

# Agenda – SSAB Capital Markets Day 2023

## Introduction

- Transforming the future of steel
- Steel industry outlook

Martin Lindqvist, President & CEO  
Viktor Strömberg, EVP Strategy & Digitalization

## Divisions

- Global leader in high-strength steels
- Nordic leader in premium steels
- Market leader North American plate

Johnny Sjöström, EVP SSAB Special Steels  
Olavi Huhtala, EVP SSAB Europe  
Chuck Schmitt, EVP SSAB Americas

Q&A

*Coffee break at around 14.45 CET*

## Transformation

- Leading sustainable product offering
- Future production footprint
- Sustainable raw materials

Tony Harris, VP Sales  
Carl Orrling, VP Transformation  
Viktor Strömberg, EVP Strategy & Digitalization

Q&A

## Financials

- A more profitable SSAB
- Q&A

Leena Craelius, CFO

## Summary

- SSAB Taking the Lead

Martin Lindqvist, President & CEO

# Transforming the future of steel

Martin Lindqvist, President and CEO

SSAB

# Introduction to SSAB

# SSAB's positions of strength

Global leader in  
high strength steels



**3.0**<sub>Mt</sub>

Q&T and Premium

Leading the green  
steel transition



**500**<sub>t</sub>

Fossil-free  
pilot shipments

Nordic  
market leader



**40**<sub>%</sub>

Market share  
in the Nordics

US plate market  
leader



**30**<sub>%</sub>

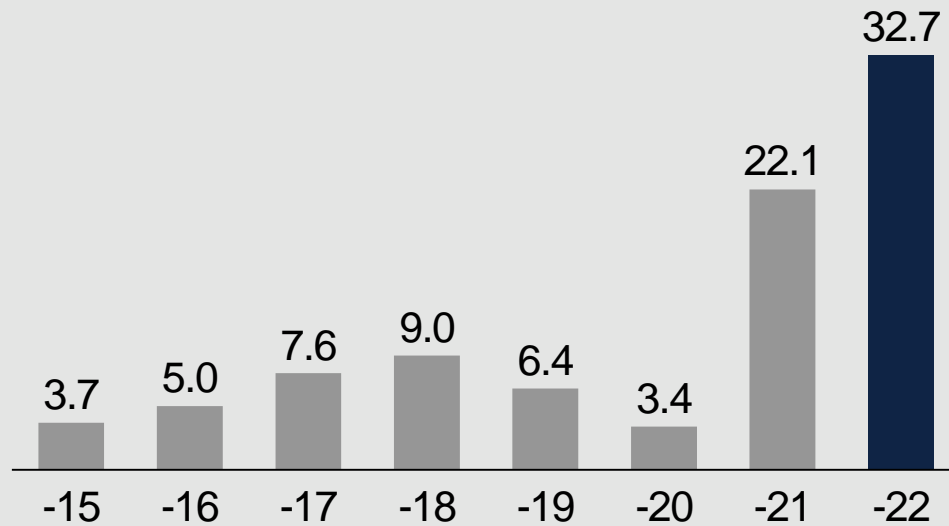
Market share  
in the US, plate

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# Profitable industry leader

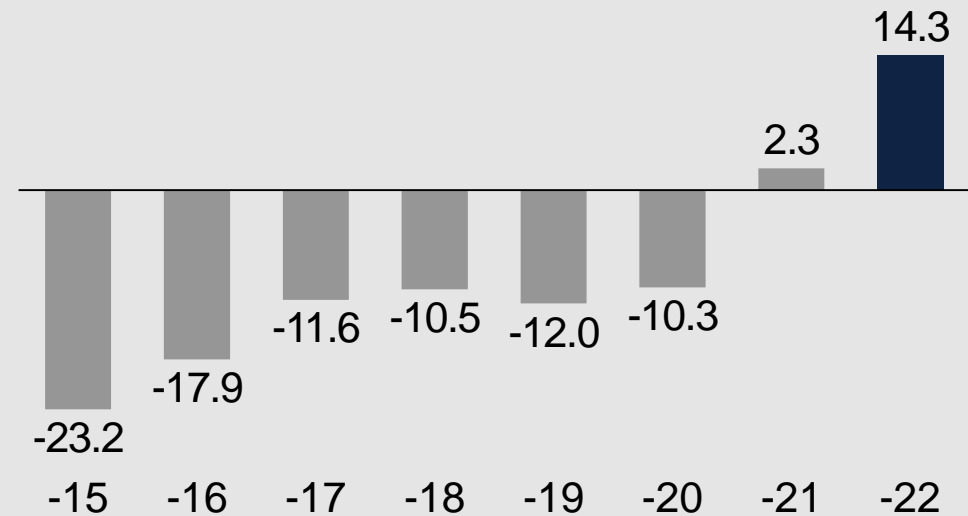
## Solid earnings

Adjusted EBITDA (SEK bn)

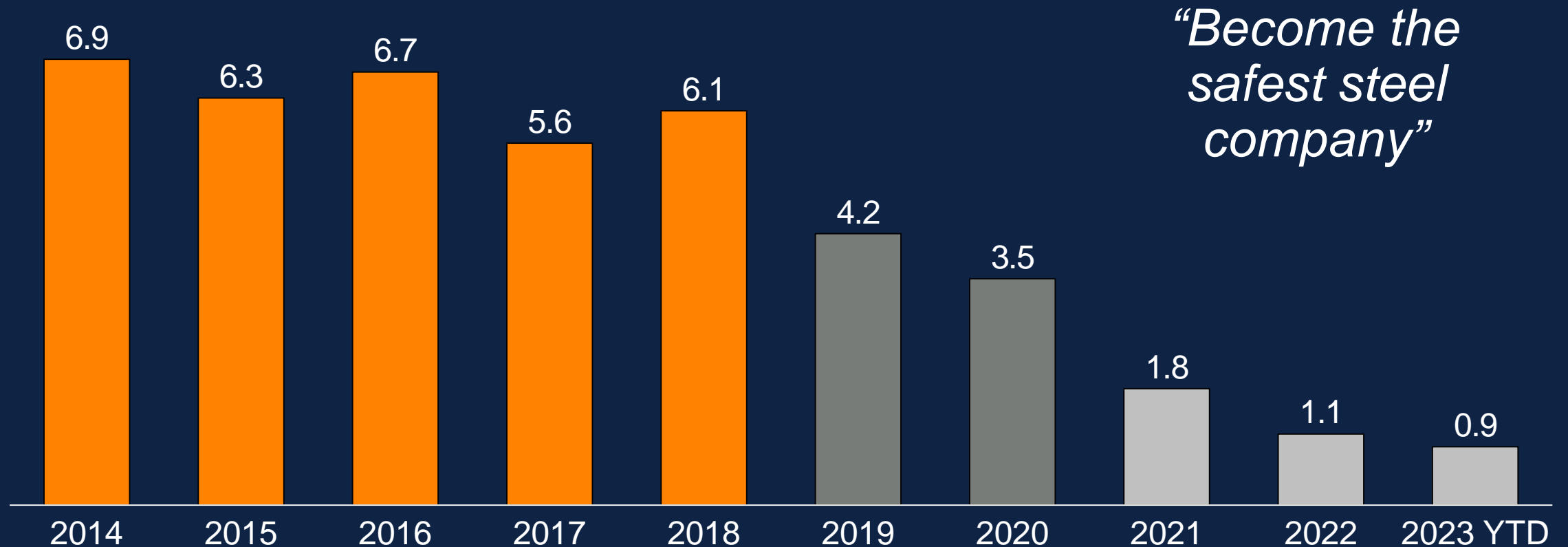


## Strong balance sheet

Net cash position (SEK bn)



# Well on our way to safety leadership



LTIF, Lost Time Injury Frequency

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# A more resilient SSAB

# Focus areas in recent years – a more resilient SSAB

**Mix  
improvement**

**Channel  
development**

**Structural  
synergies**

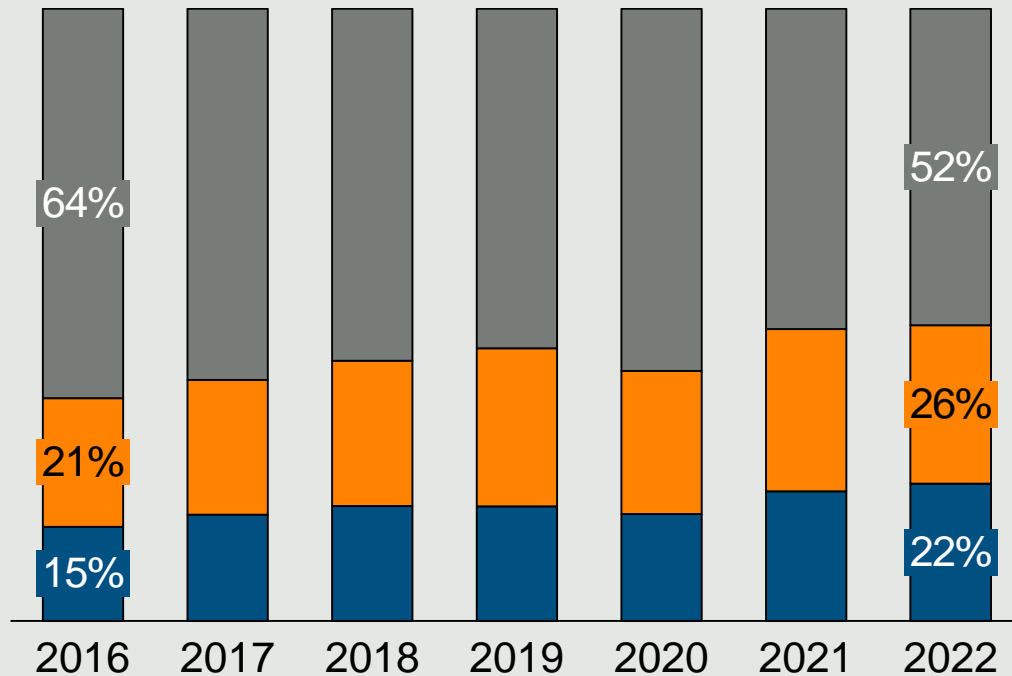
**Continuous  
improvements  
(SSAB One)**



# Product mix close to 50% specialty/premium

SSAB portfolio mix development

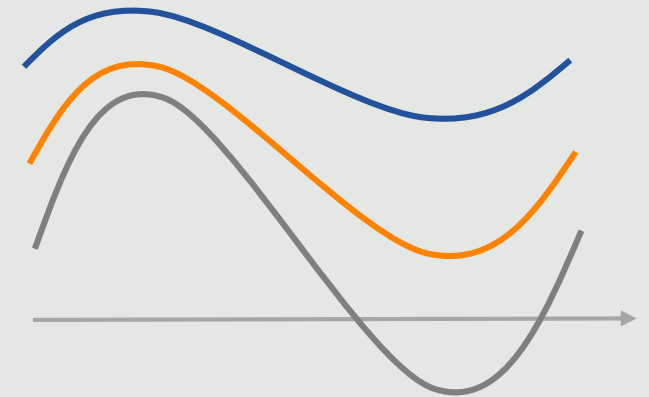
Special Premium Standard



Average gross margin 2016-2022 (indexed)



