# Business & strategic update

March 2025

BEFESA



## Agenda

## **Executive Summary**

**Current Trading** 

Resiliency

**USA** operations

China operations

Business Plan

**Growth Strategy** 



## **Executive Summary**



FY24 Adj. EBITDA at €213m, 17% YoY, within the previous guidance range of €205-235m Strong Operating Cash in FY24 up 30% driven by solid cash conversion Leverage of x2.9 at Dec24. Below initial target of x3.0, and below x3.4 in Q3'24



Recycling operations in US improving profitability as planned
Zinc refining focus on cost reduction. Negative contribution of -€15m in FY24.



China operations at break-even

Expansion plan in China stop, until market conditions improve



For 2025 expecting strong double-digit EBITDA growth

Target **leverage** between **x2.0** and **x2.5** over the investment period

Total Capex of €100m over the next years



**Growth capex** to focus on **Palmerton** and **Bernburg**: low risk projects

Steel dust and Salt Slags in Europe to be executed once market is ready and leverage reduced.

Expecting €300m EBITDA by 2028/29

## **Key highlights**

FY24A



Resiliency



USA



#### €213 Full year EBITDA within the initial guidance range of €195-235m despite challenging macro situation

- It represents +17% EBITDA growth year on year
  - All-time-high quarterly EBITDA in Q4 24 at €62m
  - Strong volume and higher blended price in steel, partially offset by depressed average metal margin in 2<sup>nd</sup> alu
- Leverage at Dec24 stood at x2.9, meeting the target for this period of below x3.0, and significantly, improving from Q3 of x3.4
- Expecting strong double-digit growth in FY25 EBITDA vs. 2024
  - (+) Better hedging, higher volume in steel dust in the US, lower cost in zinc refining in the US, lower coke price in the US
  - · (-) Partially offset by higher inflation and (potentially) pressure on aluminium metal margin
  - (+/-) Combination of LME zinc price and TC to be determined
- Expecting FY25 leverage to continue further reduction below x2.5
  - · Improved earnings, capital allocation discipline

#### Unique business model with high barriers to entry resulting in high margins over time and strong performance through the cycle

- Strategically located plants near customers and long-term service relationships providing high barriers to entry
- Proven track record of resilience through cycles and volatile commodity environments, driven by a resilient service-focused business model and a prudent financial policy
  - Despite Befesa being part of the value chain of cyclical industries like steel, zinc, and aluminium, its business model
  - Solid volume from EAF steel customers (most stable steel producers)
  - Stable service fee and long-term relationship with customers
- Zinc price exposure managed through hedging policy consistently and rigorously applied for the last 20+ years
  - Zinc is a very "rational" commodity driven by supply demand fundamentals
  - C90 growing at 6% CAGR over the last 15 years, consistently acting as a solid floor of the zinc price
- >75% of total company EBITDA and free cashflow from high-margin segments
  - Europe steel dust & salt slags representing today
  - >35% EBITDA margin sustained over time regardless of commodity prices

#### Operational improvement of recycling assets on plan, ready to capture market growth. Stabilizing refining plant

- Steel dust recycling operations increasing efficiency according to initial plan based on operational synergies and best practices
  - Resulting in an increase of EBITDA/ton of 63%, from €70 in FY21 to €114 in FY24, despite current persistent high coke price in US
- Palmerton refurbishment (expansion and modernization of plant) as planned to capture the growth of the US market: 1st kiln in operation Q4 2024, 2<sup>nd</sup> kiln H1 2025
  - 60kt incremental EAF dust already contracted from existing EAF customers for 2025
  - Targeting **70-75% utilization by 2025** and close to 90% by 2026/27 (from current >65%)
- Turnaround plan for zinc refining plant (acquired in Q3 2022 for \$47m) in the final stage with the focus on cost reduction
  - 3-stage plan: 1) quality improvement, 2) increase in utilization and 3) cost optimization
  - Reducing €15-20m cost base, on an annual basis from key areas: personnel, maintenance, residue treatment, operations and supply chain
  - Plant has its own cyclicality, €5m (low cycle) vs. €15m (high cycle) EBITDA, depending on TC and zinc premiums dynamics
  - Negative contribution of -€15m in FY24. Targeting towards breakeven in 2025/26

## **Executive Summary 2/2**

### China



## Business Plan

## Growth Strategy



#### China focus on improving existing operations. Expansion plan stop

- Befesa invested in China in 2020 to capture the business opportunity that increased EAF steel and environmental regulation presented
  - Total capex invested €90m in two EAF dust recycling plants in the provinces of Jiangsu and Henan
- The real estate crisis in China is driving low utilization of EAF steel makers
  - 2024 is the 5th year with a double-digit decline
- Differences in EAF steel production and regulation enforcement between the two provinces drive performance
  - · Jiangsu is a tier 1 province with strong enforcement of the environmental regulation and high plant utilization and positive EBITDA
  - · Henan is a tier 2 province and utilization is expected to remain subdued for a while
- Befesa at 50% utilization rate and EBITDA break even, within two years of operations despite challenging market environment
- Investment plan in China on-hold for the coming years until a clear market recovery
  - Focus on operational improvement of existing facilities to improve utilization and generate positive free cashflow
  - Despite challenging short term, mid term opportunity in China remains very attractive: (1) increased EAF penetration and (2) stringent environmental regulation

#### 5-year Business Plan presented in CMD in November 2022 to be executed keeping leverage below x2.5

- Growth going forward maintaining leverage between x2.0 and x2.5
  - · Only committed capex is Palmerton and Bernburg expansion, which are ongoing and low risk projects
  - European projects (expansion of steel dust and new salt slags) to be executed considering leverage and market conditions
- China expansion plan stops until a recovery in the market is clear
  - China plants 3, 4 and 5 stop for the next years. If the market recovers, the expansion plan could be restarted fast
  - In the mid and long term, the opportunity in China remains attractive: more EAF + regulation
- Discipline in capital allocation, keeping total capex at €100m per year maximum
  - Maintenance capex around €40m per year. Growth capex around €60m prioritizing early cashflow generation projects
  - Focus on positive free cashflow generation
  - Maintaining dividend policy of 40-50% of net income as payout
- Expecting to achieve €300m EBITDA by 2028/29

#### Growth strategy driven by favourable mega trends of decarbonization, energy transition and environmental regulation

- The strategy of Befesa remains unchanged, focus on the two-core business
  - · Steel dust and salt slags recycling services to the steel and aluminium industries as well as secondary aluminium
  - · Ambition to become and maintain the global leading position in steel dust and salt slags recycling
  - Focus on the current markets, Europe, USA and Asia
- Favourable mega trends driven by decarbonization, energy transition and environmental regulation
  - · Decarbonization trend will drive shift towards electric arc furnace (EAF)
  - Increasing demand for metals coupled with resource scarcity leading to increasing importance of secondary metals
  - Strong focus on recycling and re-using promoting shift to more sustainable circular economies
  - Regulations getting stricter and expanding into new geographies to protect the environment
- Zinc and aluminum demand to grow driven by a transition to green energy as well as EV
  - Energy transition will increase zinc demand as renewable energies infrastructure require zinc
  - Transition to EV will drive aluminium demand as the auto industry looks for light-weight solutions to reduce their carbon footprint

