

Aurubis Capital Market Day 2023

London, June 13



Agenda

1 Strategy Recap

2 Strategy Implementation & Achievements

3 Q&A Session

4 Sustainability

5 Battery Recycling

6 Financials

7 Q&A Session

8 Outlook

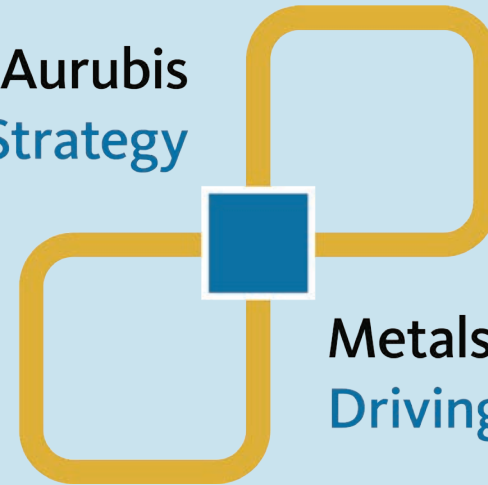
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Strategy Recap

Roland Harings, CEO



Aurubis
Strategy



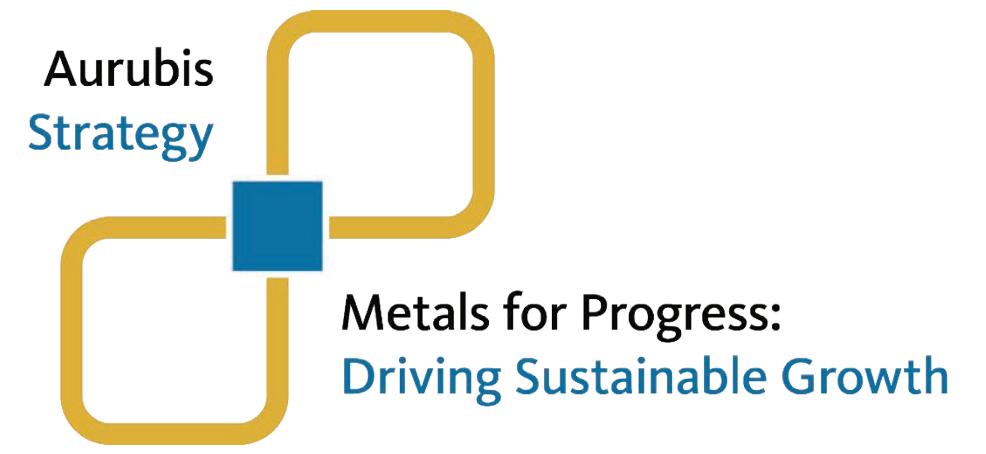
Metals for Progress:
Driving Sustainable Growth

Aurubis strategy builds on the sound mission to drive sustainable growth for our shareholders



Industry Leadership in Sustainability

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



» It is our mission to responsibly transform raw materials into metals for an innovative and sustainable world.

Confirming our strategy even in a challenging economic environment



Macroeconomic environment has changed

2021



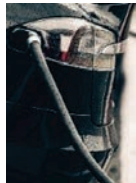
Economic development

Global GDP growth & faster innovation cycles



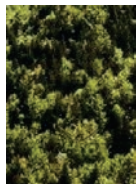
World trade

Persistent shift of recycling input material flows as Asia cuts imports



Electrification/digitalization

Higher metal content in waste



Sustainability

Tightening regulation & rising collection rates

2023

Recycling business benefiting from increasing regionalization

Trend accelerated by regulatory frameworks; geopolitical situation

High demand for copper products for decarbonization and e-mobility

Trend remains supportive



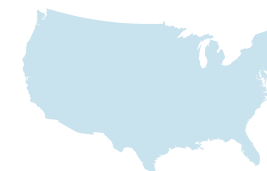
New regulatory frameworks

EU Critical Raw Materials Act



Increased targets for the processing and recycling of strategic raw materials

US Inflation Reduction Act



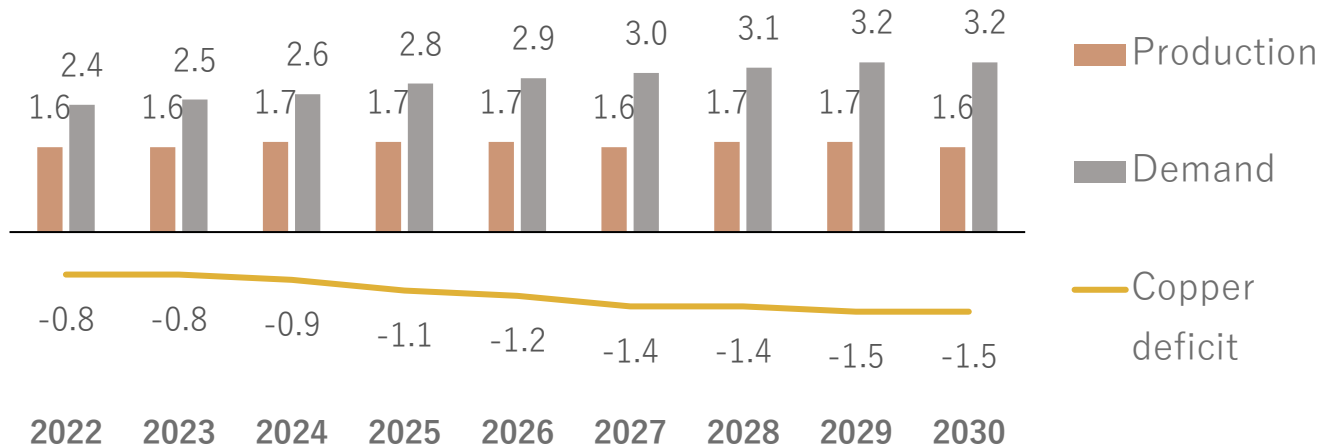
Tax incentives for the procurement of domestically sourced raw materials

Anticipated and growing metal supply deficits in North America and Europe drive key growth opportunities for our core business

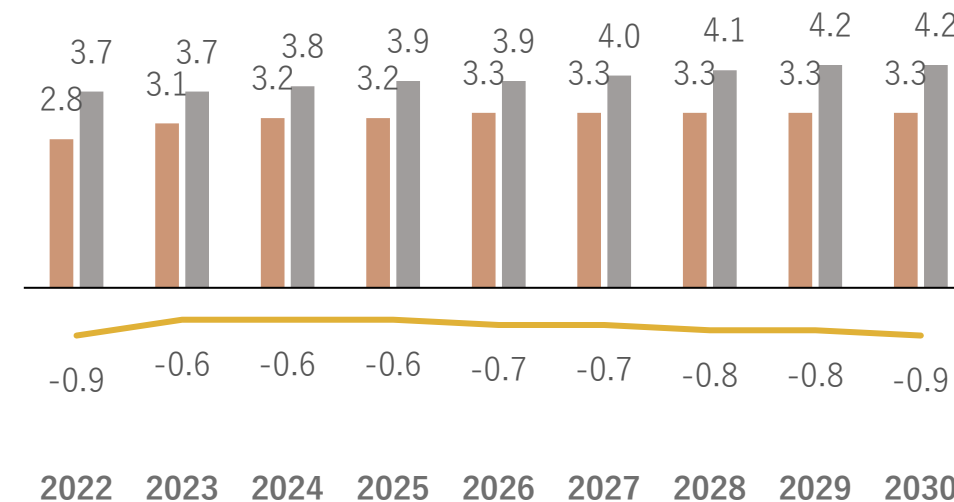
Refined copper market balance (in Mt)



North America



Europe*



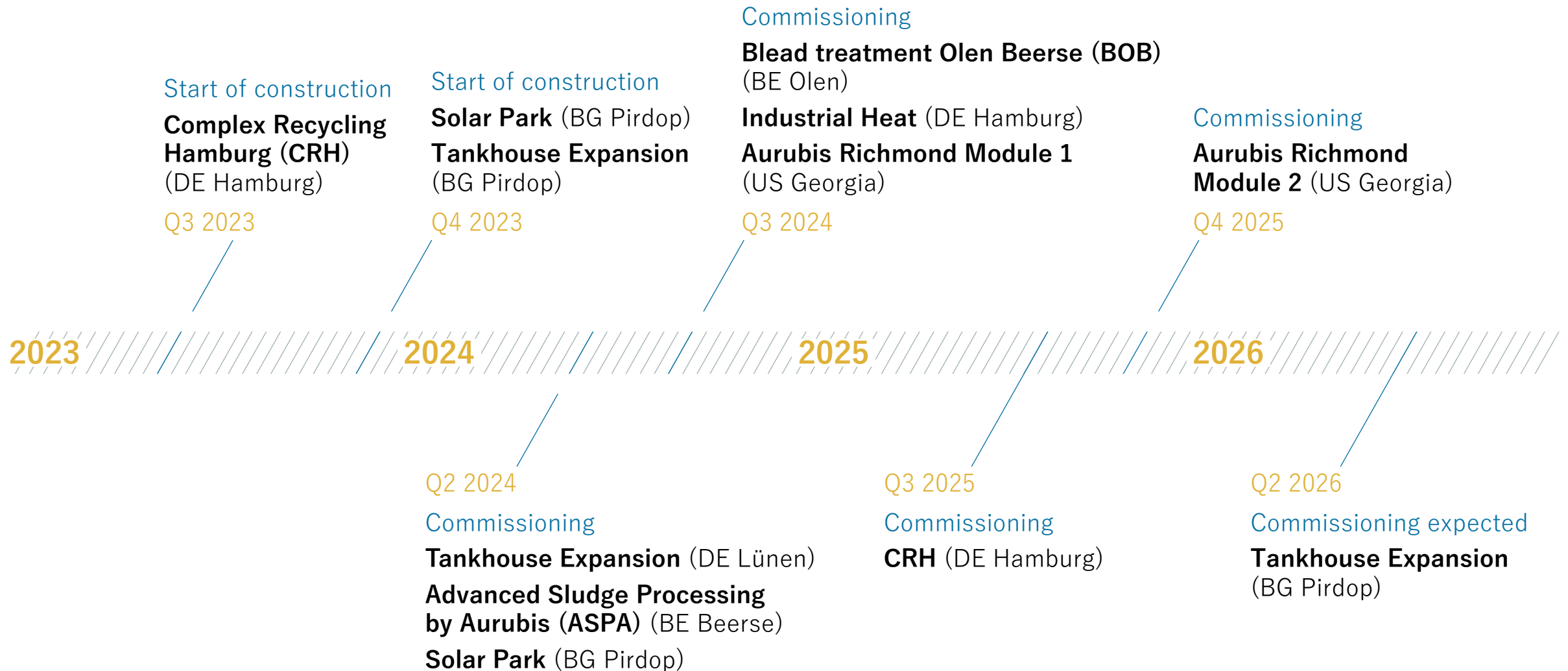
Relevant markets show structural undersupply of refined copper

Greater regionalization of the recycling business will require increased local production to fill anticipated supply gaps in key markets

Market trends confirm our strategy to expand existing and build new regional capacities

* Europe incl. Turkey
Source: Wood Mackenzie Copper Outlook Q1/2023

Continuous strengthening of our business model underway through key organic growth projects



Effective governance of projects in implementation ensures efficient execution within prescribed boundaries

Project management cycle

Supervisory Board Meetings

Participants: Members of Supervisory and Executive Board + additional as required
Frequency: Quarterly

Executive Board Strategy Meetings

Participants: Members of Executive Board, Corporate Development/Strategy + additional as required
Frequency: Monthly

Strategy Committee

Participants: Heads of key corporate functions*, Strategy Team + project leads as required
Frequency: 1–2/month

Project Steering Committees

Participants: Project leads, Group Engineering, Procurement, Controlling + Project Sponsor and additional as required
Frequency: As required

* Corporate Development, Group Commercial, Controlling, Legal, Engineering, R&D, Procurement, Sustainability

Key elements of Aurubis Project Management Governance

Regular meeting cadence up to Executive and Supervisory Board, ensuring **comprehensive and consistent information** enabling sound decision-making

Executive Board takes ultimate decisions and drives alignment with Supervisory Board on **strategic direction** and approvals of project implementation

Strategy Committee monitors project portfolio progress along **stage gates**, informs, escalates & provides recommendations to Executive Board

Corporate Development Strategy function maintains **integrated view on strategic plan and regularly reports** to Executive Board and Strategy Committee

Project **progress and status regarding time, budget, and expected profitability monitored** closely from Feasibility stage to Detailed Engineering and Execution

Steering Committees (SteerCos) established from Basic Engineering stage to ensure continuity into Detailed Engineering and Execution. Members include Group Engineering, Group Procurement, and Group Controlling (mandatory members), with other key functions, e.g., Sustainability, as required

Close monitoring of our projects enables successful implementation

“Early warning radar” (EWR) introduced to ensure our strategy always adapts to conditions around us



30 “signposts”, each representing a key view or assumption of our strategy, form the basis for important strategic conclusions and are reviewed regularly

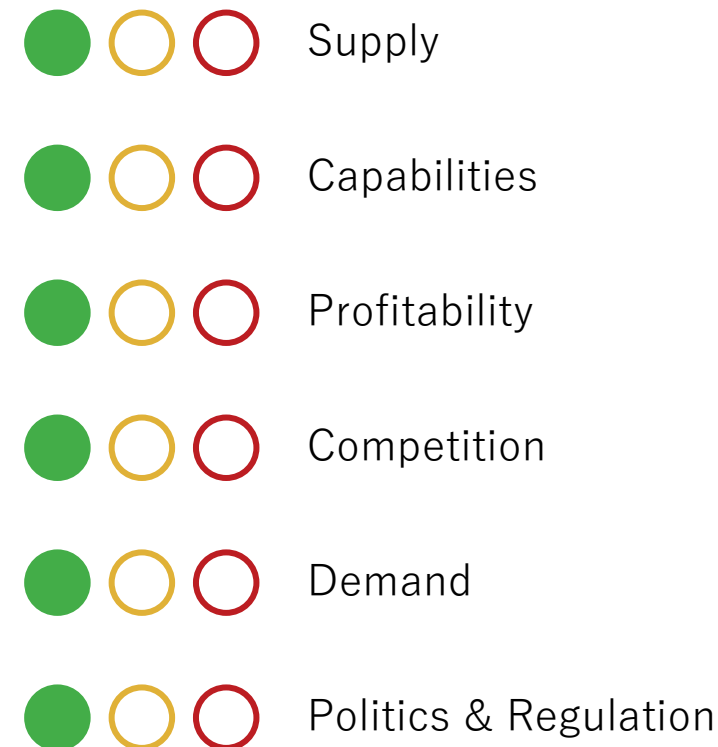


Unforeseen divergences between expected and actual developments trigger a discussion about whether strategic conclusions need to be updated

First applied in 2022 confirming fundamentals of current strategy

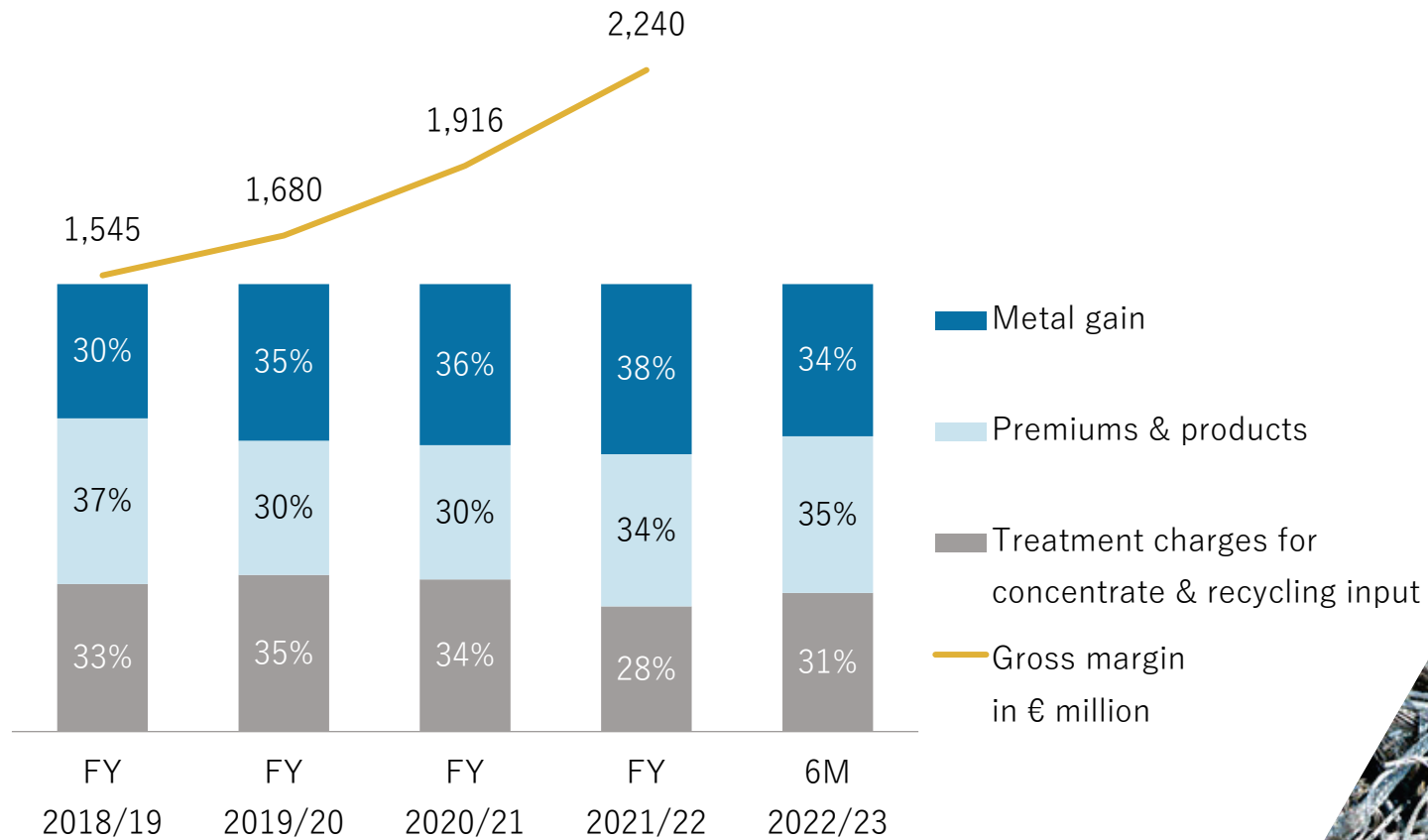
Current review of methodology and early warning areas is underway

Project implementation dashboard



Business model resilience based on independence of income components, drives gross margin growth

Breakdown of income components in the Aurubis Group



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



Growth strategy confirmed: 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 is 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 CO₂ contribution)