Volatility (illustrative)

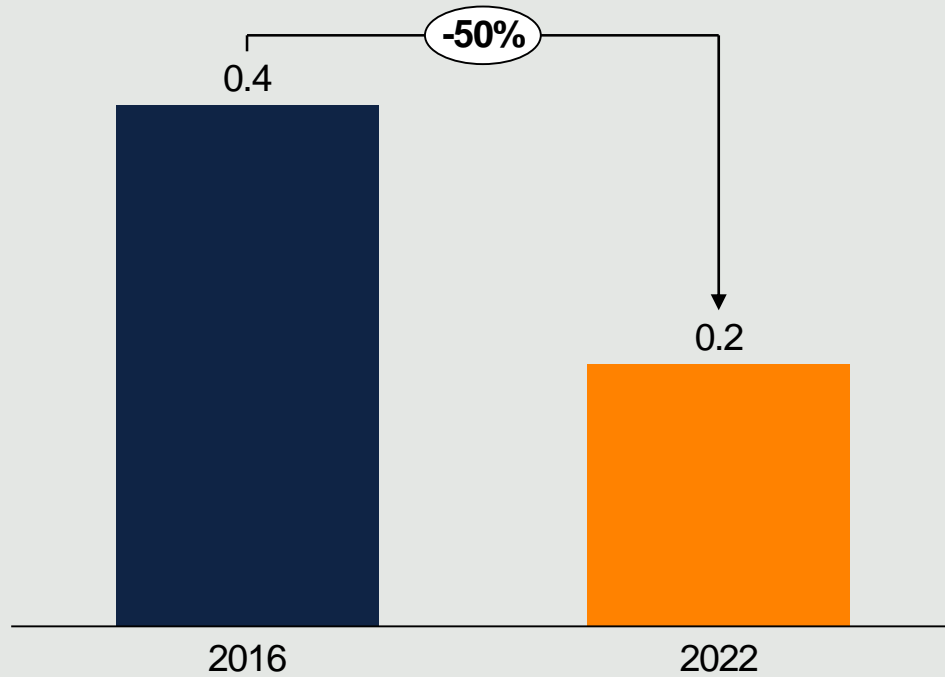


# Less volatile business portfolio - examples



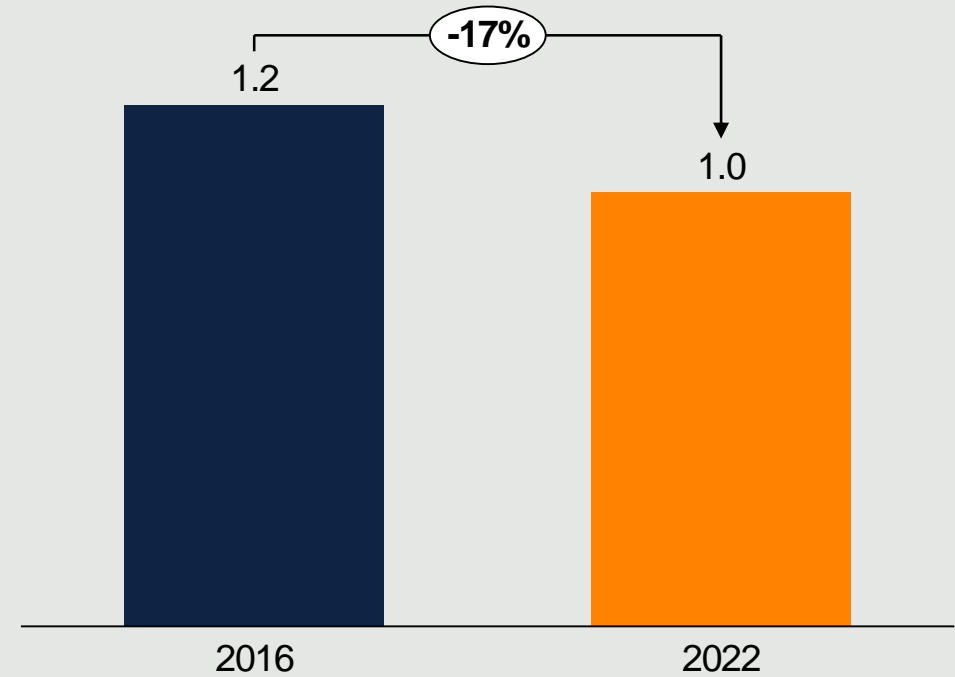
## Standard coils to continental Europe

SSAB Europe, standard HR coils outside Nordic, Mt

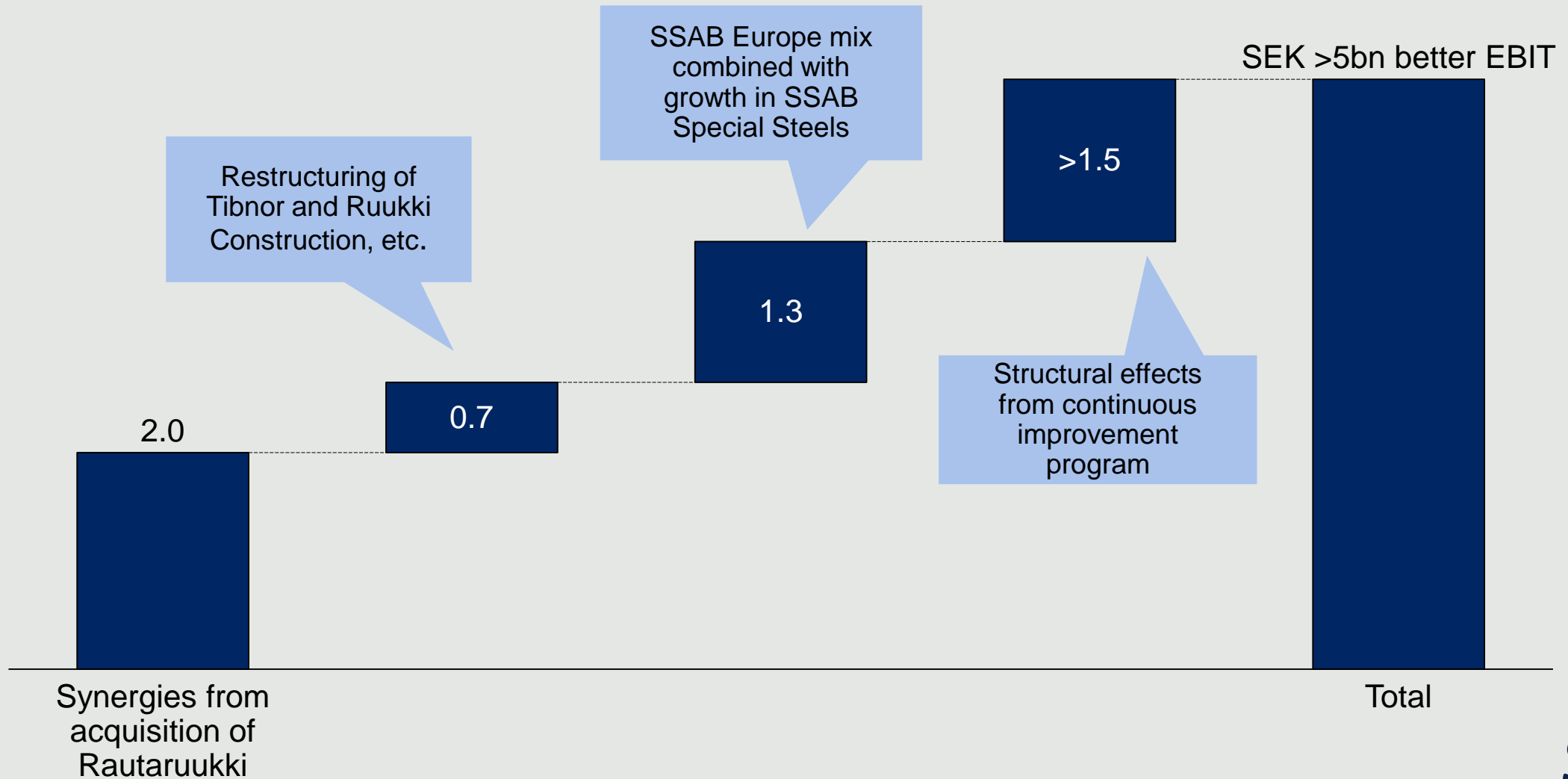


## North American sales to Steel Service Centers

SSAB Americas, sales to Steel Service Centers, Mt



# Structural improvements since 2015



# Taking the lead – our plan for the coming years

# Our successful strategy continues

Global leader in high-strength steels

**3.0Mt**

Q&T and Premium

Nordic leader in premium steels

**40%**

Market share  
in the Nordics

Market leader North  
American plate

**30%**

Market share,  
US plate

Develop channels to  
the market

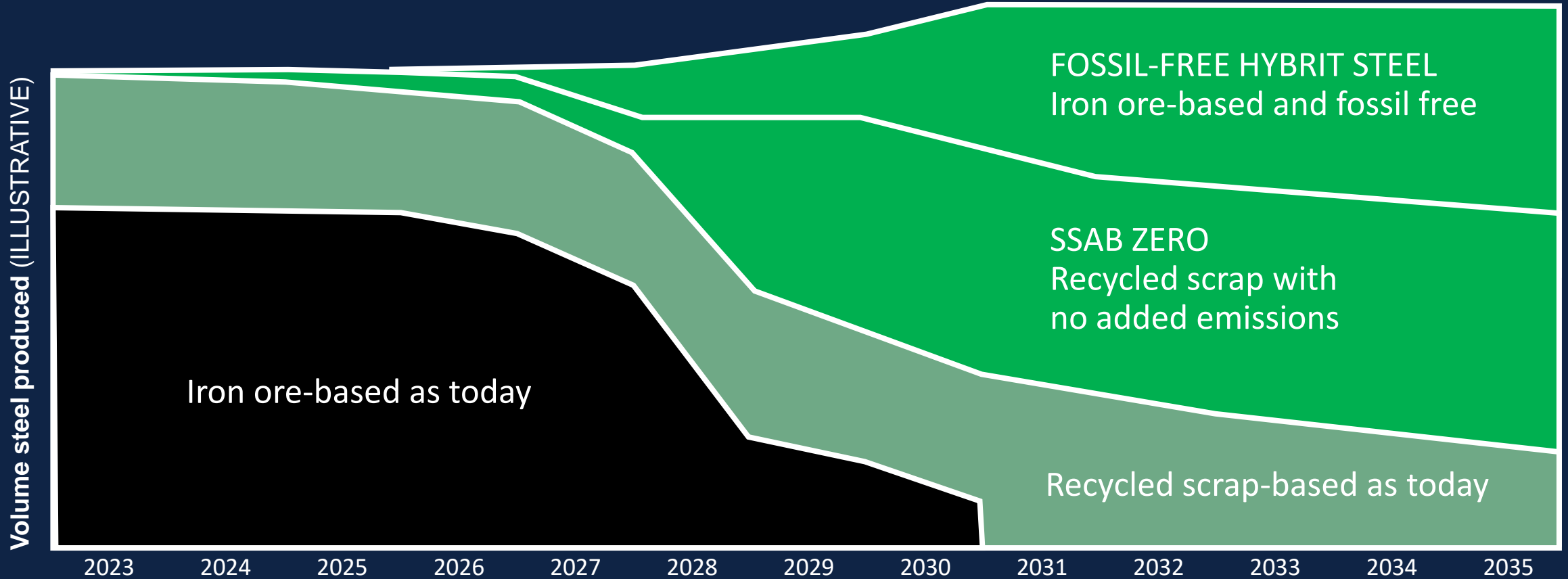
Tibnor  
Ruukki Construction  
SSAB Services

