

# Aurubis AG

## Metals for Progress

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BofA Global Research Global Metals,  
Mining & Steel Conference

May 17th, 2023  
Barcelona



# Executive summary of first 6 months 2022/23

Operating EBT  
6M 2022/23 of  
**€ 291 million**  
(PY: € 331 million)<sup>1</sup>

ROCE  
**15.6 %**  
(PY: 19.6 %)<sup>1</sup>

Aurubis' positive development continues with the **second quarter at the very high level of the previous year**

Good concentrate markets and product demand **led to good Q2 2022/23 figures**, despite lower sulfuric acid revenues and higher costs, with well managed energy costs

Lower metal result related to input materials; remains a significant contribution to Group's earnings

Net cash flow  
**€ 19 million**  
(PY: € 54 million)<sup>1</sup>

Increased forecast  
range for FY 2022/23  
**€ 450–550 million**  
op. EBT

Ongoing strong operating performance at our smelter in Pirdop; Hamburg performance stabilized in Q2

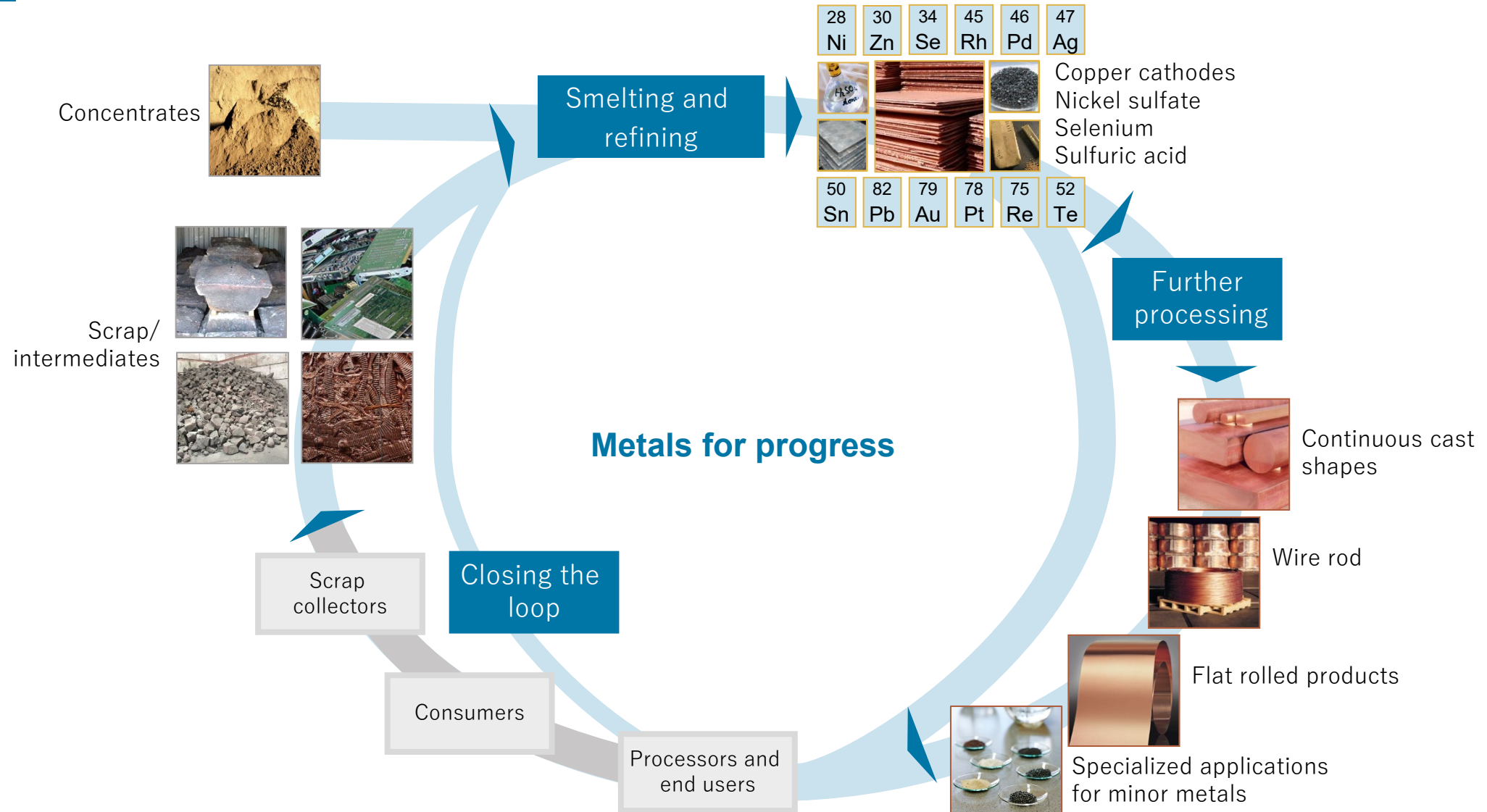
Net cash flow low due to temporarily high working capital

Upward adjustment: op. EBT for FY 2022/23 at **€ 450–550 million**




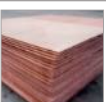




<sup>1</sup> Prior-year figures adjusted


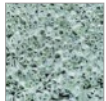


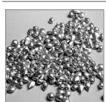



**» Good operating performance in Q2 and ongoing strong metal demand led to an increase in the forecast**

# Closing the loop is part of Aurubis' integrated business model



# Increased concentrate throughput and strong product demand

	FY 2021/22	Change vs. prior year
 Concentrate processing <sup>1</sup>	2,429,000 t	+8 %
 Copper scrap/blister copper input <sup>2</sup>	540,000 t	-1 %
 Other recycling materials <sup>2</sup>	524,000 t	-3 %
 Cathode output	1,111,000 t	+0 %
 Continuous cast wire rod output	880,000 t	+1 %
 Copper shapes output	218,000 t	+17 %
 Flat rolled products + specialty wire output	176,000 t	-8 %
 Sulfuric acid output	2,296,000 t	+9 %

	FY 2021/22	Change vs. prior year
 Gold	47 t	-8 %
 Silver	911 t	-4 %
 Lead	44,016 t	+8 %
 Nickel	3,863 t	-1 %
 Tin	9,340 t	-7 %
 Zinc	13,917 t	-24 %
 Minor metals	867 t	-11 %
 Platinum group metals (PGMs)	9,514 kg	+9 %

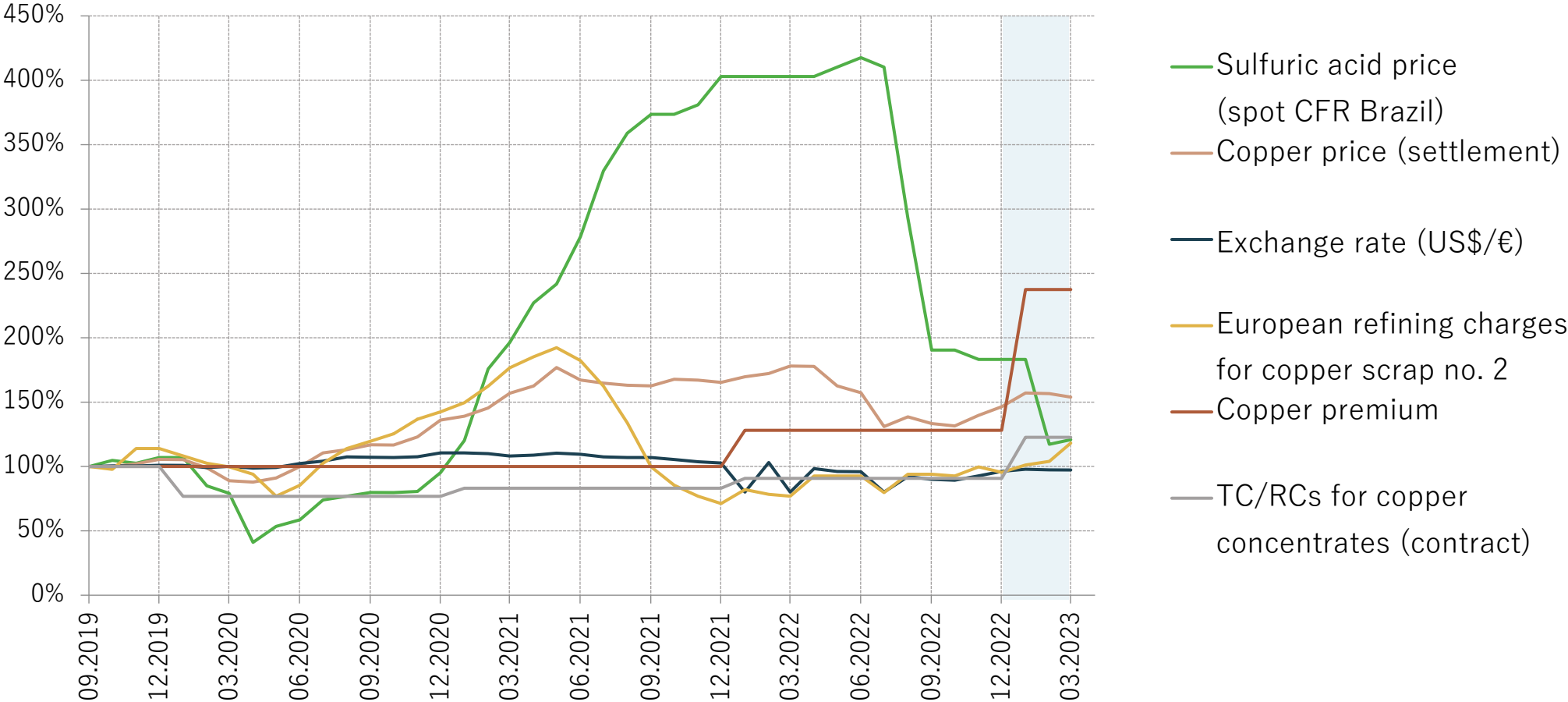
<sup>1</sup> Custom smelter production <sup>2</sup> Prior-year figures adjusted

