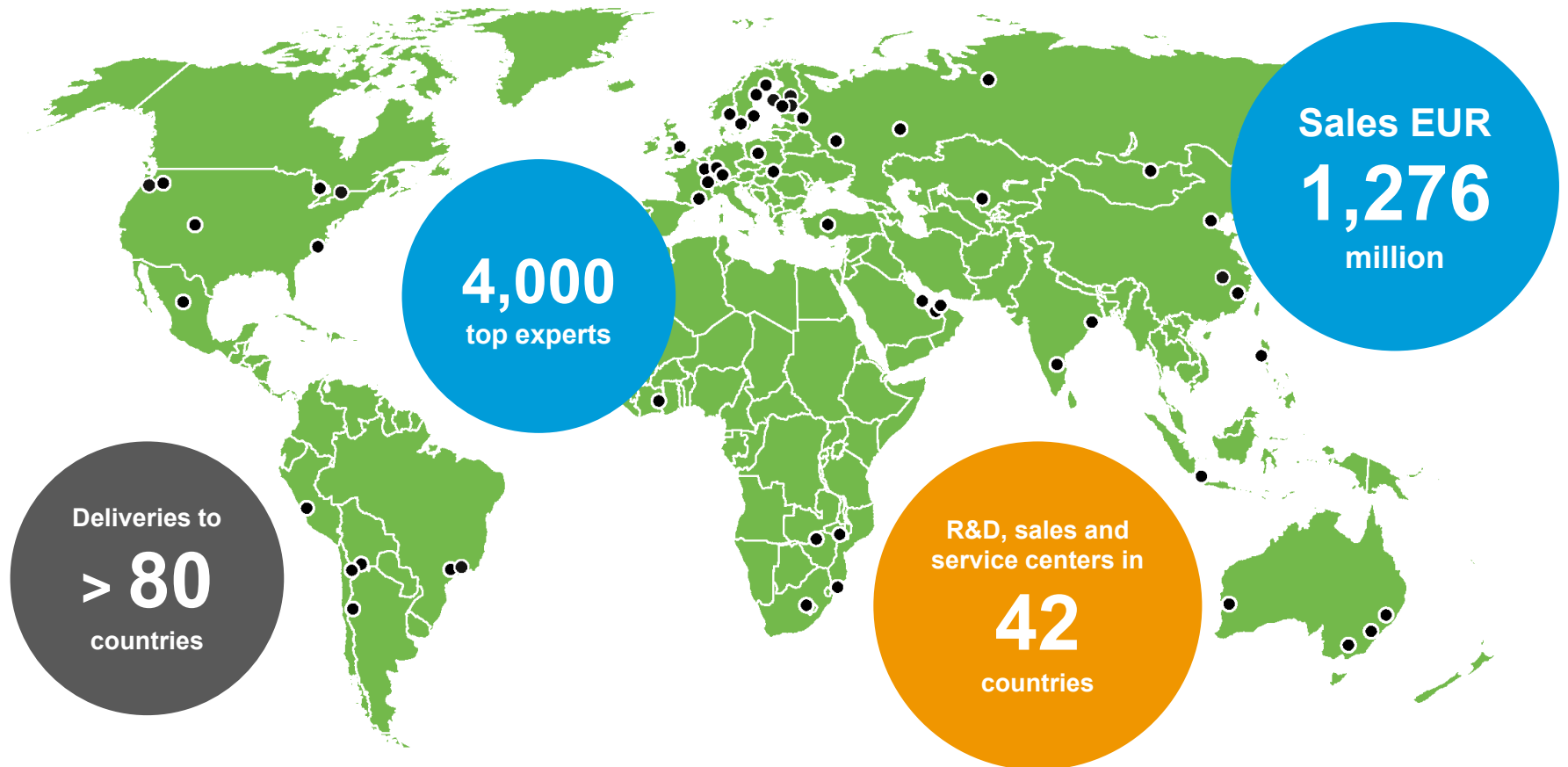
## Leading technologies are our core strength

- R&D centers in Pori, Frankfurt and Lappeenranta
- Cooperation with over 30 universities and research institutes
- Some results of our R&D in 2018:
  - Lithium hydroxide process
  - Hybrid ceramic filter plates to improve filtration capacity
  - Digital Optimizer product family for optimizing the production process and ensuring uniform product quality
  - Modular prefabricated sulfuric acid plant
- R&D investments totaled EUR 57 million, equaling 5% of sales in 2018



Our technologies enable our customers to improve their profitability in a sustainable way.

# Global operations and local presence





# Our commitment to sustainability

## SUSTAINABLE TECHNOLOGIES AND INNOVATIONS

**90%** of order intake represent Environmental Goods and Services according to OECD's criteria

**6.2** million tonnes sulfur dioxide emissions avoided through use of Outotec technologies in 2018

## TOP INDUSTRY EXPERTS

**4,000** top industry experts contribute to the success of our customers and are driven by their unique challenges

**72** nationalities work for Outotec

## RESPONSIBLE SUPPLY CHAIN

**12<sup>th</sup>** on the Global 100 list of the world's most sustainable companies

Our mission is sustainable use of Earth's natural resources.