Transformation of steel mills to fossil-free production

- ▶ Lower cost and better efficiency
- ▶ Improved flexibility
- ▶ Higher capacity for high-strength and premium steels

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# Transform SSAB to a fully sustainable steel portfolio



# Launch of SSAB Zero

- Zero carbon emission in operations. Third-party verified
- Fossil-free electricity, biocarbon and biogas
- No carbon emission offsetting or mass balancing allocation schemes



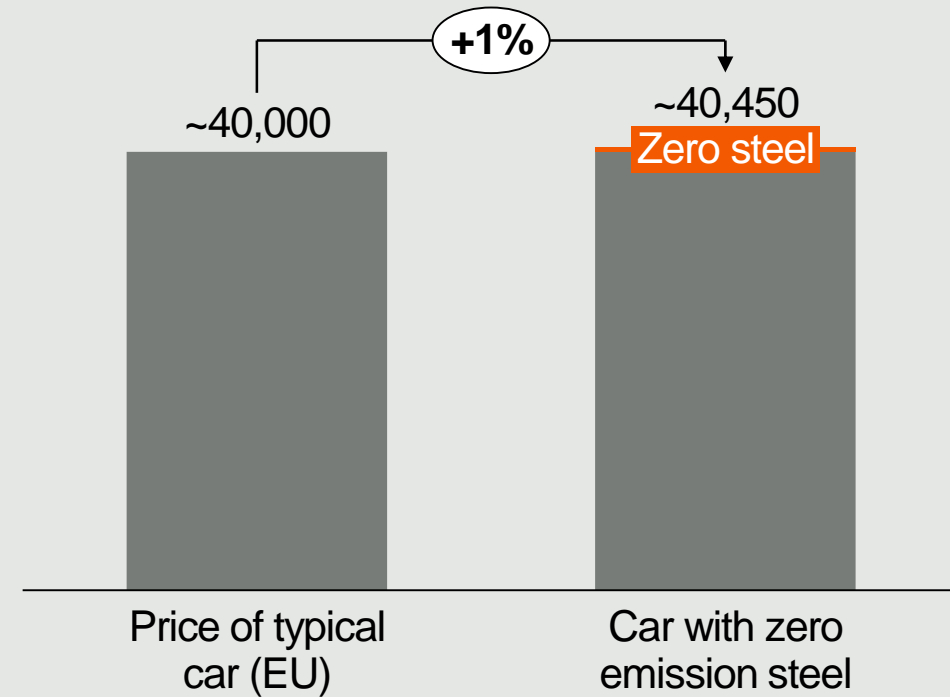
# Zero-emission steel is a premium product

Substantial premium for steel

Value for end products far exceeds the cost

- SSAB estimates that the gross premium on steels with almost zero fossil CO<sub>2</sub>e emissions will be around EUR 300/tonne

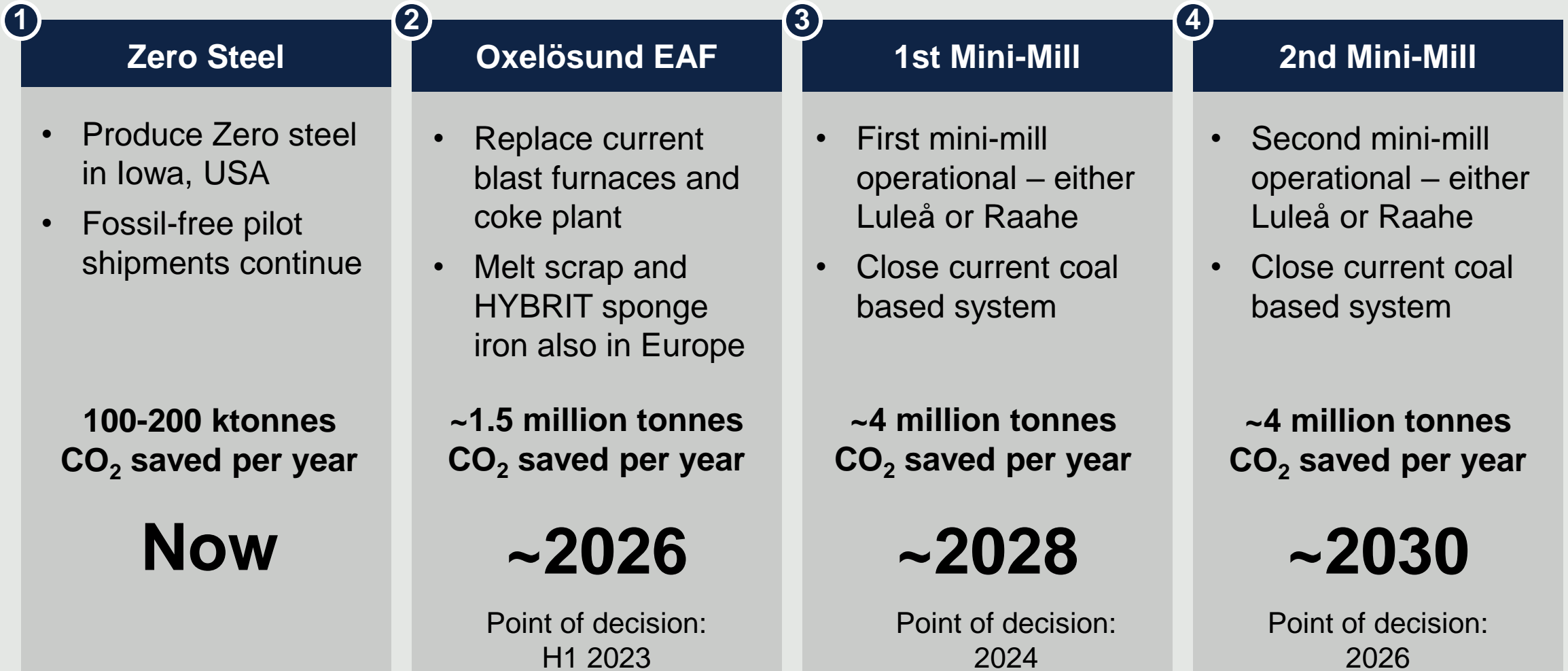
EUR/car





# Transformation of Nordic mills

# Step-wise transformation plan until 2030



# Future footprint - efficient mini-mills and EAFs

Luleå mini-mill



Raahe mini-mill



# Several benefits from transformation to mini-mills

Modelling indicate ~12% lower total cost per tonne after 2030 given current commodity forecasts, including CO<sub>2</sub>

**-12%**

Reduce the fixed cost per ton with ~50%, enabling a much more flexible cost base moving with the business cycle

**-50%**

Total capacity similar as today – with lower cost, higher flexibility and new capabilities enabling volume growth to ~8 million tonnes

**~8 Mt**

New capabilities supporting SSAB's product mix agenda towards 2/3 premium and special steels shipments

**~2/3**











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# HYBRIT – key to flexibility and fossil-free value chain

- Planning for demonstration plant with a capacity of 1.3 million tonnes of fossil-free sponge iron
- The JV, Hybrit Development AB, owns the intellectual property rights to the technology
- Partners have the option to build own DRI plants
- Upscaling of the HYBRIT technology for commercial fossil free sponge iron yet to be proven



# What we need outside of our own control

		Oxelösund	Luleå	Raahe
<b>Environmental permits</b>	Permits to change to more environmentally friendly production			
<b>Grid connections</b>	New power lines to connect to main grid			
<b>Electricity</b>	Need ~4.5 TWh more (excluding Hybrit)			
<b>Level playing field</b>	 EU competition receiving billions in state aid to invest in existing technology – US funding the green transition via Inflation Reduction Act			

Industry-leading  
profitability

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# Fundamentals for industry-leading profitability

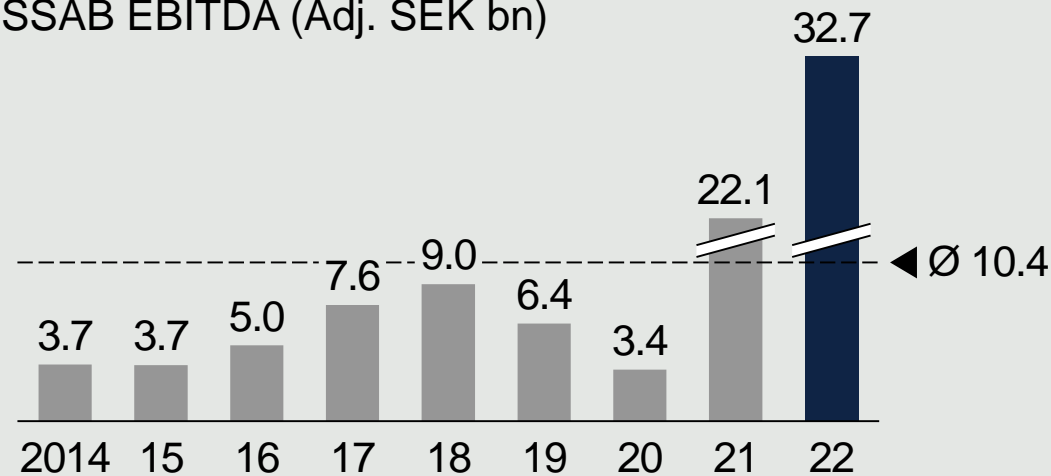
Financing transformation capex + dividend

