

Aurubis AG Metals for Progress

EXANE BNP PARIBAS 16th Basic Materials Conference March 23







1. Aurubis' market position

- 2. Market development
- 3. Financial data
- 4. Strategy and outlook



Copper Market Trends



Recycling Market Trends

Multipolar business world Growth in emerging countries (especially China) will outpace Western countries

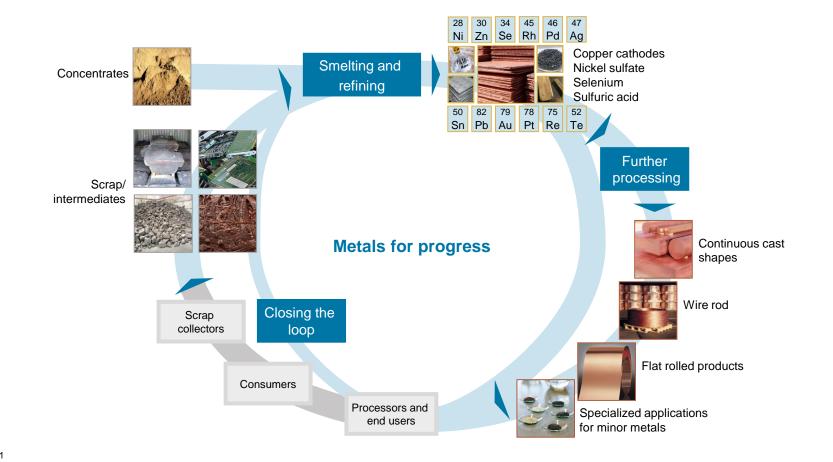
More complex materials Rising number of elements and decreasing metal content in primary & recycling raw materials

Increasing recycling efforts Stricter legislation and increasing consumer awareness regarding sustainability

Local handling of recycling materials

Developing countries are reducing or banning imports of waste materials from the Western world





Strong concentrate and recycling markets compensate for product business strained by COVID-19

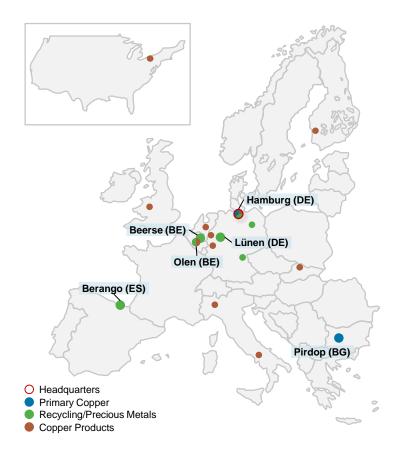


	FY 2019/20	Change vs. prior year		FY 2019/20	Change vs. prior year
Concentrate processing*	2,378,000 t	+7 %	Gold	47 t	-8 %
Copper scrap No.2 input**	310,000 t	+7 %	Silver	972 t	+13 %
Other recycling materials**	348,000 t	+36 %	Lead	28,014 t	+47 %
Cathode output**	1,031,000 t	-4 %	Nickel	3,395 t	+11 %
Continuous cast wire rod output	759,000 t	-6 %	Tin	4,213 t	+158 %
Copper shapes output	154,000 t	-11 %	Zinc	3.565 t	New
Flat rolled products + specialty wire output	178,000 t	-15 %	Minor metals	807 t	+14 %
Sulfuric acid output	2,272,000 t	+8 %	Platinum group metals (PGMs)	8,935 kg	-9 %

* Custom smelter production ** Metallo volumes included for 4 months

Aurubis production & sales footprint





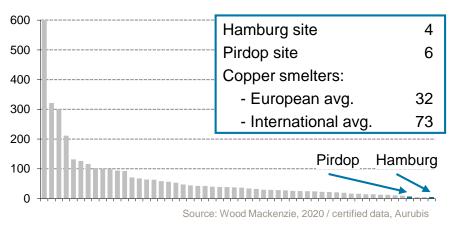
- » Aurubis operates a closely linked network of 6 key plants in Europe with a focus on smelting and refining of primary and recycling raw materials
- » Furthermore, Aurubis operates a network of 9 plants and 3 service centers in Copper Products
 - » <u>Rod</u>: Hamburg, Olen, DG Emmerich, Avellino
 - » <u>Shapes</u>: Hamburg, Schwermetall (JV w/Wieland)
 - » <u>Flat Rolled Products</u>: Stolberg, Zutphen, Pori, Buffalo + 3 Service Centers in UK, Slovakia, and Italy
- » Aurubis has a service and sales network in more than 20 countries (Europe, Asia, and North America)

Environmental protection is one of Aurubis' key strengths and a competitive advantage



Primary copper

 SO_2 emissions of copper smelters (in kg SO_2 per t of copper)



- » Outstanding success in environmental and climate protection
- » One of the most environmentally friendly copper producers in the world today



- » One of the largest copper recyclers in the world with the best available technology
- » High metal recovery rates while observing stringent environmental standards with its multimetal recycling process

Sustainability is a fundamental component of the Aurubis strategy and our efforts are positively recognized by various ratings