Battery recycling remains a priority growth area

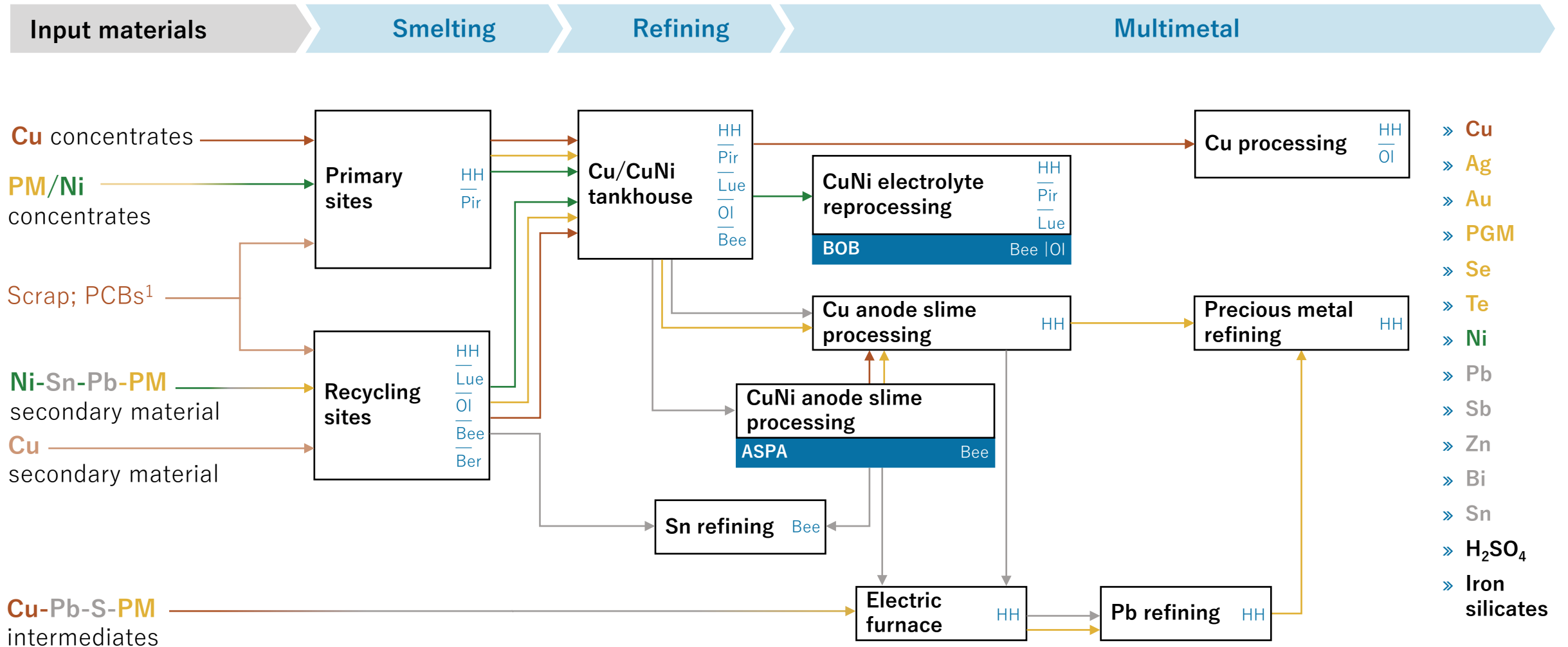
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Strategy Implementation & Achievements

» Aurubis Smelter Network

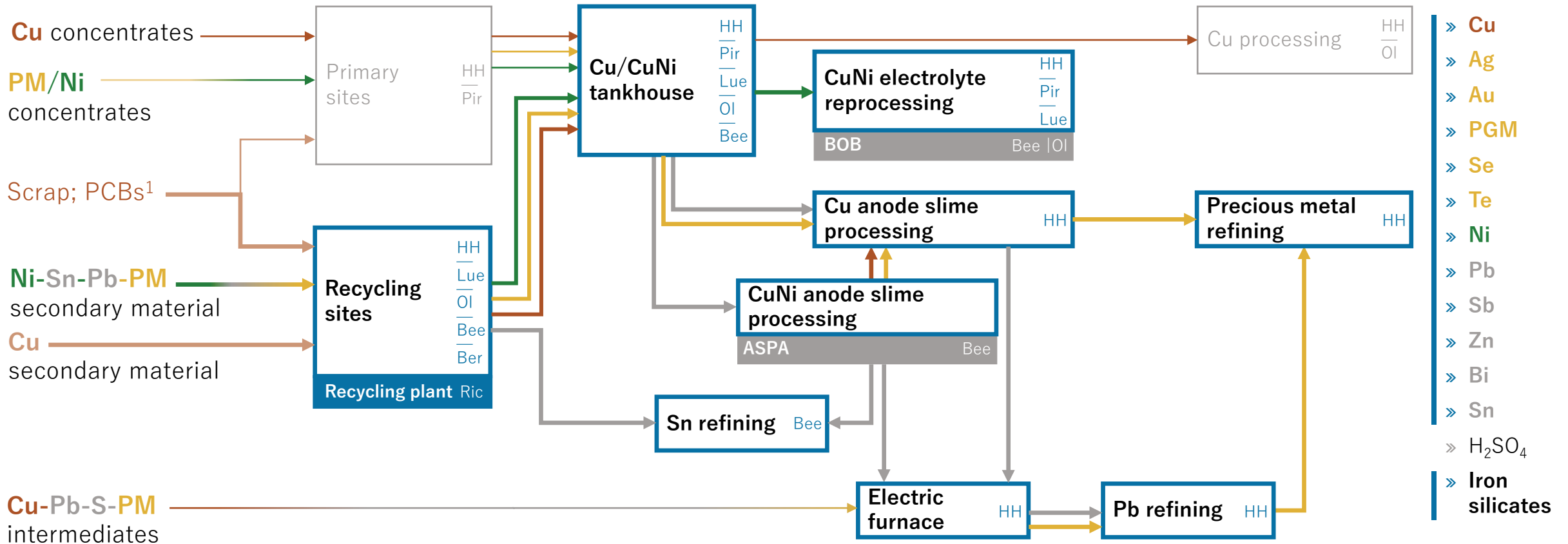
Inge Hofkens, COO Multimetal Recycling

Expanding our flowsheet with additional smelting furnaces and processes to drive multimetal growth strategy



¹ Printed circuit boards

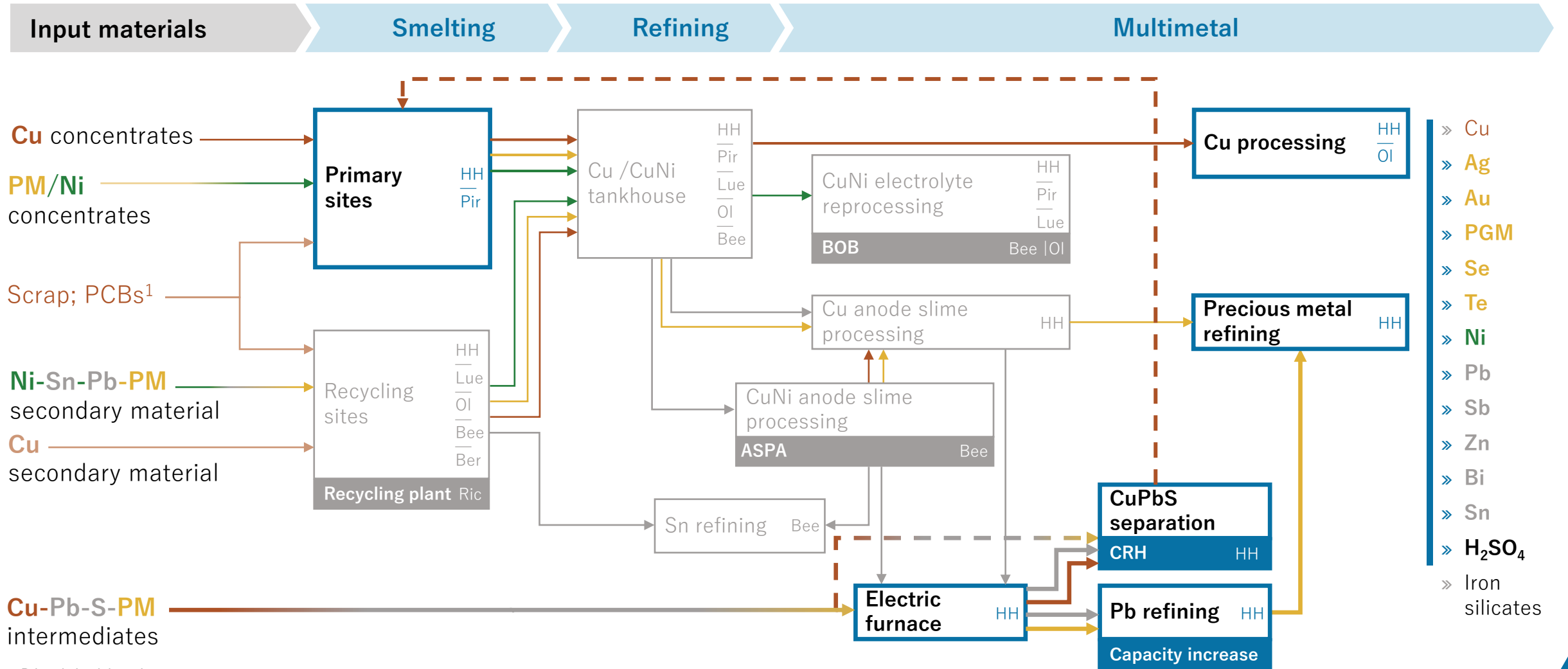
Aurubis Richmond



- » Cu
- » Ag
- » Au
- » PGM
- » Se
- » Te
- » Ni
- » Pb
- » Sb
- » Zn
- » Bi
- » Sn
- » H₂SO₄
- » Iron silicates

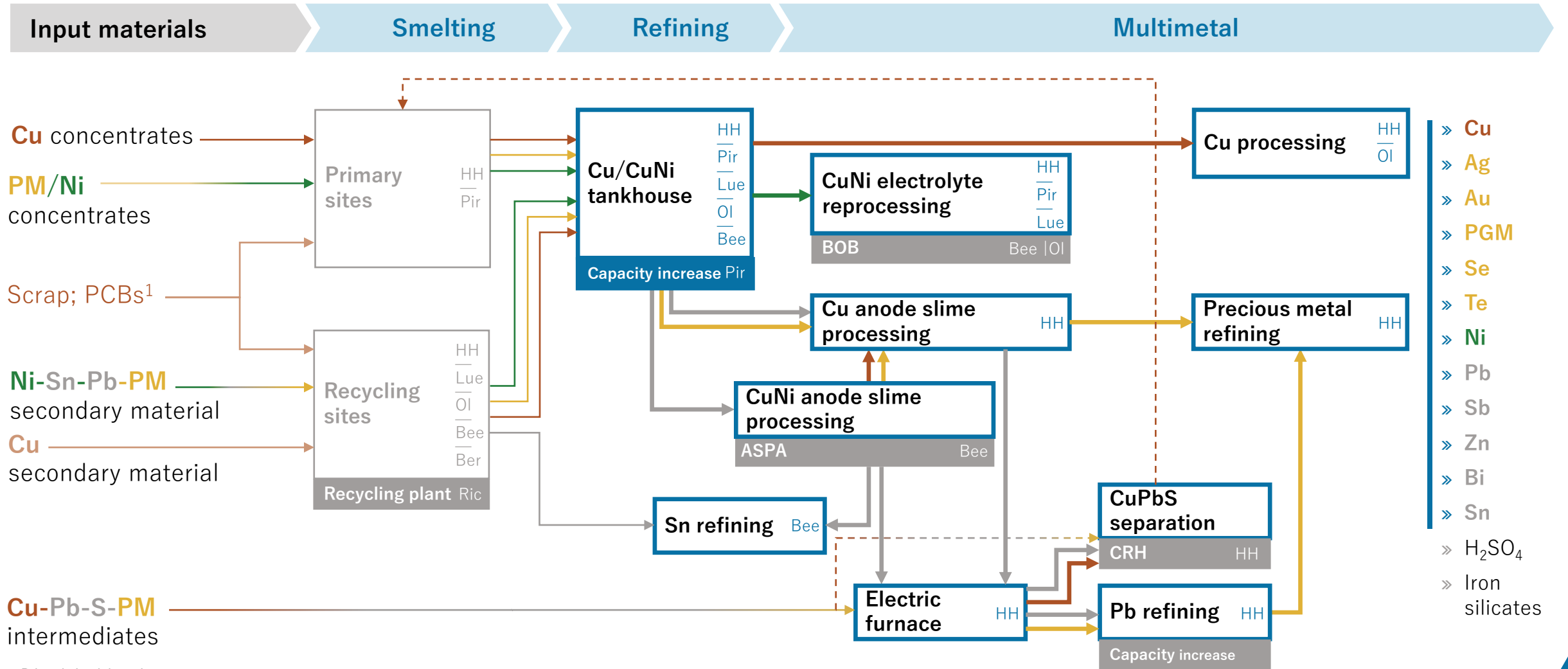
¹ Printed circuit boards

Complex Recycling Hamburg (CRH)



¹ Printed circuit boards

Tankhouse Expansion in Pirdop



¹ Printed circuit boards

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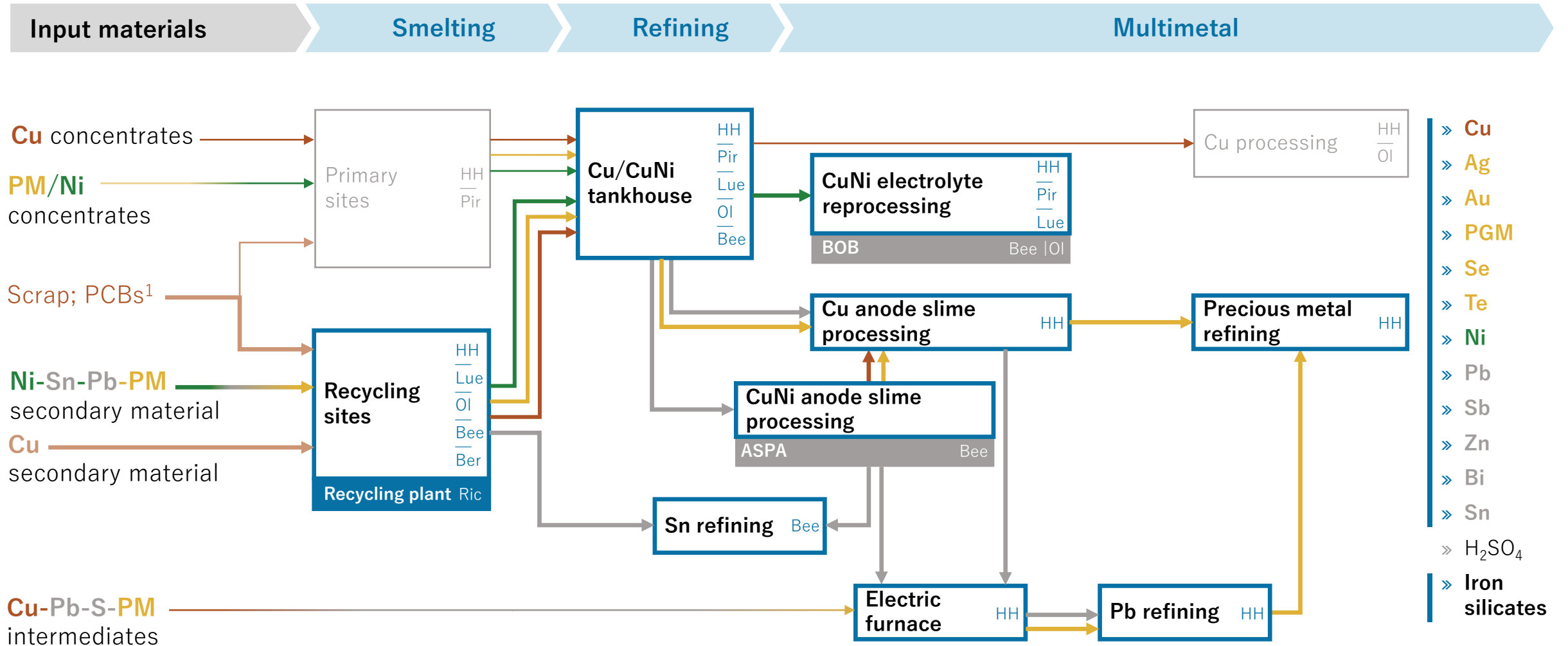
Strategy Implementation & Achievements

» Aurubis Richmond

David Schultheis, Designated President /
Managing Director Aurubis Richmond LLC



Aurubis Richmond



¹ Printed circuit boards

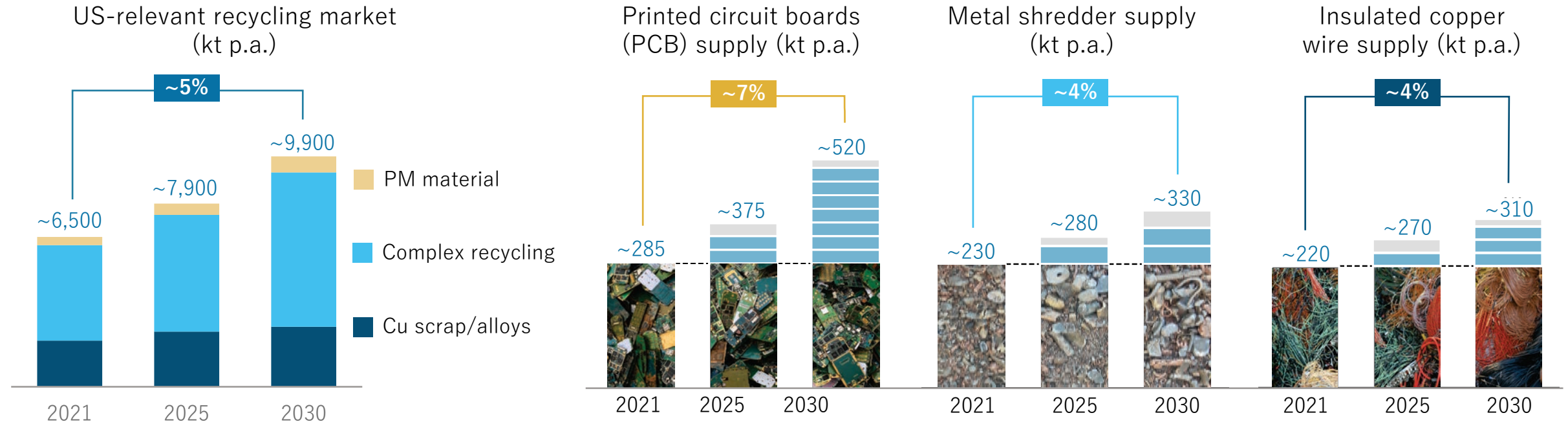
Aurubis Richmond

Video



Very attractive market environment: Relevant recycling materials to grow at ~5 % p.a. in North America

— Pursuing growth in North America



Key growth drivers



Collection rates

Increasing collection rates, especially of bulk e-waste and PCB materials (currently only ~30 %)



Declining exports

Net export of copper scrap **continuously decreasing due to increasingly restrictive import policies in China/SEA**



Incremental growth

Continuous growth of industrial activity and consumption of electronics lead to solid growth base

Aurubis Richmond with significant progress since groundbreaking in June 2022 – first equipment received in May 2023



First equipment

June '22

June '23

November '23

June '24

Start of hot commissioning (Module 1)

May '23

Start of sampling/
pre-processing

Start of cold commissioning (Module 1)