Healthier over the cycle profitability

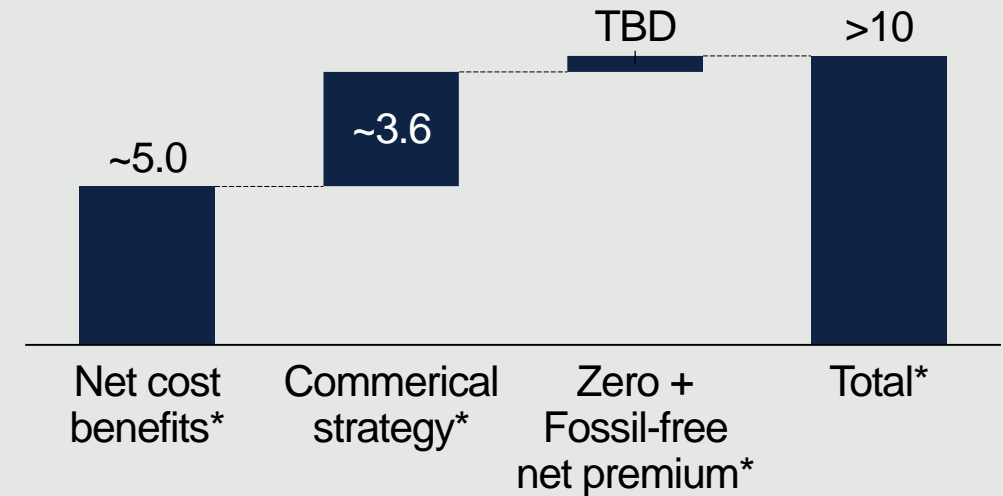
+

Significant transformation benefits

SSAB EBITDA (Adj. SEK bn)



Transformation benefits >2030 (SEK bn)

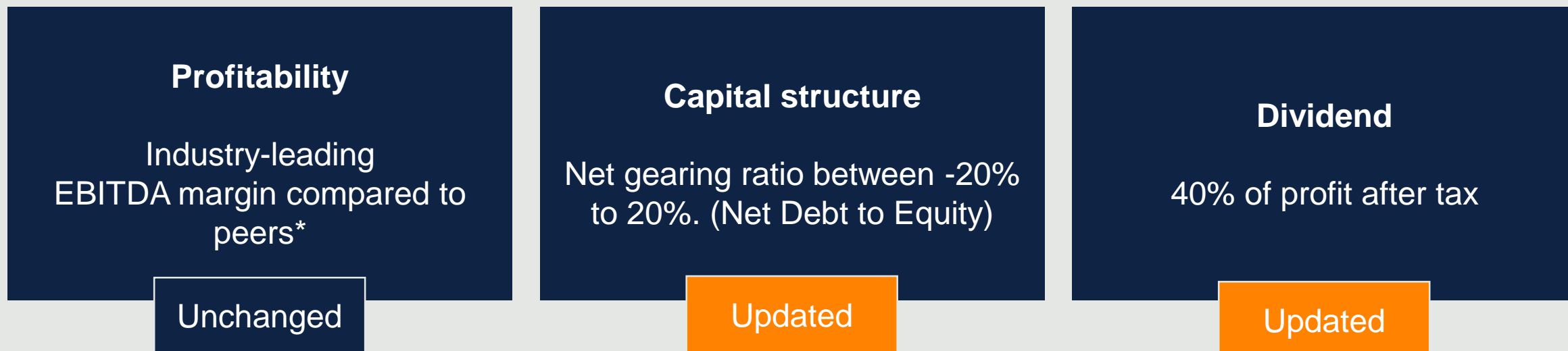


\*Benefits refers to annual earnings improvement compared to a scenario where SSAB keeps current blast furnace system

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# SSAB financial targets



*Before determining the yearly dividend proposals and capital structure adjustments, the management and board of directors will evaluate the capital needs for the coming years based on market outlook, capex plans and other considerations.*

\*ArcelorMittal, Nucor, Salzgitter, Tata Steel Europe, ThyssenKrupp and US Steel

# Summary

# Summary

## SSAB's strategic direction continues

Global leader in high-strength steels

#1 in Nordic home market and US plate

Develop channels to the market

## Leading the green transition

Superior zero-emission steel offering

All mills in favorable position for transformation to fossil-free steelmaking – mill size and raw material supply

Synergies from our leading US EAF mills – ability to launch and start production of SSAB Zero now

World-leading development of hydrogen-based DRI within the Hybrit project

Better cost position and 2/3 of volume premium/high-strength reduces volatility and lifts low-point profit

Stepwise investment program to fossil-free with flexibility to adapt to changing conditions

Strong balance sheet and cash flow generation, no goodwill and new target for capital structure and dividend

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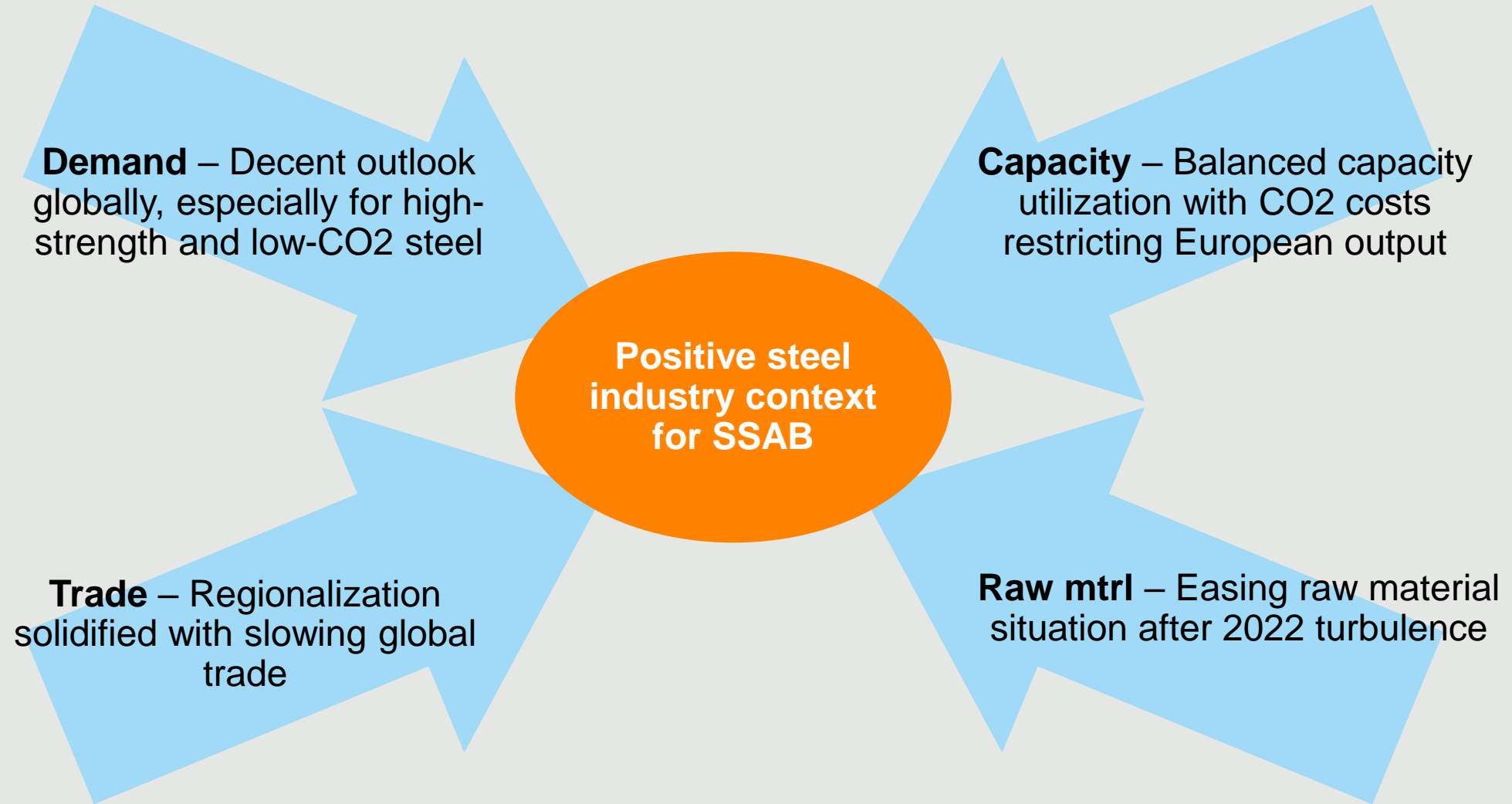
# A healthy steel industry landscape

Viktor Strömberg

EVP and Head of Strategy and Digitalization

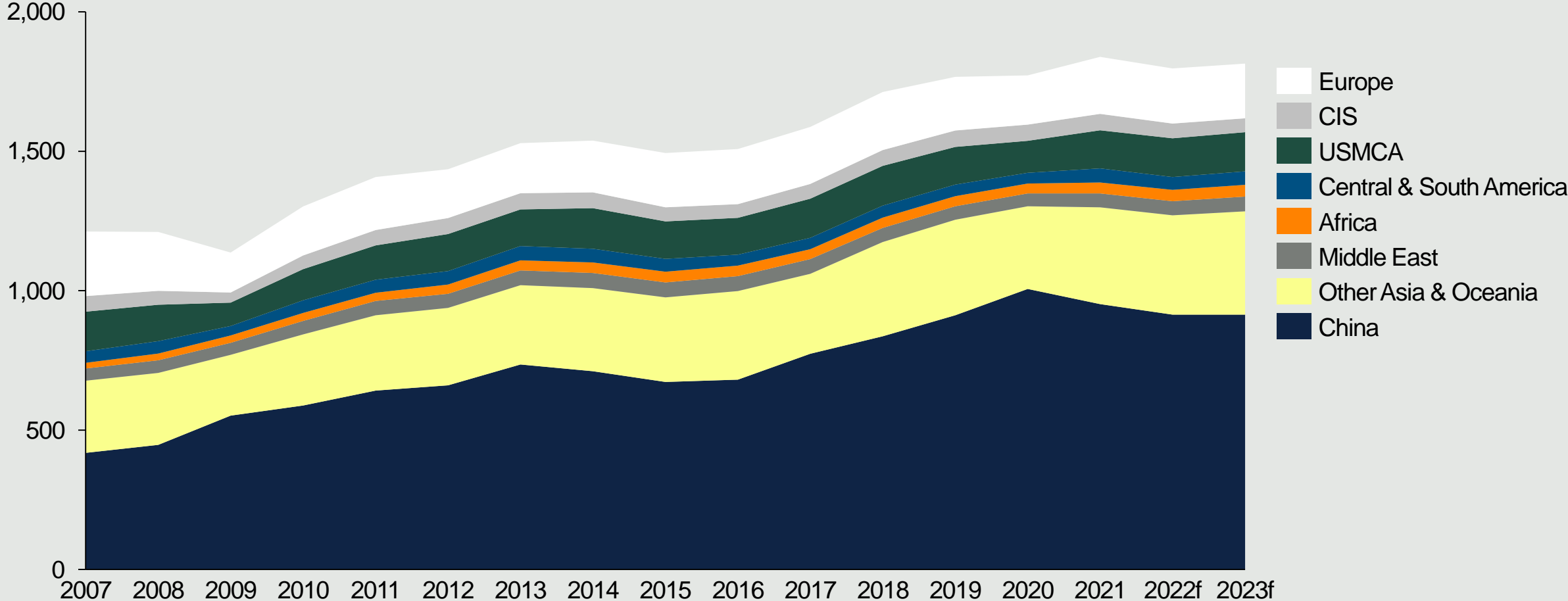
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# Healthier steel industry fundamentals