## OUTOTEC'S OWN OPERATIONS

**51%** of electricity consumption from renewable sources

**1.9** lost-time injuries per 1 million work hours

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# Significant progress in several areas in 2018

## Significant business growth

- Order intake increased 4% (with comparable currencies 8%)
- Sales grew 12% (with comparable currencies 16%)

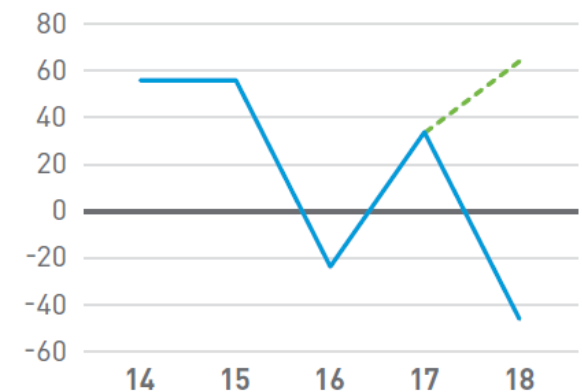
## Availability of spare and wear parts improved in the service business

- Service sales grew 3% (with comparable currencies 9%)

## Minerals Processing further improved its profitability (adjusted EBIT 11%)

## Customer satisfaction clearly improved

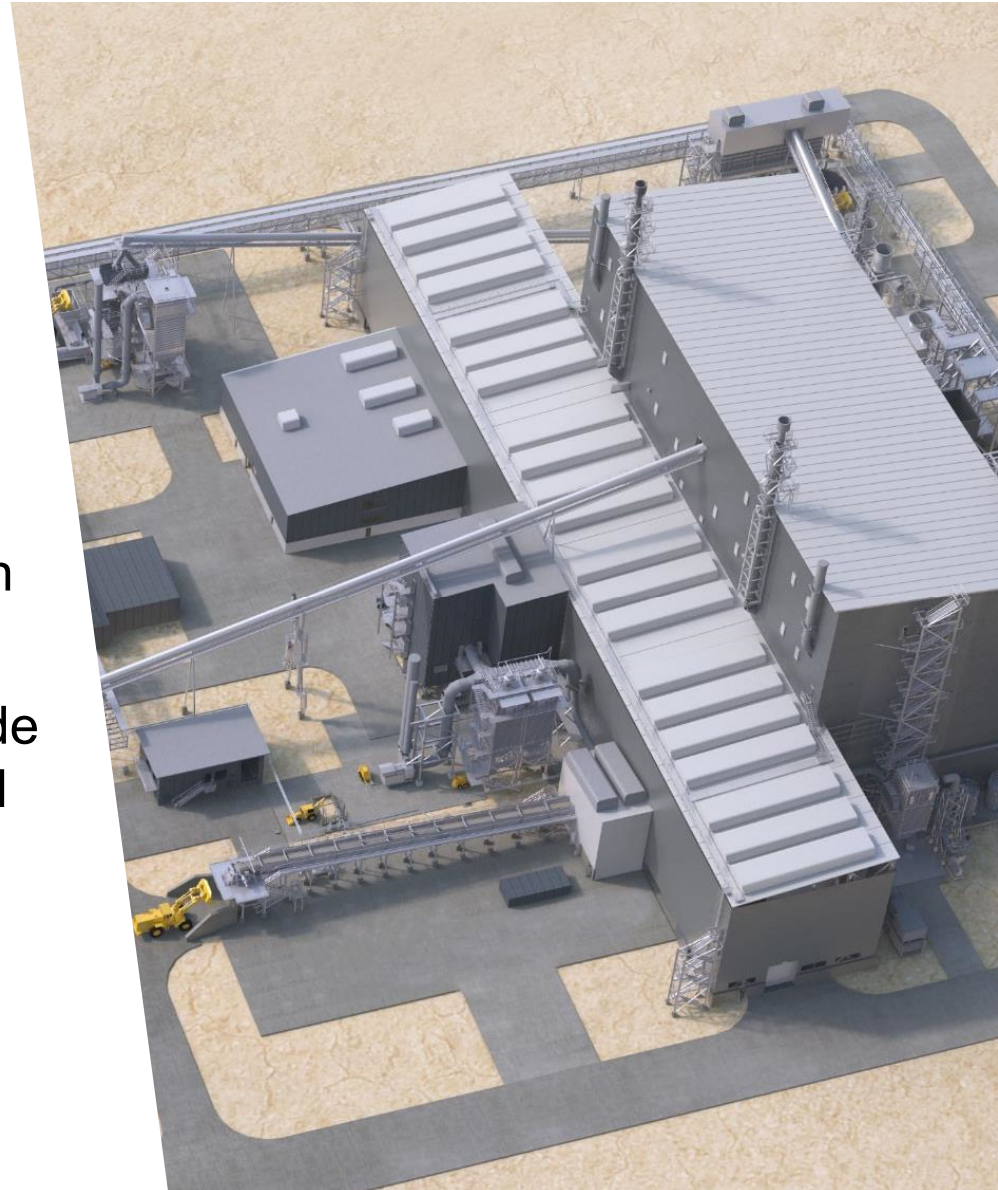
### ADJUSTED EBIT\*, EUR MILLION



--- aEBIT excluding ilmenite smelter provision  
\* excluding restructuring and acquisition-related items as well as PPA amortizations

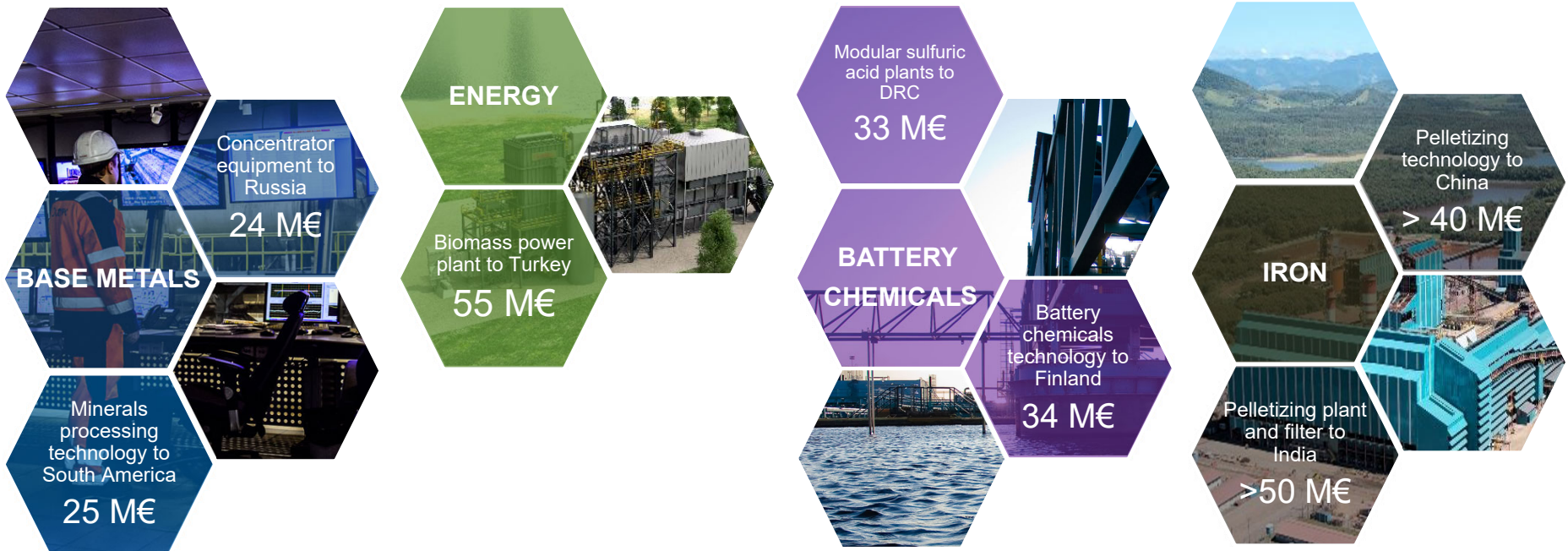
## Analysis of the ilmenite smelter is progressing

- A team consisting of Outotec's, customer's and third-party experts, altogether 40 people, are investigating the furnace in Saudi Arabia.
- The investigations and negotiations with the customer have progressed well.
- A provision of EUR 110 million was made after careful consideration diligently and booked in the result of Q4/2018.





# Largest orders in 2018



# Financial results of 2018

EUR million	2018	Change from 2017, %	Change with comparable currencies, %
Sales	<b>1,276</b>	12	16
Service sales	<b>497</b>	3	9
Share of services in sales, %	<b>39</b>		
Adjusted EBIT <sup>1, 2</sup>	<b>-46</b>		
Adjusted EBIT, % <sup>1, 2</sup>	<b>-4</b>		
EBIT	<b>-66</b>		
EBIT, %	<b>-5</b>		
Result for the period	<b>-67</b>		
Net cash from operating activities	<b>70</b>		

<sup>1</sup> Excluding restructuring and acquisition-related items as well as PPA amortizations.

<sup>2</sup> aEBIT for the full year was EUR 63.8 million (5.0%) excluding the provision for the ilmenite smelter project.