August '24

Groundbreaking



Status today

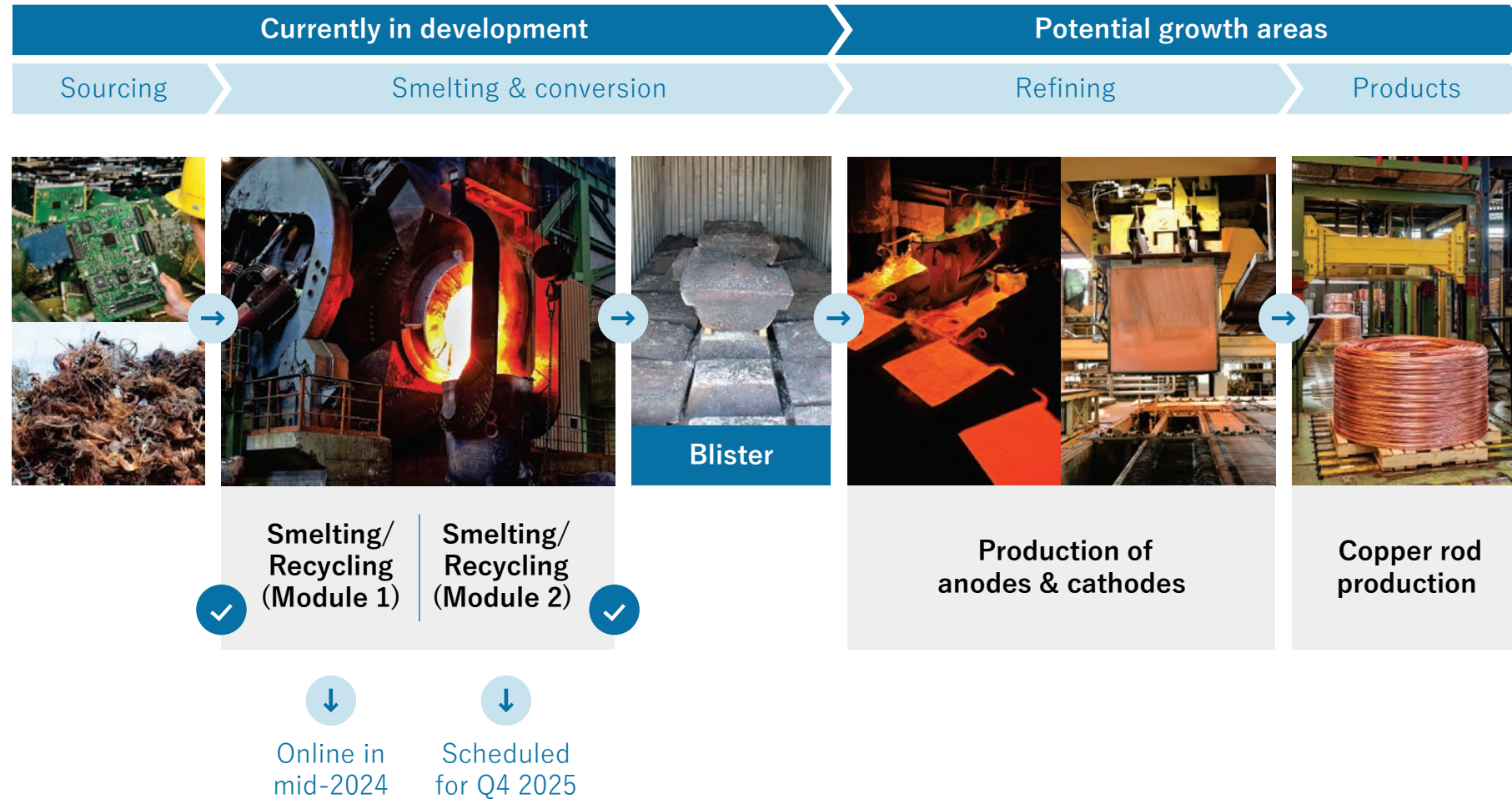


Key project statistics:

- **Visible progress:** 24.7 t m² concrete poured, 17.5 t m² PEMB¹ erected
- **Module 1:** € 290 m capex contracted; € 87 m capex spent²
- **Module 2:** OEM & crane manufacturer **contracts signed** – construction and equipment installation contracts to follow shortly
- **Project & Operational teams:** key project roles & senior mgmt. team staffed (~60 FTE in May 2023) – strong hiring to continue until 2024
- **Forecast of € 392 m and project schedule substantiated** – proactive value engineering and pursuit of cost savings opportunities

¹ Pre-engineered metal buildings; ² Status 6M 2022/23

Our growth ambition: Become the largest fully-integrated copper producer in North America



Leveraging potential across the whole copper value chain

- Gradual expansion of capacities and growth along entire copper value chain with production of sustainable copper to capture strong market trends in the US
- Pursuing profitable growth and further diversification from geopolitical and FX risks, but also securing local, secure, low-carbon, and low-cost energy

On track for profitable growth in North America



Our **strategy**, focused on growth in recycling and North America, **and underlying reasons** for our investment decisions **have proven to be right**



The **US market is growing rapidly** – launching the second module so early was the right decision



Aurubis Richmond is well on track: **on time and within budget**



With Richmond, we are building a **state-of-the-art and very competitive facility** in North America



Richmond will become our **"home base"** for **profitable growth** in the very attractive North American market

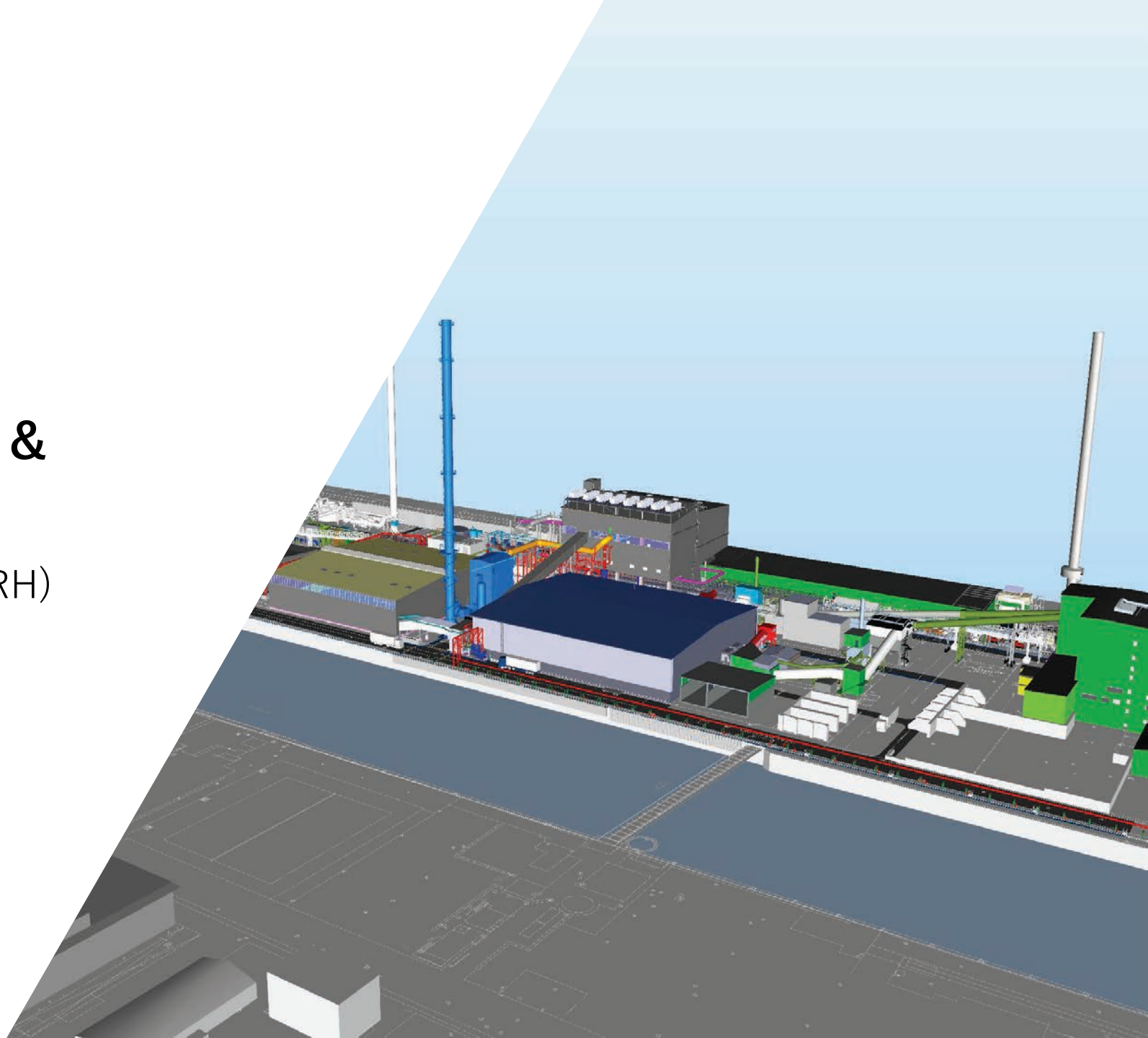
» Aurubis Richmond: Strong foundation for a profitable future & sustained growth in North America

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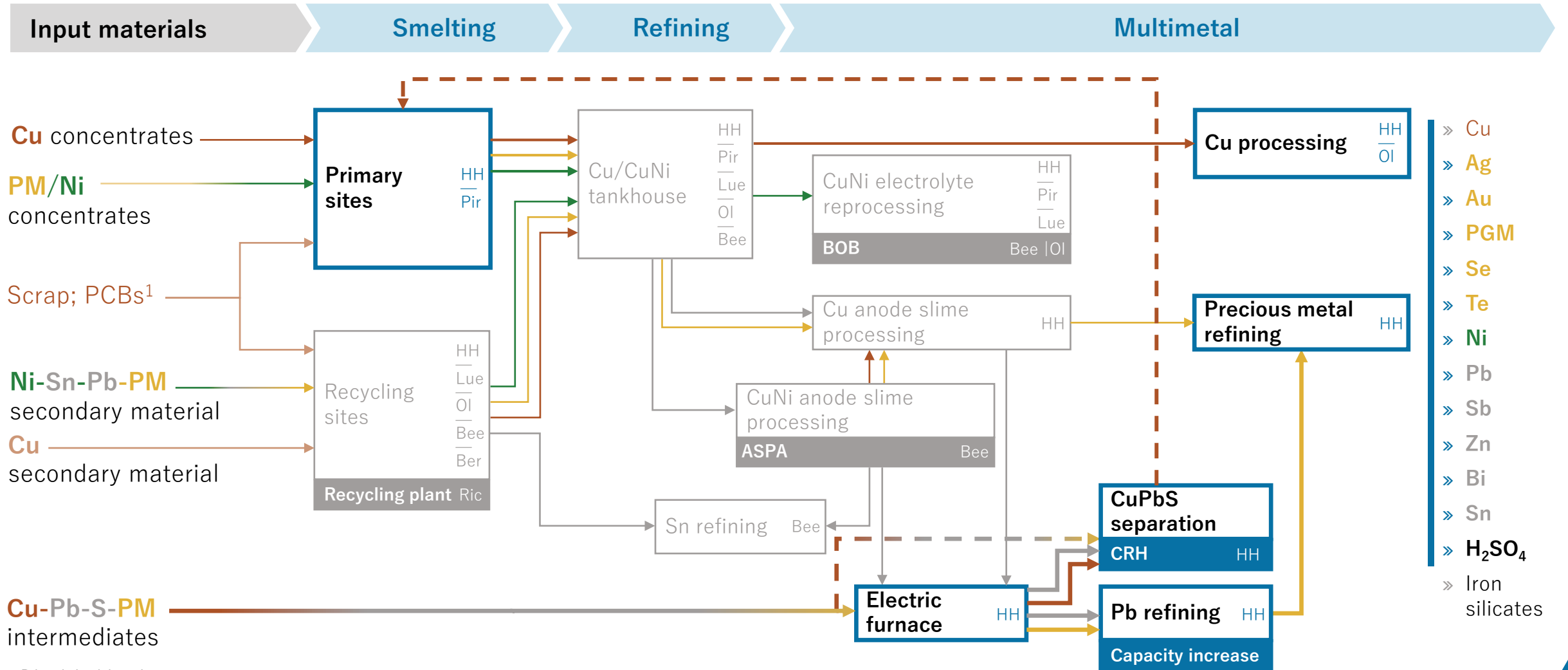
Strategy Implementation & Achievements

» Complex Recycling Hamburg (CRH)

Dr. Jürgen Jestrabek, CRH Project Lead



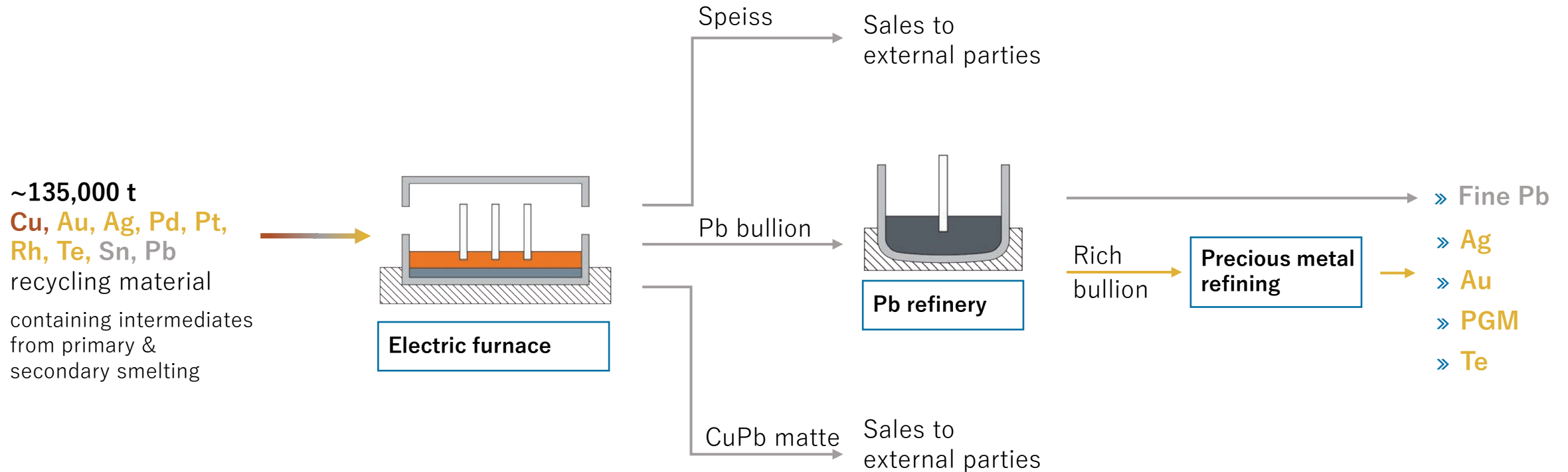
Complex Recycling Hamburg (CRH)



¹ Printed circuit boards

Without CRH: Currently, valuable intermediates not leveraged

Current metal flow sheet

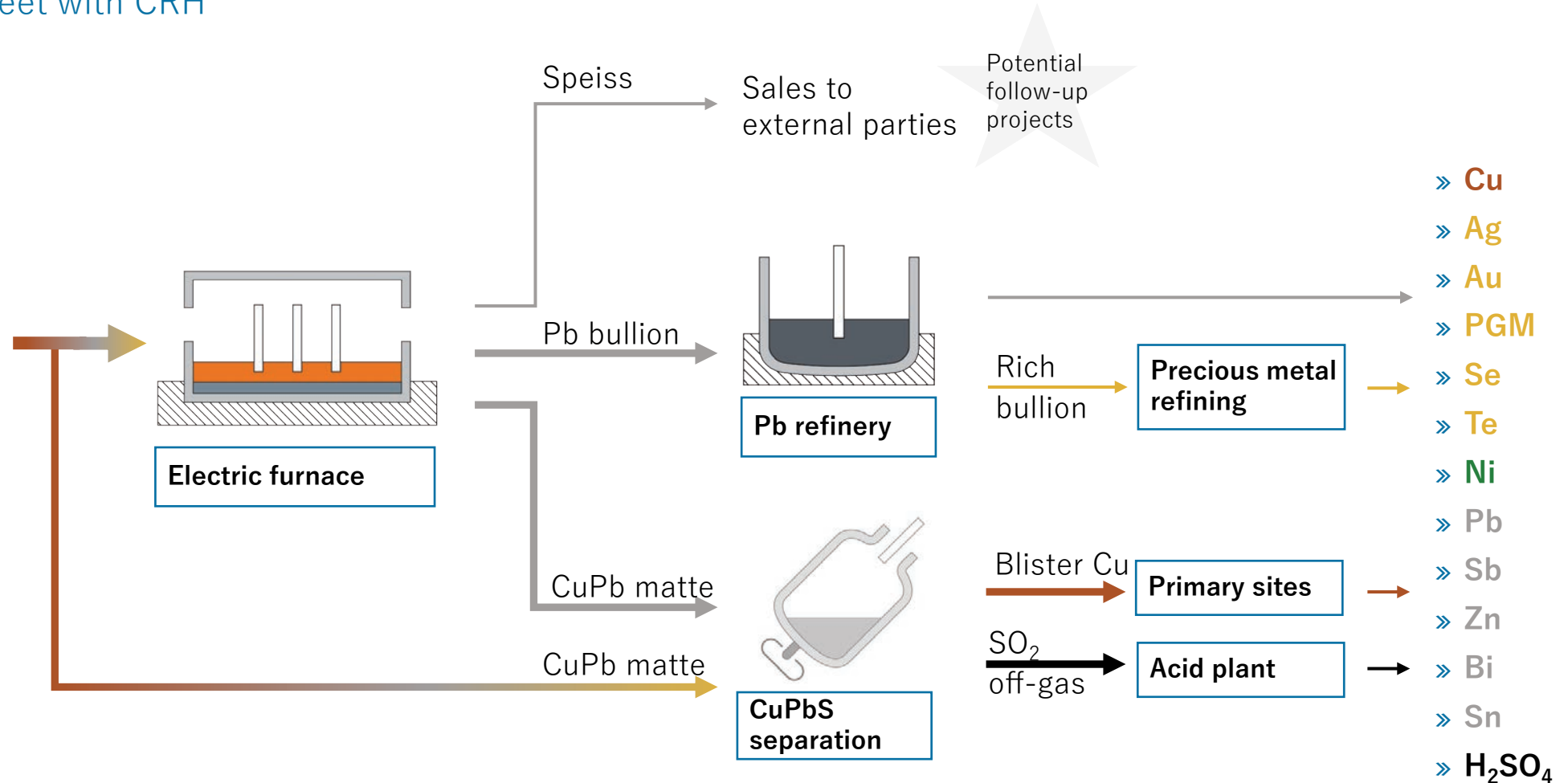


With CRH: Optimizing our metal flowsheet with additional metal processing steps, using valuable intermediates

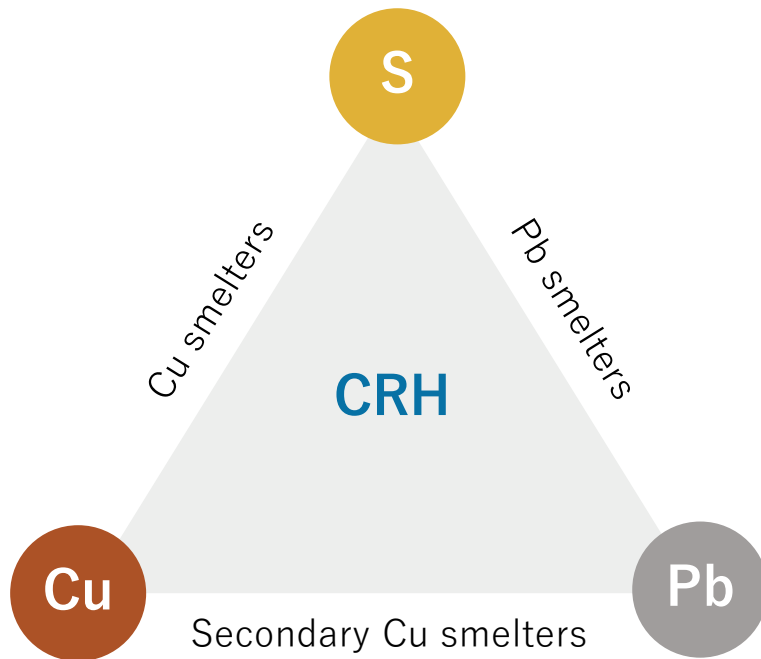
New metal flow sheet with CRH

+ ~25 %
Cu-Pb-S-PM
 recycling material

~135,000 t
Cu, Au, Ag, Pd, Pt, Rh, Te, Sn, Pb
 recycling material
 containing intermediates
 from primary &
 secondary smelting



CRH leverages our unique strengths, creating opportunities for complex processing of copper, lead & sulfur



Cu smelters e.g., RWO, Pirdop, AC Huelva, Boliden

- Very strong in Cu/S separation: Cu anodes and SO₂/sulfuric acid
- Very limited in Pb: Pb losses, slag quality, and anode/Cu electrolysis

Pb smelters e.g., Nyrstar Stolberg, Glencore Nordenham

- Very strong in Pb/S separation: lead bullion and sulfuric acid
- Cu discharged as CuPb matte, CuPb dross as feed for CRH

Secondary Cu smelters e.g., Lünen, Beerse

- Very strong in Cu/Pb separation: Cu anodes and mixed tin
- Very limited in S: very limited/expensive SO₂ processing without sulfuric acid plant

CRH combines the separation and processing of Cu, Pb, and S

- Low-lead Cu as blister copper in CU smelter > Cu anode
- Low-Cu PbO slag in RWN e-furnace for PbSn recovery > lead bullion
- S as SO₂ to contact plant and recovery of sulfuric acid