## Agenda

## **Executive Summary**

## **Current Trading**

Resiliency

**USA** operations

China operations

Business Plan

**Growth Strategy** 



# Robust FY24 operating and financial results despite challenging macroeconomic environment



## 2024 Financial Highlights

- Adj. EBITDA FY24 at €213m, up 17%. All-time-high quarterly EBITDA in Q4 24 at €62m
- Strong Operating Cash in FY24 up 30% driven by solid cash conversion
- Leverage of x2.9 at Dec24. Below initial target of x3.0



## 2024 Business Highlights

- Solid EAF dust volume in Europe and US, despite weak steel sector overall
- High utilization in salt slags; 2<sup>nd</sup> Alu impacted by challenging auto industry in Europe
- Palmerton expansion as expected with 1<sup>st</sup> kiln already in operation
- China remains subdued



#### Outlook

- Expecting strong double-digit EBITDA growth and leverage below x2.5 for 2025
- Business plan and capital allocation to focus on de-leveraging and ongoing approved capex projects
- Growth capex to focus on Palmerton and Bernburg: low risk projects
- China expansion plan stop due to current market conditions

#### Revenue +5%

FY24A: €1,239m

€1,181m in FY23A

#### Adj. EBITDA +17%

FY24A: €213m

€182m in FY23A

#### Operating Cash Flow +30%

FY24A: €192m

€147m in FY23A

## **FY24 Steel Dust business highlights**

Strong Steel dust recycling operations in Europe and US partially offset by zinc refining contribution



- Steel production in Europe at 5-year low impacted by weak end-markets demand
- EAFD throughput remained stable in 2024, supported by solid deliveries from EAF steel customers and high plant utilization averaging 92% for the year



- Good utilization levels in the steel dust recycling plants around 70%, similar to previous quarters
- Operational improvement of recycling plants on track delivering higher EBITDA per ton (c.€115/t)
- US Zinc refining in final stage of turnaround with a focus on cost reduction.
   -€15m negative contribution in 2024

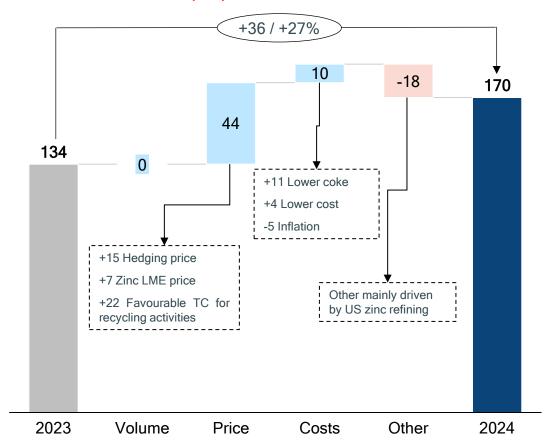


- Robust Q4'24 for EAFD throughput in Asia (Turkey & South Korea), reaching c.83% load factor - the highest since Q1'22
- Chinese plants continue running at utilization levels of 50%, impacted by weak EAF steel production

## **Steel Dust Recycling Services Financials**

Favourable blended price and TC, lower coke and energy price, partially offset by zinc refining in the US

#### EBITDA 2023 to 2024 (€m)



<sup>1</sup> Blended rate between hedged prices and average spot prices, weighted by the respective hedged and non-hedged volumes, reflecting the effective price to Befesa

		2023	2024	YoY change (%)
Revenue	€m	785.6	825.6	+5%
Adjusted EBITDA	€m	134.1	170.4	+27%
Adjusted EBITDA margin	%	17.1%	20.6%	+4%
Steel Dust throughput	Kt	1,194.8	1,210.7	+1%
Plant utilization	%	69.4%	70.4%	+1%
WOX sold	Kt	399.1	400.5	+0%
Zinc LME	\$/t	2,647	2,779	+5%
Zinc LME	€/t	2,450	2,569	+5%
Zinc hedging	€/t	2,417	2,521	+4%
Zinc blended <sup>1</sup>	€/t	2,425	2,549	+5%
Zinc TC	\$/t	274	165	-40%
				j

## **FY24 Aluminium business highlights**

Strong salt slags recycling performance partially offset by weak secondary aluminium metal margin

Salt Slags recycling





- Strong volume of salt slag recycled with plants running at 91% capacity utilization
- Hannover plant (Germany) back to operations at full capacity
- Lower FBM aluminium price impacts negatively

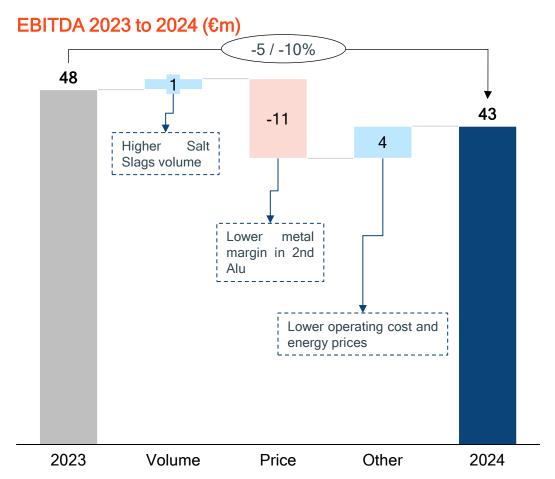
#### 2nd aluminium



- Very weak European automotive industry impacting demand of secondary aluminium
- FY24 volume of 2nd aluminium production impacted by weak auto industry. Load factor at 84%
- Compressed aluminum metal margin driven by weak demand and access to aluminium scrap

## **Aluminium Salt Slags Recycling Services Financials**

EBITDA impacted by lower 2º alu metal margin, partially offset by lower energy prices and higher Salt slags volume.



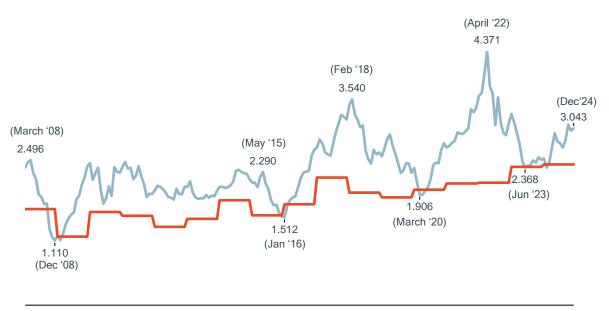
<sup>1</sup> Total revenue after intersegment eliminations (2023: €47.6m; 2024: €53.7m)

		2023	2024	YoY change (%)
Revenue¹ - Salt Slags - Secondary Alu	€m	<b>399.0</b> 86.3 360.2	<b>419.4</b> 105.9 367.3	+5% +23% +2%
EBITDA - Salt Slags - Secondary Alu	€m	<b>47.6</b> 26.0 21.6	<b>43.0</b> 31.8 11.2	-10% +22% -48%
EBITDA margin (Salt Slags)	%	30.1%	30.0%	0%
Salt Slags & SPL treated <sup>2</sup>	Kt	360.8	425.7	+18%
Salt Slags utilization	%	76.8%	90.6%	+14%
2 <sup>nd</sup> Alu alloys produced	Kt	168.2	171.3	+2%
Secondary Alu utilization	%	82.2%	83.6%	+1%
Aluminum FMB <sup>3</sup>	€/t	2,188	2,306	+5%
			Ĺ	

<sup>2</sup> Salt Slags & SPL treated volume reflects the increase due to the commissioning of Hanover in 2023

<sup>3</sup> Aluminium scrap and foundry ingots aluminium pressure diecasting ingot DIN226/A380 European Metal Bulletin free market duty paid delivered works