# Sulfuric acid stabilizes at lower levels, other market conditions stable

Trend in significant market prices and refining charges



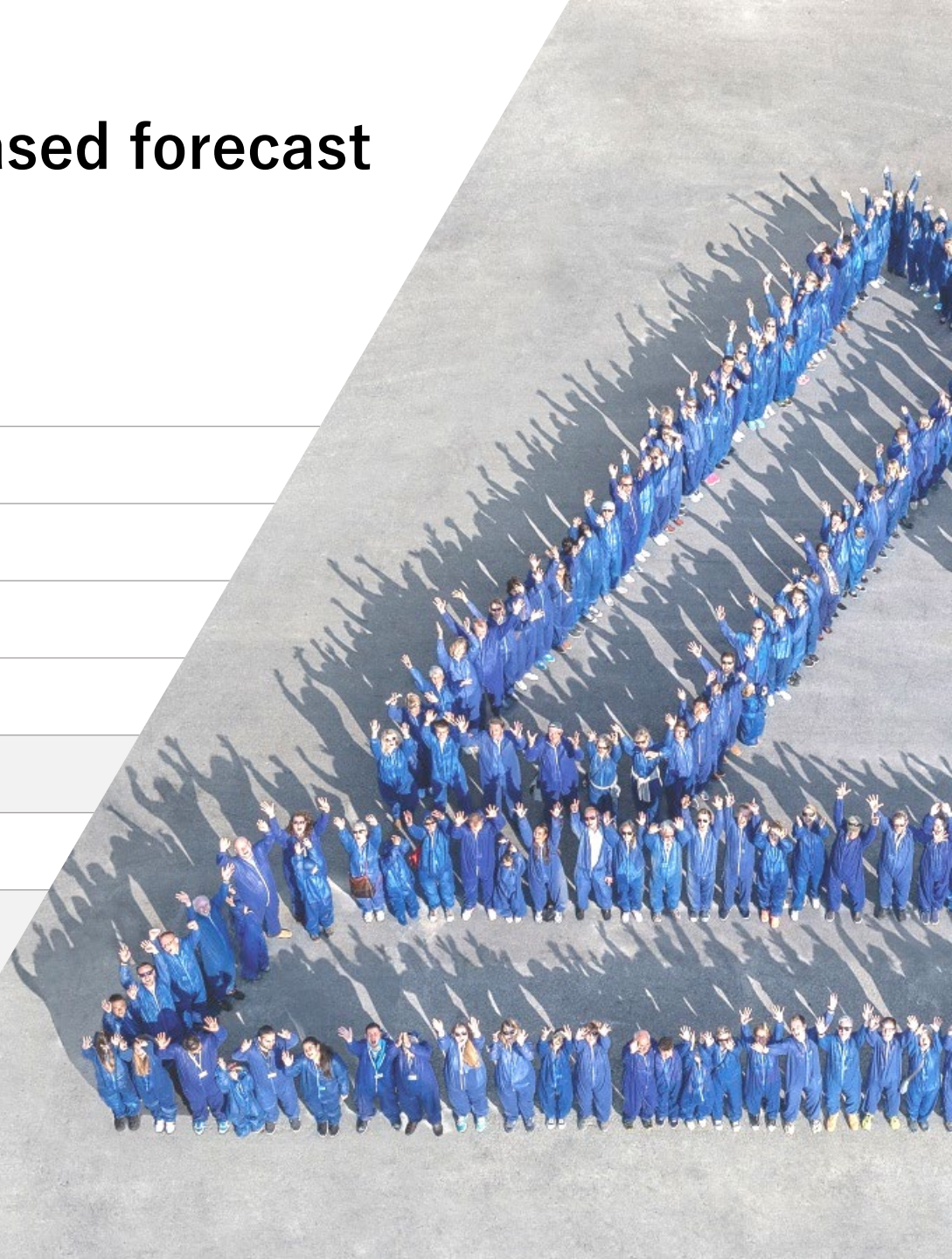
100 % = Sept. 2019



# Aurubis with strong Q2 results and increased forecast

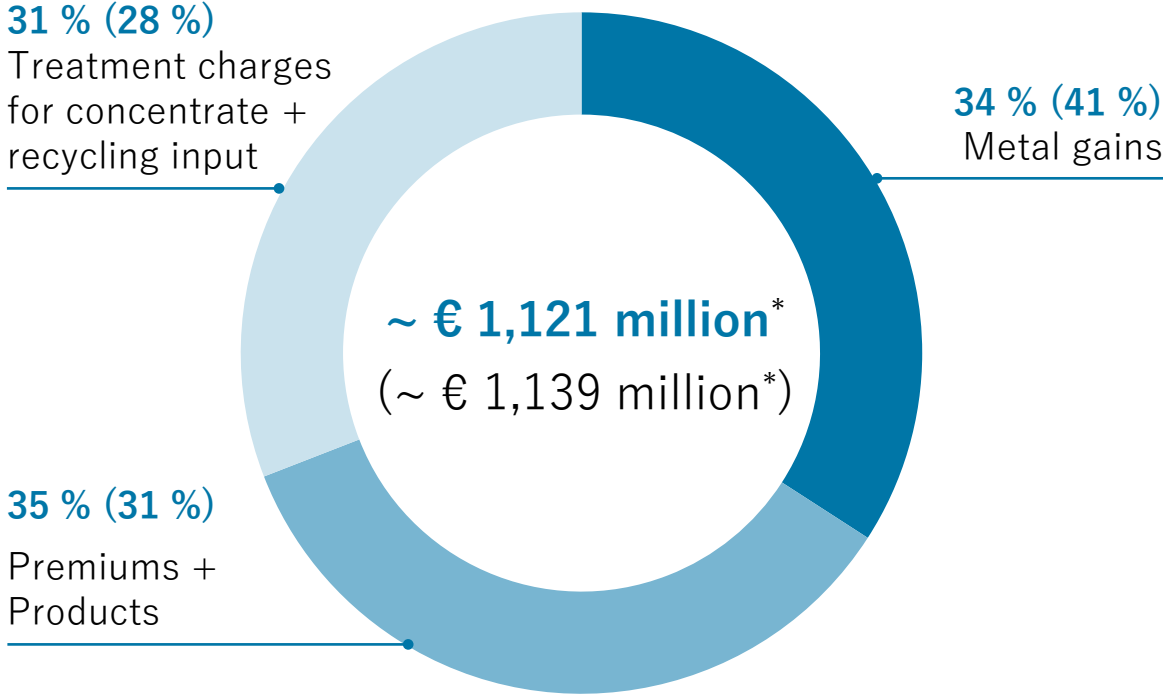
(operating IFRS)		6M 2022/23	6M 2021/22 <sup>1</sup>	Change vs. prior year
Revenues	€m	8,784	9,262	-5 %
Gross profit	€m	839	857	-2 %
EBITDA	€m	383	426	-10 %
EBIT	€m	286	332	-14 %
<b>EBT</b>	€m	<b>291</b>	<b>331</b>	<b>-12 %</b>
Consolidated net income	€m	230	257	-11 %
<b>Operating ROCE</b> (operating EBIT last 4 quarters)	(%)	<b>15.6</b>	<b>19.6</b>	-

<sup>1</sup> Prior-year figures adjusted



# Gross margin at prior-year level

Breakdown of income components in the Aurubis Group 6M 2022/23 YTD (YTD prior-year figures)