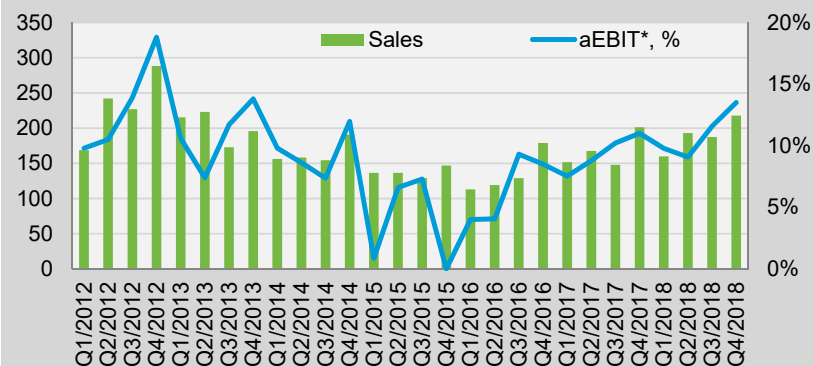
# Good progress in Minerals Processing – service sales improved profitability

Minerals Processing EUR million	2018	Change, %	Change in comp. currency, %
Order intake	<b>719</b>	-1	4
Sales	<b>758</b>	13	19
Service sales	<b>344</b>	13	20
Adjusted EBIT *)	<b>84</b>		
Adjusted EBIT *) , %	<b>11</b>		

\* Excl. restructuring and acquisition-related costs as well as PPA amortizations



Sales and adjusted EBIT development by quarter

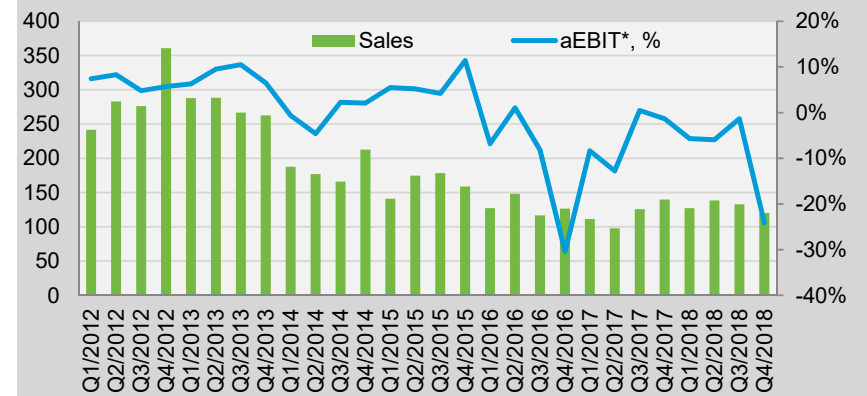


# Solid order intake and sales development, ilmenite smelter project provision impacted profitability in Metals, Energy & Water

Metals, Energy & Water EUR million	2018	Change, %	Change in comp. currency, %
Order intake	<b>532</b>	11	15
Sales	<b>519</b>	9	12
Service sales	<b>152</b>	-13	-10
Adjusted EBIT <sup>1, 2</sup>	<b>-125</b>		
Adjusted EBIT, %	<b>-24</b>		



Liikevaihdon ja oikaistun liiketuloksen kehitys



<sup>1</sup> Excl. restructuring and acquisition-related costs as well as PPA amortizations.