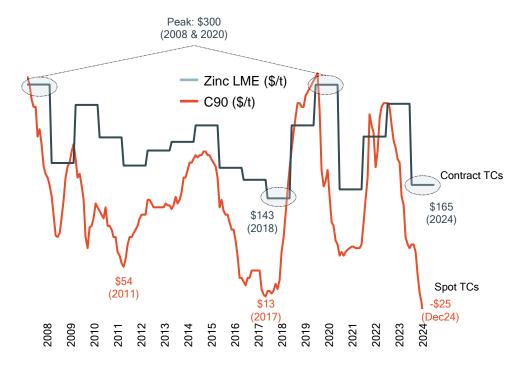
# Zinc price traded higher in H2'24 vs H1'24, with mini rallies in May and in Q4 2024 (≈\$3,000/t)



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

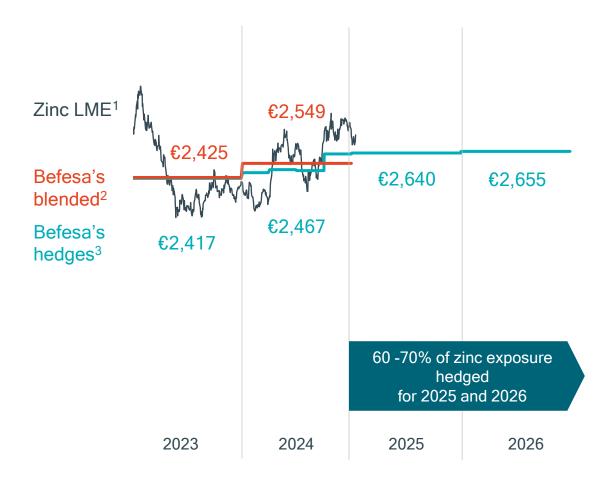
- Q4 2024 LME zinc price average \$3,050 / €2,858 per ton.
- FY24 LME zinc price average \$2,779 / €2,569 per ton
- LME zinc trading sideways between \$2,300 \$3,100 per ton in H2 2024.
- FY25 average consensus at \$2,857 per ton

Zinc LME: London Metal Exchange (LME) zinc daily cash settlement prices, US\$ per tonne Curve C90: represents the production cost at the 90th percentile of global zinc smelters Sources: Internal data, Morgan Stanley and McKinsey reports



- Zinc TC for 2024 settled at \$165/t, -40% yoy (2023: \$274/t)
- Spot TC trading negative driven by lack of supply of zinc concentrates in the market.
- Each \$10/t zinc TC variation impacts c.€2.0m FY EBITDA (excluding US where the impact is neutral)
- Zinc concentrate market remains tight, which would imply low benchmark TC for 2025

# Zinc price hedging extended until dec 2026 at all-time high level of €2,650. Next hedging Q1 2027



<sup>1</sup> London Metal Exchange (LME) zinc daily cash settlement prices

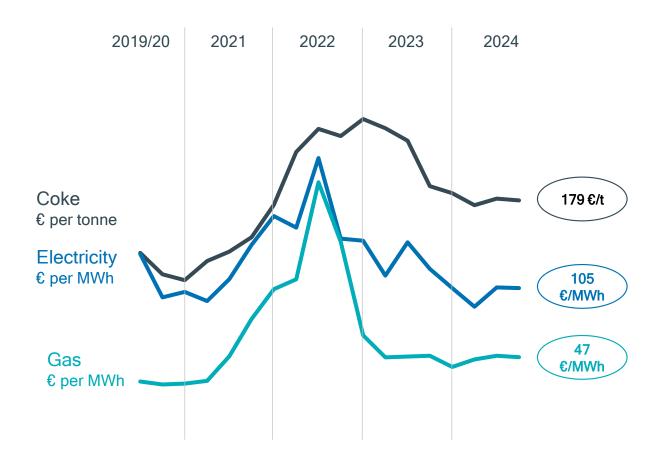
- 1 Befesa's hedging strategy unchanged
  - 1-3 years forward
  - Targeting 60% 75% of zinc equivalent
  - Befesa provides no collateral
- Befesa's hedging strategy has proven successful providing price visibility and lowering impact from zinc price volatility
- 3 Hedge level in 2025 higher than 2024, representing c.€20m incremental EBITDA in 2025
- For the unhedged portion: each \$100/t change in zinc LME price represents €7–8m impact on FY EBITDA

<sup>2</sup> Zinc blended prices are averages computed based on the monthly effective LME zinc and hedging prices weighted with the respective hedged and non-hedged volumes

<sup>3</sup> Assumes FX €/\$ of 1.10 for 2024, and 2025

# Coke price continued further normalisation in FY24; Gas & electricity prices stabilised around 2021 levels

### Befesa's energy price evolution by source



## FY24 Avg. €/unit

#### Coke

- Befesa's coke price continued further normalisation in Q4'24 to levels below 2022 and 2023 average
- 2024 price average c.-20% vs. 2023 average and c.40% above 2019 - 2021 average price level

## **Electricity**

 Electricity prices decreased in 2024 (-20% vs 2023), remaining at low levels since 2019

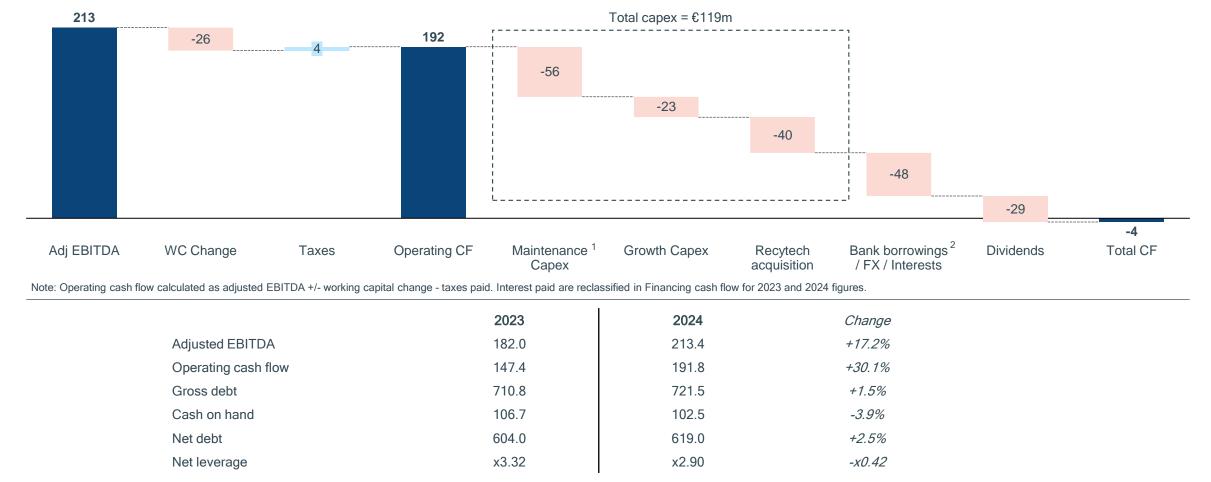
#### Gas

 Gas prices decreased in 2024 (-10% YoY) and stabilised around average levels of 2021

## **EBITDA to Cash Flow**

Operating Cash Flow in 2024 amounts to €192m, up 30% YoY. Cash on hand as of Dec24 stands at €103m.