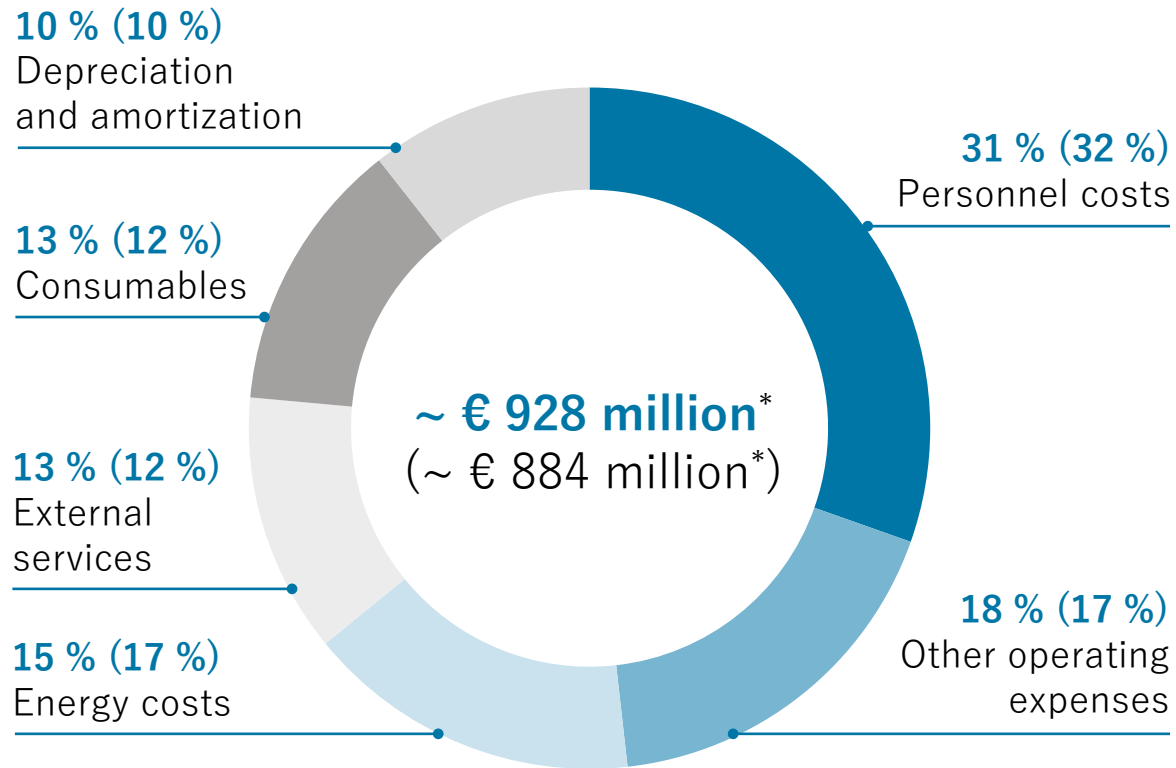


\* Gross margin = Total of earnings components metal result, treatment charges for concentrate + recycling input, and premiums + products



# Overview of Group costs – energy costs reduced

Overview of cost/expense positions  
6M 2022/23 YTD (YTD prior-year figures)

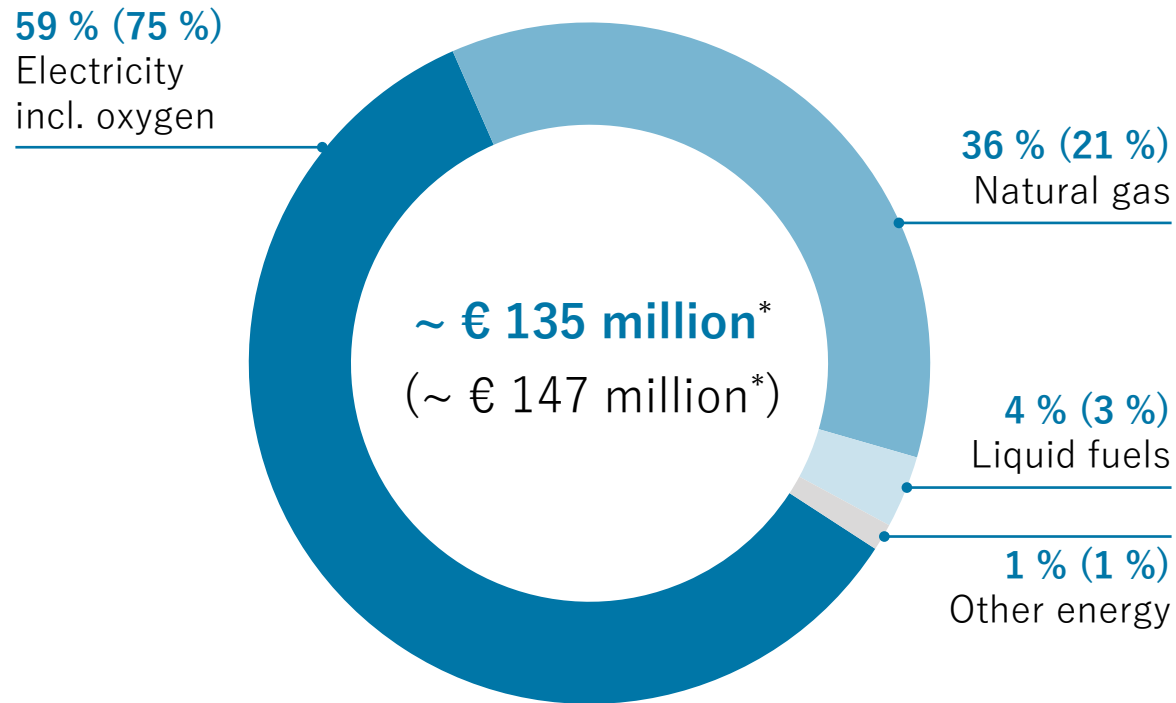


\* Figures adjusted by energy compensation and hedging transactions



# Aurubis continues to manage energy costs

Breakdown of energy costs 6M 2022/23  
(YTD prior-year figures)



\* Figures adjusted by energy compensation and hedging transactions

Electricity incl. oxygen consumption in the Aurubis Group: approx. 1.81 TWh (2022)\*

CO<sub>2</sub> emissions of 1.31 million t (2022)\*

- 0.52 million t of direct emissions (Scope 1)
- 0.78 million t of indirect emissions related to purchased electricity; market-based (Scope 2)

Key influencing factors for reduction of energy costs in 6M 2022/23:

- Active energy management/hedging transactions
- Electricity price cap in Bulgaria
- Indirect CO<sub>2</sub> compensation (annual payment)

\* Preliminary figures

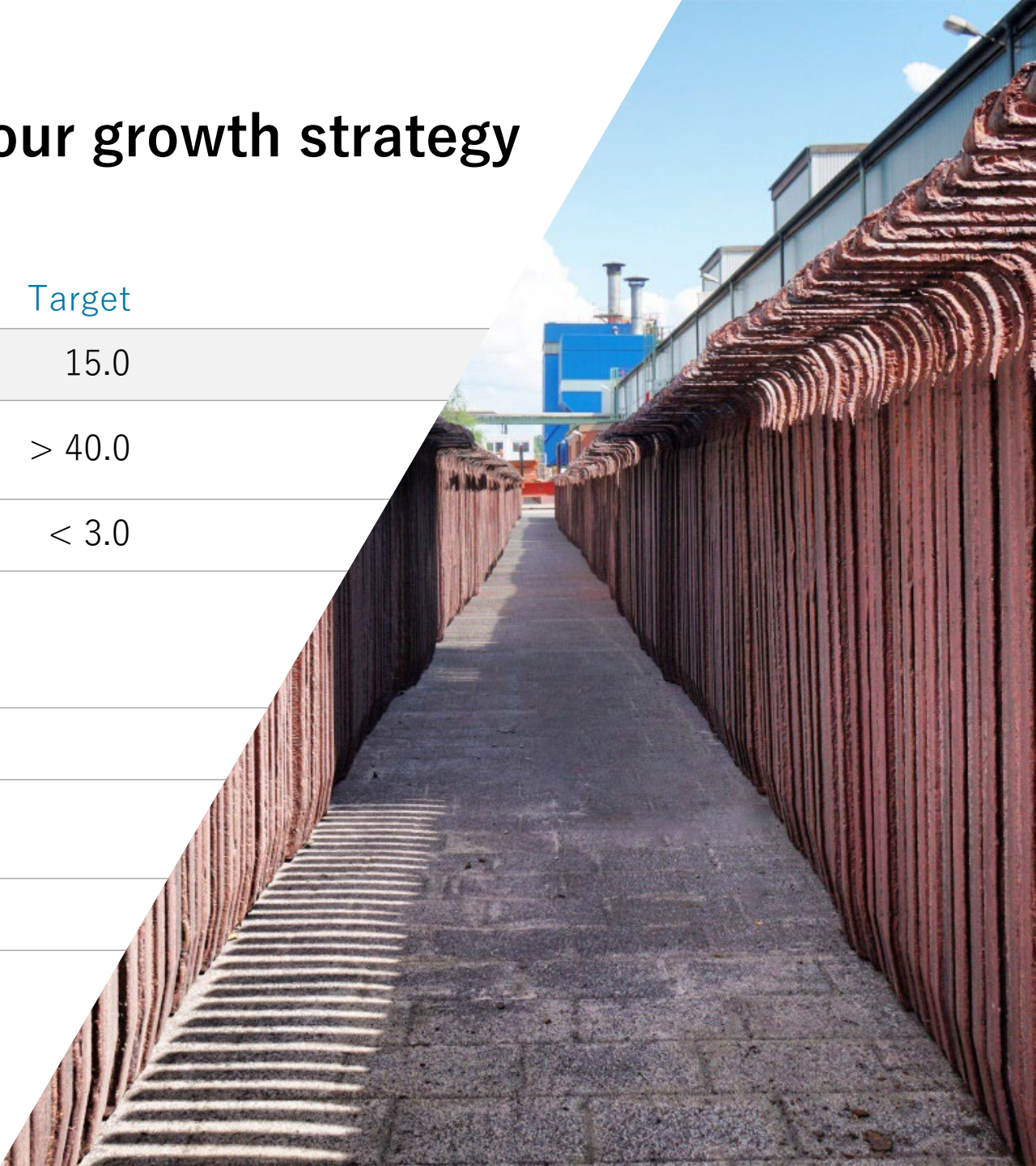
# Aurubis' financial position enables our growth strategy