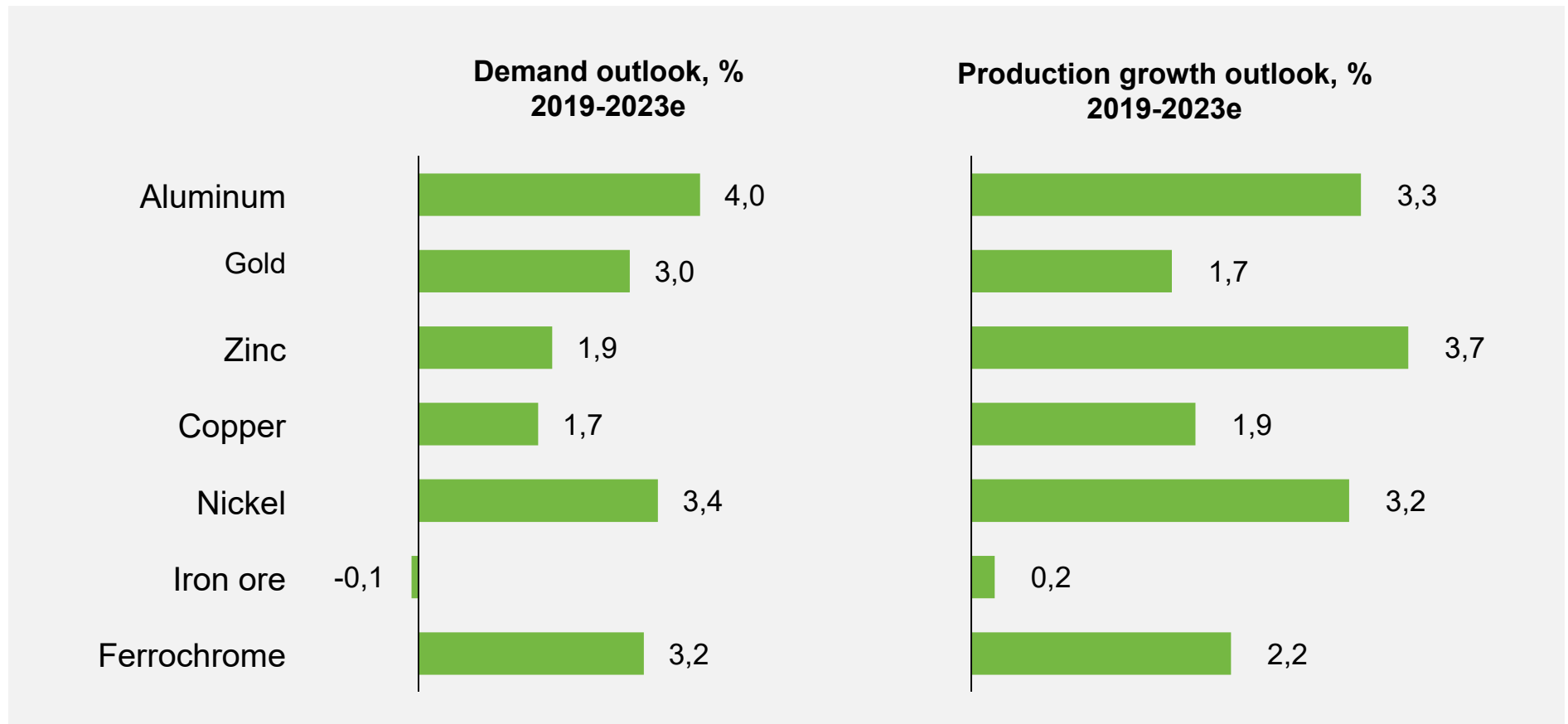
<sup>2</sup> aEBIT for the full year was EUR -15.0 million (-2.9%) and Q4/2018 EUR 2.1 million (1.7%) excluding the provision for the ilmenite smelter project.

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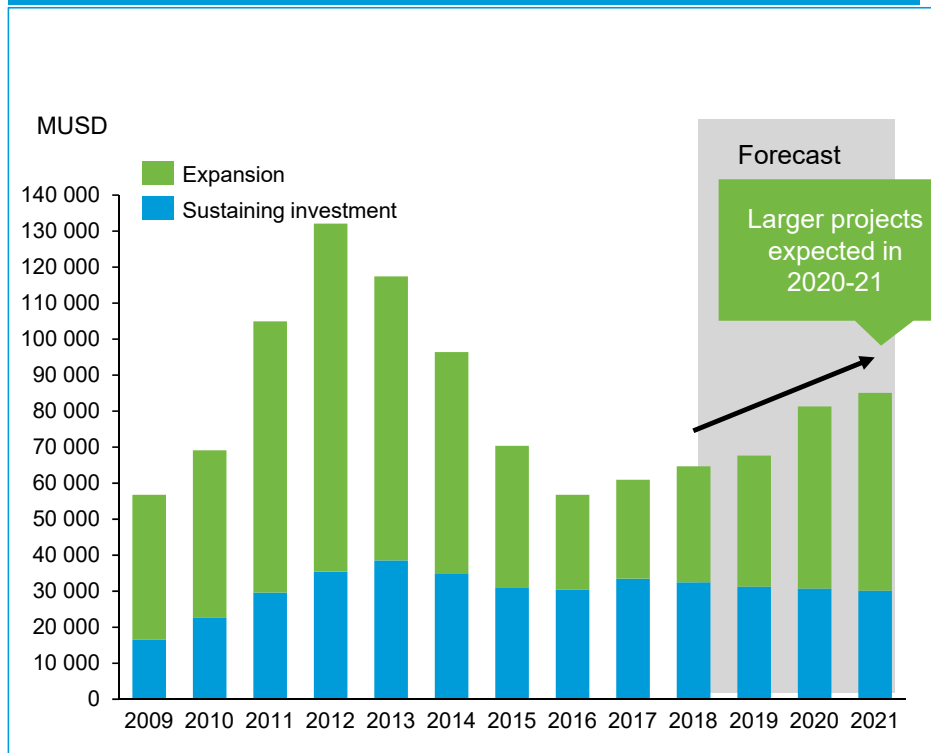