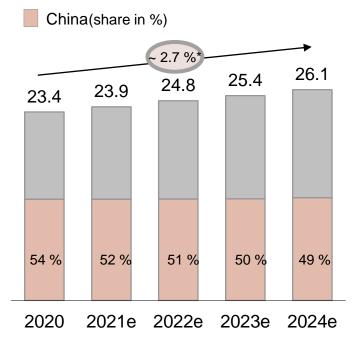




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Global demand for refined copper (in million t)



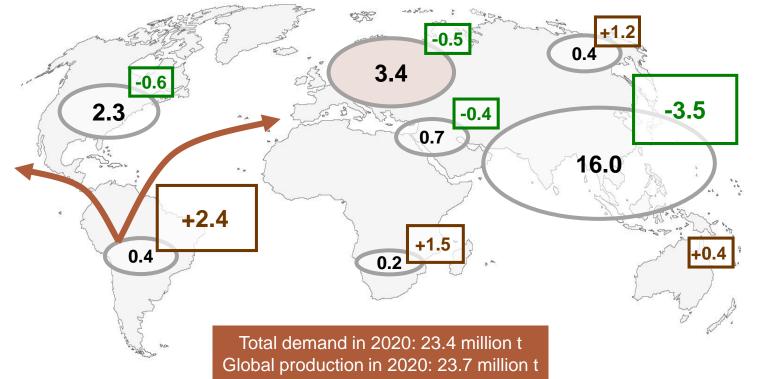
- » China continues to be the most important source of global copper demand (approx. 50 % share) and a major net importer
- Growth potential for copper use is primarily found in infrastructure expansion (electricity and telecommunications/5G), in machinery and plant engineering, as well as in construction, transportation (electric vehicles), and renewable energies (wind and solar)
- » Further momentum from the "New Infrastructure" campaign
- » Development in emerging countries and the use of new technologies increase the long-term need for copper outside of China as well

* CAGR (Compound Annual Growth Rate) Source: Wood Mackenzie, 12/2020

The European copper market traditionally shows a cathode deficit

Copper demand by region in 2020 (in million t)

Copper surplus/deficit (in million t)

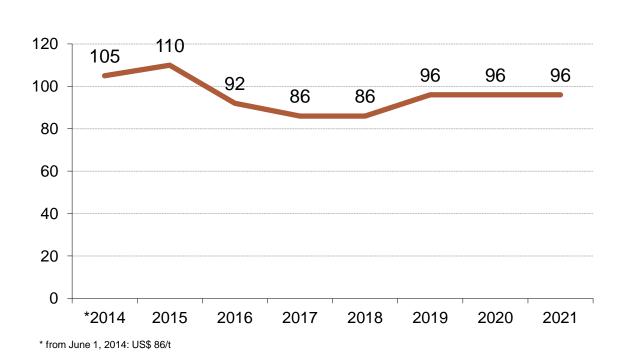


Aurubis copper premium

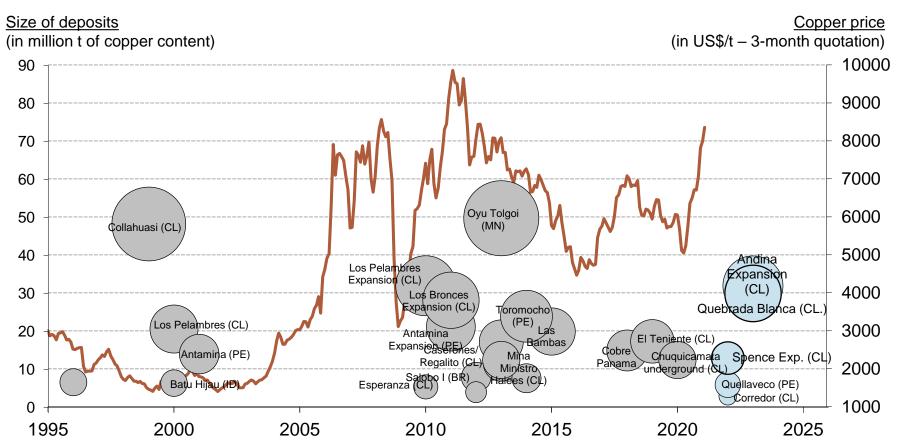


(in US\$/t)

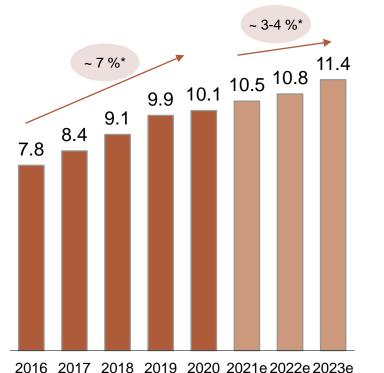




Expected copper prices will support mining projects



Production of refined copper in China (in million t)

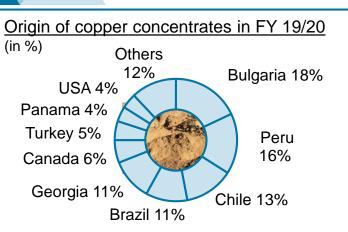


- » Expected production increases will primarily take place at a number of existing smelters and be moderate for the most part
- » CRU and Wood Mackenzie expect Cu concentrate demand to grow between 3-4% CAGR 2021-2025
- » Low TC/RC level in 2021 is leading to capacity reductions in China
- » The current smelter project pipeline falls significantly short of historic levels