		6M 2022/23	6M 2021/22 <sup>3</sup>	Target
ROCE <sup>1</sup>	%	15.6	19.6	15.0
Equity ratio (equity/total assets)	%	53.1	54.0	> 40.0
Debt coverage <sup>2</sup>		-0.2	-0.3	< 3.0
Additional KPIs				
		6M 2022/23	6M 2021/22	
Capital expenditure	€m	179	120	
Capital employed (balance sheet date)	€m	3,253	2,881	
Net cash flow	€m	19	54	

<sup>1</sup> Rolling EBIT last 4 quarters

<sup>2</sup> Net financial liabilities/rolling EBITDA last 4 quarters

<sup>3</sup> Prior-year figures adjusted



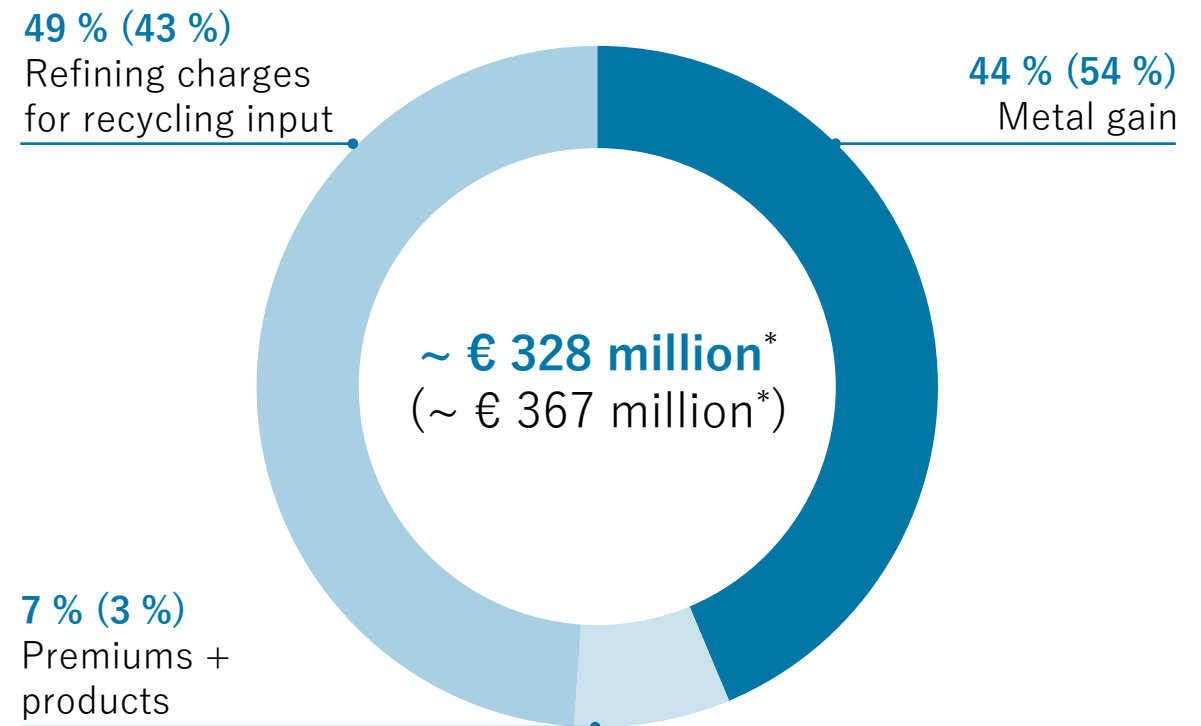
# Multimetal Recycling segment

		6M	6M
Operating results		2022/23	2021/22 <sup>2</sup>
EBIT	€m	102	158
<b>EBT</b>	<b>€m</b>	<b>103</b>	<b>158</b>
<b>ROCE<sup>1</sup></b>	<b>%</b>	<b>15.5</b>	<b>44.4</b>
Quantities			
Copper scrap/blister copper	mt	173	156
Other recycling materials	mt	268	251
Cathodes	mt	263	258

<sup>1</sup> Rolling EBIT last 4 quarters

<sup>2</sup> Prior-year figures adjusted

Breakdown of income components in MMR segment  
6M 2022/23 YTD (YTD prior-year figures)



\* Gross margin = Total of earnings components metal gain, treatment charges for concentrate + recycling input, and premiums + products

# Custom Smelting & Products segment

		6M	6M
Operating results		2022/23	2021/22 <sup>2</sup>
EBIT	€m	220	205
<b>EBT</b>	<b>€m</b>	<b>223</b>	<b>205</b>
<b>ROCE<sup>1</sup></b>	<b>%</b>	<b>19.1</b>	<b>13.7</b>
Quantities			
Concentrates	mt	1,262	1,314
Copper scrap/blister copper	mt	101	116
Sulfuric acid	mt	1,183	1,238
Cathodes	mt	305	301
Rod	mt	445	435
Shapes	mt	95	111
Flat rolled products and specialty wire	mt	67	88

<sup>1</sup> Rolling EBIT last 4 quarters

<sup>2</sup> Prior-year figures adjusted

Breakdown of income components in CSP segment  
6M 2022/23 YTD (YTD prior-year figures)

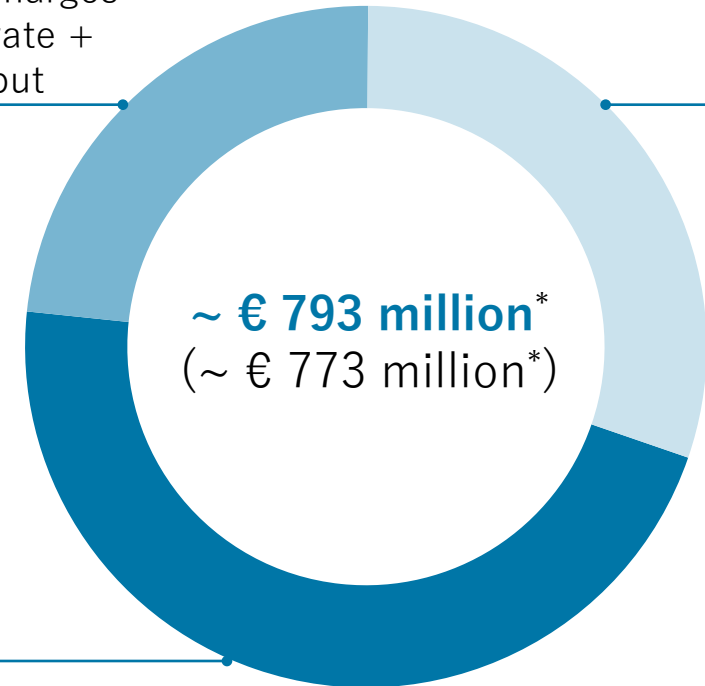
**24 % (21 %)**

Treatment charges  
for concentrate +  
recycling input

**30 % (35 %)**  
Metal gain

**46 % (44 %)**

Premiums +  
products



\* Gross margin = Total of earnings components metal gain, treatment charges for concentrate + recycling input, and premiums + products

# Promising market outlook for 2022/23

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## Copper concentrates

We anticipate an increase in concentrate supply from the mine side, underpinned by new greenfield projects and the expansion of existing mines. Our smelters are already well supplied into Q4 of FY 2022/23.