#### Adjusted EBITDA to Total cash flow in 2024 (€ million)



<sup>1</sup> Includes investments required to maintain or replace assets as well as those related to productivity, compliance and IT

<sup>2</sup> Mainly includes cash bank inflows/outflows from bank borrowings and other liabilities, interest paid as well as the effect of foreign exchange rate changes on cash

# Achieved <x3 leverage target at Dec24, ongoing reduction through disciplined capital allocation

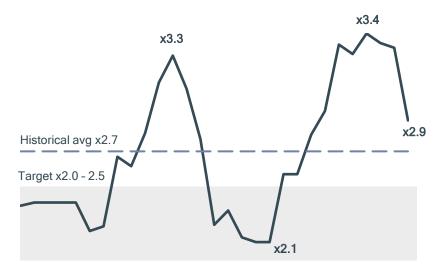
## Capital structure

- TLB of €650m
  - Maturity in July 2029
  - E+275 bps (25 bps reduction when leverage <x3.0 and <x2.5)</li>
  - Expecting E+250 bps in FY25
  - Covenant-lite terms
- RCF of €100m (fully undrawn)

## Capital allocation discipline and leverage management

- Leverage at x2.9 as of year-end 2024; Expecting <x2.5 by year end 2025</li>
- Target of x2.0 to x2.5 from 2025 onwards
- Growth capex focus on approved projects: Palmerton and Bernburg
- Maintenance capex reduced to ~€40 / 45m per year
- Total capex to be reduced to ~€100m per year, over the coming years

#### **Net Debt / EBITDA**



## Befesa expects strong double digit EBITDA growth in 2025

	Commentary	2025 Outlook	
Steel dust volume	<ul> <li>Europe: stable/strong volume expected, despite current challenging steel industry</li> <li>USA: higher EAF steel dust volume driven by volume from new contracts</li> <li>China/Asia: stable volume vs 2024</li> </ul>	Neutral to positive	
Salt slags 2 <sup>nd</sup> Alu	<ul> <li>Stable salt slags volume vs 2024</li> <li>Metal margin compression in 2<sup>nd</sup> alu caused by alu scrap scarcity and weak demand from auto sector</li> </ul>	<ul> <li>Salt slags: Stable</li> <li>2<sup>nd</sup> alu: Stable to negative</li> </ul>	
Zinc Refining	<ul> <li>Stabilized operations in 2024. Strong operating cost cutting efforts in 2025</li> <li>Fix cost reduction of €15/20m to be captured in 2025</li> <li>Low TC and low Zinc premium: through of the cycle for the refining business</li> </ul>	<ul> <li>Very positive</li> </ul>	
Energy prices	<ul> <li>Slightly lower overall coke prices for the group expected in 2025</li> <li>European natural gas and electricity higher than 2024</li> </ul>	Neutral to negative	
General inflation	General inflation (maintenance, auxiliary materials), labour inflation increase throughout the group	• Negative	
Treatment charge	<ul> <li>Zinc concentrate market remains tight with spot TC in the negative territory</li> <li>Last 15-year low at \$143. Expecting 2025 benchmark TC to remain stable or lower vs TC 2024</li> </ul>	Stable to positive	
Zinc hedging	• Average zinc price hedging for 2025 at €2,640, driving strong earning growth in 2025	<ul> <li>Very positive</li> </ul>	
Zinc LME	• Volatility expected driven by global macro uncertainty. C90 around €2,500 acting as floor of zinc. 2024 avg. \$2,779	• Uncertain	
Capex	• Total capex below €100m. €40/45 regular maintenance + €55/60 growth (Palmerton + Bernburg)	• <€100m	
Leverage	Leverage reduction to continue further to below x2.5	• < x2.5	

## Agenda

**Executive Summary** 

**Current Trading** 

## Resiliency

**USA** operations

China operations

Business Plan

**Growth Strategy** 

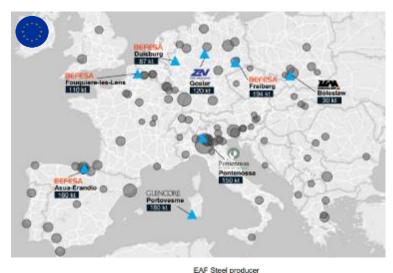


# Unique business model with high barriers to entry resulting in high margins over time and strong performance through the cycle

- Strategically located plants near customers and long-term service relationships providing high barriers to entry
- Proven track record of resilience through cycles and volatile commodity environments, driven by a resilient service-focused business model and a prudent financial policy
  - Despite Befesa being part of the value chain of cyclical industries like steel, zinc, and aluminium, its business model is highly resilient with highly stable margins
  - Solid volume from EAF steel customers (most stable steel producers)
  - Stable service fee and long-term relationship with customers
- Zinc price exposure managed through hedging policy consistently and rigorously applied for the last 20+ years
  - Zinc is a very "rational" commodity driven by supply demand fundamentals
  - C90 growing at 6% CAGR over the last 15 years, consistently acting as a solid floor of the zinc price
- >75% of total company EBITDA and free cashflow from high-margin segments
  - Europe steel dust & salt slags representing today
  - >35% EBITDA margin sustained over time regardless of commodity prices



## Unique business model with high barriers to entry resulting in high margins over time and strong performance through the cycle











## Strategic locations

Locked-in captive demand as Befesa's plants strategically located in close proximity to client locations



#### Short distance

Plants located nearby EAF producers in order to avoid higher costs related to dust transportation



## Barriers to entry

High barrier to entry for competitors, given new recycling plants require significant time to build and substantial capex investments, including regulatory arrangements and a close proximity to customers

## **Befesa's Resilience During Latest Crises**

Befesa has demonstrated resilient volumes and capacity utilisation levels during the latest crises



<sup>1)</sup> Source: worldsteel.org

<sup>2)</sup> Total EBITDA is the sum of Steel Dust & Aluminium Salt Slags segments proforma (PF) comparable to Befesa structure in '19/'20; Thus, it excludes divested IES, EPC and Concessions businesses

<sup>3)</sup> EU-27 crude steel production estimate for FY'21 based on Sep'21 YTD actual of 115Mt/3\*4 = c.150Mt

<sup>4) 2021</sup> load factor considers the proportional installed capacity of the Chinese and US sites based on the days these sites were operational in 2021

## C90 growing at 6% CAGR over the las 15 years, consistently acting as a solid floor of the zinc price



#### C90 as solid floor for zinc

- C90 represents the zinc price level at which 10% of the most expensive mines break even
- Historically as floor for zinc price
- Supply is cut upon breaking the C90
- Zinc is a very rational commodity driven by fundamentals of supply and demand

## Agenda

**Executive Summary** 

**Current Trading** 

Resiliency

## **USA operations**

China operations

Business Plan

**Growth Strategy** 



# Operational improvement of recycling assets on plan, ready to capture market growth. Stabilizing refining plant

- Steel dust recycling operations increasing efficiency according to initial plan based on operational synergies and best practices
  - Resulting in an increase of EBITDA/ton of 63%, from €70 in 2021 to €114 in 2024, despite current persistent high coke price in US
- Palmerton refurbishment (expansion and modernization of plant) as planned to capture the growth of the US market: 1st kiln in operation, 2nd kiln H1 2025
  - 60kt incremental EAF dust already contracted from existing EAF customers in 2025
  - Targeting **70-75% utilization by 2025** and 90% by 2026/27 (from current 65%)
  - Turnaround plan for zinc refining plant (acquired in Q3 2022 for \$47m) in the final stage with the focus
    on cost reduction
    - 3-stage plan: 1) quality improvement, 2) increase in utilization and 3) cost optimization
    - Reducing €15-20m cost base on an annual basis from key areas: personnel, maintenance, residue treatment, operations and supply chain
    - Plant has its own cyclicality €5m (low cycle) -15m (high cycle) EBITDA, depending on TC and zinc premiums dynamics
    - Negative contribution of -€15m in FY24. Towards breakeven in 2025-26