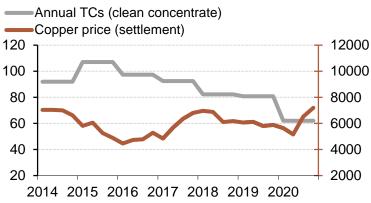
* CAGR (Compound Annual Growth Rate)

Source: CRU Copper Concentrates Outlook 2020Q3; Wood Mackenzie Global Copper Long-Term Outlook 2020Q3; Aurubis Market Intelligence

Increasing production continues to lead to a good concentrate supply on the market



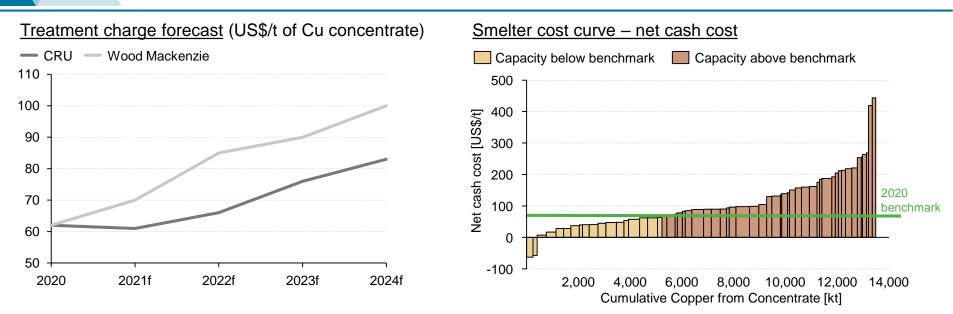
TC trend for copper concentrates (in US\$/t)





- » First 2021 framework contract between Freeport-McMoRan and China Copper for standard concentrates with TC/RC of US\$ 59.5/t and 5.95 cts/lb
- » TC/RC levels vary according to concentrate complexity
- » Continuous high copper price incentivizes mines to maximize output and bring new mine capacities online in order to increase supply of concentrates
- » TC/RC levels are also affected by production disruptions, strikes, and export restrictions, as well as expanded smelting capacities in China

Strong increase in TC benchmark levels expected – current TC levels are unsustainable for the primary Cu smelter industry



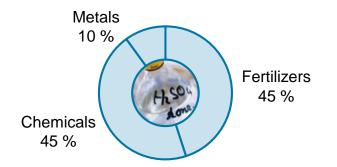
- With the smelter project pipeline drying out and concentrate capabilities ramping up during the timeframe of the outlook, Wood Mackenzie and CRU expect a steady increase in TC benchmark levels until 2024
- » Using Wood Mackenzie's Smelter Cost Model as a reference, current TC benchmark levels are unsustainable for 68 % of the Cu smelter capacity, as these operate above US\$ 62/t

Note: Wood Mackenzie Copper Smelter Cost Model covers ~73 % of global capacity; net cash cost includes deduction of by-product & energy credits Sources: CRU Copper Concentrates Outlook 2020Q4; Wood Mackenzie Global Copper Concentrates Long-Term Outlook 2020Q4; Wood Mackenzie Smelter Cost Model 2020Q3 April 21 **Auruhis**

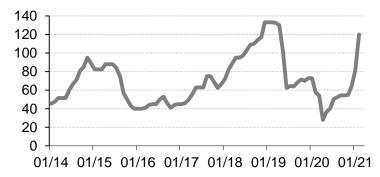
Very volatile sulfuric acid markets



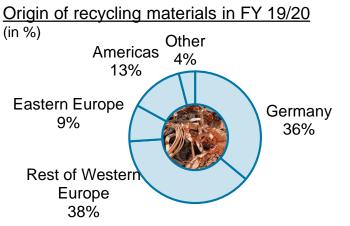
Aurubis sulfuric acid sales by sector/industry in FY 2019/20



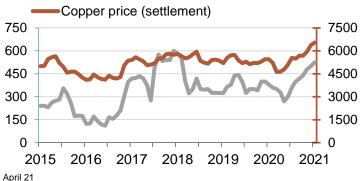
Sulfuric acid price (CFR Brazil spot, in US\$/t)



- » At Aurubis, sulfuric acid is a joint product of concentrate processing that is produced during flue gas desulfurization
- » ~1 t of sulfuric acid is produced from ~1 t of concentrates
- » Global market volume in 2020 ~272 million t
- » Aurubis produced ~2.3 million t of sulfuric acid in FY 19/20
- » Sulfuric acid demand is sensitive to global economic developments



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Copper scrap refining charges and copper price
(in €/t)
        European RC (CRU)
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- » Aurubis processes roughly 700,000 t of recycling materials that contain copper and different kinds of metal; 310,000 t of this quantity was No. 2 copper scrap in FY 19/20
- » Metallo is focused on non-organic recycling materials with lower metal content and processes more than 315,000 t
- The supply of recycling materials tends to fluctuate depending on factors such as metal prices
- » Various import restrictions introduced for recycling materials in China are changing international material flows