## Recycling input materials

We expect a stable supply of copper scrap and complex recycling materials for FY 2022/23. The smelter network is already supplied with a considerable amount of recycling materials up until Q4 of FY 2022/23.

## Sulfuric acid

Current outlook for FY 2022/23 shows reduced demand from the chemical and fertilizer industries. Both European and overseas markets show lower price levels. We anticipate lower income from sulfuric acid in FY 2022/23.

## Aurubis copper premium

Has been set at US\$ 228/t for 2023 (2022: US\$ 123/t).

## Other copper products

Outlook for FY 2022/23 shows a mixed picture; we foresee continued strong demand for wire rod, while demand for shapes and flat rolled products is expected to be reduced.

# FY 2022/23 guidance

## Our forecast range

Operating **EBT**  
between € **450** million  
and € **550** million

Operating **ROCE**  
between **14** %  
and **18** %

	Operating EBT in € million	Operating ROCE in %
Group	450–550	14–18
Multimetal Recycling	110–170	13–17
Custom Smelting & Products	390–450	18–22

# Our strategy builds on the sound mission of Aurubis and covers all relevant aspects to drive sustainable growth



## Industry Leadership in Sustainability

- Enablers**
- Digitalization, automation, and “Plant of the Future”
  - Strategic resource management, talent and personnel development



**» We are consistently implementing the strategy**

# Growth strategy: CAPEX and EBITDA impact increase significantly

## Short term

Currently approved

- **Growth Capex ~€ 1,100 million approved**
- **Key projects** Aurubis Richmond Module 1 & 2, Tankhouse Pirdop, CRH, BOB, ASPA, Industrial-heat II, PV 2&3 Pirdop
- **EBITDA of ~€ 260 million** starting 2026/27, thereof **~€ 170 million** from Aurubis Richmond

## Medium term

Medium-term planning (next 4 years)

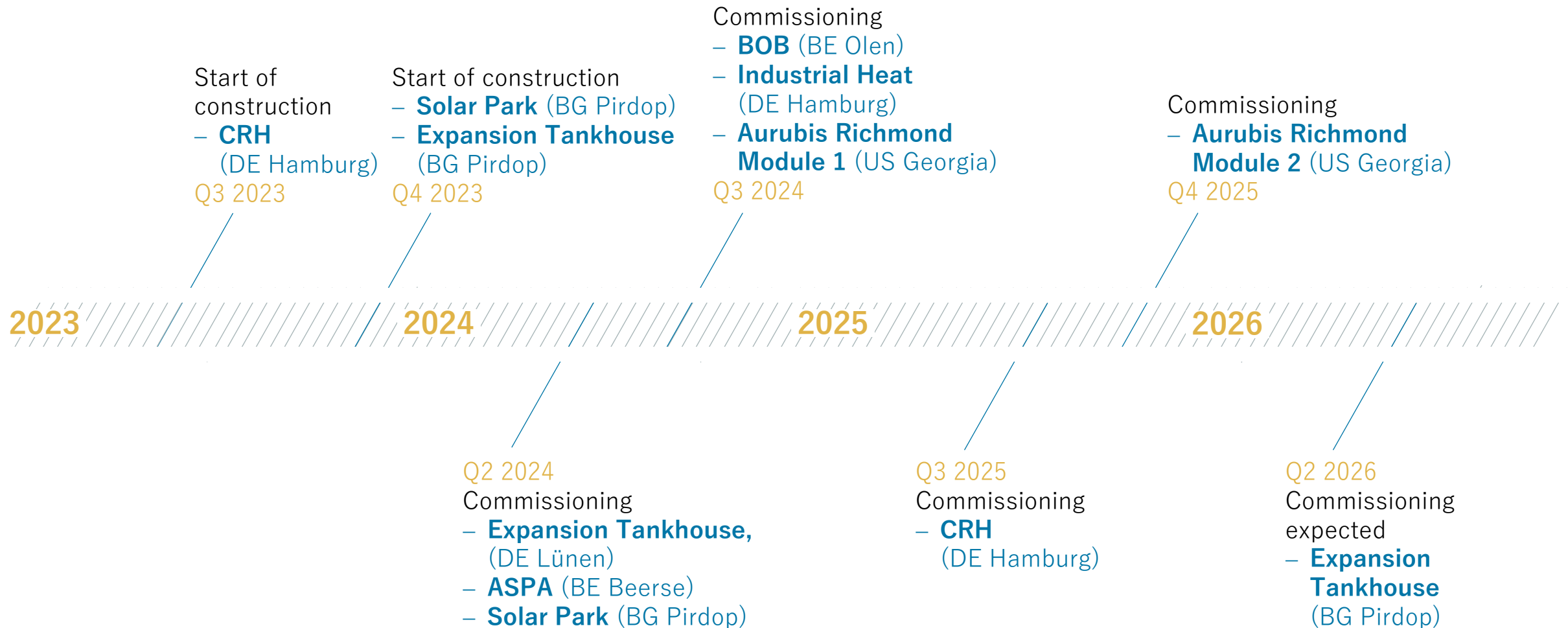
- **Growth Capex ~€ 280 million** are included in the medium-term planning
- **EBITDA ~€ 70 million** in addition from planned strategic projects
- Additional strategic projects, e.g., **the modular recycling system (€ 250–300 million Capex) / battery recycling**, not yet included, but are actively pursued

## Long term

Until 2030

- **Ambition and scale of our long-term growth and project plans** remain at a high level
- All Capex projects are subject to a **sustainability assessment** (especially CO<sub>2</sub>- contribution)
- **Battery recycling remains a priority growth area**

# Timeline of strategic projects in implementation




# Growth options

## Aurubis Richmond, US – construction work is progressing



# Aurubis Richmond – the leading processor of electric and electronic recycling materials in the US



<p>Investment</p> <p><b>~ € 640 million</b></p>	<p>EBITDA p.a.</p> <p><b>~ € 80 million</b> (by 2025/26)</p> <p><b>~ € 170 million</b> (by 2026/27)</p>	 <p><b>Pursue Growth Options</b></p>
<p><b>Start of production</b> following ramp-up phase</p> <p>Module 1: <b>2024</b></p> <p>Module 2: <b>2026</b></p>	<p><b>~ 180,000 t</b> input material</p> <p><b>~ 70,000 t</b> blister copper output</p>	<p>Aurubis Richmond complements and expands our international integrated smelter network with a highly attractive investment in a promising growth market.</p> <p>The total investment includes additional infrastructure investments and inflation.</p> <p>Aurubis Richmond establishes us as the front-runner in the US recycling market – tied directly to our strength, innovative expertise, industry-leading metallurgical processes and flexible applications.</p> <p>With this, Aurubis will become the leading processor of electrical and electronic scrap in the US, by doubling the throughput capacity and output.</p> <p>In total ~200 new jobs.</p>

» **Project strengthens the circular economy and underlines Aurubis' ambition to strengthen and expand our position as the most efficient integrated smelter network worldwide**

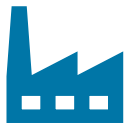
# Aurubis Richmond: Expansion of front-runner position in the US recycling market



## Augusta, Richmond County, Georgia, USA

Started as greenfield project, Aurubis is currently building the largest **complex recycling smelter** in the United States

**Plant** designed to recycle **PCBs, shredder**, and other **metal-containing recycling materials**



- 4 Top-blown rotary converters
- 2 Lead-tin alloy furnaces



**2022 – 2025**

Construction timeframe and plant equipment orders confirmed

Using **proven market technologies**

employed in the Aurubis network

Producing blister copper as a **marketable product**

and processing it within the Aurubis smelter network and for external sales

Further option for **brownfield expansion** on site



**> 70,000 t** blister copper recovered from recycling materials



**~200** employees and managers planned



**Future improvement of CO<sub>2</sub> footprint**

# Secure core business: Complex Recycling Hamburg (CRH) – further optimization of smelting process



CRH



# Secure & strengthen core business

## CRH: Further optimization of the smelting process in Hamburg



Secure  
Core Business



Strengthen  
Core Business

Investment  
~ **€ 190 million**

EBITDA p.a.  
~ **€ 40 million**  
(at full production)

Start of production  
following ramp-up  
phase  
**Q4 2025**

~ **32,000 t** p.a.  
Input of external  
material

Aurubis is **strengthening its core business** and investing € 190 million for further optimization of the smelting process at the Hamburg site.

Construction of a new TBRC at the Hamburg site incl. process gas cleaning system based on best available techniques (BAT).