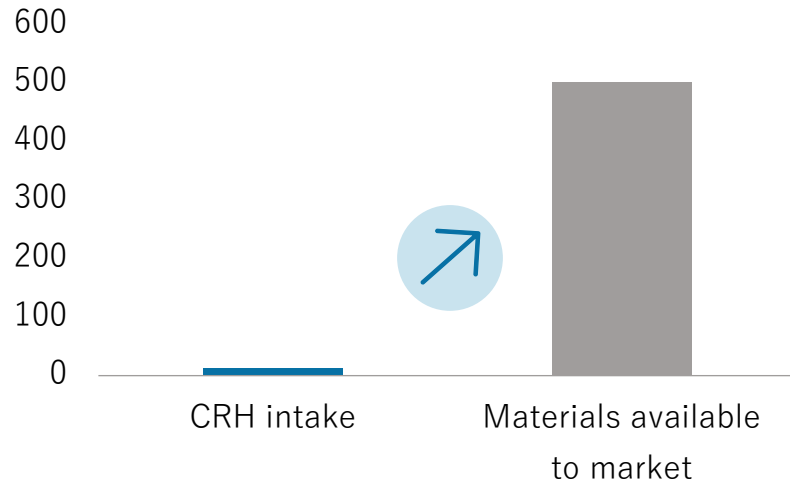


CRH enables processing of complex intermediate products from internal processing and external market

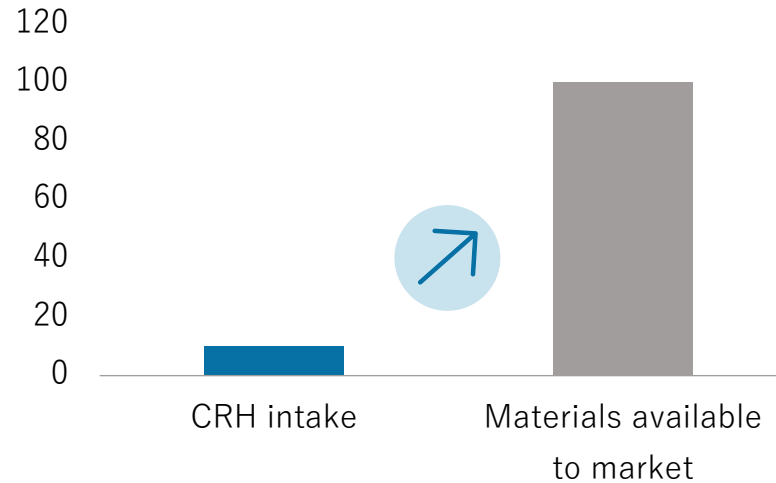
CRH makes the most of our valuable intermediates – and opens up significant market opportunity from available third-party materials

Three main relevant input materials

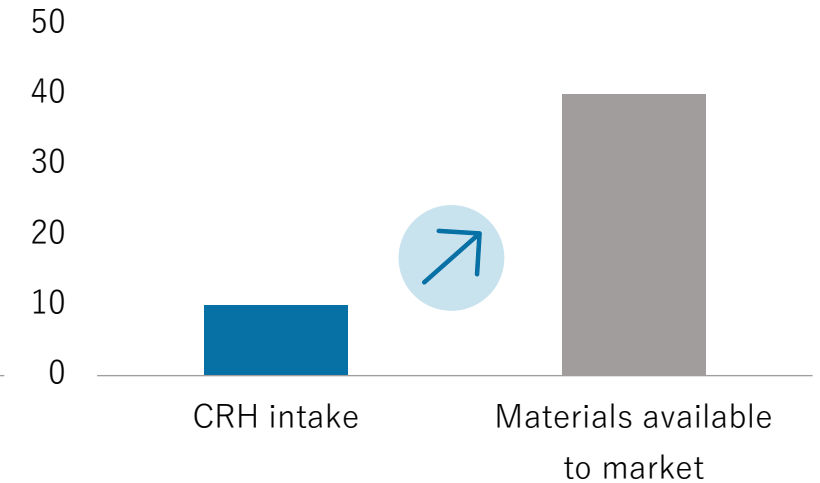
Pb sulfate – intermediate of the zinc industry* (kt p.a.)



CuPb dross – intermediate of the lead industry* (kt p.a.)



CuPb matte – intermediate of the lead industry* (kt p.a.)



Competitive landscape and market



Competitive landscape
Metallurgical expertise required,
 limited number of other processors
 with these technological capabilities






Provider of further multimetal capabilities
 With CRH, Aurubis enables further processing of
metal phases



Incremental growth
Continuous growth of industrial activity
 and demand for industrial metals leads to solid growth base

*Source: Aurubis research

Securing & strengthening our core business with CRH: World-class plant to optimize smelting process in Hamburg

<p>Investment ~€ 190 million</p>	<p>EBITDA p.a. ~€ 40 million (at full production)</p>	<p> Secure Core Business</p> <p></p> <p> Strengthen Core Business</p>	
<p>Start of production following ramp-up phase Q4 2025</p>	<p>~32,000 t p.a. input of external material</p>	<p>Strengthening our core business with a world-class facility in Hamburg – one of only a handful globally accomplishing very complex, sophisticated recycling</p> <p>Construction of a new TBRC with process gas cleaning system based on best available techniques (BAT)</p> <p>Processing <u>internal and external value-added complex intermediates and recycled materials</u> with additional treatment and refining charges and metal recoveries</p> <p>Increase in metal yield (mainly precious metals) with lower process times</p> <p>Prerequisite for further attractive strategic projects (e.g., higher yield of additional industrial and precious metals)</p> <p>Differentiation from competitors through expansion of metallurgical processes and extension of the value chain at the Hamburg site</p>	

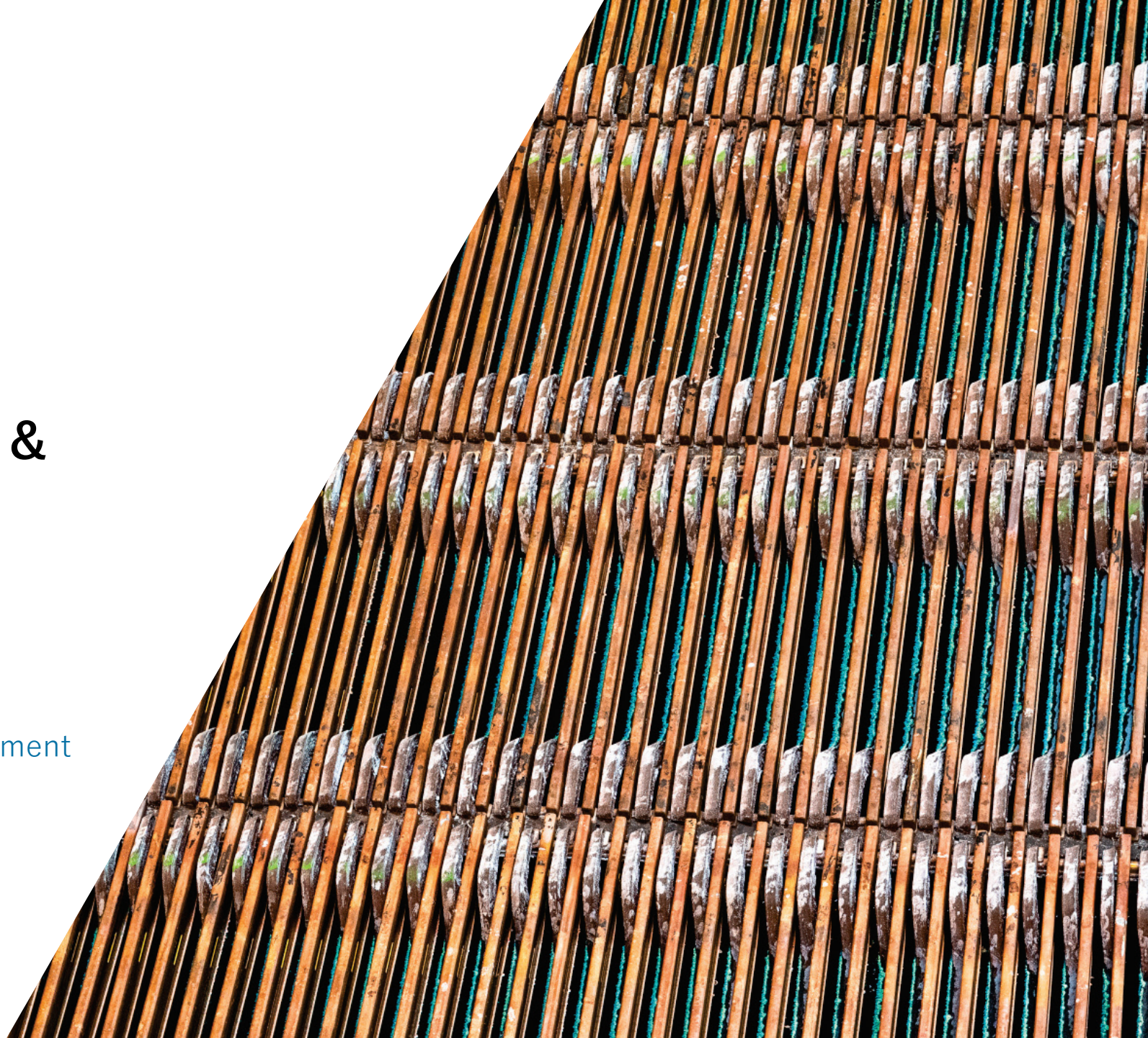
» CRH increases capacities for sustainable recovery of metals from intermediates and complex recycling materials. This world-class facility widens the gap to competitors.

2

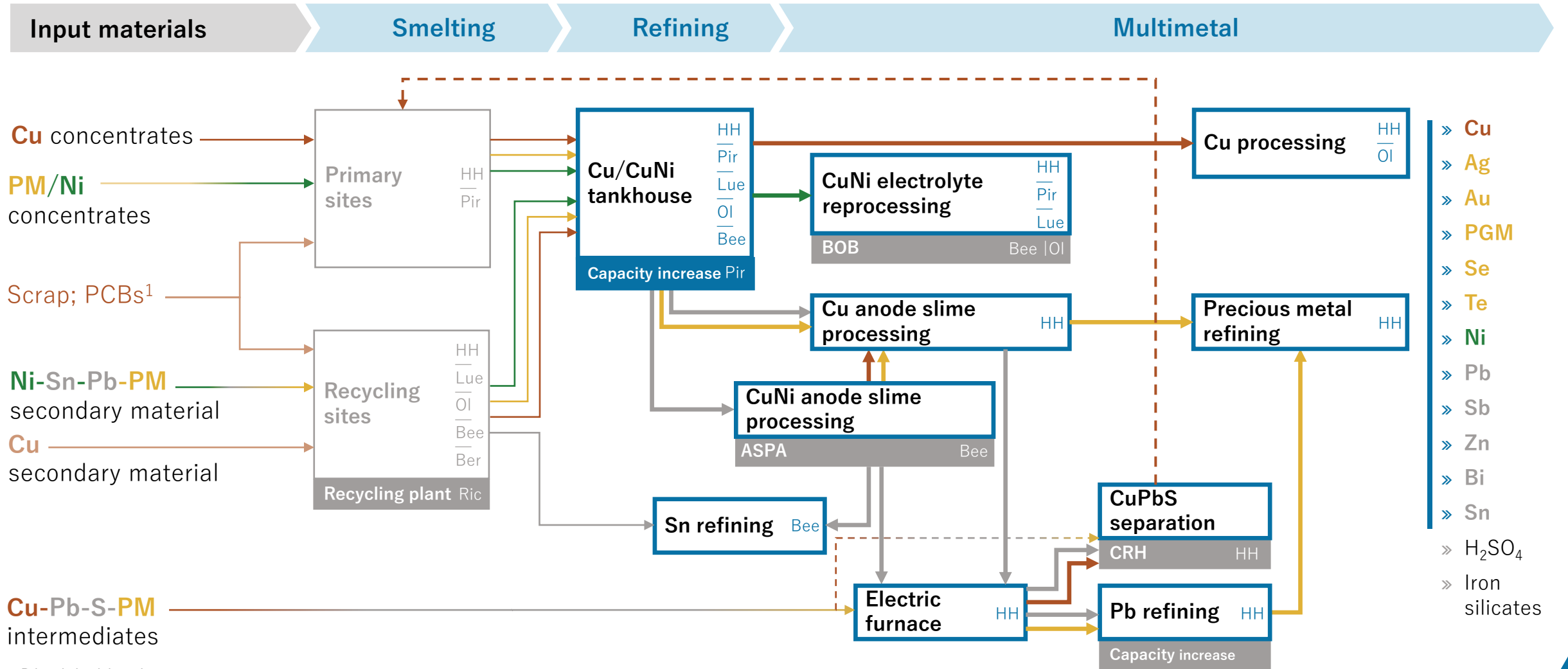
Strategy Implementation & Achievements

» Tankhouse Pirdop

Dr. Thomas Sturm, SVP Corporate Development



Tankhouse Expansion in Pirdop



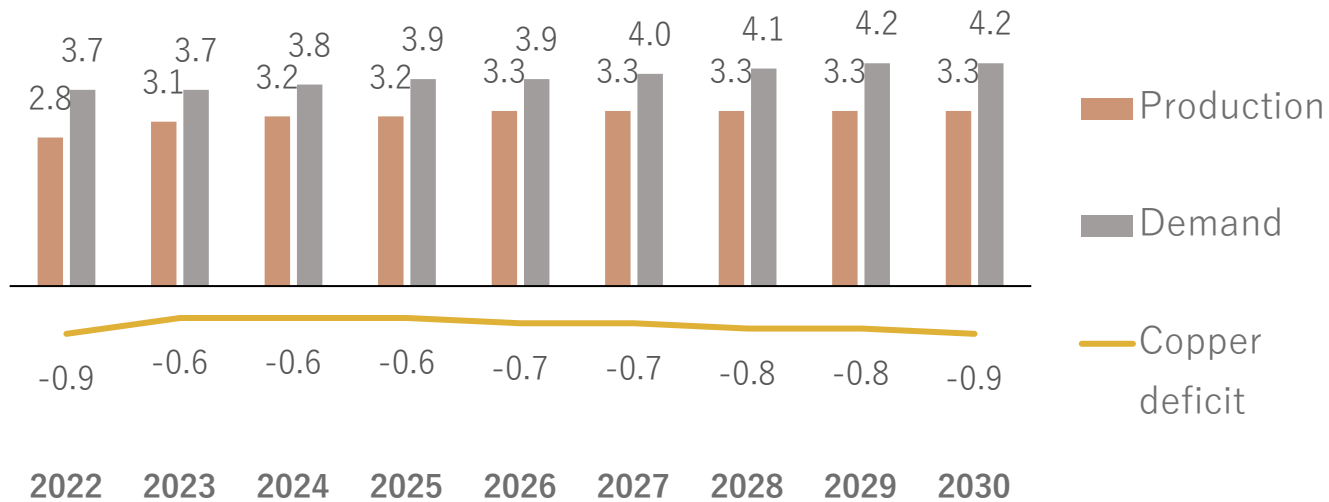
¹ Printed circuit boards

Continued copper deficit in Europe driven by higher consumption

Refined copper market balance* (in Mt)



Europe






Europe shows structural undersupply of refined copper

Regionalization of production boosted by EU Critical Raw Materials Act, including recycling

Market requires expansion of existing and/or new regional capacities

* Europe incl. Turkey
Source: Wood Mackenzie Copper Outlook Q1/2023

Europe needs more cathodes at the highest sustainability standard – we are expanding Pirdop to cater to these needs

<p>Investment ~ € 120 million</p>	<p>EBITDA p.a. ~ € 30 million (at full production)</p>	<p> Secure Core Business</p> <p></p> <p> Strengthen Core Business</p>	
<p>Start of production following ramp-up phase second half of 2026</p>	<p>~ 120,000 t p.a. additional capacity</p>	<p>Strengthening our core business by expanding the tankhouse at our Bulgarian site – utilizing Pirdop’s anode and nickel processing capacity and enabling integrated local production with a low CO₂ footprint</p> <p>Additional supply of 120 kt of cathodes produced at the highest sustainability standards for a growing European market</p> <p>Optimizing Aurubis Group flows by eliminating structural transport of anodes from Pirdop to Olen and avoiding related emissions</p> <p>Realization of technology upgrades in line with Aurubis’ automation and digitalization strategy, including robotics applications increasing productivity</p> <p>Expansion also enables further growth in recycling and multimetal processing in Olen, Beerse, and Lünen</p>	

» Copper tankhouse expansion in Pirdop combines leveraging local asset base with profitable technology upgrades and creating optimization effects across the whole Group

Pirdop will generate sustainable and profitable growth in business areas well known to us



The project fully leverages our production in Pirdop and is situated in a dynamic growth region with beneficial input factors (i.e., energy and labor)



We are further optimizing our flowsheet across our smelter network. We are strengthening our position as the most sustainable smelter network and, with this expansion, providing the platform for further investment in the European recycling asset base



We are expanding our product offering with high-grade quality cathodes for European industry, providing sustainable critical raw materials to decarbonize Europe. We are driving sustainable growth

» Pirdop strengthens our position in a rapidly growing market and fits seamlessly into our European smelter network.