# Metals demand outlook support new investments



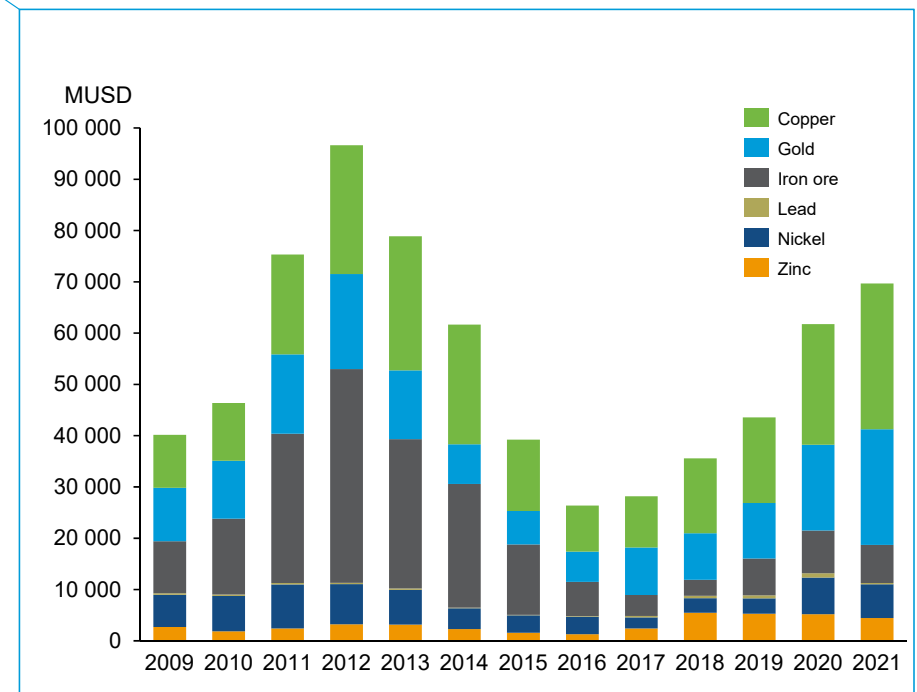
# Investments are expected to increase

Total capex investments for copper, gold, iron ore, lead, nickel and zinc (mines only)

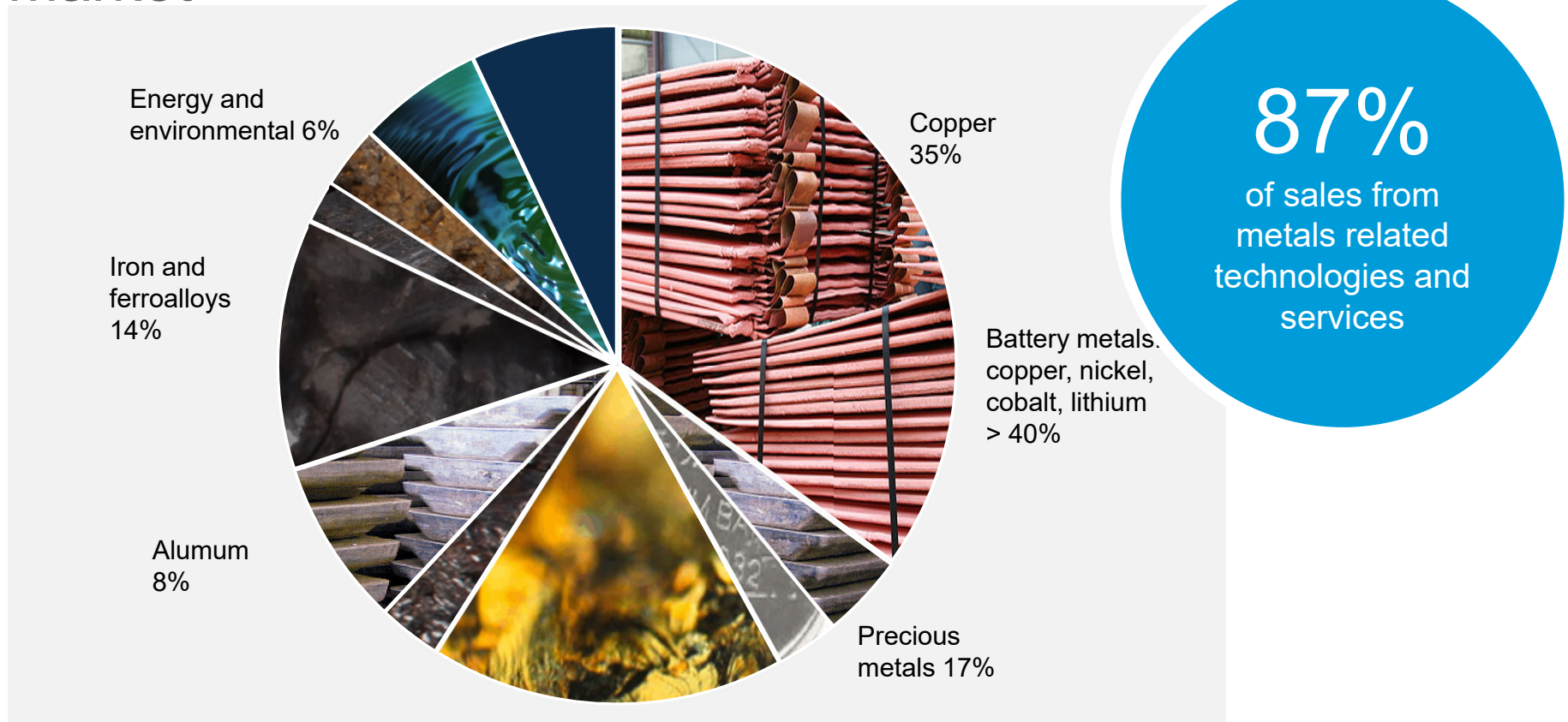


Source: Woodmac Q4 2018

Expansion capex investments by commodity: copper and gold expected to lead the growth