Market conditions in Q1 2020/21: Very promising scrap markets, strong demand for copper products

Trend in significant market prices and refining charges

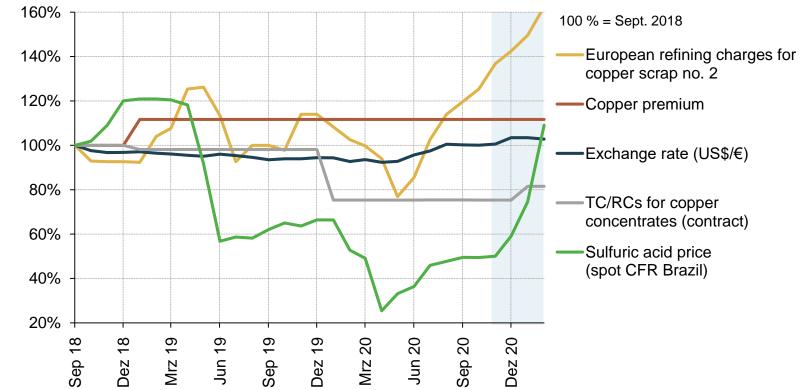










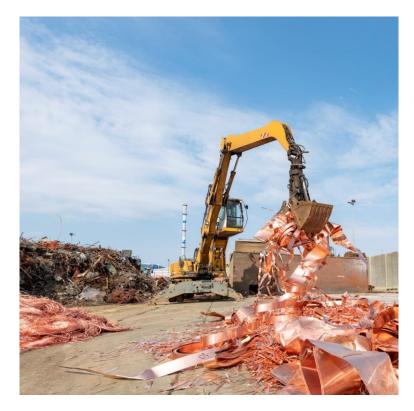




TC/RC	Treatment and refining charge = Mines' payments to smelters for processing copper concentrates into cathodes. Smelters' central profit driver – primarily influenced by concentrate supply and demand
RC	Refining charge = Fee for processing copper scrap, blister, and recycling materials into cathodes; primarily influenced by the situation on the European scrap markets
Metal prices	Price risks fundamentally eliminated at Aurubis by hedging; strong influence on revenues and working capital, also for our customers
Cathode premium	Surcharge for high-quality cathodes (Grade A) and a premium for cathode delivery, paid by the customer; expresses the scarcity in structurally undersupplied markets
Product surcharge	Processing price for converting cathodes into copper products (wire rod, shapes, flat rolled products, etc.), paid by the customer
Sulfuric acid	Sulfuric acid (H_2SO_4) is a joint product of concentrate processing; 1 t of sulfuric acid is generally produced per t of concentrates treated







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Executive summary of Q1 2020/21





- » First quarter closed with a very good Q1 result
- » Operating EBT of \in 82 million (PY: \in 31 million)
- » ROCE of 9.6 % (PY: 7.6 %)
- » Good operating performance of our plants
- » Net cash flow at € -273 million (PY: € -93 million)
- » Positive development of market conditions with increased RCs for copper scrap and recycling material, higher metal gains based on higher metal prices, and growth in demand for copper products
- » Integration process of Metallo proceeded well. Synergies now already expected at € 15 million EBITDA over course of FY 2020/21
- » Due to the positive development of market conditions, we increased our forecast for FY 2020/21:
 - » Operating EBT now between € 270 million and € 330 million





		3M 2020/21	3M 2019/20	Target
ROCE*	%	9.6	7.6	15.0
Equity ratio (equity / total assets)	%	47.9	53.7	> 40.0
Debt coverage**		0.9	0.1	< 3.0
Additional KPIs		3M 2020/21	3M 2019/20	
Capital expenditure	€m	36	61	
Capital employed (balance sheet date)	€m	3,120	2,633	
Net cash flow	€m	-273	-93	
* Polling ERIT last 4 quarters				

* Rolling EBIT last 4 quarters ** Net financial liabilities / rolling EBITDA last 4 quarters

Segment MRP: Good operating performance combined with favorable market conditions



Operating results for Segment Metal Refining & Processing (MRP) (first 3 months FY 2020/21)

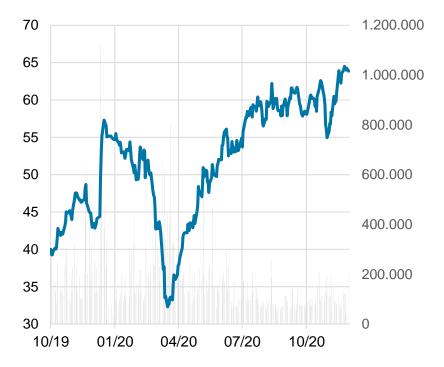


Segment MRP	3M 2020/21	3M 2019/20	2
EBIT (in €m)	99	55	
EBT (in €m)	97	54	
ROCE* (%)	13.7	13.8	2
(Quantities in 1,00	0 t)		
Concentrates	607	490	
Copper scrap / blister copper	102	100	
Other rec. materials	139	67	
Cathodes	278	234	
Sulfuric acid	550	471	
Rod	200	199	
Shapes	40	35	