Processing **internal and external value-added complex intermediates and recycled materials** with additional treatment and refining charges and metal recoveries.

Increase in metal yield (mainly precious metals) with lower process times.

CRH is the prerequisite for further attractive strategic projects (e.g., higher yield of additional industrial and precious metals).

Differentiation from competitors through expansion of metallurgical processes and extension of the value chain at the Hamburg site.



**Project underscores Aurubis' commitment to its Hamburg site, while increasing capacities for the sustainable recovery of metals from intermediates and complex recycling materials**

# Secure & strengthen core business

## Expanding the tankhouse in Pirdop



# Secure & strengthen core business

## Expanding the tankhouse in Pirdop



<p>Investment ~ <b>€ 120 million</b></p>	<p>EBITDA p.a. ~ <b>€ 30 million</b> (at full production)</p>	<p> <b>Secure</b> Core Business</p> <p></p> <p> <b>Strengthen</b> Core Business</p>	
<p>Start of production following ramp-up phase <b>second half of 2026</b></p>	<p>~ <b>120,000 t</b> p.a. additional capacity</p>	<p>Aurubis is <b>strengthening its core business</b> and investing € 120 million in expanding the tankhouse at its Bulgarian site in Pirdop.</p> <p>Processing of around <b>340,000 tons of copper cathodes</b> in the future, which corresponds to an increase of around 50 %.</p> <p>Further optimization of material flows in the smelter network.</p> <p>Reduction of our logistics costs and the CO<sub>2</sub> footprint associated with them.</p> <p>Expansion also creates the conditions for additional strategic projects at other Aurubis Group sites.</p>	

» **By expanding production capacity, Aurubis is investing in a growing market and making another contribution to driving innovations and technological advances.**

# Secure & strengthen core business Advanced Sludge Processing by Aurubis (ASPA)






ASPA



# Secure & strengthen core business Advanced Sludge Processing by Aurubis (ASPA)



<p>Investment ~ <b>€ 33 million</b></p>	<p>EBITDA p.a. ~ <b>€ 7 million</b> <small>(at full production)</small></p>	<p> <b>Secure</b> Core Business</p> <p></p> <p> <b>Strengthen</b> Core Business</p>	
<p>Start of production following ramp-up phase <b>FY 2024/25</b></p>	<p>~ <b>2,500 t p.a.</b> input material in form of anode sludges</p>	<p>Aurubis is <b>strengthening its core business</b> and taking the next step towards becoming the <b>most efficient and sustainable integrated</b> smelter network worldwide.</p> <p>Construction of a state-of-the-art recycling facility at the <b>Beerse site (BE)</b>.</p> <p><b>ASPA</b>, a newly developed hydrometallurgical process, will extract <b>more</b> valuable metals such as Au, Ag, and Sn from anode sludge <b>faster</b>.</p> <p>Prime example of the <b>synergies</b> created by the Metallo acquisition and how the whole company benefits in developing new <b>innovative solutions together</b>.</p>	

» Project capitalizes on synergies from the Metallo acquisition and contributes significantly to a well-functioning circular economy

# Secure & strengthen core business

## Bleed treatment Olen Beerse (BOB) – Construction kick-off






BOB



# Secure & strengthen core business

## Bleed treatment Olen Beerse (BOB)



<p>Investment ~ <b>€ 70 million</b></p>	<p>EBITDA p.a. ~ <b>15 million</b> <small>(at full production)</small></p>	<p> <b>Secure</b> Core Business</p> <p></p> <p> <b>Strengthen</b> Core Business</p>	
<p>Start of production following ramp-up phase <b>Summer 2024</b></p>	<p>~ <b>81,000 t p.a.</b> Input metric tons bleed per year</p>	<p>Aurubis is <b>strengthening its core business</b> and investing € 70 million in the Aurubis site in Olen to increase recycling capacity of the important industry metals nickel and copper.</p> <p>BOB is a state-of-the-art energy-efficient <b>process to extract impurities from bleed</b> (also known as electrolyte) and optimize material streams of nickel and copper.</p> <p>Start of construction is planned for September 2022 with a planned start of the plant in July 2024. The facility does provide spare capacity for future expansion of the asset.</p> <p>Expected full EBITDA impact of about € 15 million, once in full operation in FY 2025/26.</p>	

» This project is another prime example of how Aurubis realizes synergies in its smelter network and contributes significantly to the European circular economy.