# US recycling operations improving gradually profitability as planned



## Gradual recovery of EAF volume since 2021:

- Loss of an EAF steel dust supply contract with a major steelmaker before acquisition
- Volume being recovered gradually, as expected
- 60kt additional EAF dust contracted for 2025/26



## 2024 EBITDA at €47m, 25% EBITDA margin

- Average plant utilisation at around 65%
- FBITDA / ton at €114



#### **Outlook:**

- Targeting to increase utilisation rate from current ~65% to ~70/75 in 2025 and to ~85-90% in 2026
- Expecting EBITDA run-rate at ~€70-80m per year

#### Steel dust throughput & Plant utilisation





<sup>\*</sup> Adjusted for customer loss before acquisition

<sup>\*</sup> Operational and financial figures in 2021 were consolidated as of mid-August, following the acquisition of the US recycling assets.

# Synergies focused on operational efficiency and coke consumption, mostly captured already



Coke consumption reduced by 21% driven by operational efficiencies. Coke-to-throughput ratio decreased from 38% to 25% by implementing best practices



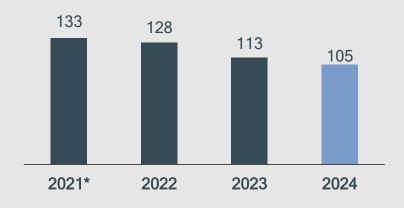
Coke average price in the US decreased by 19% in 2024, although it is still slightly above the levels of 2022

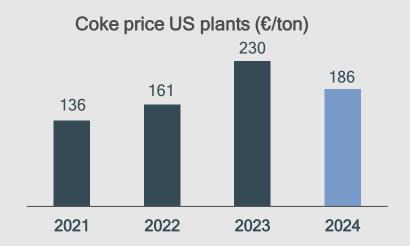


#### **Outlook**

- Operating leverage to be translated into higher profitability
- Further progress in operational efficiencies will translate into lower coke consumption and cost per ton
- Further coke price normalization expected for 2025 and beyond

## Coke consumption US plants (Kt)





## Palmerton plant refurbishment progressing well to seize growth in the US EAF steel dust market



#### Plant overview

- 2 kilns with c. 163 kt → 220 kt (post-refurbishment) EAF steel dust recycling capacity
- Producing WOX as a marketable product



## Indicative timing and status



- ✓ EPC contract signed
- > Construction works ongoing

Timing confirmed:

- ✓ Phase I: completed by H2 2024 Phase II: completed by H1 2025
- > Commercial contracts with EAF steel players ongoing
- > Planned commissioning 2<sup>nd</sup> kiln in Q3'25



### **Key financials**

- Capex: €55–€65 million
- **EBITDA run-rate**: €25–€30 million
- Payback: 2–3 years; IRR: >30%







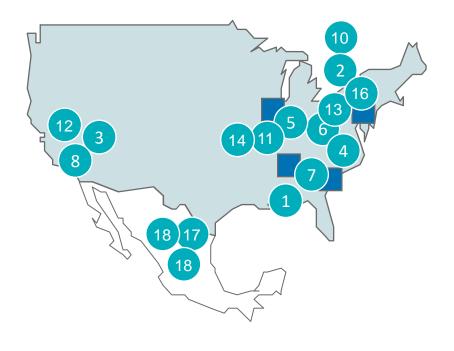
Source: Company information

## New EAF announcements supported by strong infrastructure programs requiring steel

Steelmaker		Location		New capacity, Mt	Start up
A		<ol> <li>Calvert, Alabam</li> </ol>	na	1.5	H2'24
Arcelor/Mittal		2 Hamilton, Ontar	io, Canada	2.4	2026
		3 Kingman, Arizor	na	0.6	Q3'24
NUCOR		4 Lexington, Nortl	h Carolina	0.4	Q1'25
		5 Crawfordsville,	Indiana	0.3	Mid '25
		6 Mason County,	W Virginia	2.7	H2'25
		South Carolina		0.5	Mid'25
		8 Fontana, Califor	rnia	0.4	2026
		9 Pacific Northwe	st region	0.6	TBD
ALGOMA STEEL INC.		Ontario, Canada		0.8	YE'24
NIPPON STEEL	USS	Osceola, Arkansas		2.7	Q3'24
PACIFIC		Mojave, Califorr	Mojave, California		2026
CMC		Berkeley Count	y, W Virginia	0.5	Q4'25
HYB/\R		Osceola, Arkans	sas	0.6	2026
		15 TBD		0.6	TBD
72 STEEL LLC		16 Aliquippa, Penn	Aliquippa, Pennsylvania		2025
Ternium 🖰		🚺 Pesquería, Mex	Pesquería, Mexico		H1'26
<u>DEACERO</u>		18 Saltillo & Celaya	Saltillo & Celaya, Mexico		TBD
				20	

Befesa targeting to increase utilization gradually to 90% by 2026/28

## 60kt additional EAF steel dust already contracted



■ Befesa EAF steel dust recycling plants

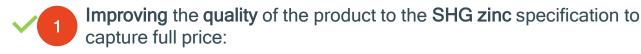
## Zinc refining asset being turnaround to improve profitability



## Zinc refining plant: Key facts

- Vertical integration in the US which makes sense as there is lack of smelting capacity in the US
- Feeding material solely with WOX / 100% from Befesa today's production + some volume from competitors (ZN)
- Unique asset in the world producing green zinc from 100% recycled material
- Ensures allocation of 100% WOX production in the US;
   Otherwise, as there is no smelting capacity in the US, big logistics operations would be needed to transport WOX
- A different plant & business vs Befesa's traditional recycling business: 200 people vs 60 in recycling per plant; New technology of solvent extraction
- No intention to replicate the zinc smelting business in other markets (Europe, China), but it makes sense in the US at the purchase price paid (acquired for \$47m in 2022)
- Potential to deliver \$10-15m EBITDA p.a. in the upper part of the cycle (around breakeven in the low part);
   Net revenue of \$200-\$230m, 1% to 5% EBITDA margin

## Implementing a 3-phase plan since acquisition



- Otherwise, penalties are applied
- Already producing SHG zinc at the right quality
- Increasing the utilization of the plant, where the breakeven is around 85-90% (vs 50% in the recycling business)
  - Operating at >85% over the past months

## 3 Cos

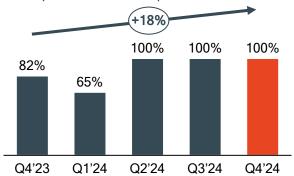
#### **Cost reduction**

- Focus so far has been on increasing production and quality at no matter what cost
- Focus now is on cost cutting to improve the profitability of the plant
- 2023: Slightly negative EBITDA
- 2024:
  - 2 headwinds: TC reduction (\$274 to \$165) and decrease in the zinc premiums in the US
  - Negative contribution of -€15m in FY24

# Turnaround plan to improve profitability of zinc refining plant

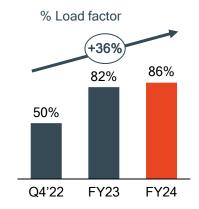
### **Quality improvement**

% In Spec SHG over total production



- In Spec SHG (Special High Grade) zinc receives a premium Zinc Price due to its exceptionally high purity (99.995%)
- The high zinc content and consistency of "In Spec SHG" ensure it is traded at a premium on global markets, such as the London Metal Exchange (LME)
- Quality improvement achieved in the last two quarters.