- Scrap markets show significantly higher RCs for copper scrap and recycling materials compared to previous year, combined with considerably increased throughput
- Significantly increased concentrate throughput, with weakened market conditions for concentrates
- » Good metal gain at increased precious metal prices
- » Cathode output increased in Hamburg and Olen year-on-year
- Sulfuric acid production increased in line with concentrates, but significantly lower prices vs. Q1 2019/20
- Sood recovery of demand for rod and shapes, production levels slightly above PY



Xetra turnover (in units)
 Price (in €/share)



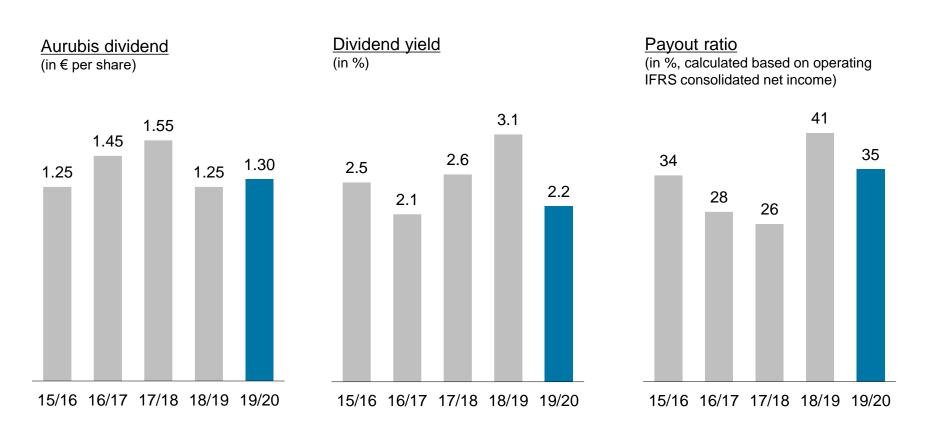
Buyback of up to 10 % of company's own shares

- » Volume: up to € 200 million
- » Period from March 19, 2020 to September 17, 2021

1st & 2nd tranche Buyback: 2.89 % Ø € 46.39/share, total € 60.2 million

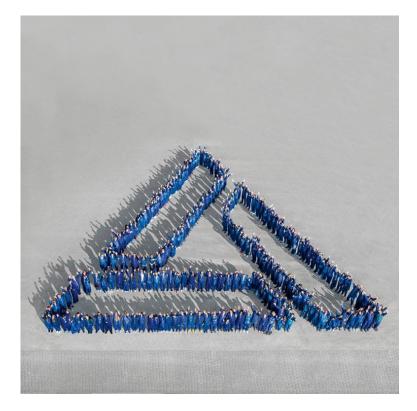
<u>Target</u>: to create treasury stock, especially as acquisition currency or for financing purposes (e.g., convertible bonds)

- » Shares will not be canceled
- » Dividend policy remains unchanged









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Strategic perspective: "Most efficient and sustainable smelter network worldwide"



Aurubis growth focus in the processing of recycling materials

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- » Footprint expansion into new secondary/recycling markets and material groups
- Integration of Metallo into the Aurubis Group and optimization of Group-wide flowsheets
- » Expanding activities for selected Precious & Minor Metals

Aurubis aims to be the **most sustainable** integrated smelter network worldwide

- » Group-wide decarbonization roadmap
- » Continued reduction of emission levels
- » Ensuring sustainability of Aurubis' supply chains
- » Performance Improvement Program (PIP)

Metallo acquisition: Focus after closing is now on integration and leveraging synergies

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» Further diversifies Aurubis' business model towards multi-metal recovery and strengthens Aurubis' metal portfolio, especially nickel, tin, zinc, and lead

Aurubis acquires a technology leader and strengthens its

footprint in the processing of non-ferrous recycling materials

- » Metallo's zero waste business model will boost Aurubis' sustainability contribution
- » Complementary business models create potential to unlock significant synergies
- » € 400 million ESG-linked Schuldschein loan successfully redeemed bridge loan to finance acquisition
- Integration process is progressing, material milestones to be concluded by the end of the calendar year
- » Synergies due to optimization of input mix, smelter network, and leveraging of efficiencies

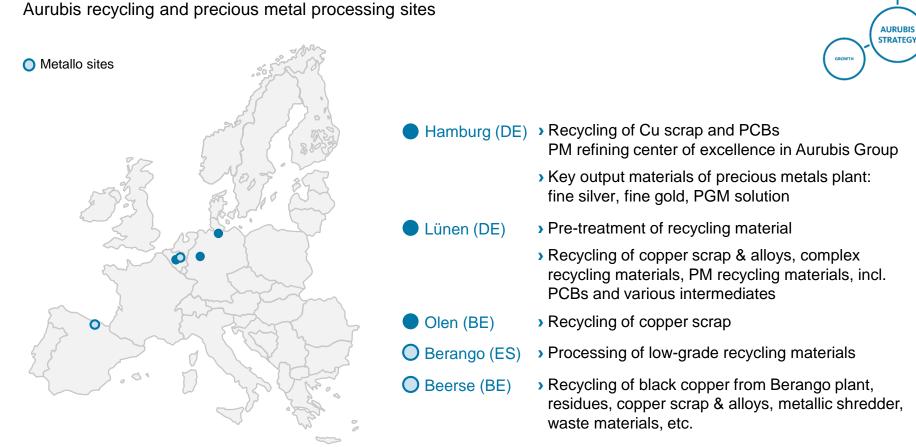


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Metallo further expanded Aurubis' recycling footprint: Aurubis now has ~1 million t of process capacity for recycling materials