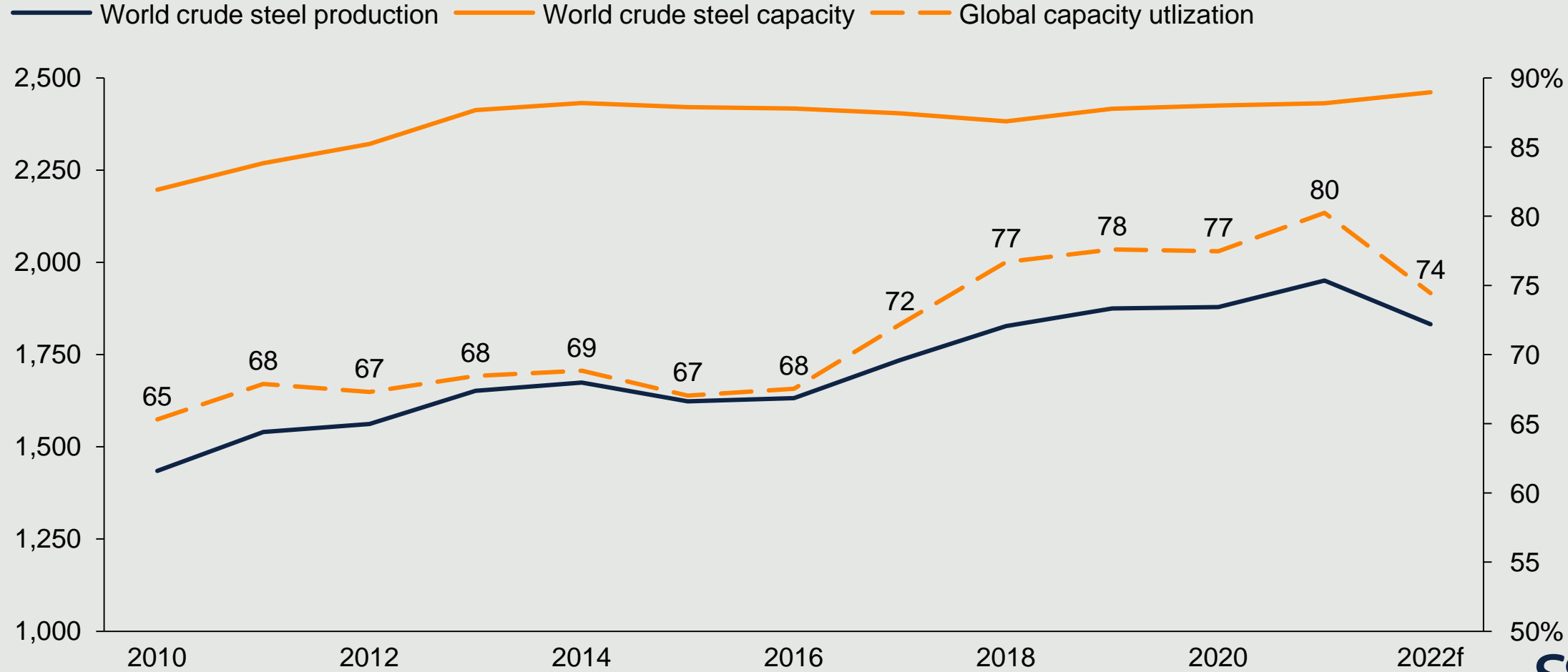
# World steel demand at all-time high

Apparent steel demand, Mt



# Global capacity utilization at healthy levels again

Global production and capacity balance, million tonnes,%

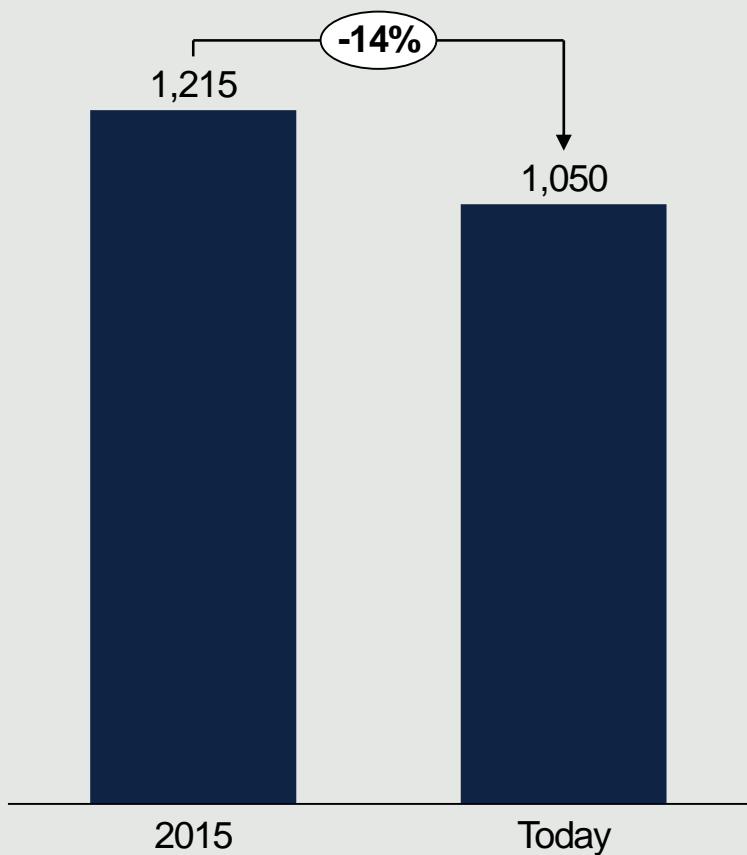




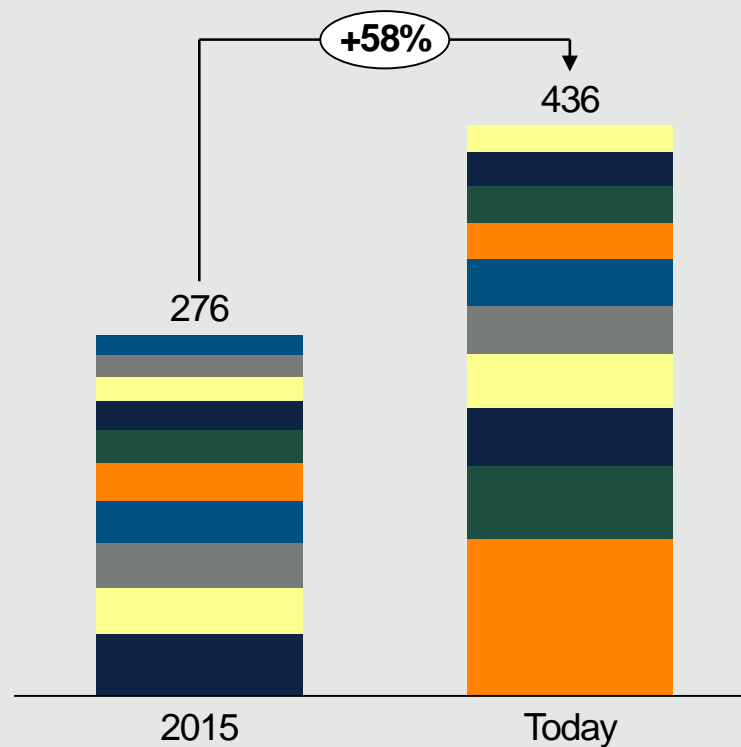
# China developments supporting global fundamentals



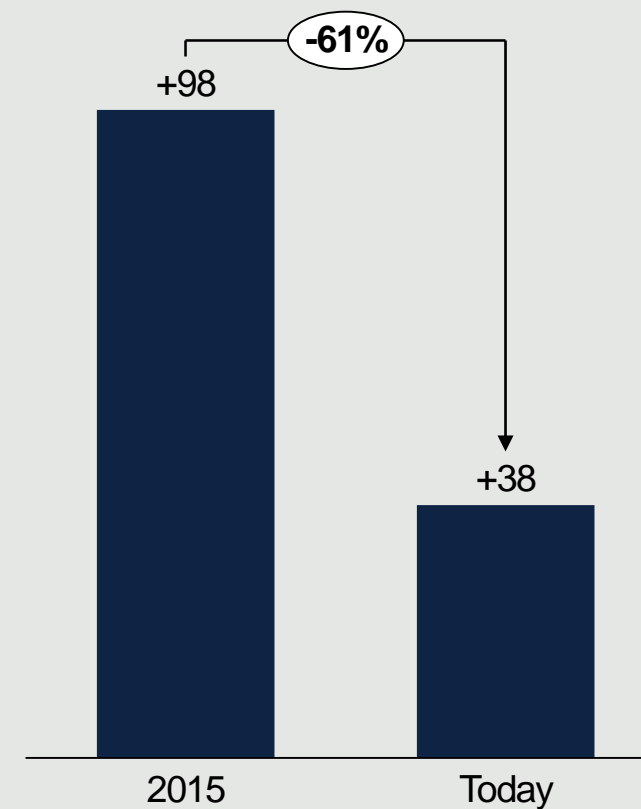
China steelmaking capacity,  
million tonnes



China industry structure,  
Production of top-10, million tonnes



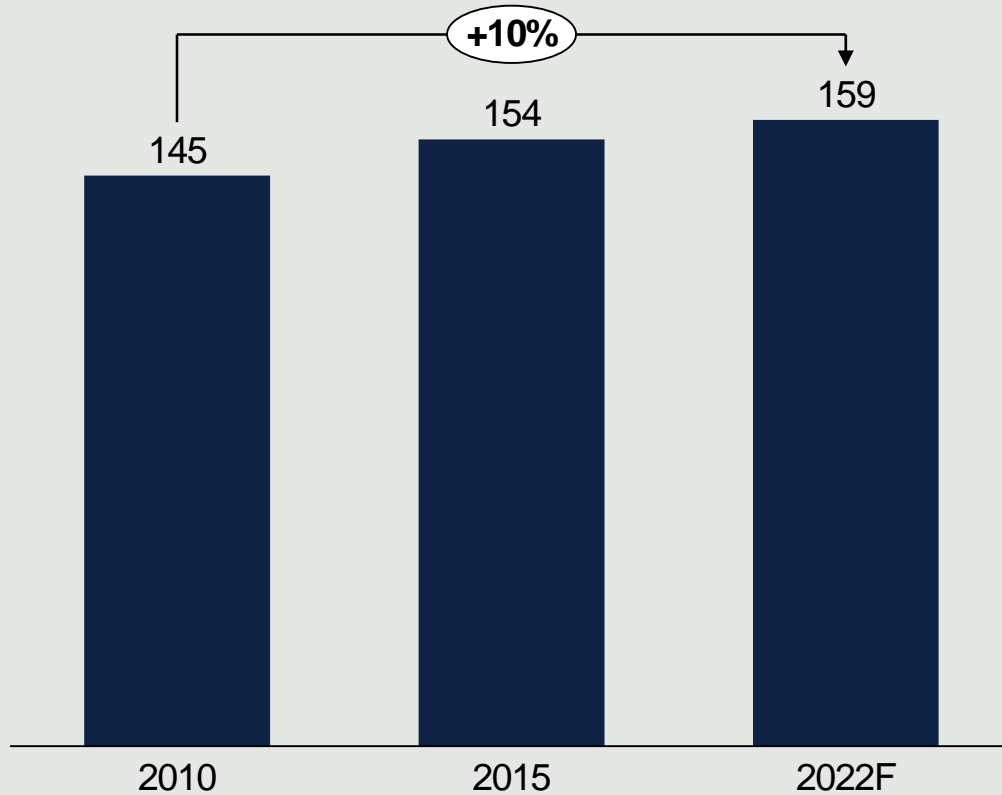
China net trade balance  
million tonnes