# Growth options

## Battery Recycling



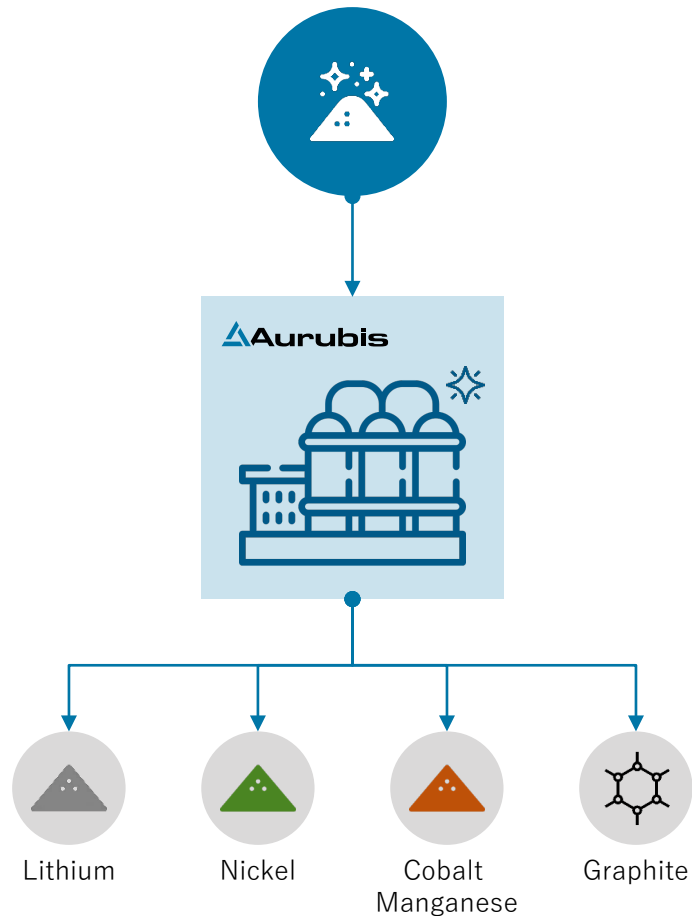
# Pursue growth options

## Aurubis has developed a novel black mass recycling technology



Battery recycling

Black mass



Sustainably closing  
the loop



Integration into  
smelter network



Metal recoveries  
beyond regulatory  
requirements



Battery-grade  
products

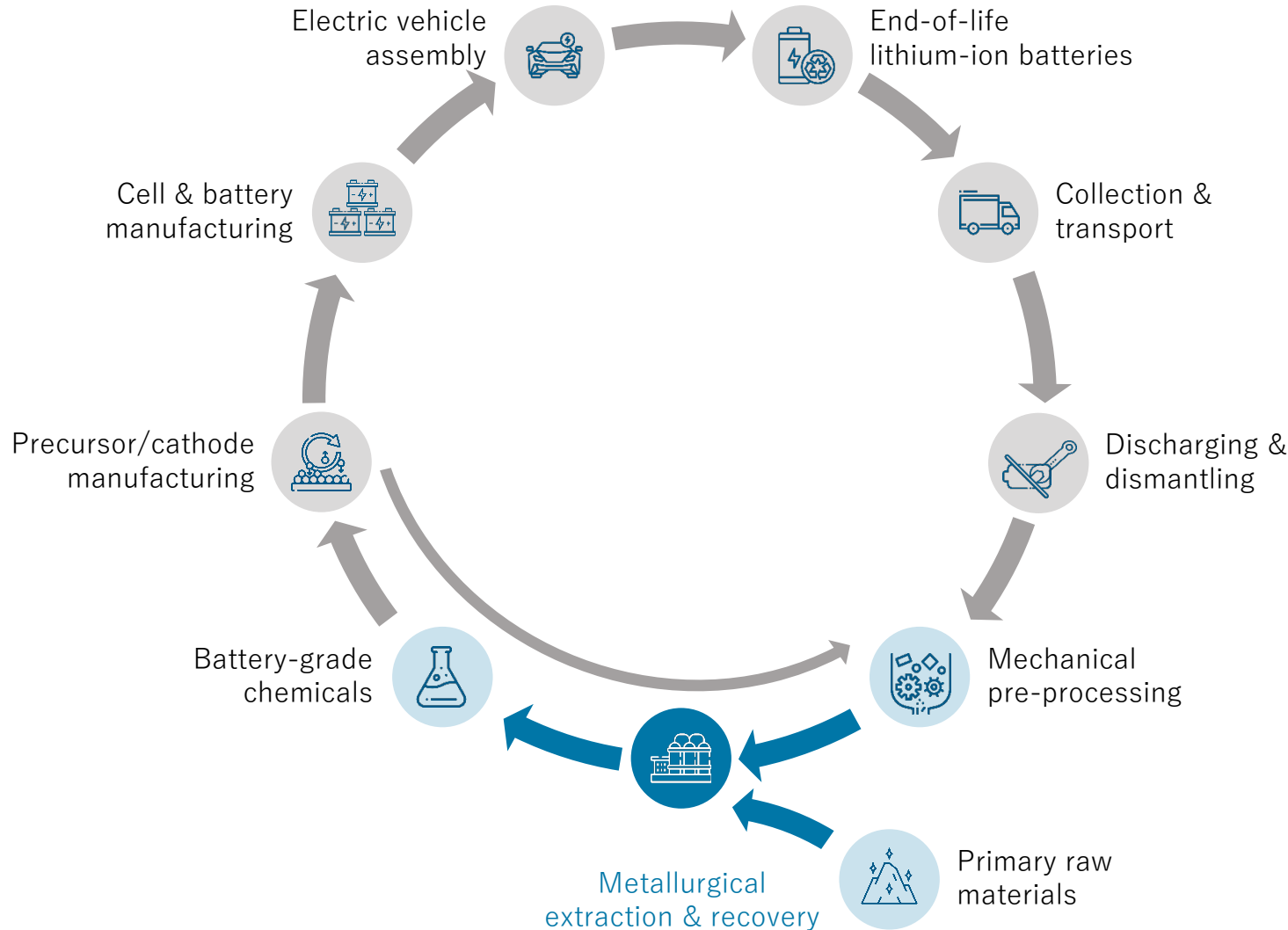


Cost  
efficiency



Patent  
application

# Aurubis contributes to sustainably closing the loop for batteries



## We are the experts

Complex raw materials are our daily business.

## We are multimetal

Already today, we process a range of 20 different metals.

## We are committed

Our financials are sound, and we have the capacity to make the investments.

# Renowned ratings show strong track record in sustainability



## Aurubis' main sustainability ratings & initiatives



# The Copper Mark – Aurubis Bulgaria, Hamburg and Lünen smelter certified!

- The Copper Mark launched for copper producers in March 2020
- Basis: UN SDGs & Risk Readiness Assessment
- Review of the 32 sustainability criteria
- Focus on steady improvement of the sector
- Joint Due Diligence Standard enables effective due diligence
- Aurubis Bulgaria, Hamburg and Lünen are certified for meeting The Copper Mark's requirements for responsible production practices
- Aurubis Olen expected in 2023



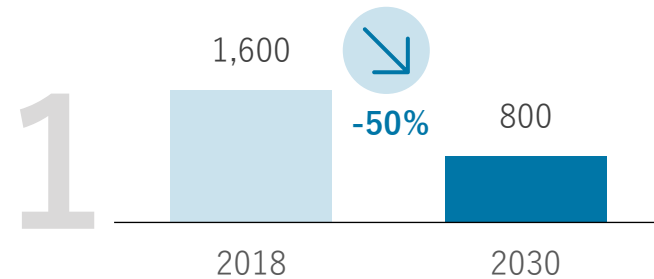
» The copper value chain demonstrates responsibility to mutually improve and develop.

# Six decisive KPIs underline Aurubis' ambitions in sustainability



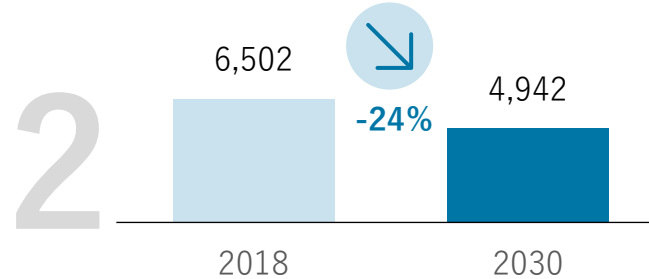
## CO<sub>2</sub> emissions Scope 1+2

Absolute Scope 1+2 CO<sub>2</sub> emissions (in kt)



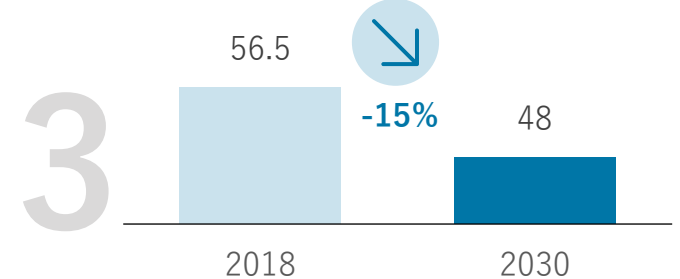
## CO<sub>2</sub> emissions Scope 3

Scope 3 CO<sub>2</sub> emissions (in kt)<sup>1</sup>



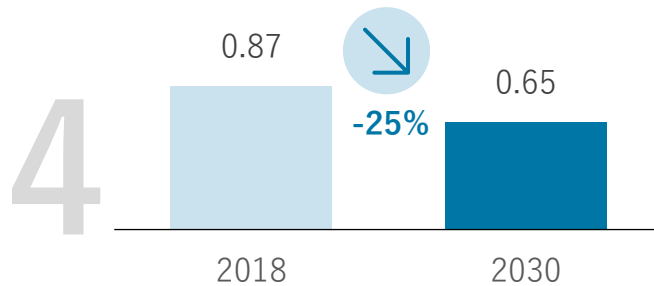
## Air emissions (dust)

Air emissions (in g per t of multimetal Cu equivalent)<sup>2</sup>



## Metall emissions to water

Metal emissions to water (in g per t of multimetal Cu equivalent)<sup>2</sup>



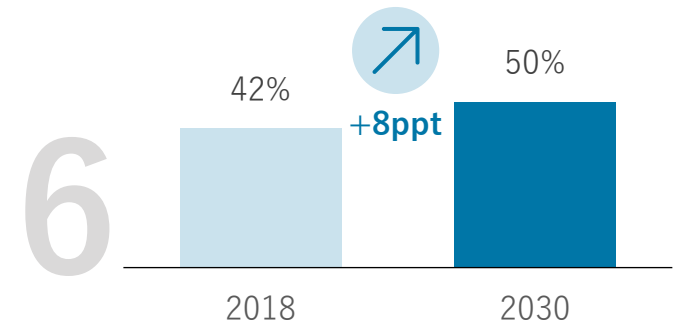
## Supply chain integrity

Number of suppliers with very high risk<sup>3</sup>



## Recycling content (Cu)

Recycling share of Cu cathodes (in %)



<sup>1</sup> Assumed steady copper cathode production until target year (physical intensity target)

<sup>2</sup> Multimetal Cu equivalent: total metal produced at Aurubis smelters (Cu, Zn, Ni, Pb, Sn, Au, Pd, Pt, Ag, Rh, Se, Te) x weight factors

<sup>3</sup> Aurubis is introducing a revised and uniform business partner screening system in fiscal year 2022/23, in which we bundle the requirements of the various regulations, standards, and initiatives.

# Sustainability

## Life cycle assessment of our copper cathodes

The CO<sub>2</sub> footprint of Aurubis copper production is less than half the global average  
in kg CO<sub>2</sub> eq./t Cu



Global average

2013: 4,027

2019: 3,833



 **Aurubis**

2013: 2,300

2021: 1,460



\* Source: International Copper Association 2019, Aurubis LCA 2021

» Aurubis constantly works on further energy efficiency measures to improve CO<sub>2</sub> footprint



# Sustainability: Energy and decarbonization projects




PV Pirdop I-III



# Sustainability: Aurubis on its way to carbon-neutral production



<p>Investment</p> <p><b>+~ € 12 million</b> (for 2024 expansion)</p>	<p>Optimizing electricity consumption p.a.</p> <p><b>~ 13,500 MWh*</b> (since PV 1)</p> <p><b>+~ 17,000 MWh</b> (by Q2 2024)</p>	<p> <b>Industry Leadership in Sustainability</b></p>
<p>Start of production</p> <p><b>Q2 2024</b></p>	<p>CO<sub>2</sub> savings p.a.</p> <p><b>+ ~ 34,000 t</b></p> <p>compared to coal-fired power generation</p>	<p>Expansion of solar park until 2024 in <b>Pirdop</b>, Bulgaria, with a combined performance of 24 MWp.</p> <p>The solar park will reduce the <b>smelter's external electricity consumption by approx. 30,000 MWh</b> annually, and for the period of 15 years, the total renewable energy production will amount to approx. <b>450,000 MWh</b>.</p> <p>Further expansions are planned with investments underway.</p> <p>Compared to coal-fired power generation, this will save up to <b>34,000 t of CO<sub>2</sub> emissions p.a.</b> – or over <b>500,000 t</b> over the operating period.</p>

\* Better performance than anticipated (11,000 MWh)

**» Further reduction of our already very small CO<sub>2</sub> footprint within the international sector and expansion of our leading position in environmental protection**

# Sustainability

## Germany's largest industrial heating project



### Industry Leadership in Sustainability

Investment  
~ **€ 97 million**

EBITDA p.a.  
(at full production)  
~ **€ 3 million**

The industrial heating project to supply heat to the [HafenCity East](#) district with a savings potential of up to [20,000 t of CO<sub>2</sub> p.a.](#) was successfully implemented with [energcity](#) in 2018.