#### **Plant Utilization**



- Breakeven utilization at 85%
- From April 2024 the average utilization has increased to 93%, producing 100% In Spec SHG.

#### Cost Reduction



- €15-20m cost reduction to be achieved in 2025
- Strong cost cutting plan across all functions: maintenance, operations, purchasing, logistics, SG&A
- 60-70 FTE reduction
- Residue treatment in house vs externalized service

Negative contribution of -€15m in FY24; targeting towards breakeven in 2025/26; between €5m to €15m in the mid term.

## Agenda

**Executive Summary** 

**Current Trading** 

Resiliency

**USA** operations

## China operations

Business Plan

**Growth Strategy** 



# China focus on improving existing operations. Expansion plan stop

- Befesa invested in China in 2020 to capture the business opportunity that increased EAF steel and environmental regulation presented
  - Total capex invested €90m in two EAF dust recycling plants in the provinces of Jiangsu and Henan
- The real estate crisis in China is driving low utilization of EAF steel makers
  - 2024 is the 5<sup>th</sup> year with a double-digit decline
- Differences in EAF steel production and regulation enforcement between the two provinces drive performance
  - Jiangsu is a tier 1 province with strong enforcement of the environmental regulation and high plant utilization and positive EBITDA
  - Henan is a tier 2 province and utilization is expected to remain subdued for a while
- Befesa at 50% utilization rate and EBITDA break even, within two years of operations despite challenging market environment
- Investment plan in China on-hold for the coming years until a clear market recovery
  - Focus on operational improvement of existing facilities to improve utilization and generate positive free cashflow
  - Despite challenging short term, mid term opportunity in China remains very attractive:
     (1) increased EAF penetration and (2) stringent environmental regulation



# Befesa invested in China in 2020 to capture the business opportunity that increased EAF steel and environmental regulation presented

Total capex invested €90m in two EAF dust recycling plants in the provinces of Jiangsu and Henan

**Key milestones** First to market with state-of-the-art 110 kt EAFD recycling plants in China: ▶ **Jiangsu**: Completed on budget; Operating since December 2021 ► Henan: Completed construction Dec'21; Started commissioning; Expecting ramp up H1'22 and Opening of a commercial output H2'22 commercial office in China to monitor the market 2021 2024 2010 2019 Guanadona: On hold until market recovers, or supply agreements Jiangsu: Broke ground are in place April '19; Ramp up planned H2'20; ▶ Henan: Signed agreement; Breaking ground Q4'19; Ramp-up H1'21

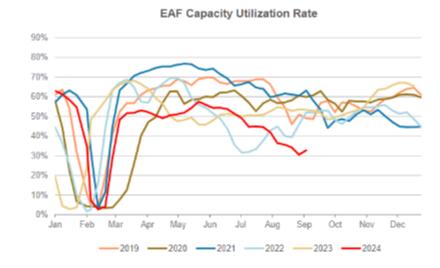
- 2 Environmental Regulation
- In 2017, steel mill dust was categorised as hazardous waste (specific treatment was required)

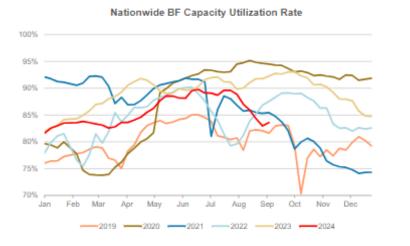
- 3 EAF Dust Availability
- Bigger steel producer in the world
- EAF steel production in China accounts for less than 10% of total crude steel production, with the commitment from the Government to increase the penetration to 20% in 2030
  - Since 2017, the country has invested 110 million tons per year in new EAF capacity as part of a replacement program

- 4 Investment approach
- 2 EAF dust recycling plants in the provinces of Jiangsu and Henan
- Total capex invested amounted to €90m, with an expected EBITDA run-rate of c.€10m per plant
- Goal of ring-fencing local markets, following the European business model

# The real estate crisis in China is driving low utilization on EAF steel makers, resulting in low EAF dust generation

- EAF steel output is being impacted by the real estate crisis, with a low utilisation rate
- 2024 represents the fifth year with a double-digit decline
- 3 Long products production is at the lowest level in the last 5 years
- Capacity utilization of Chinese EAF at 30% vs pre-covid 70% driven by weak real estate activity
- Flat products usually manufactured via BOF at higher levels than the last years
- Going forward, however, steel production by EAF is expected to increase from the current 10% to more than 30%, with more scrap available gradually and in compliance with the C-neutral policy





## Differences in EAF steel production and regulation enforcement between the two provinces drive performance

#### Jiangsu

Tier 1 province with strong enforcement of the environmental regulation, high plant utilisation rate and positive EBITDA



#### Henan

Tier 2 province, with utilisation rate expected to remain subdued for a while



#### Plant overview



- 1 kiln in use since January 2022 with 110,000 tons of dust throughput
- 53 employees
- Utilisation rate 70%
- Plant shutdowns to optimise utilisation (2-month campaign, then standstill for 1-2 months)

- 1 kiln in use since February 2023 with 110,000 tons of dust throughput
- 36 employees
- Utilisation rate 20%, with shortage of dust due to the low production level of steel mills in the area
- Steel dust from other provinces being transported to the plant

### Regulation



- Mature monitoring and enforcement by the government
- Illegal sales of high-Zn dust are rather rare
- Some internal recycling by steel makers which will disappear in the mid-term as it does not add any value
- Regulation is the same as in Jiangsu, but the enforcement and supervision are much weaker
- 30% of EAF goes to illegal routes

# Investment plan in China stop for the coming years until a clear market recovery

Despite de challenging short term, in the medium term the opportunity in China remains very attractive

## Investment plan stop:



## Focus on operational improvement of existing facilities to improve utilization and generate positive free cashflow

- Jiangsu focused on improving volume and utilisation, with the outlook of achieving mid-single-digit EBITDA in 2025:
  - Existing customers to increase volume
  - New EAF in the area
  - New customers from other provinces
- Henan: Difficult to improve utilisation significantly, as the law reinforcement is currently very weak

## Resilient business despite EAF steel makers' decline

 Despite this challenging market environment, Befesa reached 50% utilisation rate within two years, reaching break-even and not loss-making

### Positive trends still in place for the mid-term

- The two main drivers for the investment approach of Befesa, EAF penetration and environmental regulation, never go back and only move forward
- China is the largest producer of steel in the world, with EAF expected to grow to 25% in the coming years
  - China's scrap supply is projected to grow rapidly in the next decade
  - China's State Council announced a plan to improve the country's air quality in the long term as part of its efforts to promote quality economic development. According to the plan, the authorities will continue to promote the development of EAF steelmaking
  - An increase in EAF will result in better margins and improved air quality and lower emissions
- The Chinese government has set a **target for EAF steel over 15%** of total crude steel production by 2025.
- China Iron and Steel Association has proposed a long-term plan for EAF steel to account for over 30% of total crude steel production by 2035