# Outotec well positioned to meet the growth of metals market



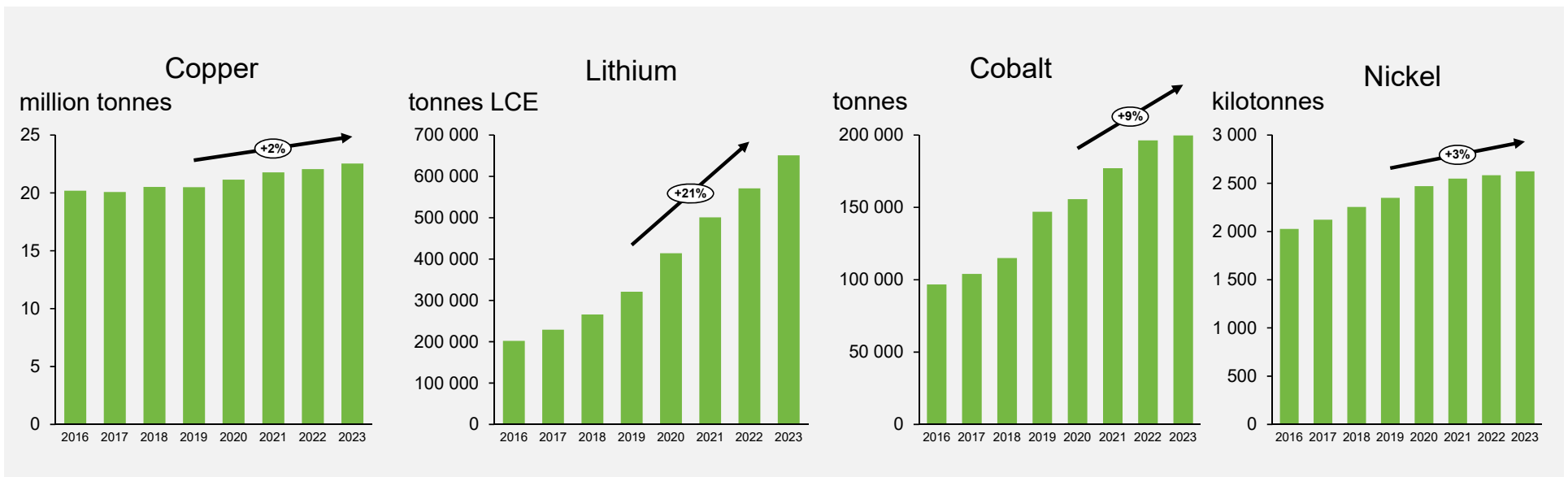
## Electric vehicles driving the demand for battery metals

- Rapid increase of electric vehicles drive the demand of battery metals and the development of related technologies
- Cathode is the most important part in batteries, as it stores the energy needed in electric motors
- Most cathodes include cobalt, lithium and nickel in varying amounts



# EV's the most significant driver of the demand for battery metals

Expected CAGR



Source: CRU, Thomson Reuters, HSBC, Macquarie Research



# Outotec is well positioned in the growth market for battery metals and technologies



- Outotec's technologies are suitable for processing all battery metals from ore to refined metal and raw material for the battery industry
- We deliver technology to most of the ongoing lithium projects
  - AMG (Brazil), Keliber (Finland), other projects (Australia, South America)
- We are participating in preparing the European wide research relating to EV battery raw materials and battery recycling

# Innovative process for producing lithium hydroxide for battery industry

- Production without intermediate products
- Technology is ready for commercial use, patent application submitted
- Developed and piloted with Critical Elements (Canada) and Keliber (Finland)



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# We continue to implement our strategy