3

Q&A Session

 **Aurubis**



4

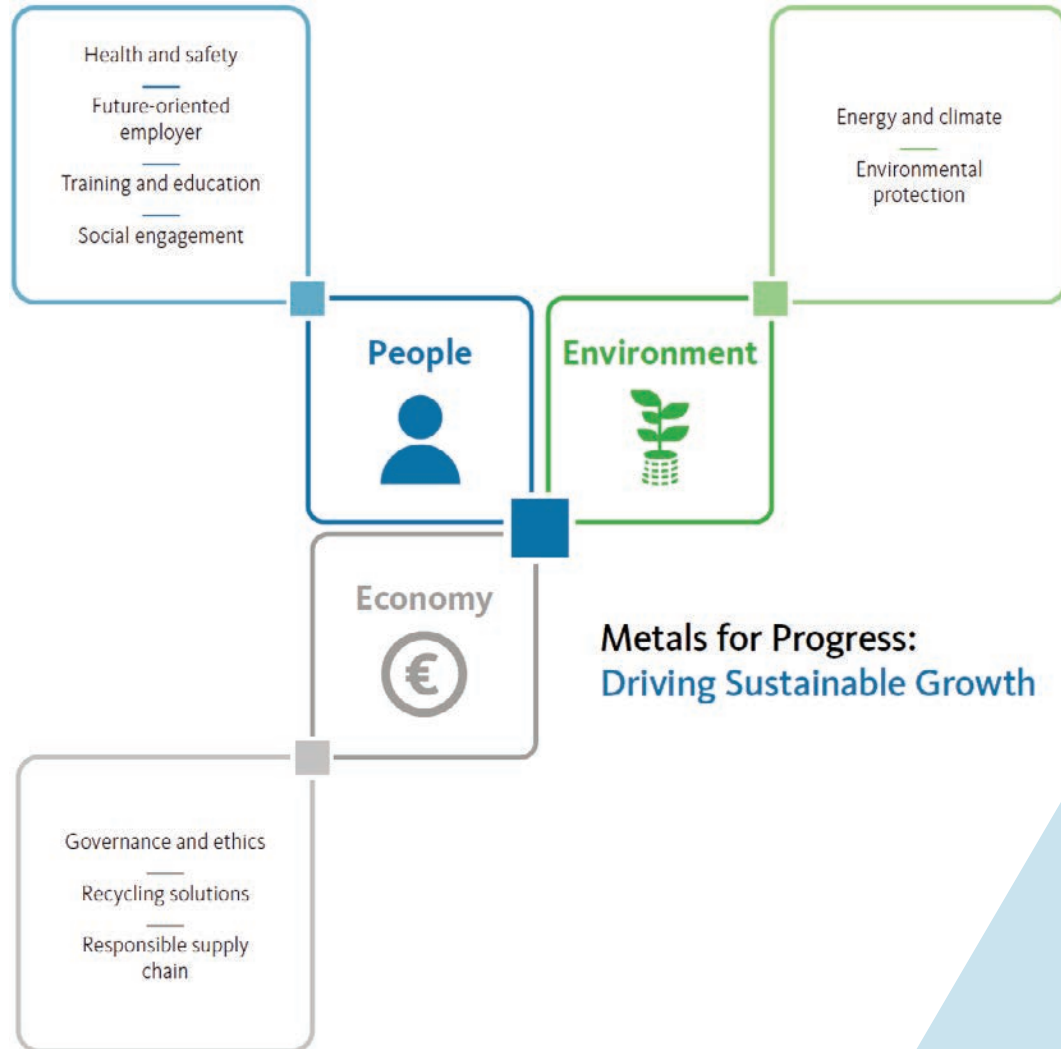
Sustainability

» Sustainability targets and initiatives

Christian Hein, Head of Sustainability



We continue to lead our industry in sustainability – minimizing emissions and costs, maximizing opportunities in new business areas



We continue to strengthen our position as the most efficient and sustainable multimetal producer worldwide

1

Sustainability is a fundamental part of Aurubis' strategy

2

We strive for **balance** between economy, environment, and people

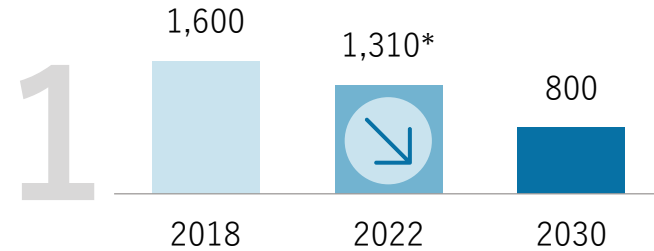
3

9 action areas, targets and measures across E, S, and G

Our KPIs underline our sustainability ambitions and demonstrate momentum

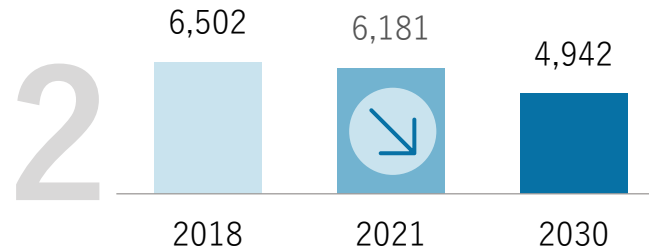


Absolute Scope 1+2 CO₂ emissions
(in kt)

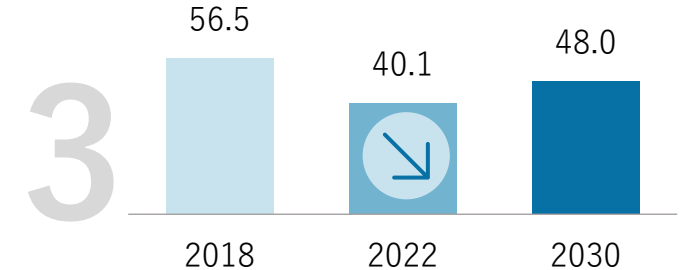


* Preliminary figures

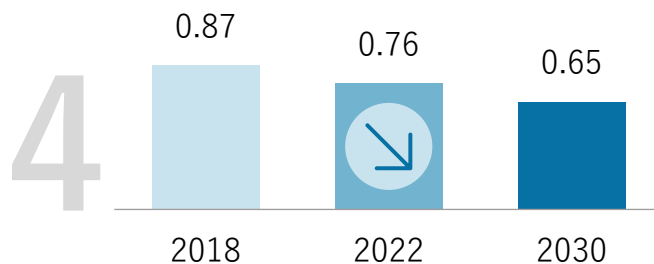
Scope 3 CO₂ emissions
(in kt)¹



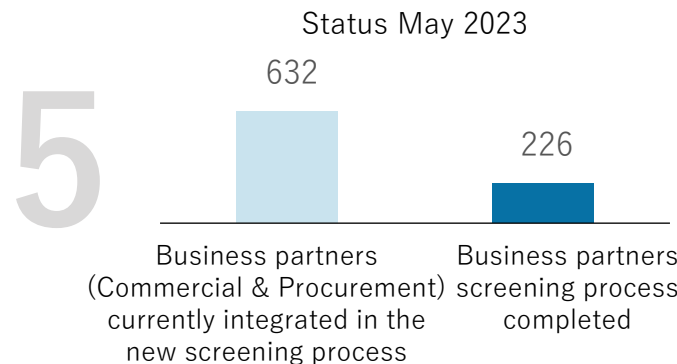
Air emissions (dust)
(in g per t of multimetal Cu equivalent)²



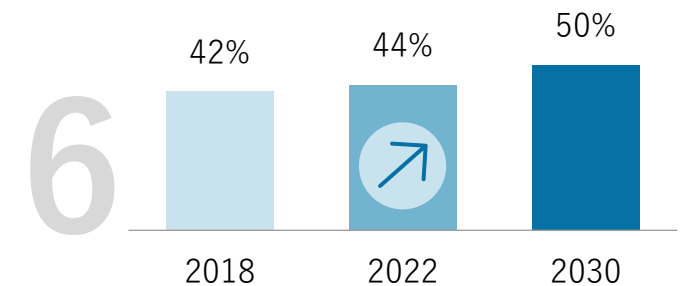
Metal emissions to water
(in g per t of multimetal Cu equivalent)²



Supply chain integrity
For all identified High Risk Business Partners we implemented action plans. This has reduced our Business Partner risk.³



Recycling content (Cu)
Recycling share of Cu cathodes (in %)



¹ Assumed steady copper cathode production until target year (physical intensity target)

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

³ Aurubis is introducing a revised and uniform Business Partner Screening system in FY 2022/23, in which we bundle the requirements of the various regulations, standards, and initiatives.

Leading the way with life cycle assessments – and substantially lower carbon footprints than industry averages



CO₂ footprint of Aurubis metals vs. global industry average

Copper cathodes

in kg CO₂ eq./t Cu

Global industry average

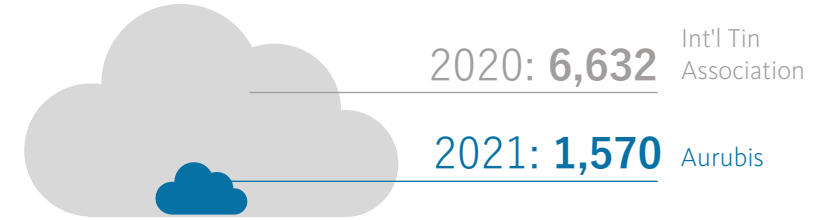


Remark: The environmental profiles have been verified by TÜV Nord Cert in accordance with DIN EN ISO 14040:2021 and DIN EN ISO 14044:2021.

Source: International Copper Association 2019, Aurubis LCA 2021

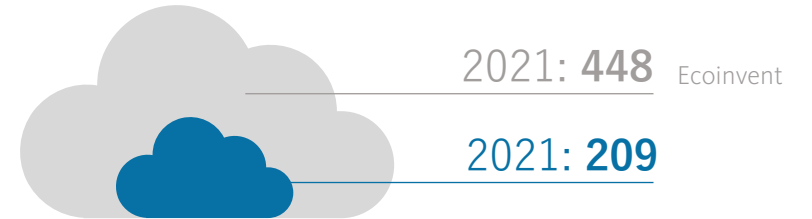
Tin

in kg CO₂ eq./t



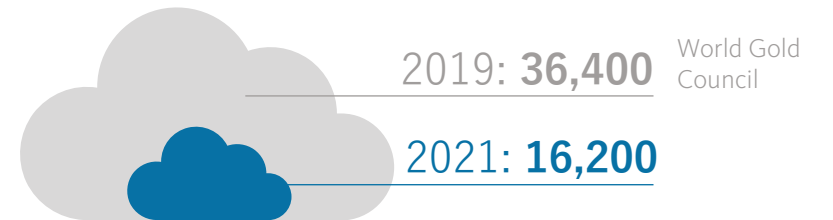
Silver

in kg CO₂ eq./kg



Gold

in kg CO₂ eq./kg



➤ Aurubis continuously pursues better energy efficiency: lowering costs, improving CO₂ footprint

The Copper Mark certification demonstrates our leadership in sustainable production practices



The Copper Mark launched for copper producers in March 2020



Focus on steady improvement of the sector's production practices



Aurubis Olen certification expected shortly



Basis:
UN SDGs & Risk Readiness Assessment



Joint Due Diligence Standard enables effective due diligence



Review of
32 sustainability criteria



Aurubis Bulgaria, Hamburg, and Lünen already certified for meeting The Copper Mark's requirements



The copper value chain can be sustainable – promoting and driving this industry initiative demonstrates our responsibility and growing momentum for a more sustainable product.



RESPONSIBLY
PRODUCED
COPPER

Global cooperation is key – working with partners in the copper value chain to accelerate the adoption of sustainable practices



MoU with Anglo American – November 2022

Companies joining forces to accelerate sustainability assurances on how copper is mined, processed, transported, and brought to market

Joint exploration of technology-driven solutions for greater transparency throughout the copper production cycle, in line with responsible metal sourcing standards of the London Metal Exchange

Collaboration kickstarted, focusing on enhancing ESG data transparency & tackling decarbonization

First outcomes include joint participation in the Chain of Custody Standard of the Copper Mark



MoU with Codelco – January 2023

Companies committed to building a more sustainable, responsible, and growing copper industry and value chain

Potential areas of cooperation include smelter operations and circular projects in Chile

Accord stipulates concerted effort to promote the Copper Mark

Collaboration started, focusing initially on improving smelter operation and enabling a dialogue among employees

4

Sustainability

» Decarbonization projects

Roland Harings, CEO

 **Aurubis**



Using ammonia as carbon-neutral fuel in rod products



Getting ready for a hydrogen economy: first use of [ammonia](#) as a carbon-neutral fuel in Hamburg rod plant



First test campaigns, on [industrial scale to date](#), validated potential of ammonia as alternative fuel for cathode shaft furnace; implications for production processes now under evaluation



Next steps: checking outcomes in terms of product quality, production efficiency, and build-up of [energy supply chains with low carbon footprint](#), as well as different concentrations of ammonia used

» We are investigating and driving the use of alternative, carbon-neutral fuels to achieve environmental and cost benefits.



Using Ultra High Temperature Hydrolysis (UHTH) to lower costs and fossil fuel usage



Pilot plant for a **hydrolysis process** using organic-rich recycling materials (i.e., PCBs, shredder material) to **extract synthetic gas**



Tests showed up to **50 % of carbon** extraction and utilization in synthetic gas, which replaces natural gas



Pilot plant close to commissioning, which will use the UHTH process to extract synthetic gas from organic-rich materials at the Lünen site



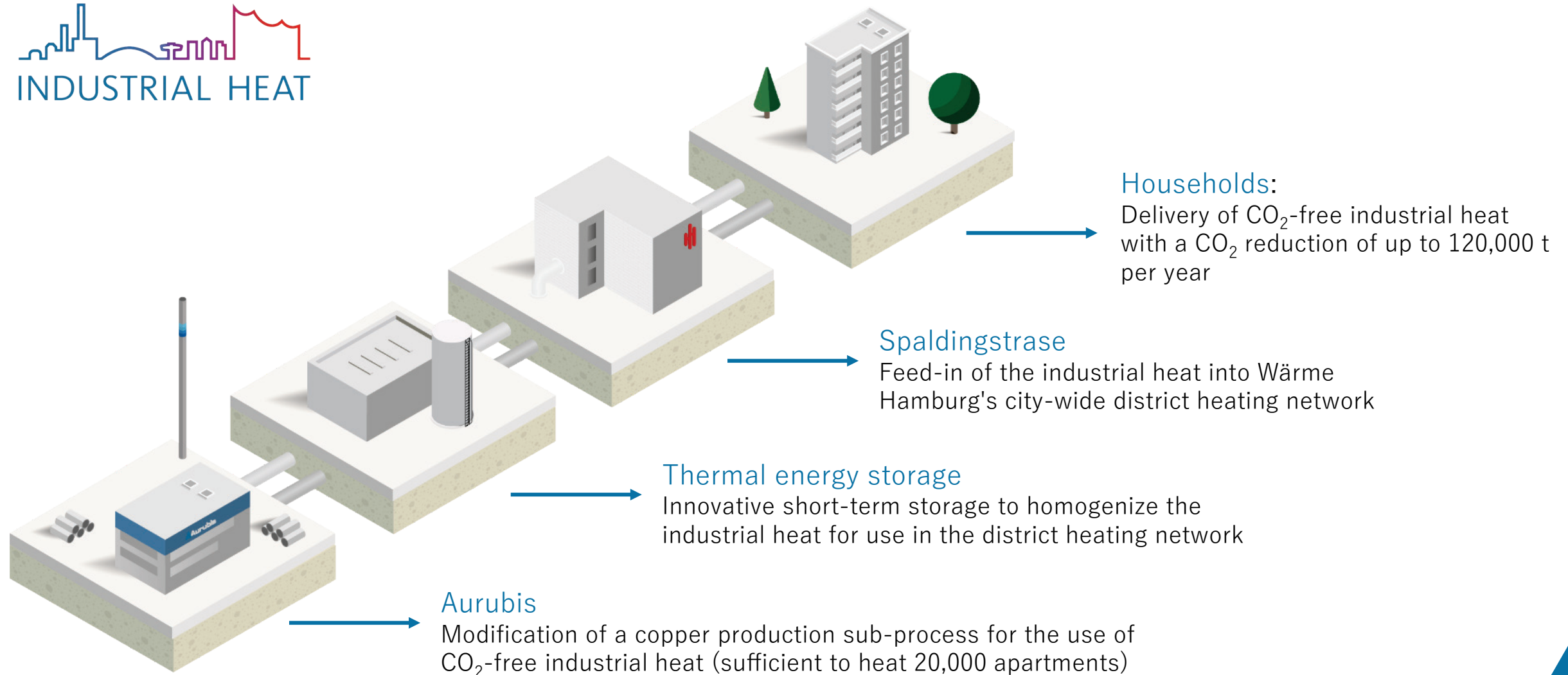
The **hydrolysis** process therefore has the potential to significantly **reduce external sourcing of natural gas, thereby lowering CO₂ emissions and energy costs.**



We aim to reduce both the use of fossil fuels and costs by investigating and using alternative production processes.



Win-win project reduces our carbon footprint and makes Aurubis a highly valuable source for sustainable district heat supply



Monetizing its industrial heat, Aurubis strengthens its symbiotic partnership with the city of Hamburg



Project generates carbon savings potential of up to **20,000 t of CO₂ p.a. for Hamburg**; Aurubis' follow-up project with remaining industrial heating potential will lead to even higher **carbon reduction of 100,000 t p.a.**



Industry Leadership in Sustainability

Existing project supplies heat (as industrial by-product) to [Hamburg's HafenCity East](#) district, running successfully with [enercity](#) since 2018

Follow-up project helps the city of Hamburg to achieve its [climate goals](#) and supports Aurubis' [sustainability ambition](#) by further reducing our carbon footprint

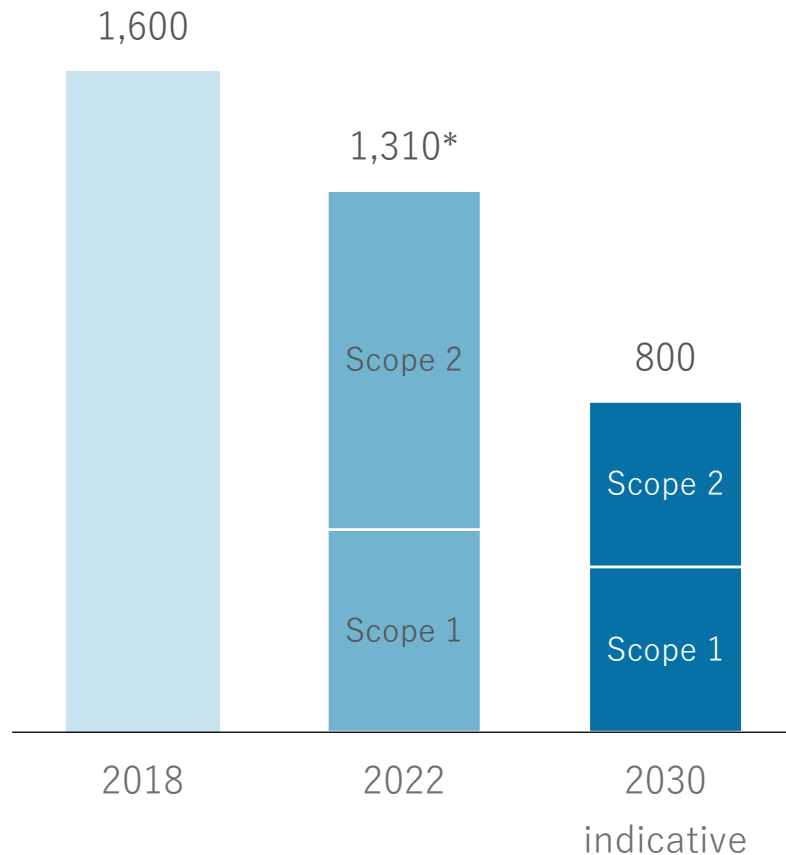
Cost efficiency and project profitability achieved through [funding](#) from the German Federal Ministry for Economic Affairs and Energy and revenues from heat sales to [Wärme Hamburg GmbH](#)

» Our industrial heating delivers sustainable heat and will more than halve CO₂ emissions of the city of Hamburg by 2030.