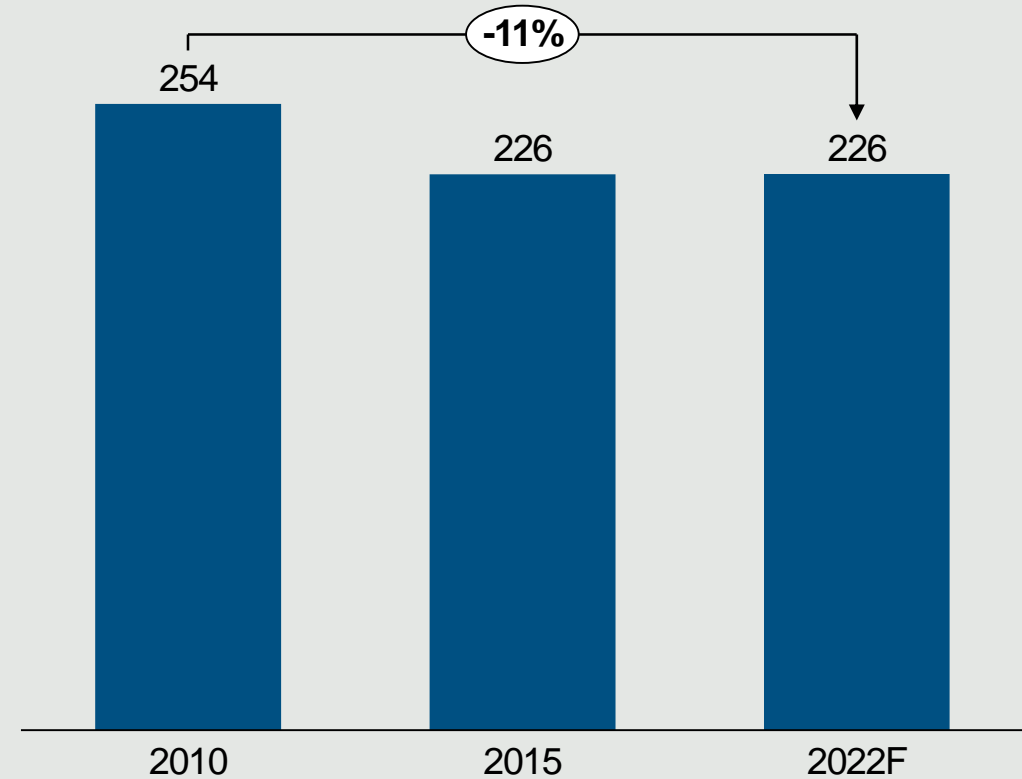


# Healthier fundamentals in Europe

**EU+UK apparent steel demand,**  
million tonnes



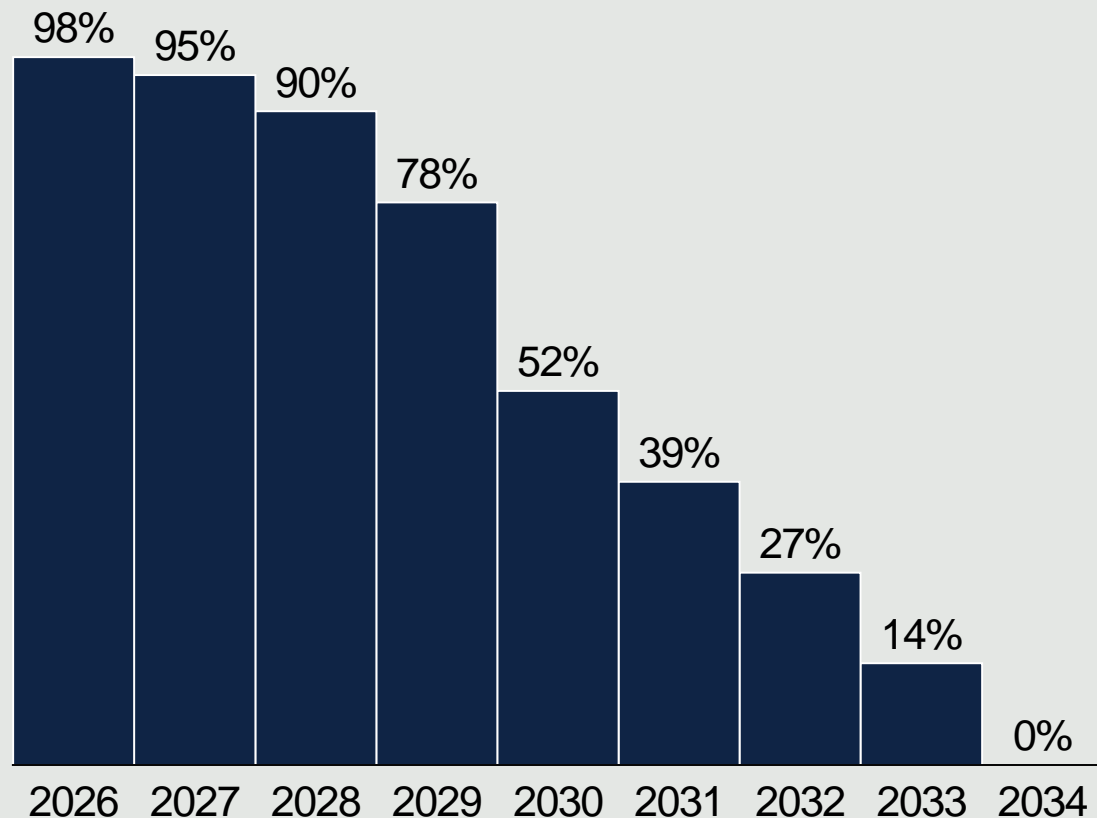
**EU+UK crude steel capacity,**  
million tonnes





# Termination of free emissions is a game changer

Free ETS allocation, % of benchmark

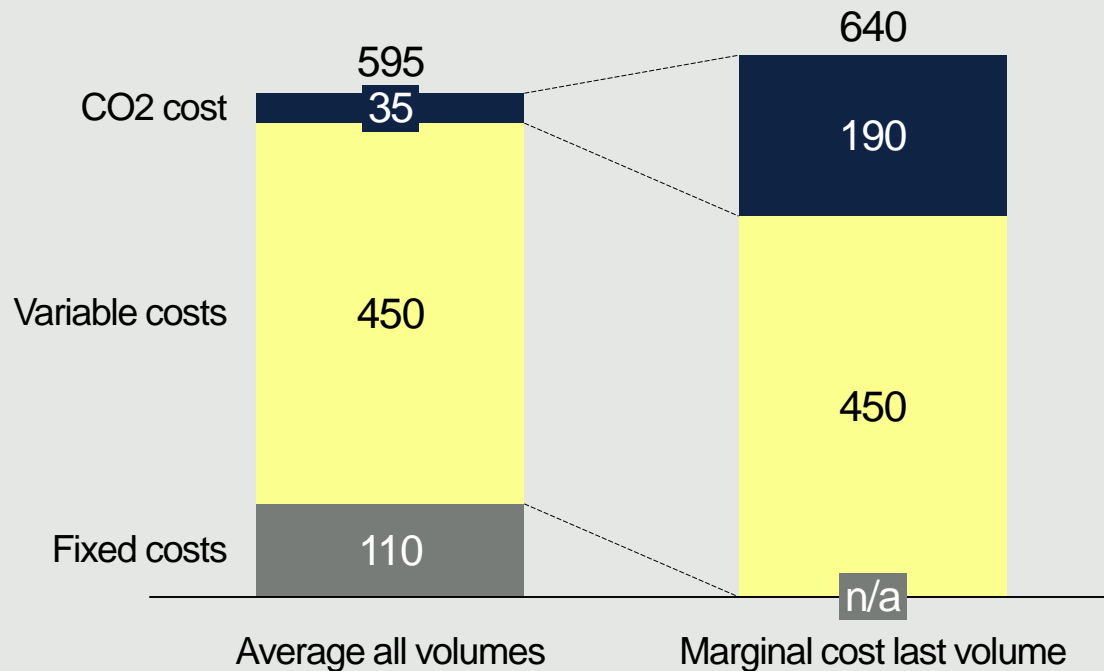


- New Directive negotiated between European commission and Parliament
- Directive coupled with CBAM regulation to avoid leakage to imports
- With a potential ETS price of EUR 100/t the cost for EU producers will be substantial
- The cost for SSAB would be SEK >10bn per annum for current BF footprint (~10 Mt CO<sub>2</sub> emissions)



# CO<sub>2</sub> policy leads to a steeper cost curve in Europe

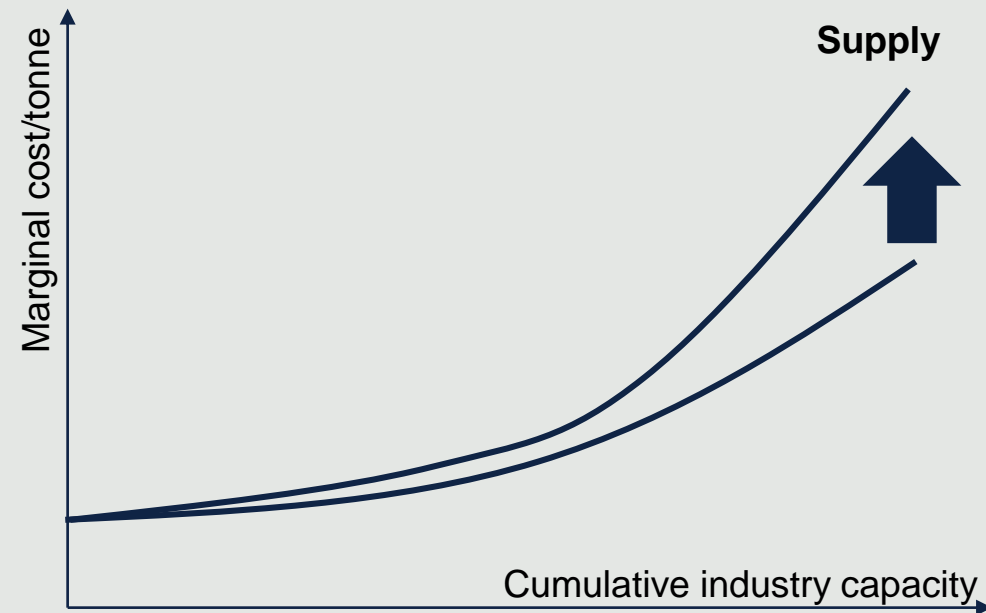
Cash cost for typical EU BF producer  
2023 (EUR/tonnes)