# Agenda

**Executive Summary** 

**Current Trading** 

Resiliency

**USA** operations

China operations

**Business Plan** 

**Growth Strategy** 



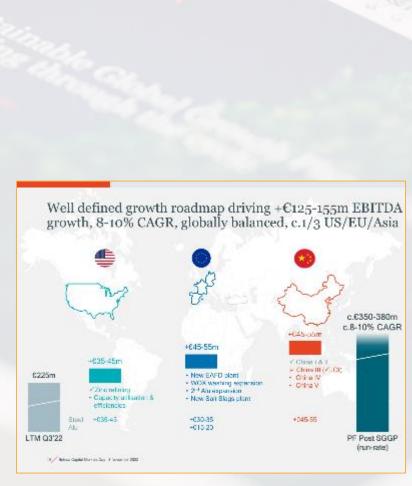
# 5-year Business Plan presented in CMD in November 2022 to be executed keeping leverage below x2.5

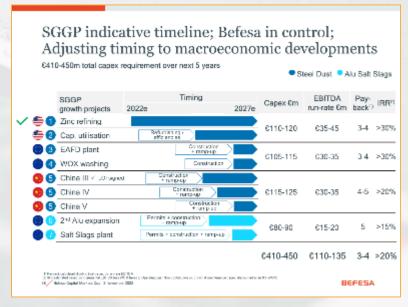
- Growth going forward maintaining leverage between x2.0 and x2.5
  - Only committed capex is Palmerton and Bernburg expansion, which are ongoing
  - European projects (expansion of steel dust and new salt slags) to be executed considering leverage and market conditions
- China expansion plan stops until a recovery in the market is clear
  - China plants 3, 4 and 5 stop for the next years. If the market recovers, the expansion plan could be restarted fast
  - In the mid and long term, the opportunity in China remains attractive: more EAF + regulation
- Discipline in capital allocation, keeping total capex at €100m per year maximun
  - Maintenance capex around €40m per year. Growth capex around €60m prioritizing early cashflow generation projects
  - Focus on positive free cashflow generation
  - Maintaining dividend policy of 40-50% of net income as payout
- Expecting to achieve €300m EBITDA by 2028/29



## What we said at the CMD in November 2022







# Befesa is adjusting and adapting its business plan to the temporary macroeconomic challenges

		CMD Nov 2022	Today	Outlook
Capex		Total capex: €410-450m	<ul> <li>20% invested, €87m: US refining and Recytech</li> <li>20% being invested, €90m: Palmerton &amp; Bernburg</li> </ul>	<ul><li>30%: Europe steel dust &amp; salt slags, €120-140m</li><li>30% China 3, 4 &amp; 5 stop</li></ul>
Returns		<ul> <li>Incremental EBITDA +€125-155m</li> <li>IRR &gt;20%</li> </ul>	<ul> <li>Recytech: +€15m EBITDA; +30% IRR</li> <li>US refining: negative EBITDA/ramp-up/turnaround</li> </ul>	<ul> <li>Incremental EBITDA +€80-90m</li> <li>IRR &gt;20%</li> </ul>
Markets	(§ ()	<ul> <li>Globally balanced 1/3 US, Europe and Asia/China</li> </ul>	<ul><li>Focus on the US and Europe</li><li>China stop</li></ul>	<ul><li>Focus on the US and Europe</li><li>China stop</li></ul>
Timing	Ō	<ul> <li>Flexibility in the capital deployment</li> <li>Ability to adapt to market developments and macro situation</li> </ul>	<ul> <li>Palmerton completed by Q2 25</li> <li>Bernburg completed by Q2 26</li> </ul>	Timing of remaining projects based on leverage and market development
Leverage		<ul> <li>Keeping leverage ≤ 2x</li> </ul>	FY24 leveraged under x3.0	<ul><li>FY25 expected below x2.5</li><li>Target x2.0 - 2.5</li></ul>
Capital allocation	<b>E</b>	<ul> <li>Capex self-funded with free cashflows</li> <li>Maintaining dividend policy of 40-50% net profit payout</li> </ul>	<ul> <li>Capex ~€100m per year</li> <li>Focus on deleveraging</li> <li>Same dividend policy</li> </ul>	<ul> <li>Capex ~€100m per year</li> <li>Focus on deleveraging</li> <li>Same dividend policy</li> </ul>

# Capex already invested will deliver growth over the coming years

	Project	Capex	EBITDA today	EBITDA potential
	US recycling	€390	€47	€70
	China 1	€45	€3	€8-12
	China 2	€45	-€3	€8-12
	US refining	€49	-€15	€5-10
	Recytech	€29	€12	€12
	Palmerton	€60	n/a	€20
	Bernburg	€30	n/a	€7-8
	Salt Slags EU	€80	n/a	€15
	Recytech II*	€60	n/a	€25
	China 3,4,5	€120	n/a	€30

Expecting to reach EBITDA of €300m by 2028/29

- Total invested before 5Y Growth Plan €480m
  - Today delivering €50m
  - Potential to deliver €80-90m
  - >15% ROCE
- 20% of the 5Y Growth Plan invested
  - €80m invested in smelter + Recytech
  - Today negative EBITDA (due to smelter)
  - Potential to deliver €20m
  - >20% ROCE
- 3 20% of the 5Y Growth Plan being invested today
  - €90m in Palmerton + Bernburg
  - Potential to deliver €27m
  - >30% ROCE
- 4 30% of 5Y Growth Plan to be invested in Europe
  - Recytech II
  - Salt slags
- 5 30% of 5Y Growth Plan in China on hold

5Y plan

Remaining 50% of Recytech acquired in a highly-accretive deal,

advancing strategic global growth plan in Europe



## Key facts about Recytech:

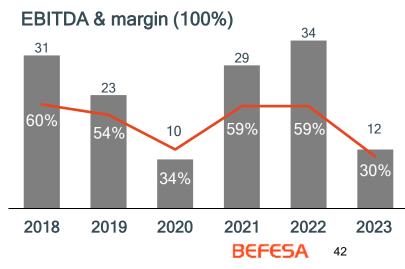
- Former 50/50 JV between Befesa and Recylex,
- Recycling of EAF steel dust, extracting zinc and converting it into WOX
- Location: Fouquières-lès-Lens (France)
- Workforce: 50 people
- EAF steel dust recycling capacity: 110 kt annually
- Sales of WOX: c. 45 kt annually
- EBITDA margin: 45%-50% (last 5-year average)



### **Transaction highlights**

- Acquisition of the remaining 50% stake in Recytech
- Investment already included in Befesa's SGGP (Europe / EAF dust recycling plant)
- Perfect location to expand EAF capacity via brownfield
- Purchase price of €40m represents a c. x2.5 through-the-cycle EBITDA multiple
- Highly accretive for Befesa's shareholders, with a ROCE of >35%





# Bernburg expansion: Moving forward with permits and commercial contracts



#### Plant overview

- Expand alu alloy production capacity at existing Bernburg plant from current 75 kt to 135 kt (+60 kt)
  - 2 rotary furnaces (and 2 holding furnaces)
- Total Befesa 2<sup>nd</sup> Alu capacity from 205 kt to 265 kt
- 30 new direct jobs



## Indicative timing and status



2026

- Existing contract with Novelis signed in July 2023
- Expansion contract signed in April 2024
- Working with German authorities to get permits; Targeting Q2 2025 to obtain final permits

2025: 12-month construction; 2026: 6-month ramp up



### **Key financials**

- Capex: c. €30m (100% self-funded)
- **EBITDA run-rate**: €6m to €7m (c. 20% margin)
- Payback: c. 5 years; IRR: 16%