Achieving results: Using multiple technologies at our sites to decarbonize our production

Scope 1+2 CO₂ emissions

Absolute Scope 1+2 CO₂ emissions (in kt)



* Preliminary figures

Identified further potential for reducing our Scope 1+2 CO₂ emissions

Scope 2



Purchasing electricity from renewable sources, e.g., using new PPAs



Internal production of electricity from renewable sources



Energy efficiency measures

Scope 1



Use of alternative energy sources (i.e., hydrogen, ammonia)



Further electrification of production processes



Energy efficiency measures

5

Battery Recycling

Ken Nagayama, Head of Business Development
Battery Materials



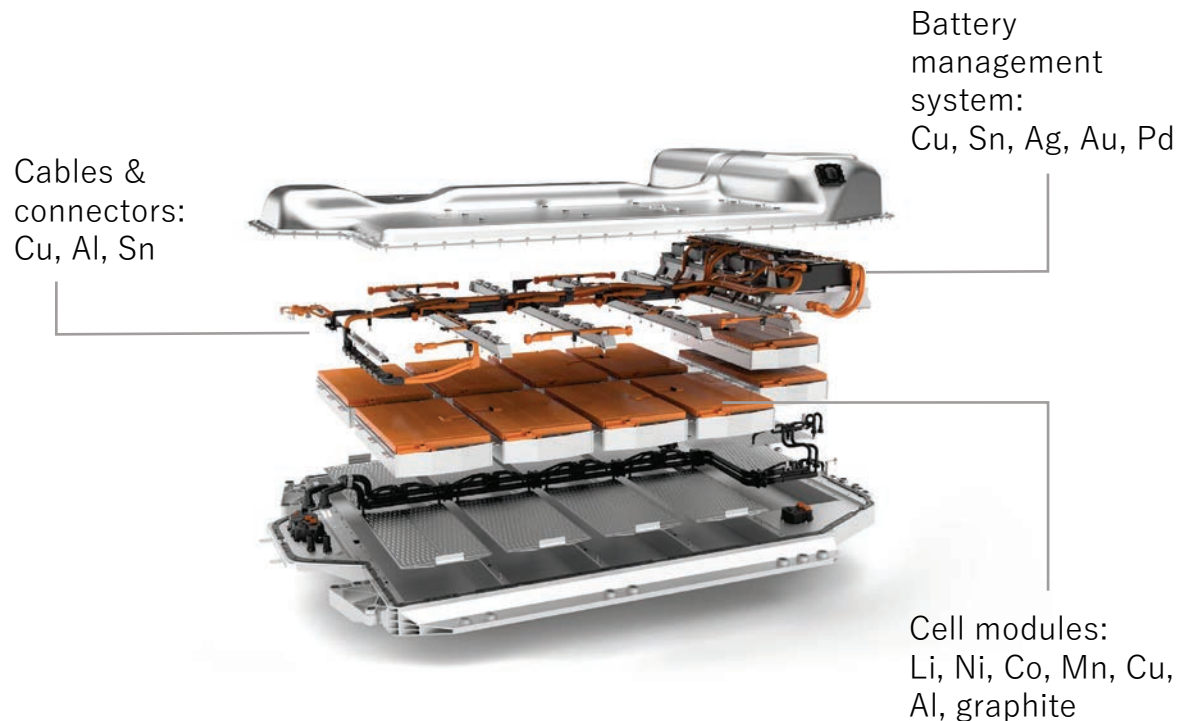
Battery Recycling

Video



Lithium-ion batteries – exceptional value hidden in complex products, complex recycling material

Batteries are complex scraps that are of huge value

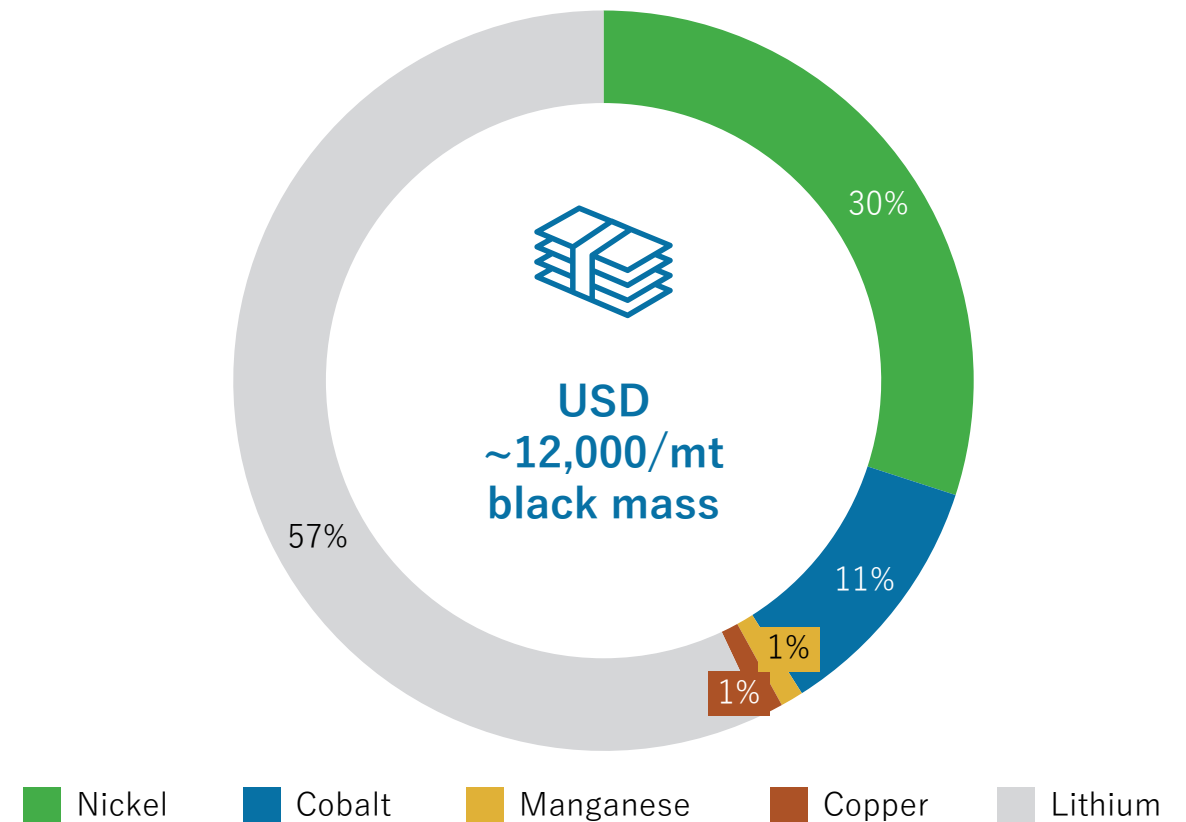


➤ Average black mass content: ~40 %

Source: BMW Group

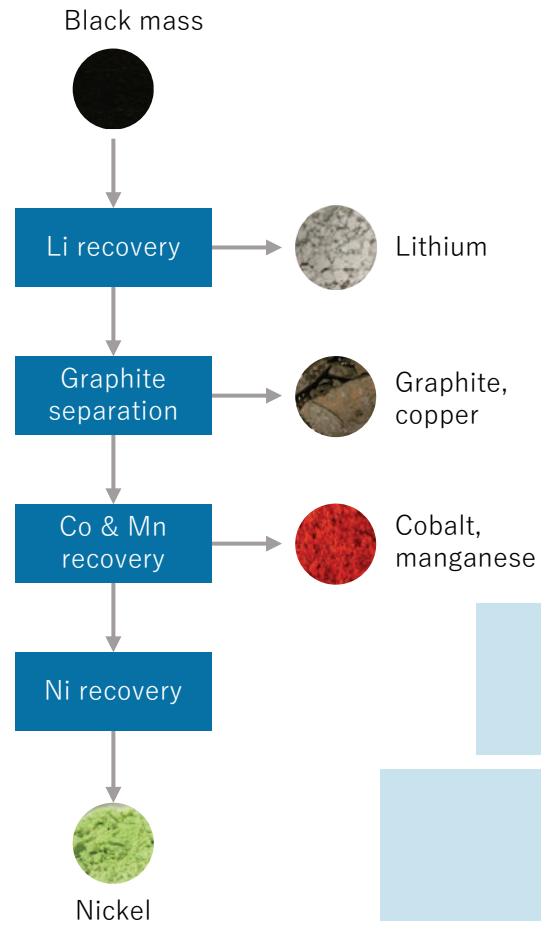
Aurubis / Capital Market Day 2023

As the metal value in black mass is very high, capabilities to recover the value are essential



Source: Aurubis, Roland Berger, LME

Our innovative process for black mass leverages capabilities of our integrated smelter network



Benefits of the unique Aurubis process

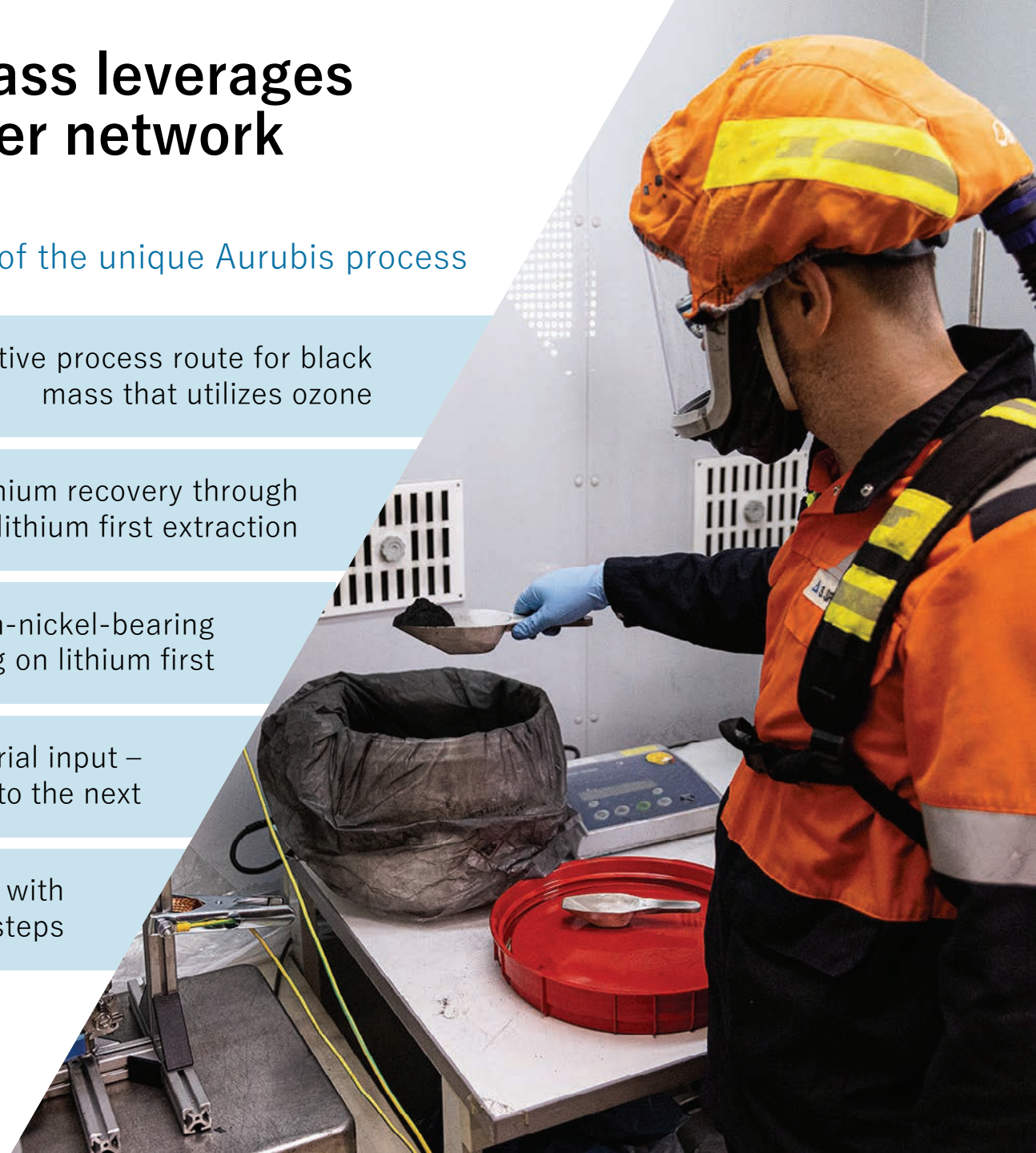
Innovative process route for black mass that utilizes ozone

High lithium recovery through lithium first extraction

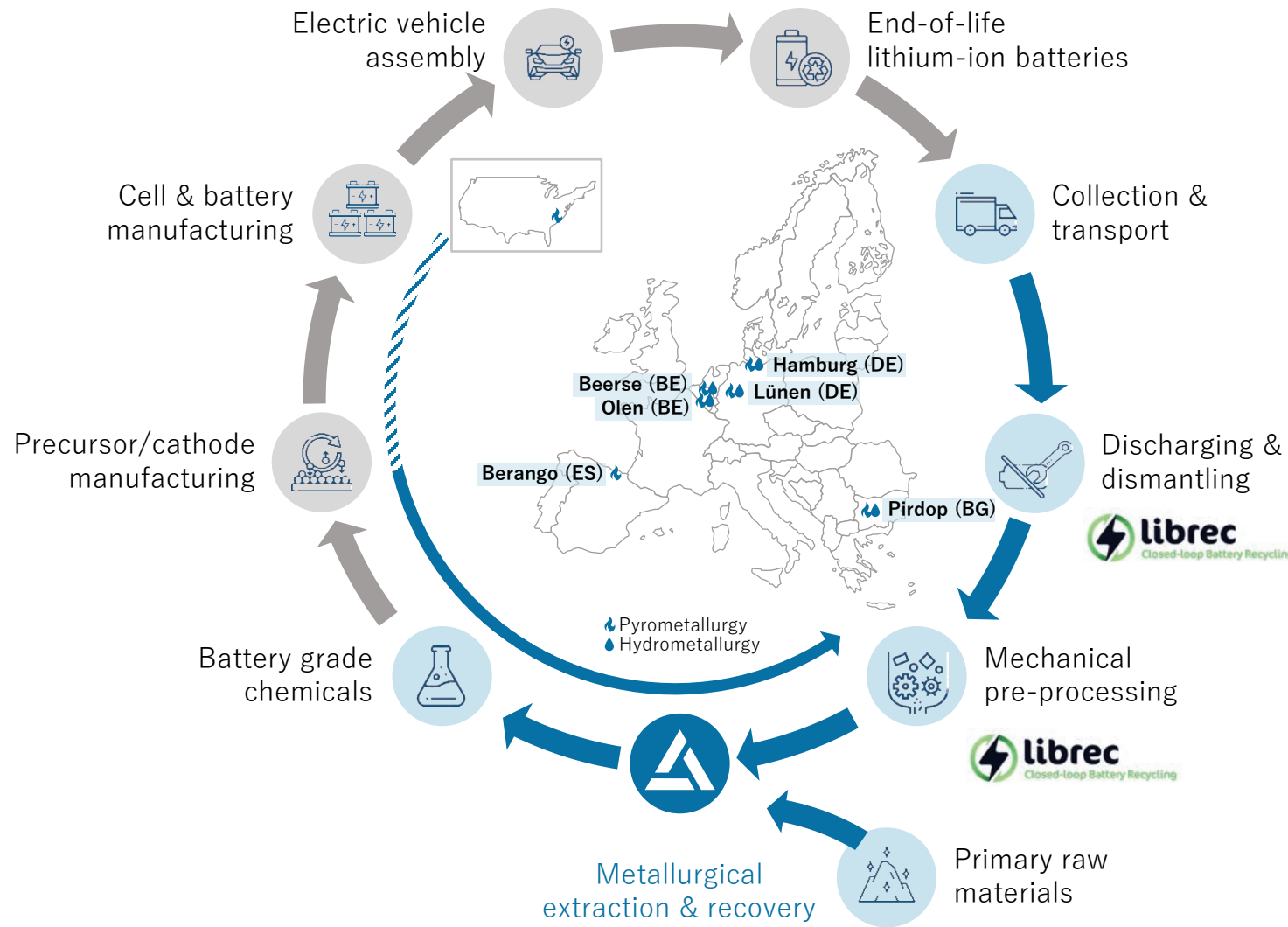
Ability to process non-nickel-bearing black mass by focusing on lithium first

Flexibility regarding raw material input – no recycling material is identical to the next

Modularity – compatible with further refining steps



Our sweet spot in the battery recycling value chain is based on Aurubis' core expertise



We are developing a fully-fledged battery recycling supply and value chain

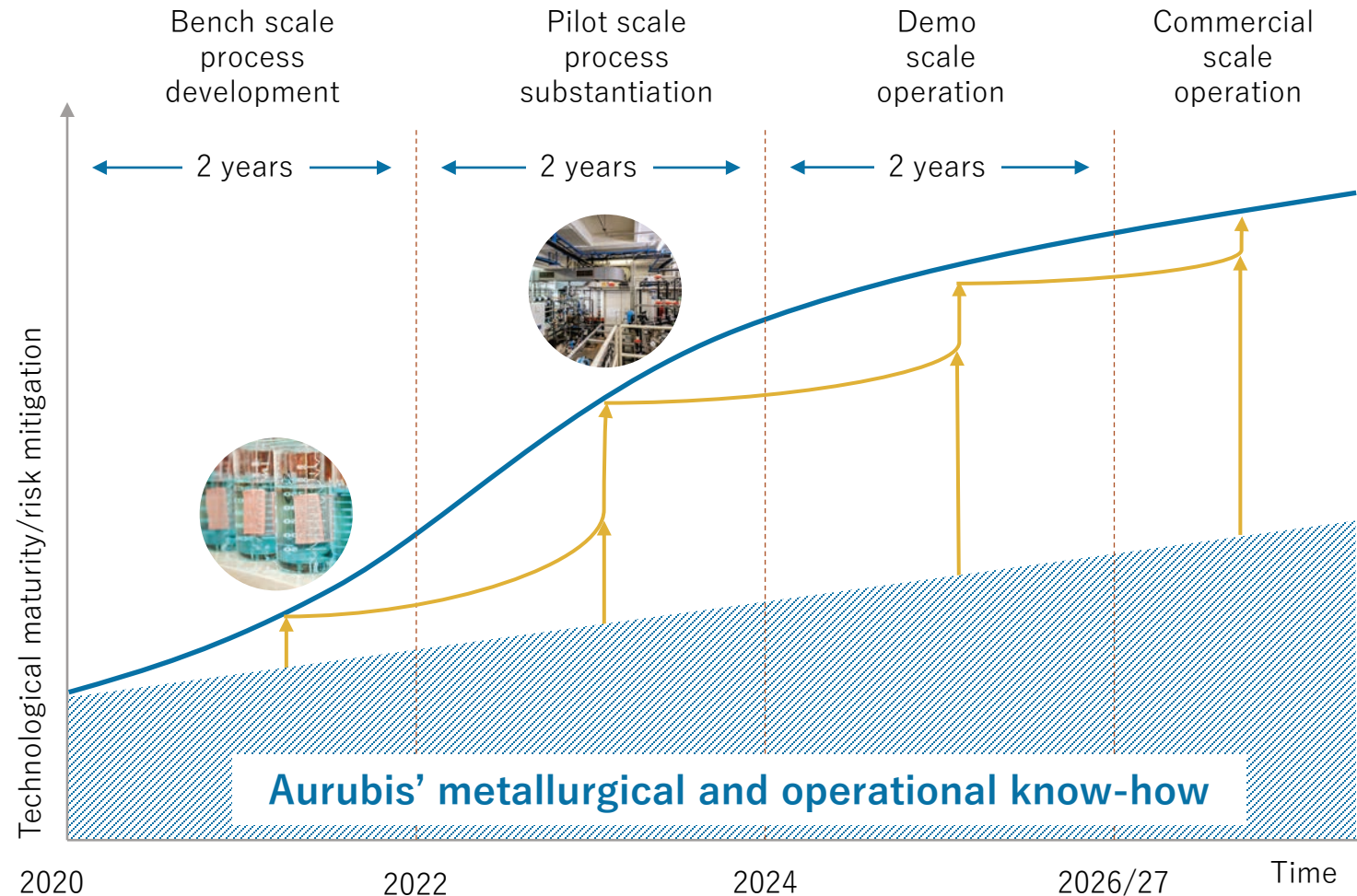
First steps taken with Librec, a specialist company in Switzerland, to optimize metallurgy vis-à-vis pretreatment

Further existing partners with core expertise in recycling to cover the production of black mass

Aurubis' integrated smelter network offers unique benefits

Downstream: intensive partnership discussions with experts in chemicals production to close the loop in battery metals

Fast-tracked process development underpinned by metallurgical and operational know-how means we can outpace other players



Pairing speed and discipline with a metallurgical edge

Deep metallurgical understanding from our smelter network laid the foundation for a new process

Vast experience and metallurgical know-how meant that process development didn't start from scratch

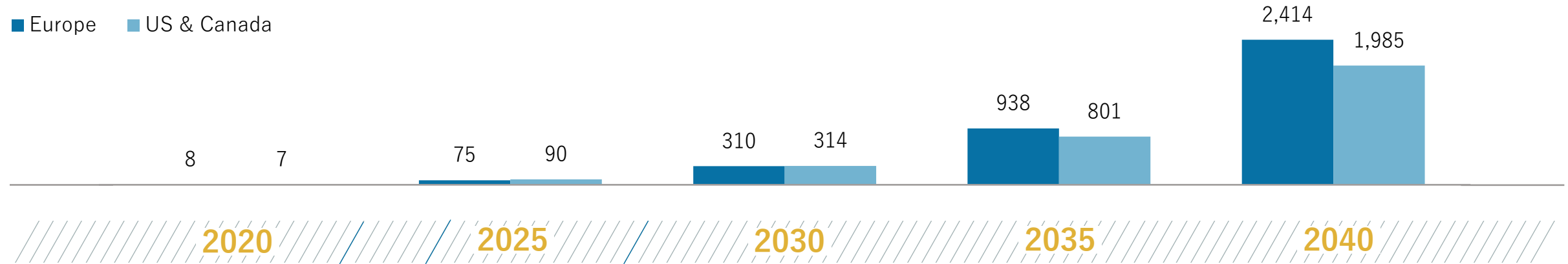
Fast-tracked technology development within a period of 5–6 years enables market entry just when solutions are required

Leveraging existing know-how to deliver robust and reliable solutions

In line with projected market growth, Aurubis could enter the commercial market in the second half of this decade

Regional supply of black mass for recycling (in kt)

■ Europe ■ US & Canada



2020

2025

2030

2035

2040

Further pilot test work campaigns (pilot & demo)

Engineering & construction

Commissioning & operation

Feasibility study

First commercial activities with demo plant in 2024

Start of commissioning commercial plant in 2026/27

Criteria for site selection of commercial plant determined; site selection process is underway as we speak

Demo plant will already deliver output on a small commercial scale, enabling build-up of market know-how and reputation

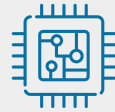
Industrial scale commercialization foreseen for 2026/27

Source: Rhomotion, Q2 2023

Beyond the market hype – our advanced approach to market entry



Battery recycling will be crucial source for EV battery raw materials in the future. Recycling, at first, will not satisfy entire future demand, but can provide sizeable contribution to raw materials needed in later stages – representing key growth opportunity for Aurubis



Our technology leadership in metallurgy, integrated smelter network, and existing material flows covering most non-ferrous metals mean Aurubis has all prerequisites and capabilities for successful battery recycling business



Battery recycling would not only allow us to benefit from our integrated smelter network, but would also strengthen the network, further optimizing core business



Diligence and robust test work are hallmarks of our process development, ensuring technology readiness and resilience upon market entry.