The acquisition strengthens Aurubis' multimetal portfolio of key metals – especially nickel, tin, zinc, and lead



Production / sales volumes and metal portfolio

Copper Copper Copper Copper Copper Copper Copper Copper Copper Copper Copper Copper Cold	Silver			Aurubis Group	thereof Metallo	
					12M 2019/20	Jun-Sep 2020
		Copper scrap/ blister copper input	1,000 t	370	21	
Nickel	PGMs	Tin	Other recycling materials	1,000 t	348	85
Platinum Osmium Iridium Ruthenium Rhodium Palladium			Copper cathodes	1,000 t	1,031	8
			Gold	t	47	-
	Rhodium	Secondities of	Silver	t	972	10
	Palladium		Lead	t	28,014	7,820
Lead	Minor Metals	Zinc Ne ^w	Nickel	t	3,395	364
	Selenium	A CONTRACTOR OF THE OWNER	Tin	t	4,213	2,777
Tellurium Rhenium Antimony Bismuth	Rhenium Antimony		Zinc	t	3,565	3,565
			Minor metals	t	807	-
	Bismuth		Platinum group metals	kg	8,935	-

Despite coronavirus restrictions: Metallo integration is a complete success, with results exceeding expectations



Examples of synergy effects



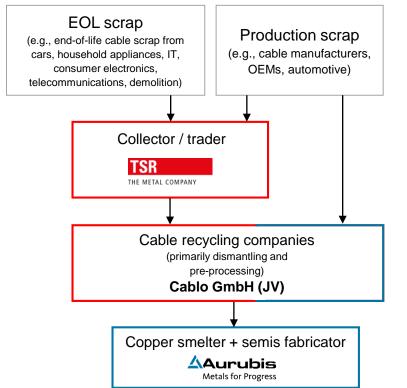
Internal valorization of intermediate material streams: maximizing the valorization of base metals other than copper, as well as precious metals and PGMs, e.g., by internalizing treatment of tankhouse intermediates.



>100 kt of materials rerouted to optimize integrated smelter network: diverting the raw materials to those entities best capable of maximizing valorization and fastest recovery of base metals and PGMs.



Minimizing third-party sales of Metallo anodes by processing them internally in the Group: usage of the integrated smelter network of the Aurubis Group.

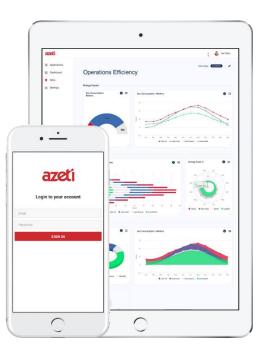




- » 40 %/60 % JV with TSR/Remondis provides a secure outlet for TSR and a secure supply of granules for Aurubis
- » Processing of 30,000-40,000 t of cable recycling materials initially
- » Conclusion of merger control process expected in late Q1 2021
- » Supports Aurubis' closing-the-loop approach and the Sustainability Strategy
- » Expected increase in copper cable scrap volumes in Europe (e.g., China import ban) offers strategic cooperation opportunities in a changing market environment







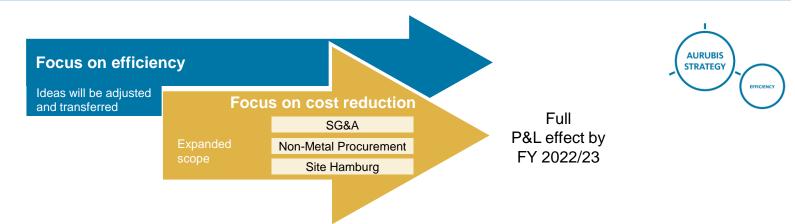
- » azeti ensures resources, software, and knowledge in the long term
- » Aurubis secures the expertise of 20 employees and thus lays the foundation for setting up a digital organization in the company
- » IoT platform (internet of things) allows optimization potential to be identified in production and will be developed continuously
- This platform will enable us to make operations more flexible, to optimize shutdown planning, to reduce maintenance efforts, and to process raw materials even more efficiently

Well on track with the efficiency improvement/cost reduction program

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We have a clear objective:

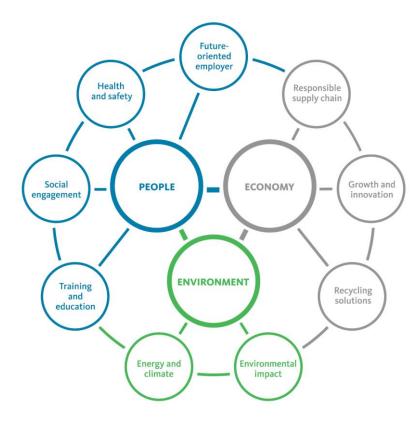
We want to become the most efficient and sustainable integrated smelter network worldwide.