Higher marginal cost with existing technology makes **growth unsustainable and uneconomical**

Industry cost curve  
Marginal cost/tonne

ILLUSTRATIVE



ETS allocation and CO2 price makes EU **cost curve** “**steeper**” - supports healthier dynamics

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# Everybody running to decarbonize steel

– hydrogen seen by more and more as the solution

Option	Carbon Capture and Storage (CCS)	Natural gas direct reduction (NG-DRI)	Hydrogen direct reduction (H-DRI)
Pros	+ No change to current steelmaking process	+ Technically mature process	+ Maximum reduction of CO <sub>2</sub>
Cons	- Expensive with added CAPEX and OPEX	- Cost and sourcing of natural gas	- Cost of hydrogen
	- Unproven at scale	- Limited reduction in CO <sub>2</sub>	- New technology

## Examples



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# Global leader in high-strength steels

Johnny Sjöström

EVP SSAB Special Steels

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# SSAB Special steels in brief



~34  
SEK bn in  
sales 2022

6-8%  
CAGR over  
time

>75%  
of sales Q&T  
material

## Key segments



Trailer & body  
builders



Raw  
material  
handling



Yellow  
goods



Lifting



Recycling

+4,100  
Professionals

+150  
Countries with sales

+90  
Local stocks

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# SSAB Special Steels fundamental to overall Group strategy

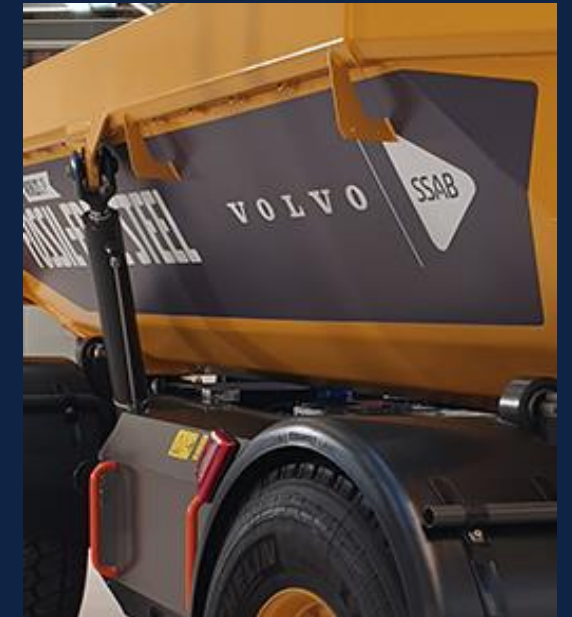
Market leadership



Product mix improvement



Developing channels to market



Green transition

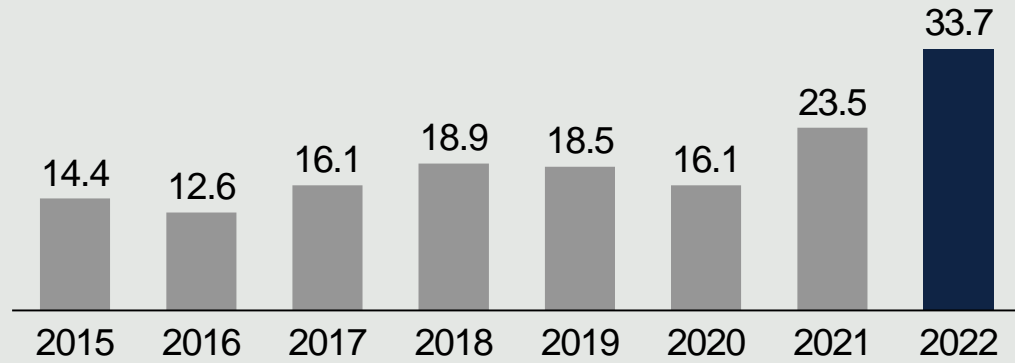
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# Introduction

# 2021 and 2022 – two strong years

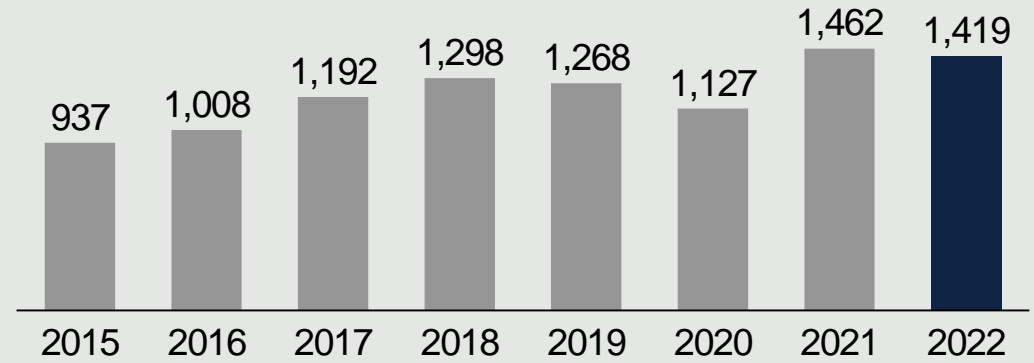
## Revenue

SEK bn



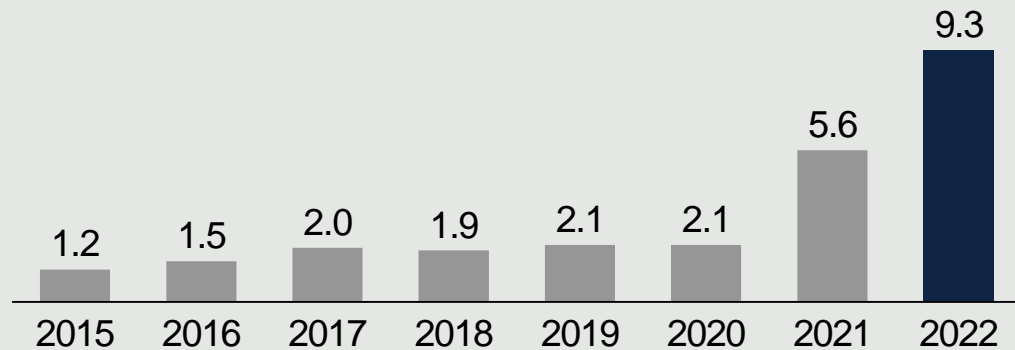
## Shipments

ktonnes



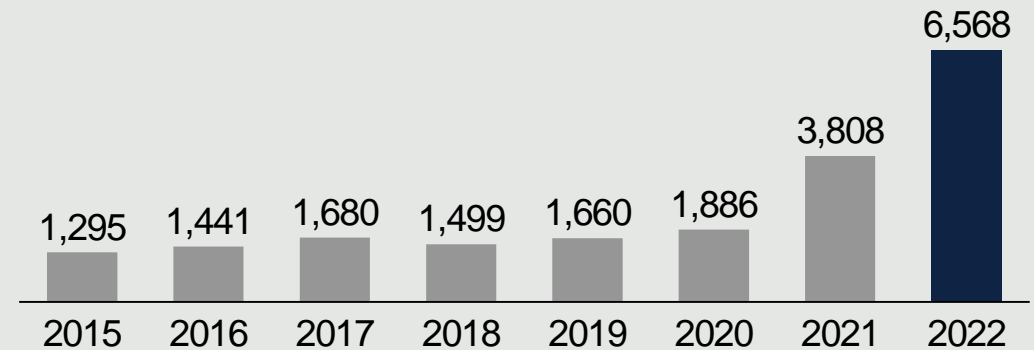
## EBITDA

SEK bn



## EBITDA per tonne delivered steel

SEK



# Global market leadership in Q&T

# Strong Q&T portfolio and building presence in additive manufacturing

## Wear QT

**Key segments:**  
Truck & body builder  
Material handling



**HARDOX®**  
WEAR PLATE

## Structural QT

**Key segments:**  
Lifting  
Forestry



**STRENX®**  
PERFORMANCE STEEL

## Protection QT

**Key segments:**  
Civil  
Military



**ARMOX®**  
PROTECTION PLATE

## Tooling QT

**Key segments:**  
Tooling  
Engineering



**TOOLOX®**  
ENGINEERING & TOOL STEEL

## Additive Powder

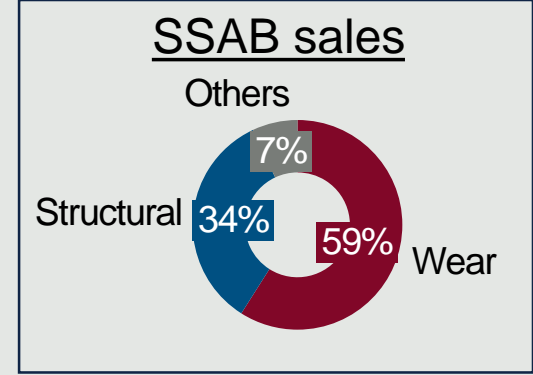
**Key segments:**  
Tooling  
Automotive