# Agenda

**Executive Summary** 

**Current Trading** 

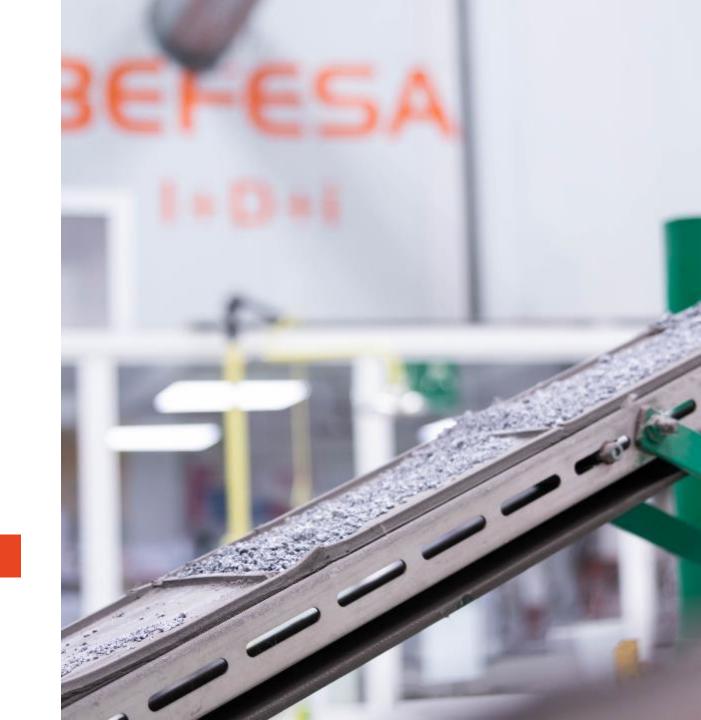
Resiliency

**USA** operations

China operations

Business Plan

Growth Strategy



# Growth strategy driven by favourable mega trends of decarbonization, energy transition and environmental regulation

- The strategy of Befesa remains unchanged, focus on the two-core business
  - Steel dust and salt slags recycling services to the steel and aluminium industries as well as secondary aluminium
  - Ambition to become and maintain the **global leading position** in steel dust and salt slags recycling
  - Focus on the current markets, Europe, USA and Asia
- Favourable mega trends driven by decarbonization, energy transition and environmental regulation
  - Decarbonization trend will drive shift towards electric arc furnace (EAF)
  - Increasing demand for metals coupled with resource scarcity leading to increasing importance of secondary metals
  - Strong focus on recycling and re-using promoting shift to more sustainable circular economies
  - Regulations getting stricter and expanding into new geographies to protect the environment
- Zinc and aluminium demand to grow driven by a transition to green energy as well as EV
  - Energy transition will increase zinc demand as renewable energies infrastructure require zinc
  - Transition to EV will drive aluminium demand as the auto industry looks for light-weight solutions to reduce their carbon footprint



# Befesa's industries are benefited from favourable mega trends driven by decarbonization and energy transition

#### **FAVOURABLE MEGA TRENDS**



Rising population



Increase in middle classes in emerging countries / urbanisation



Resource scarcity



Focus on circular economy



Stricter environmental regulations

### STEEL DUST RECYCLING INDUSTRY TRENDS



Increasing importance of secondary steel



Decarbonisation trend will drive **shift towards electric arc furnace (EAF)** 



Zinc consumption to grow with the global GDP



Energy transition will increase zinc demand as renewable energies require zinc

### ALUMINIUM SALT SLAGS RECYCLING INDUSTRY TRENDS



Increasing importance of secondary aluminium



Aluminium consumption to grow with global GDP

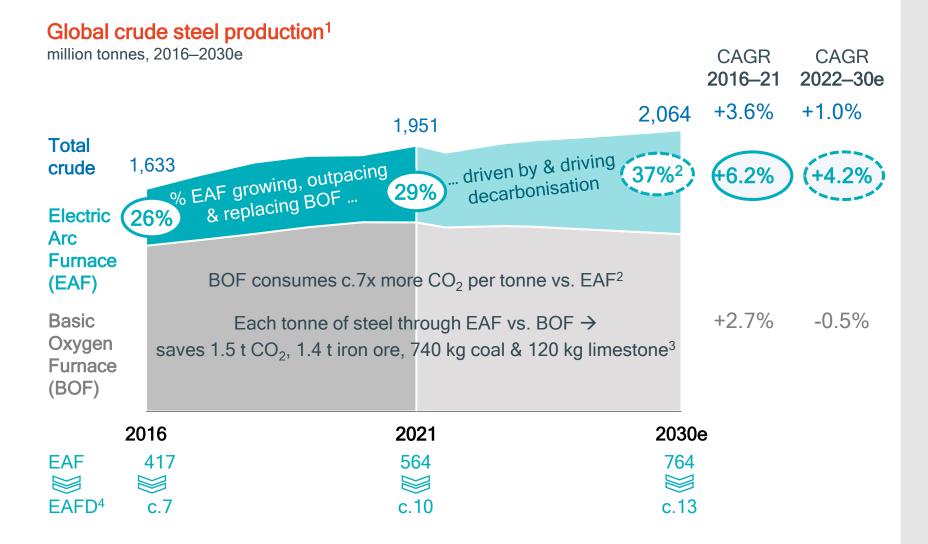


Transition to EV will drive aluminium demand as the auto industry looks for light-weight solutions and has to reduce their carbon footprint



- Increasing demand for metals coupled with resource scarcity leading to increasing importance of secondary metals
- Strong focus on recycling and re-using promoting shift to more sustainable circular economies
- Regulations getting stricter and expanding into new geographies to protect the environment

# Decarbonisation megatrends favouring and driving the electric arc furnace (EAF) steel growth

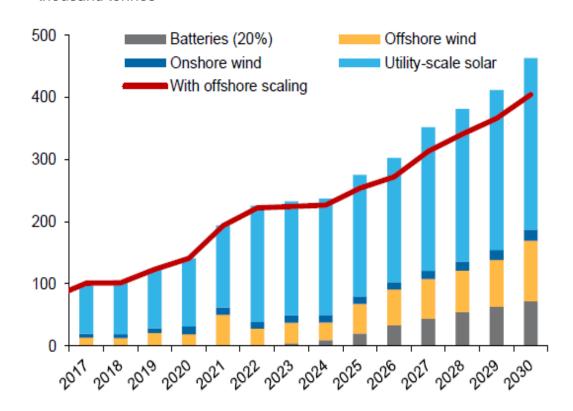


## Key takeaways

- Ongoing swift from BOF to EAF steel – Global EAF steel production to grow by +4.2% p.a. until 2030
- Increasing EAF share leads to a total addressable Electric Arc Furnace Dust (EAFD) market of ~13 million tonnes p.a. by 2030

# Energy transition megatrend requiring incremental zinc, in addition to regular GDP related growth

# Zinc annual demand from wind, solar & batteries<sup>1</sup> thousand tonnes



1 "Commodities Outlook: The (super) cycle is dead, long live the cycle", Macquarie (October 2022)

## Key takeaways

- Global zinc demand grew with GDP at 2-3% CAGR over the L10y
- Zinc consumption expected to be supported as governments invest in green technologies
- Renewable energies need storage through batteries, requiring zinc
- Offshore wind, onshore wind and solar panels require 4,
   0.4 and 2.4 tonnes of zinc respectively per MWh of installed capacity