# Achievements in our focus areas



## Customer focus

Customer satisfaction improved remarkably



## Service business

Faster quotation lead times and delivery handling



## Product competitiveness

Productization reduced engineering hours and improved quality



## Project excellence

Improved risk management and project control



## Our people

New values, training program for sales, service business and project managers

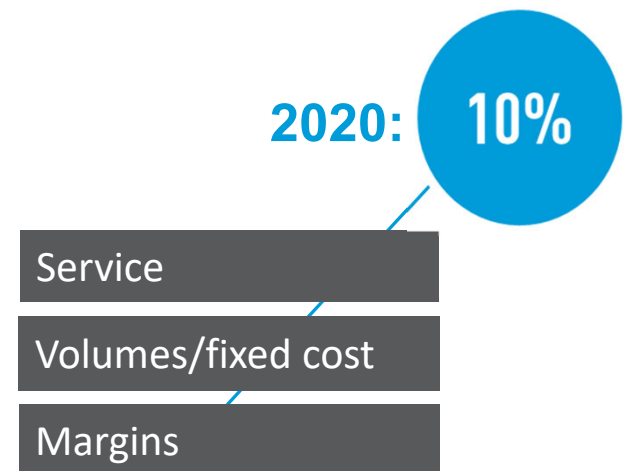




# By 2020 we aim to achieve the following targets

- ① Sales growth faster than the market
- ② Annual average service sales growth over 10%
- ③ Profitability (aEBIT) 10% of sales by 2020
- ④ Gearing at maximum 50%

We aim to grow volumes while containing fixed cost and improve margins through product competitiveness and project excellence.



**2018:**  
**5% aEBIT**

Excluding the EUR 110 million provision for the ilmenite smelter project

# Outotec's Executive Board



**Mari Tuominen-Reini**  
Senior Vice President,  
Sourcing &  
Manufacturing as of  
August 19, 2019 at the  
latest

**Tomas Hakala**  
Services

**Olli Nastamo**  
Operational  
Excellence

**Kaisa Aalto-Luoto**  
Human Resources &  
Communications

**Kimmo Kontola**  
Minerals Processing

**Gustav Kildén**  
Strategic Customers &  
Business Development

**Markku Teräsvasara**  
CEO

**Nina Kiviranta**  
Legal, Contract  
Management  
& Corporate  
Responsibility


**Jari Älgars**  
CFO

**Kalle Härkki**  
Metals, Energy  
& Water

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# Largest orders in Q1 / 2019



**NICKEL**

Mine paste backfill system to Canada  
~ 20-30 M€

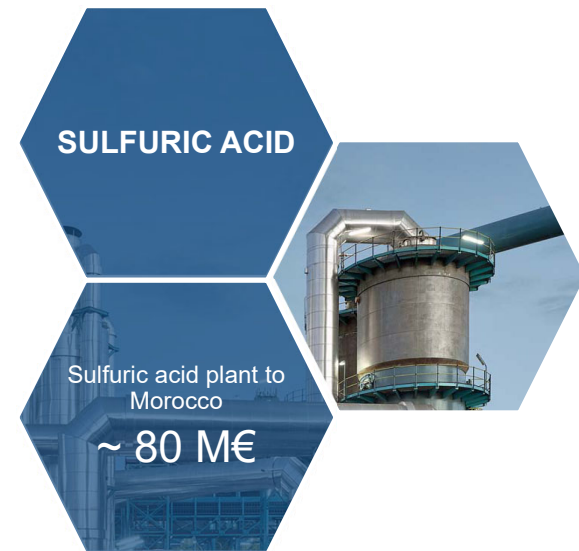
The graphic consists of two overlapping hexagons. The top hexagon is dark green and contains the word 'NICKEL'. The bottom hexagon is lighter green and contains the text 'Mine paste backfill system to Canada' and '~ 20-30 M€'. The background image shows two workers in orange safety gear and white hard hats at an industrial site.



**LITHIUM**

Filtration technology and services to Australia  
12 M€

The graphic consists of two overlapping hexagons. The top hexagon is dark green and contains the word 'LITHIUM'. The bottom hexagon is lighter green and contains the text 'Filtration technology and services to Australia' and '12 M€'. The background image shows a worker in an orange safety suit operating machinery.



**SULFURIC ACID**

Sulfuric acid plant to Morocco  
~ 80 M€

The graphic consists of two overlapping hexagons. The top hexagon is dark blue and contains the words 'SULFURIC ACID'. The bottom hexagon is lighter blue and contains the text 'Sulfuric acid plant to Morocco' and '~ 80 M€'. The background image shows a large industrial tank at a plant.

# Solid market outlook



Service opportunities



Declining ore grades  
and complex ores

new technologies |  
digitalization |  
tailings management



New uses such as  
EVs support long-  
term view



Water scarcity is a  
concern and cost  
factor

solutions for reducing  
freshwater consumption |  
purification of wastewater



Emission trading  
schemes, tightening  
regulation and social  
license to operate

energy efficiency | emission  
reduction | gas handling and  
gas cleaning | recycling



## Financial guidance for 2019

Based on the current market outlook, we expect our sales to increase, and our aEBIT\* to increase significantly from the 2018 aEBIT (EUR 63.8 million) without the provision for the ilmenite smelter project.

*\*Excluding restructuring- and acquisition-related items, as well as PPA amortizations.*



Outotec



Sustainable use of  
Earth's natural resources