Management decisions to enter this market will be made with a clear focus on profitable, sustainable growth and based on a disciplined stage-gate process, fulfilling the required KPIs.



We are ready and well prepared to capture profitable growth opportunities in the battery recycling market.

6

Financials

Rainer Verhoeven, CFO



Structural growth boosts investment proposition

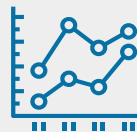
1

Track record of translating operating EBT into strong net cash flow



2

Debt-free balance sheet forms basis for strategic growth



3

Growth projects financed by robust net cash flow and up to 3x EBITDA debt capacity



4

EBITDA contribution from eight strategic investments to over-compensate expenses by 2030 and improving margins make our earnings more robust while earning a premium on the WACC even during the ramp-up phase



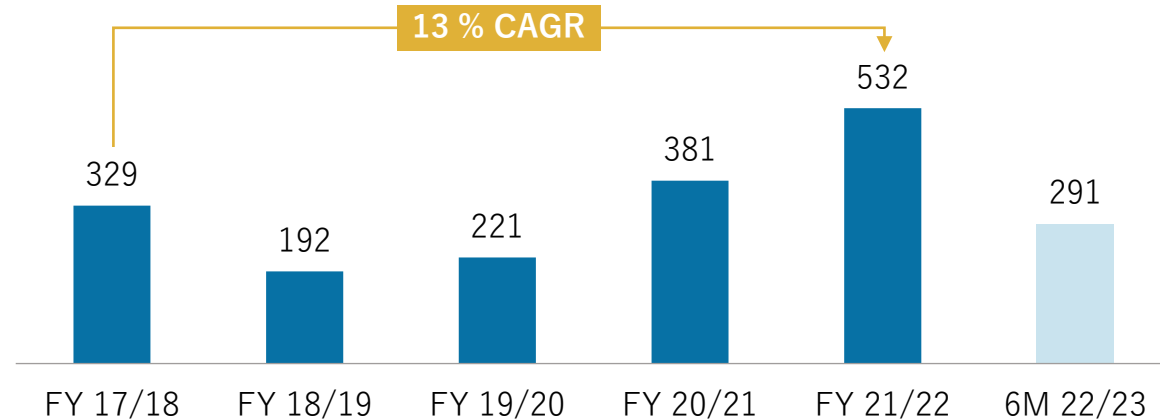
5

Shareholders participate in value creation through balanced capital allocation: accelerated organic growth and bolt-on M&A in profitable areas in and around our core business – while driving sustainable growth



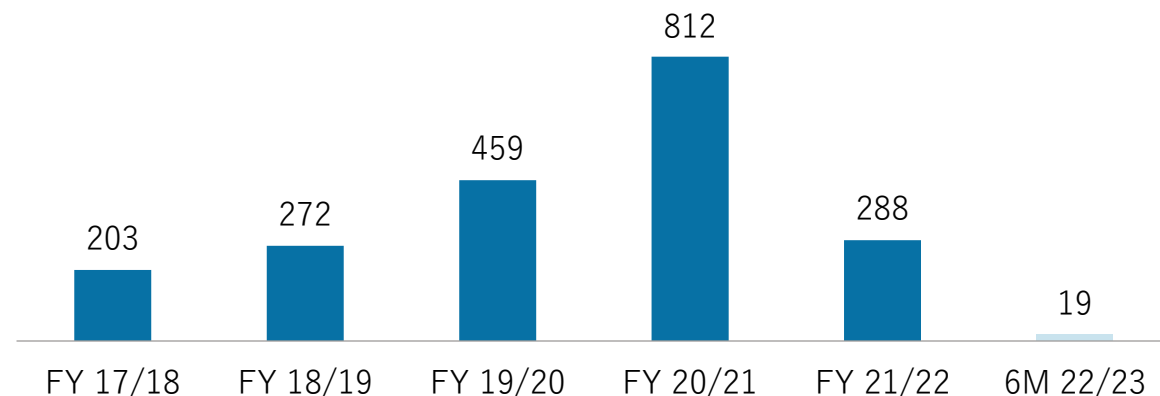
Proven ability to translate robust operating EBT into strong net cash flow as a result of strict financial management

Operating EBT (in € million)



- Proven robust earnings strength
- Consistently increased earnings over past 3–4 years
- High earnings quality due to strict financial management
- For 22/23 operating EBT expected between € 450–550 million

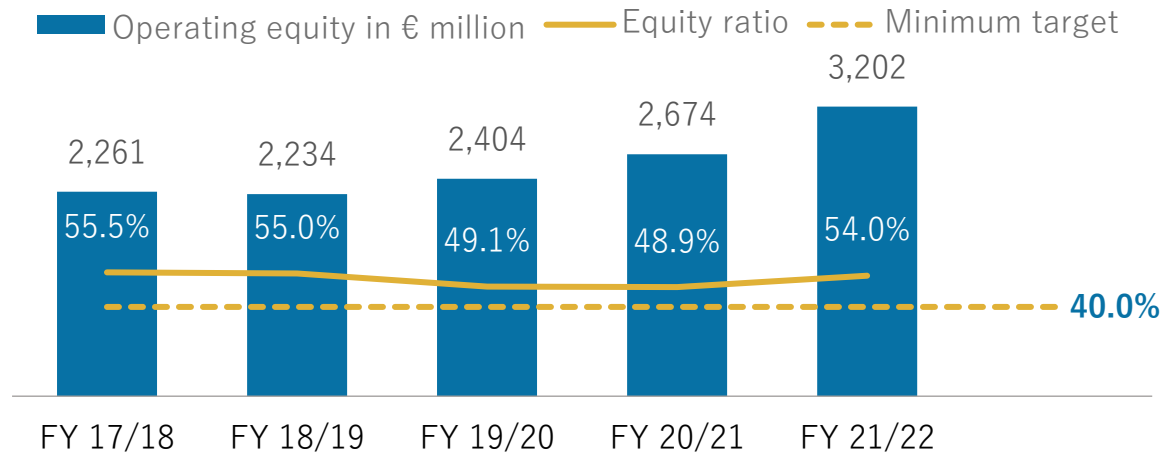
Net cash flow (in € million)



- Robust earnings successfully translated into significantly increasing net cash flow over past years
- Conscientious use of funds
- Metallo acquisition (€ 380 million) largely funded from cash flow, with significant related debt repayment in FY 21/22
- Past 6 months impacted by inventory build-up ahead of scheduled maintenance shutdown

Extraordinary balance sheet strength forms basis for strategic growth

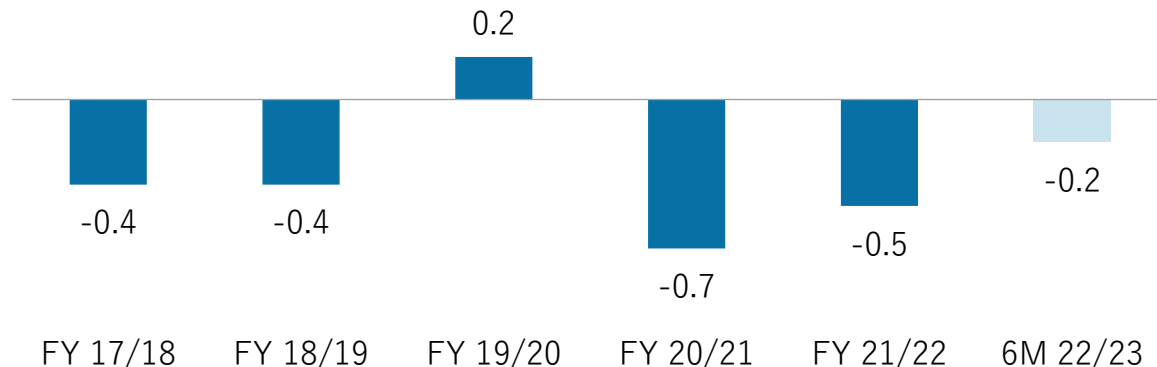
Operating equity ratio



- Strong equity position is solid foundation for strategic growth
- Track record of keeping equity ratio above 40 % threshold, even in the year of the Metallo acquisition
- Sound equity ratio provides some headroom for gearing
- Based on our current planning, our equity ratio will always remain above 45 %

Debt coverage

Net financial liabilities / rolling EBITDA last 4 quarters



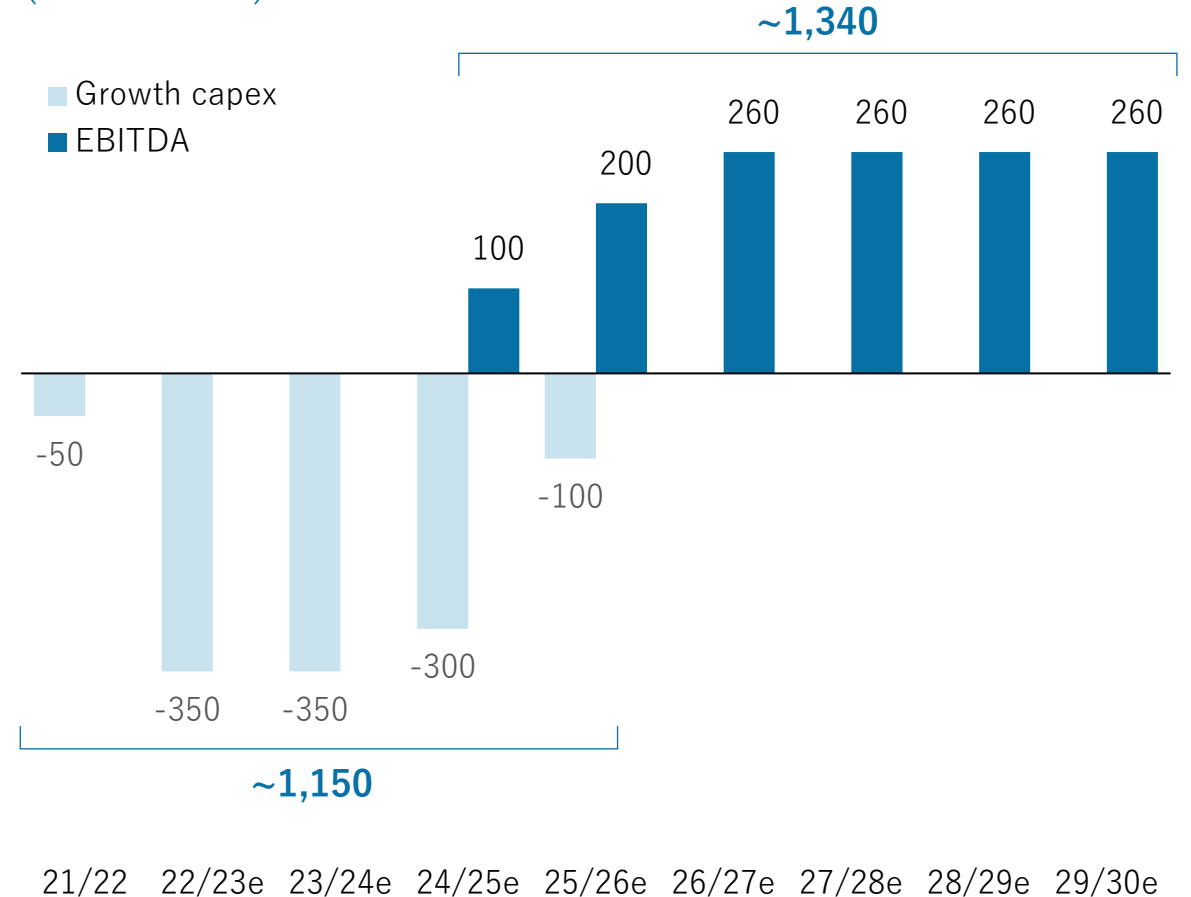
- Strong cash flow and equity position led to a positive net financial position on the balance sheet
- Balance sheet forms the basis on which attractive growth options can be financed largely from own resources
- Potential for accelerated organic growth via bolt-on acquisitions, if attractive
- Based on our current planning, debt coverage will always remain well below 1x

Accumulated EBITDA to rapidly overcompensate investments

Growth investments to be translated into profits

- Investing around € 1.1 billion in strategic growth options
- Rapid payback: accumulated EBITDA of € 1.3 billion overcompensates investments as soon as 2030
- Projects will be financed largely from own resources; current debt coverage offers additional headroom
- Balance sheet to become highly supportive for our EBITDA growth ambitions

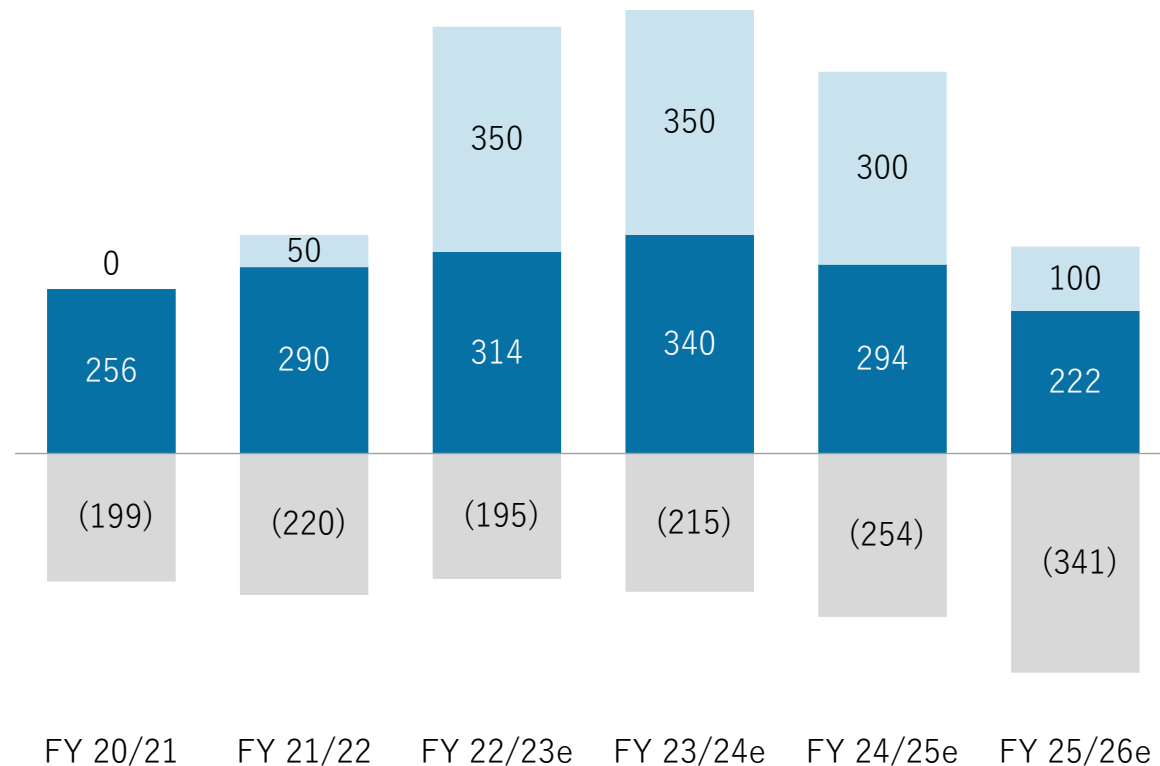
Capex & EBITDA contribution from 8 strategic projects (in € million)



Outflows from current project pipeline expected to peak in 2023/24

Capex planning broken down into baseline and strategic (in € million)

■ Baseline capex ■ Strategic capex ■ Depreciation



Investment horizon of the Group

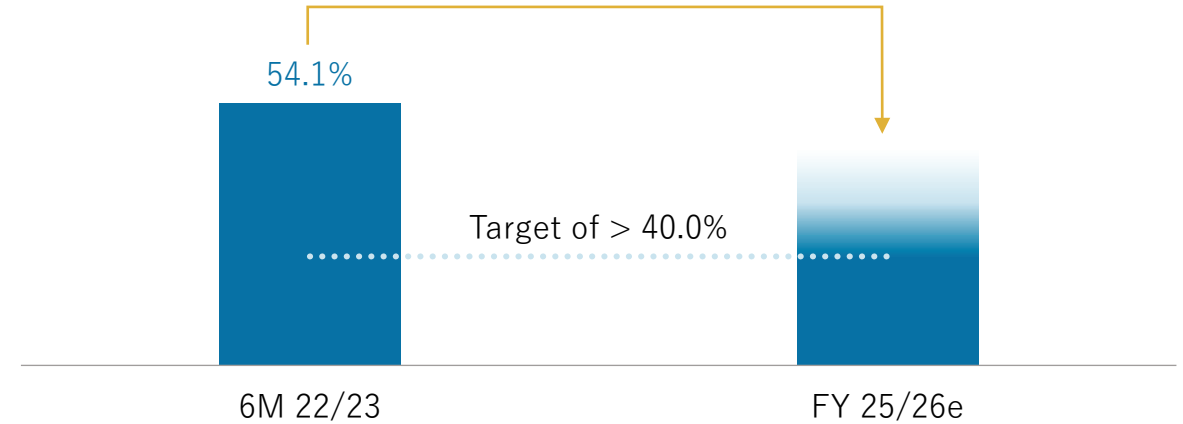
- The planned maintenance schedule of the two primary smelters in Hamburg and Pirdop will change from planned maintenance every two years to a three-year cycle from FY 2025/26 onwards
- Depreciation will start substantially impacting the P&L after FY 2025/26, but all projects are accretive to P&L
- Total fixed assets expected to reach around € 3.5 billion by 2025/26

Balance sheet with slightly higher gearing during ramp-up phase

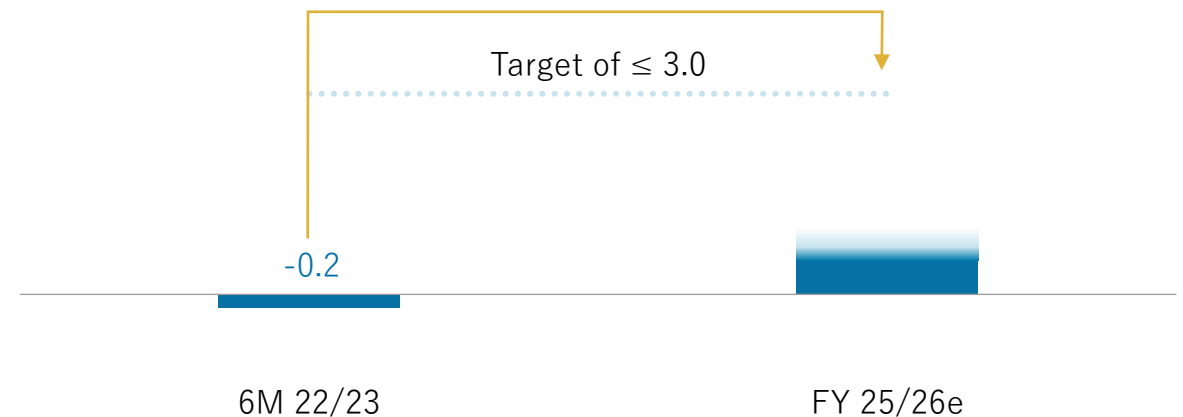
Solid financials as basis for profitable growth