- Measures for improvements are being implemented
- Cost reduction through headcount cuts of 300 FTE from the program current status at 67 %
- Cost reduction forecast from program estimated at € 70 million until the end of FY 2020/21 »

Our mission statement: Responsibly transforming raw materials into value to provide metals for an innovative world

Aurubis Sustainability Strategy

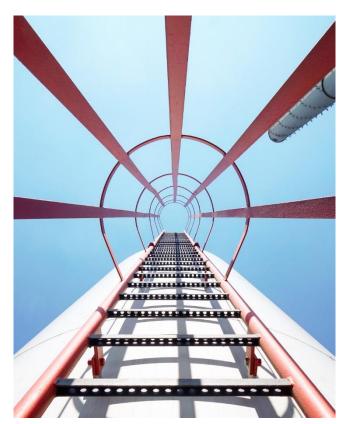


- » Running from 2018 to 2023
- » Released September 2018
- » Balance of economy, environment, people
- » 9 action areas
- » 9 targets
- » 27 measures
- » All targets and measures at www.aurubis.com/sustainabilitystrategy

Footprint reduction is an essential part of Aurubis' sustainability performance







Aurubis reduction 2000-2019

Reduction in CY 2019 vs. 2000	% Change vs. 2000
SO_2 emissions – 4.6 kg/t of copper output	-87 %
Dust emissions – 60 g/t of copper output	-95 %
Metal emissions to water – 1.0 g/t of copper output	-86 %
Water withdrawal – 49 m ³ /t of copper output	-15 %
CO_2 emissions* – 0.22 t/t of copper output	-32 %

* Scope 1

Aurubis Sustainability Strategy 2018-2023 – selected targets and KPIs





ENVIRONMENT	Year	Target	Status as at 9/30/2019
Reduction in CO_2 emissions	FY 2022/23	100,000 t ¹	74 %
More flexibility in electricity use	FY 2022/23	10 %	Aurubis Hamburg: 10 %
Specific metal emissions to water ²	CY 2022	-40 %	-52 %
Specific dust emissions to air ²	CY 2022	-15 %	-13.4 %



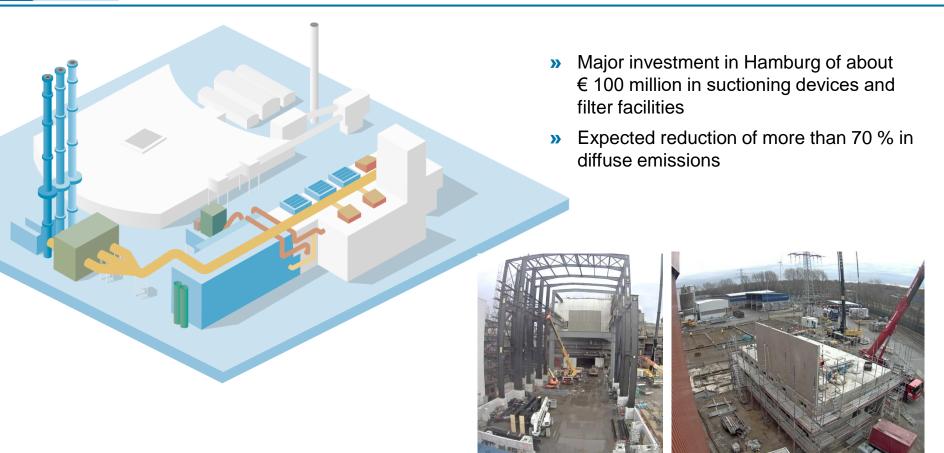
PEOPLE	Year	Target	Status as at 9/30/2019
Hours of training per employee	FY 2022/23	18	15.2
LTIFR	FY 2021/22	≤ 1.0	5.8



15	ECONOMY	Year	Target	Status as at 9/30/2019
	Contracts with primary raw material suppliers that include a human rights and environmental protection clause	FY 2022/23	100 %	> 80 %
	Introducing the Aurubis Business Partner Code of Conduct	FY 2018/19	Group-wide	Implementation ongoing

¹ Through energy efficiency projects and internal electricity projects, base year FY 2012/13

² Figures relate to the copper production sites Hamburg, Lünen, Olen, Pirdop, base year 2012, status as at 12/31/2018



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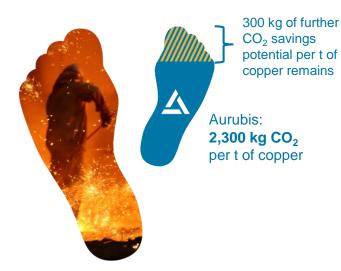
Aurubis is a global leader in decarbonization – with nearly half the global average CO_2 footprint – and continues to extend its lead



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STRATEGY



Global average: 4,027 kg CO₂ per t of copper Decarbonization enabled through innovation at Aurubis:

- » District heating part 1 in Hamburg (20,000 t CO₂)
- » Power2Steam in Hamburg (up to 4,000 t CO₂)
- » Wind turbine in Olen (~5,800 t CO₂) / back-pressure turbine in Pirdop (~5,600 t CO₂)

We continue to work on tangible solutions to extend our lead:

- » District heating part 2 in Hamburg (reduction potential of an additional 120,000 t CO₂)
- » Increasing flexibility in the energy supply
- » Sounding out how to reduce fossil fuels by using hydrogen (i.e., anode furnace), natural gas instead of oil, heat recovery, electrification, renewable electricity generation





- » Launched for copper producers in March 2020
- » Basis: UN SDGs & Risk Readiness Assessment
- » Regular review of criteria (evolving system)
- » Chain of custody later
- » Focus on steady improvement of the sector
- » Independent assessment of certified sites every 3 years
- » Several mining & smelting companies are committed to the Copper Mark



Since April 2020:

- > 2 Rio Tinto sites have been awarded the Copper Mark.
- > BHP, Antofagasta, KGHM, Freeport, and Aurubis Bulgaria aim to participate in the Assurance Process with 16 copper-producing sites representing mining, smelting, and refining.
- 4 partner organizations joined the Copper Mark:
- Ford Motor Company, Google, Intel, Wieland Group.
- 36 individual assessors from 7 assessment firms are approved.

Source: Copper Mark

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





- » Use of hydrogen as a reducing agent in the anode furnace
- Trial on an industrial scale is planned to take place in June 2021
- » Goal of exploring the increased efficiency of hydrogen in the reduction process
- CO₂ reduction potential estimated at 6,000 t p.a. for anode furnace in Hamburg
- » Pilot project for our integrated smelter network

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Copper price Precious metal prices	January Reuters poll: Copper: US\$ 7,648/t (2021) and US\$ 7,664/t (2022) Gold: US\$ 1,948/oz (2021), Silver: US\$ 25.86/oz (2021)
Copper concentrates	We anticipate an increasing concentrate supply. Our smelters are well supplied until Q3 2020/21.
Copper scrap	We expect a very good supply for the rest of FY 2020/21. The smelter network is supplied with scrap materials until Q3 2020/21.
Sulfuric acid	Current signals for Q2 remain positive: spot markets in Europe and overseas show increased demand, meeting tight supply
Aurubis Copper Premium	Has been set for 2021 at US\$ 96/t (2020: US\$ 96/t)
Rod	Outlook for Q2 of FY 2020/21 remains positive, demand from automotive sector and cable producers increased YOY
Shapes & FRP	Current demand well above previous year. Demand for FRP strongly recovered.





We increased our forecast range to an operating EBT between € 270 million and € 330 million and an operating ROCE between 9 % and 12 % for fiscal year 2020/21.

Interva	l forecast
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Operating EBT	Operating ROCE
in € million	in %
270 – 330	9 – 12
300 - 380	11 – 17
14 – 22	5 – 9
	in € million 270 – 330 300 – 380







1	VISION	2025	VISION	2025	VISION	2025
	Ps	5	P	g		g
	Passion for metallurgy		Metals for progress		Together with you	



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Financial Calendar



- » Q2 2020/21
- » Q3 2020/21
- » Annual Report 2020/21

May 10, 2021 August 5, 2021 December 3, 2021



Aurubis at a glance

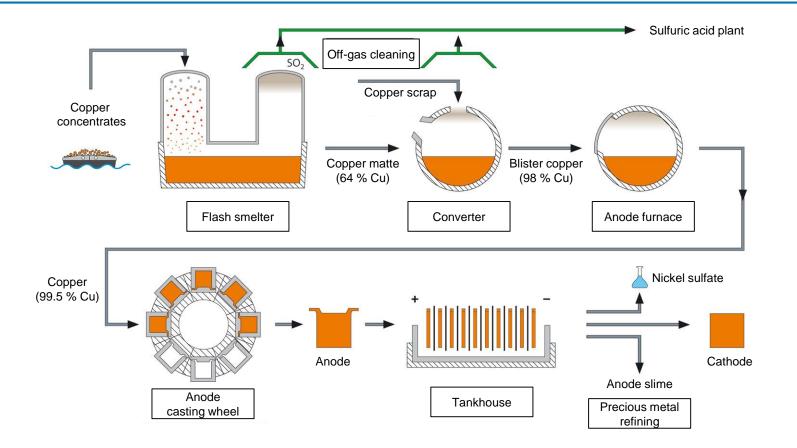
Company highlights

- » 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 about 7,200 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



Primary copper production process







Status: November 2020

	FY 2020/21	FY 2021/22	FY 2022/23	PLANNI
Hamburg	Anode furnace Jun. 2021 EBT effect approx. € 6 million	 Smelter maintenance May/Jun. 2022 EBT effect approx. € 25 million 		
Pirdop	Smelter maintenance Aug./Sep. 2021 EBT effect approx. € 23 million		 Smelter maintenance Aug./Sep. 2023 EBT effect approx. € 22 r 	nillion
Lünen	>KRS May 2021 EBT effect approx. € 7 million	KRS May 2022 EBT effect approx. € 6 million	KRS May 2023 EBT effect approx. € 7 m	illion
	Anode furnace Sept. 2021 EBT effect approx. € 6 million	 Anode furnace Sept. 2022 EBT effect approx. € 6 million 	Anode furnace Sept. 2023 EBT effect approx. € 6 m	illion





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.



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