Aurubis' remaining industrial heating potential in the Hamburg contact acid plant amounts to about [100,000 t of CO<sub>2</sub> p.a.](#)

Start of  
production  
following  
ramp-up phase  
**2nd HY 2024**

Additional CO<sub>2</sub>  
savings p.a.  
once in full produc-  
tion in 2nd HY 2024  
~ **100,000 t**

This follow-up project makes a significant contribution to achieving the city of Hamburg's [climate goals](#) and supports Aurubis' [sustainability ambition](#) through a further reduction of the carbon footprint.

With the city utility company [Wärme Hamburg GmbH](#), we have gained a reliable, long-term partner.

Cost efficiency is achieved through expected [funding](#) provided by the Federal Ministry for Economic Affairs and Energy and revenues from heat sales to [Wärme Hamburg GmbH](#).

» Hamburg heat grid's CO<sub>2</sub> emissions to be reduced by 55 % by 2030 and carbon-neutral by 2050; Aurubis Industrial Heat provides a substantial contribution

# Thank you for your participation.

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For further questions, contact:  
[IR@aurubis.com](mailto:IR@aurubis.com)

 **Aurubis**



# Financial calendar

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- Capital Market Day (in London)    June 13, 2023
- Q3 2022/23    August 7, 2023
- Annual Report 2022/23    December 6, 2023

# Your IR Contacts



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# Aurubis at a glance

Based in [Hamburg](#), Aurubis AG develops its leading market position with a [responsible approach](#) to the [environment](#), [people](#), and [resources](#)



The company's main expertise is in optimally [processing concentrates](#) and [recycling raw materials](#) with complex qualities

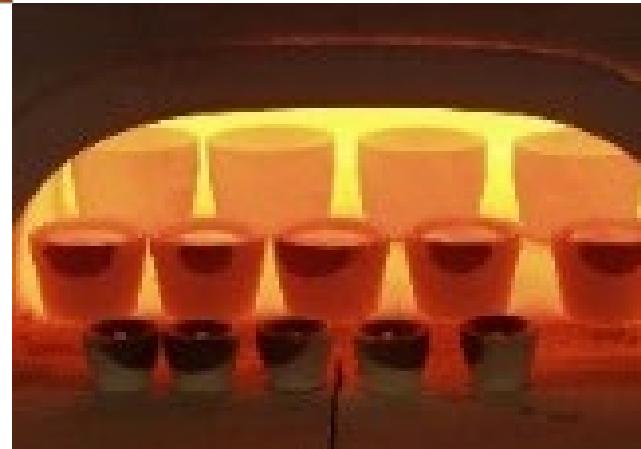
[Metallurgical know-how](#), [state-of-the-art plant facilities](#), and extraordinarily [high environmental standards](#) for the sector make Aurubis an attractive partner for raw material suppliers



The company, which was founded in 1866 as [Norddeutsche Affinerie AG](#), is listed in the [MDAX](#) and produces more than [1 million t of copper cathodes](#) and various copper products from them with around [7,100 employees](#) worldwide



The Group is [active in more than 20 countries](#) and has production sites concentrated in [Europe](#) and [North America](#)



Aurubis is one of the world's leading producers of cathodes, rod, and flat rolled copper products

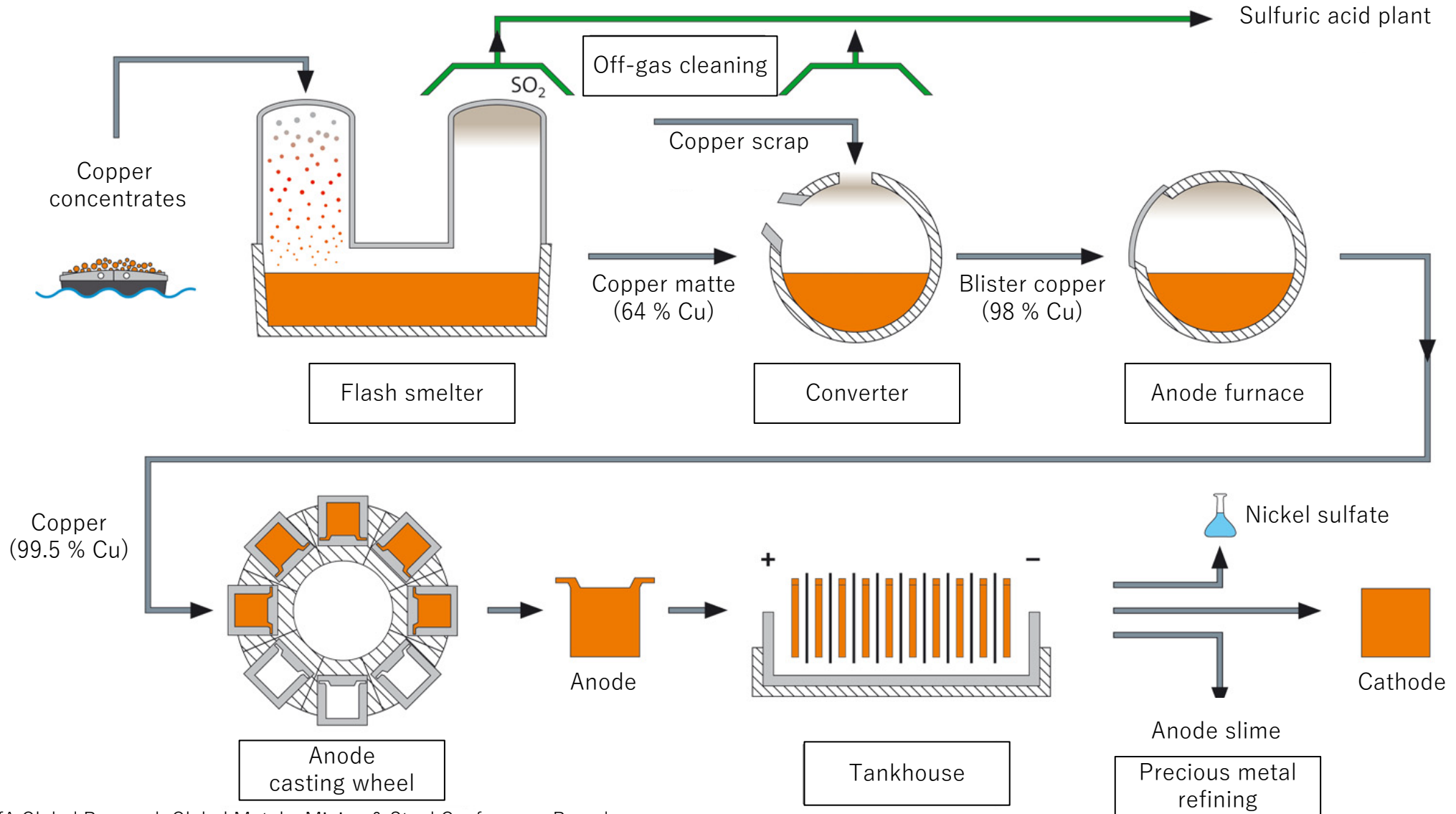
# Maintenance shutdowns in the next 3 years



EBT effect from maintenance shutdowns (in € million)

	FY 2022/23		FY 2023/24		FY 2024/25	
Smelter maintenance Hamburg			May/ June 2024	~36		
Smelter maintenance Pirdop	May/ June 2023	~20			May/ July 2025	~35
Anode furnace Lünen	Nov/ Dec 2022	~7	Nov/ Dec 2023	~8	Nov/ Dec 2024	~8
KRS Lünen	May 2023	~9	May 2024	~9	May 2025	~9

# Primary copper production process



# Disclaimer

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## Forward-looking statements

This document contains forward-looking statements that involve risks and uncertainties, including statements about Aurubis' plans, objectives, expectations, and intentions. Readers are cautioned that forward-looking statements include known and unknown risks and are subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond the control of Aurubis. Should one or more of these risks, uncertainties, or contingencies materialize, or should any underlying assumptions prove incorrect, actual results could vary materially from those anticipated, expected, estimated, or projected.