- Strong balance sheet and headroom towards targeted equity ratio (>40 %) as enabler for growth
- During the ramp-up of strategic projects, balance sheet likely to be geared with some financial debt
- Long-term and beyond 2025/26, debt-free balance sheet clearly offers further headroom towards targeted debt coverage¹ ($\leq 3.0x$), which provides additional financing capacity of up € 1.5 to 1.8 billion

Equity ratio



Debt coverage



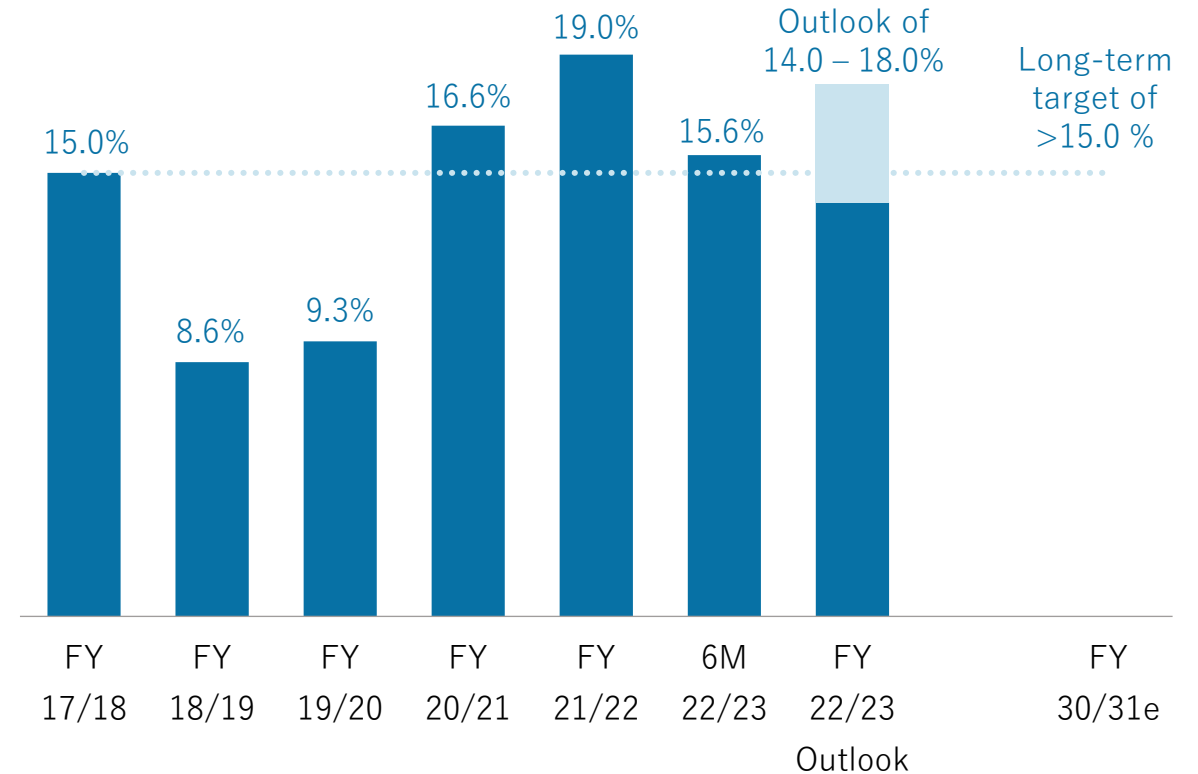
1) Net financial liabilities / rolling EBITDA last 4 quarters

Shareholders to benefit from growth strategy with consistently high profitability

Operating ROCE remains one of our most important financial KPIs

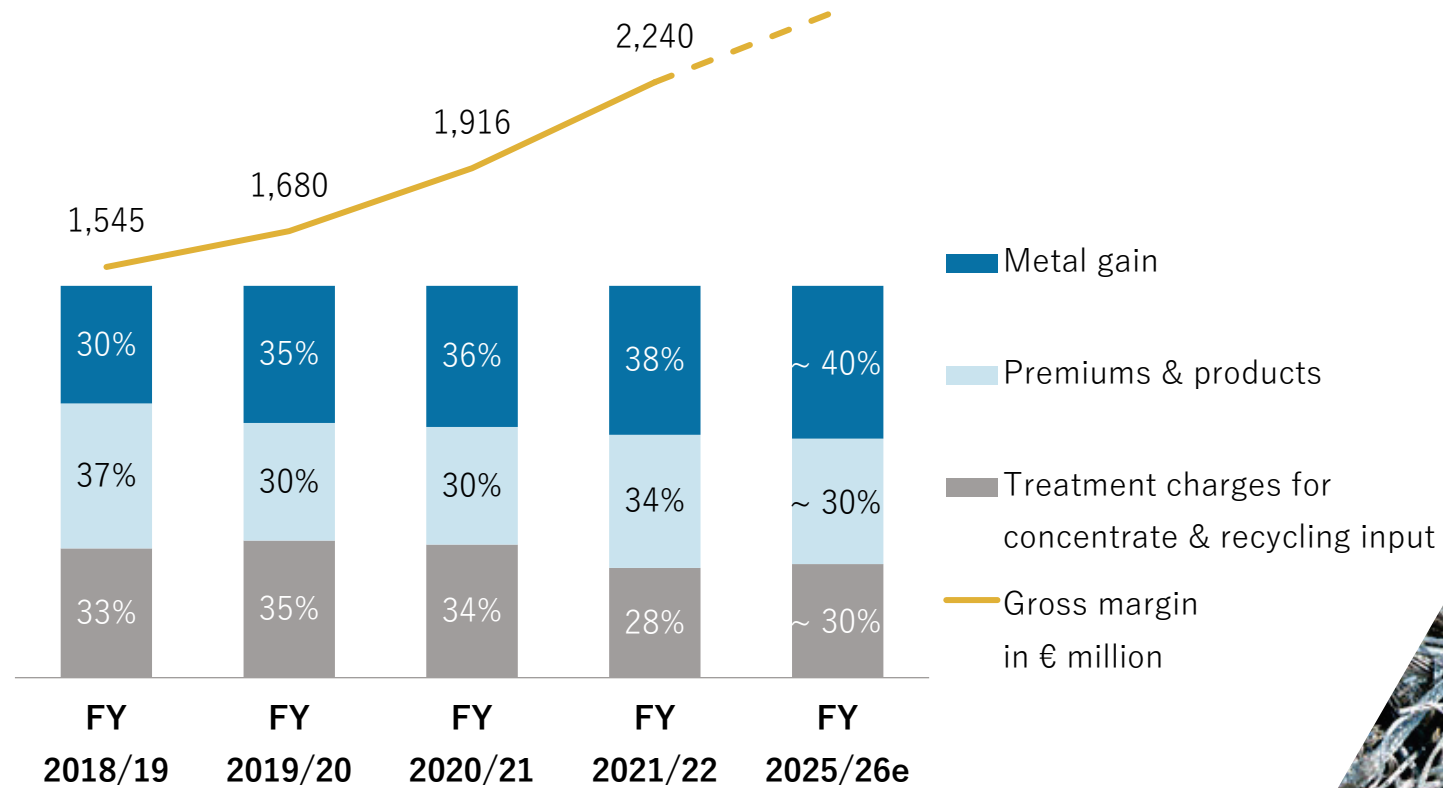
- Confirming our ROCE target of at least 15 % after completion of the ramp-up phase
- In the long term, the strategic growth projects will have a positive contribution to our ROCE target
- Earning a premium on the weighted cost of capital (WACC) even during the ramp-up phase of the strategic projects

Operating ROCE



Increased gross margin supported by balanced portfolio

Breakdown of income components in the Aurubis Group

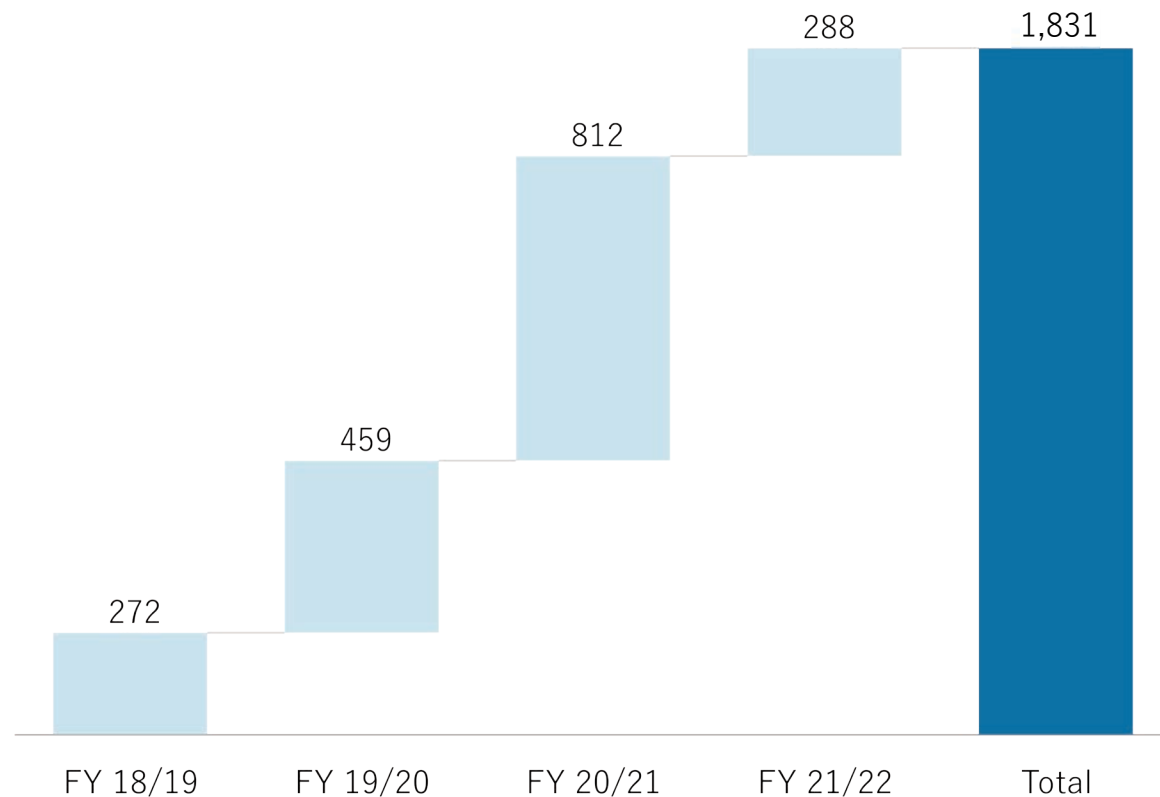


* Gross margin = Total of earnings components metal gain, treatment charges for concentrate & recycling input, and premiums & products

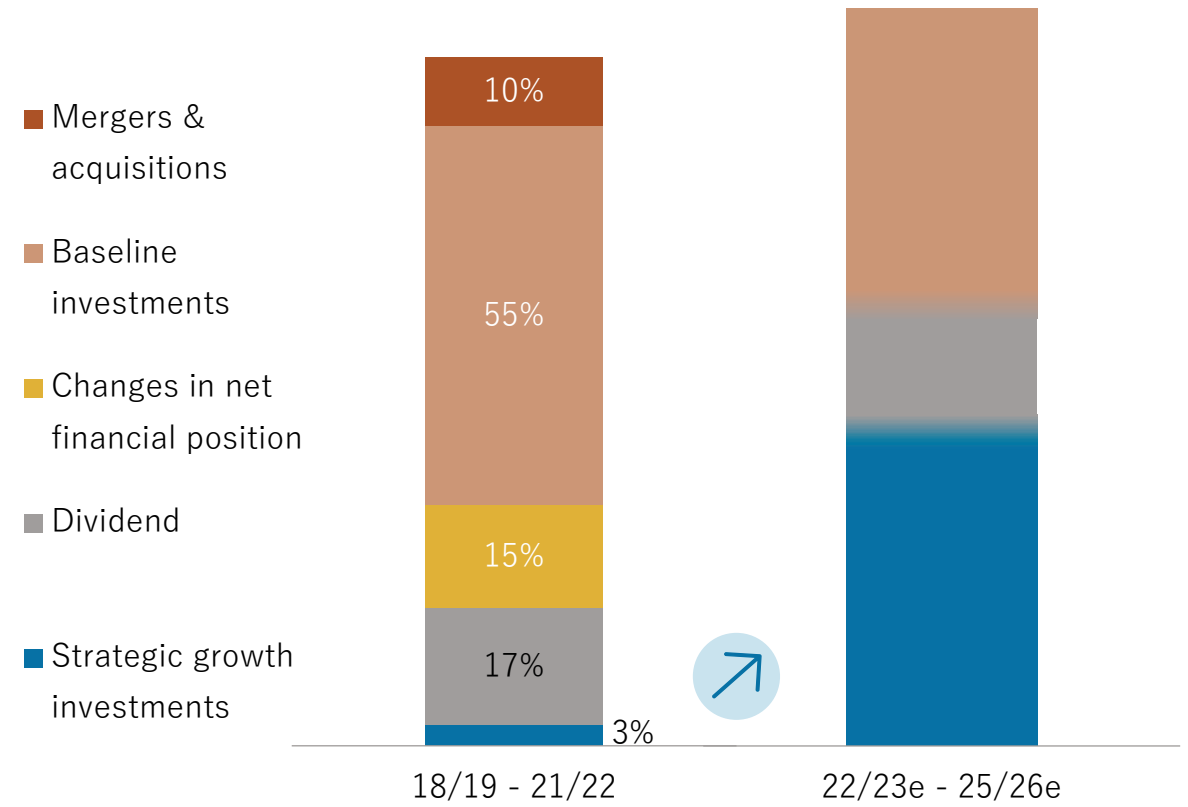


Capital allocation will focus substantially on strategic growth investments

Net cash flow
(in € million)



Capital allocation



FY 2022/23 guidance confirmed

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

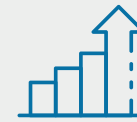
Transparent KPIs enable sustainable profitable growth and long-term value creation



Robust earnings power generates strong cash flows – used to further strengthen our balance sheet



Strong balance sheet structure and healthy gross margins create foundation for financing attractive growth projects largely from own resources and the existing debt capacity



As soon as 2030, accumulated EBITDA from growth projects expected to exceed their investment volume



Operating ROCE target of at least 15 % after completion of ramp-up phase confirmed

Earning a premium on the cost of capital (WACC) even during ramp-up phase of strategic projects



Improved gross margins resulting from strategic investments make our earnings more robust against external factors



Continued value generation for shareholders through attractive capital allocation policy

7

Q&A Session

 **Aurubis**



8

Outlook

Roland Harings, CEO

 **Aurubis**



Growth strategy confirmed: 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)

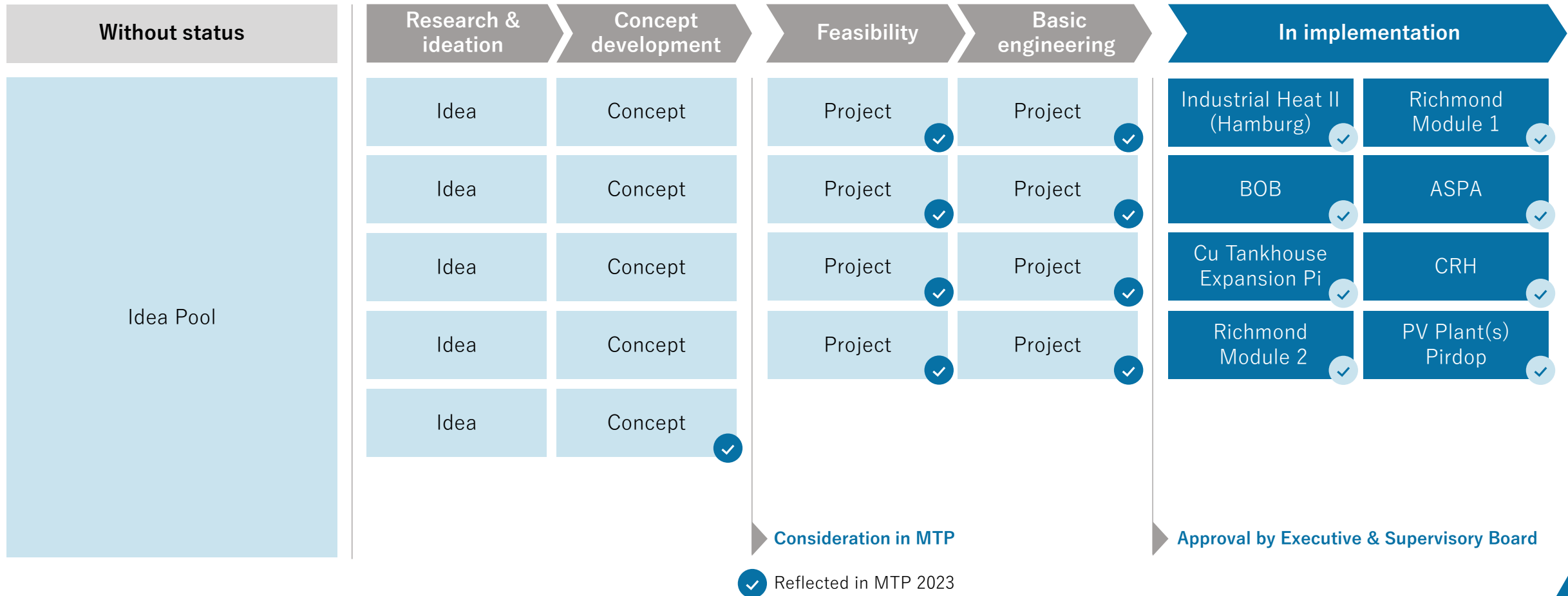
- **Growth capex ~€ 280 million** is included in the medium-term planning
- **EBITDA ~€ 70 million** in addition from planned strategic projects
- Additional strategic projects, e.g., **the modular recycling system (€ 250–300 million capex)/battery recycling**, not yet included but actively pursued

Long term Until 2030

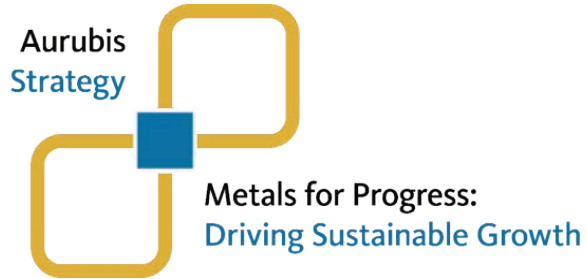
- **Ambition and scale of our long-term growth and project plans** remain at a high level
- All capex projects are subject to a **sustainability assessment** (especially CO₂ contribution)
- **Battery recycling remains a priority growth area**

Strong pipeline features advanced projects included in medium-term planning, plus wealth of nascent concepts to drive sustainable growth

Strategic projects from development to implementation



Aurubis accelerates sustainable growth



Global supplier of non-ferrous metals **essential for the transformation towards a more sustainable global economy**

World's most efficient and sustainable smelter network

Clear focus on **accelerated, organic, and profitable growth** in our established business areas plus growth potential in adjacent areas

Investment projects create value-add synergies with our existing processes and contribute positively to our operating return on capital employed (ROCE) of at least 15 %, while supporting sustainability goals

Aim to **cover our cost of capital over the cycle, with expectation for ROCE to exceed our WACC also during the investment phase**

Adopting and promoting a circular economy in Europe by continuously optimizing our material flows to reduce waste streams, pursuing decarbonization projects at all our sites to become **carbon-neutral well before 2050**

Pursuing **balanced capital allocation** allowing for self-financed growth and an appropriate dividend, thereby creating shareholder value

Aurubis CMD 2023

Capital Market Day

London, June 13