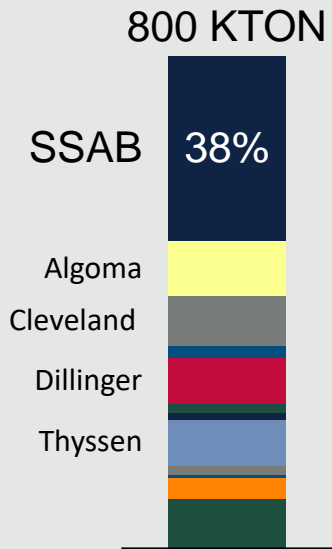
**AM Powder**

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# Q&T Wear market analysis

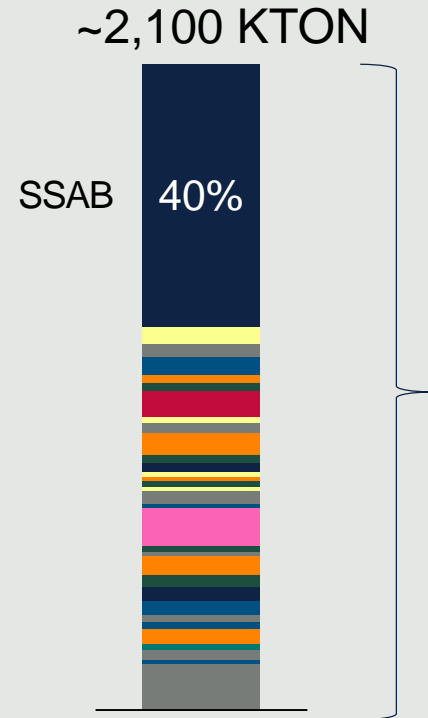


Global market 2006



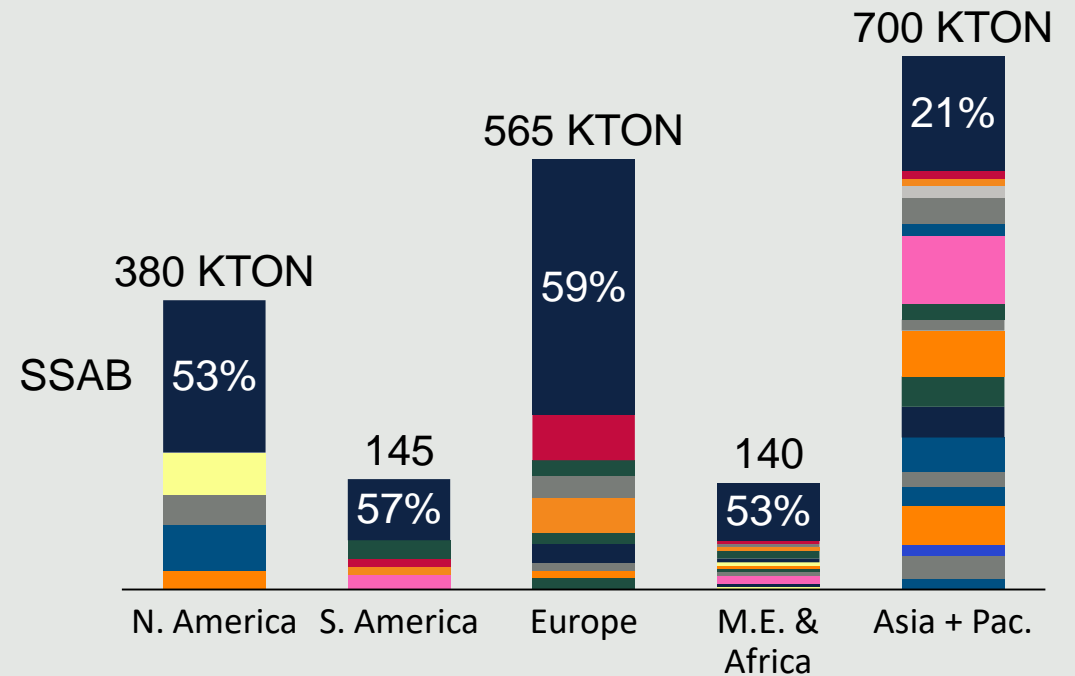
SSAB and mainly Western competitors

Global market 2021



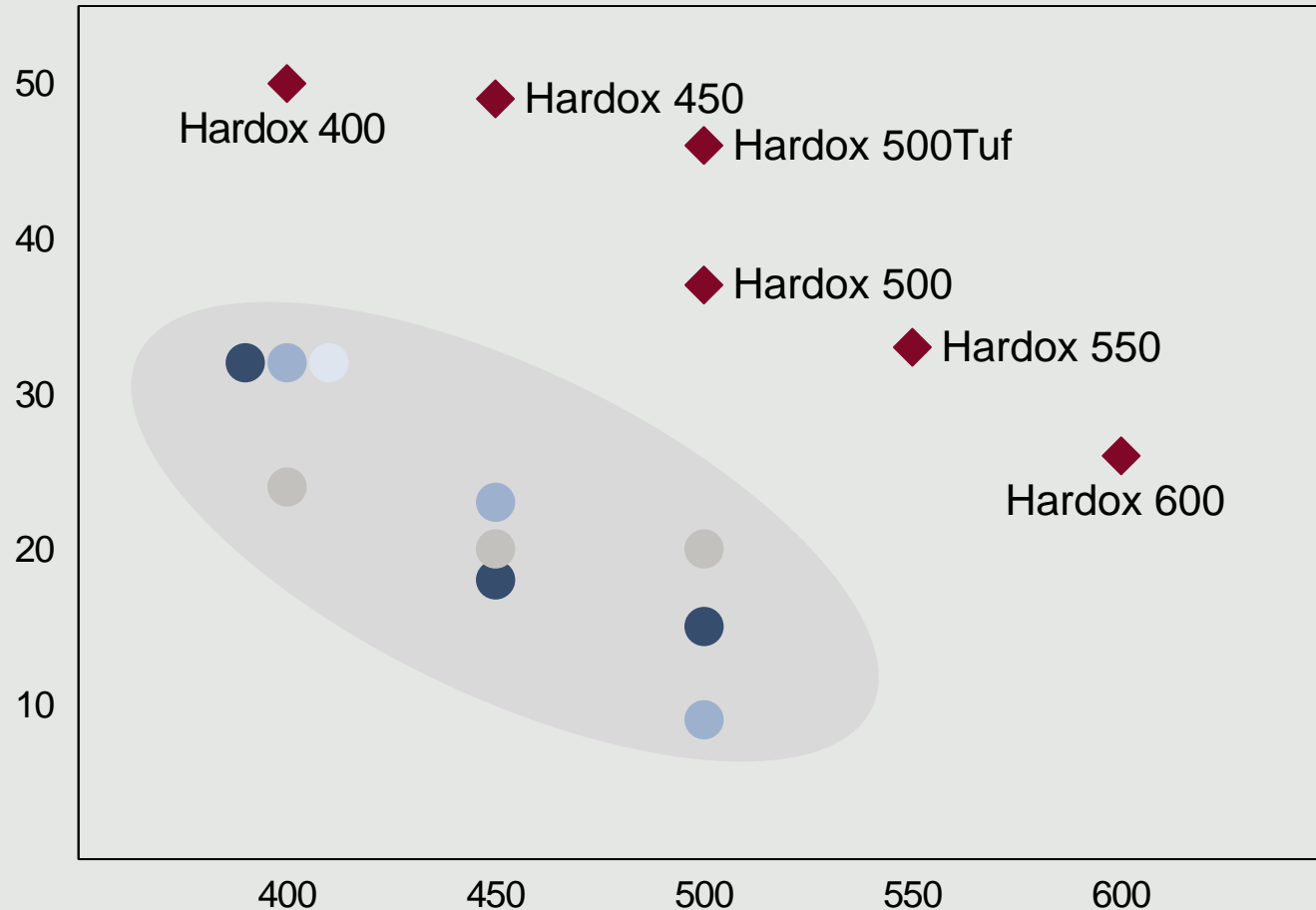
The number of competitors has increased by 2.5 times, but mainly from China

Market by region 2021



# Unique properties supporting our concept “stronger and lighter”

Typical impact toughness J/-40C    ◆ Hardox    ● C1    ● C2    ● C3    ● C4    (C = chosen competitor)



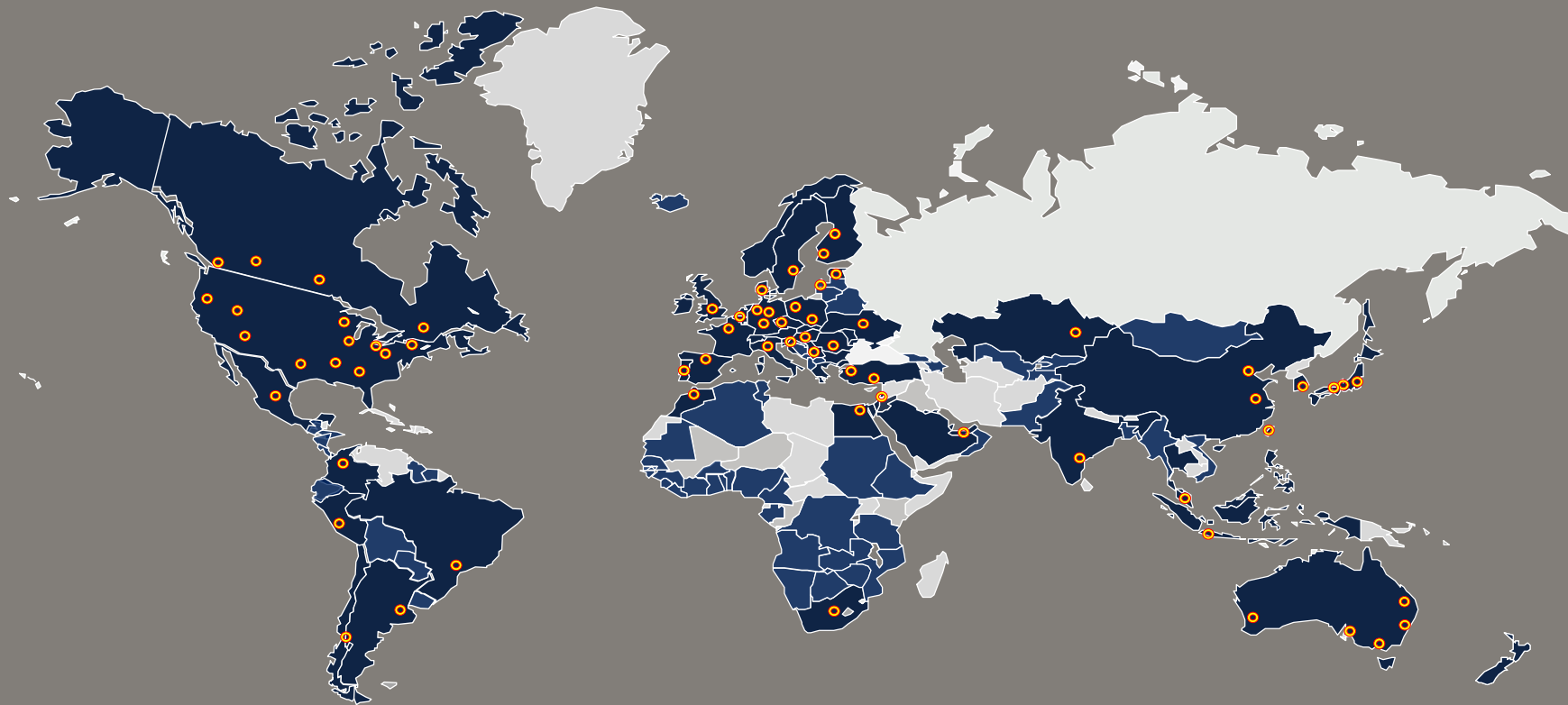
- Unique properties compared to many competitors
- Supporting our “stronger lighter” concept
- Offer a wear material with significant “structural” properties

Hardness (Brinell)

# Unique business model



# Global sales through all channels – difficult model to copy



**Differentiation:** multiple segments in multiple industries

**Fragmentation:** >11,000 customers, majority small – mid-sized and not large OEMs. >80% of customers <100 tonnes

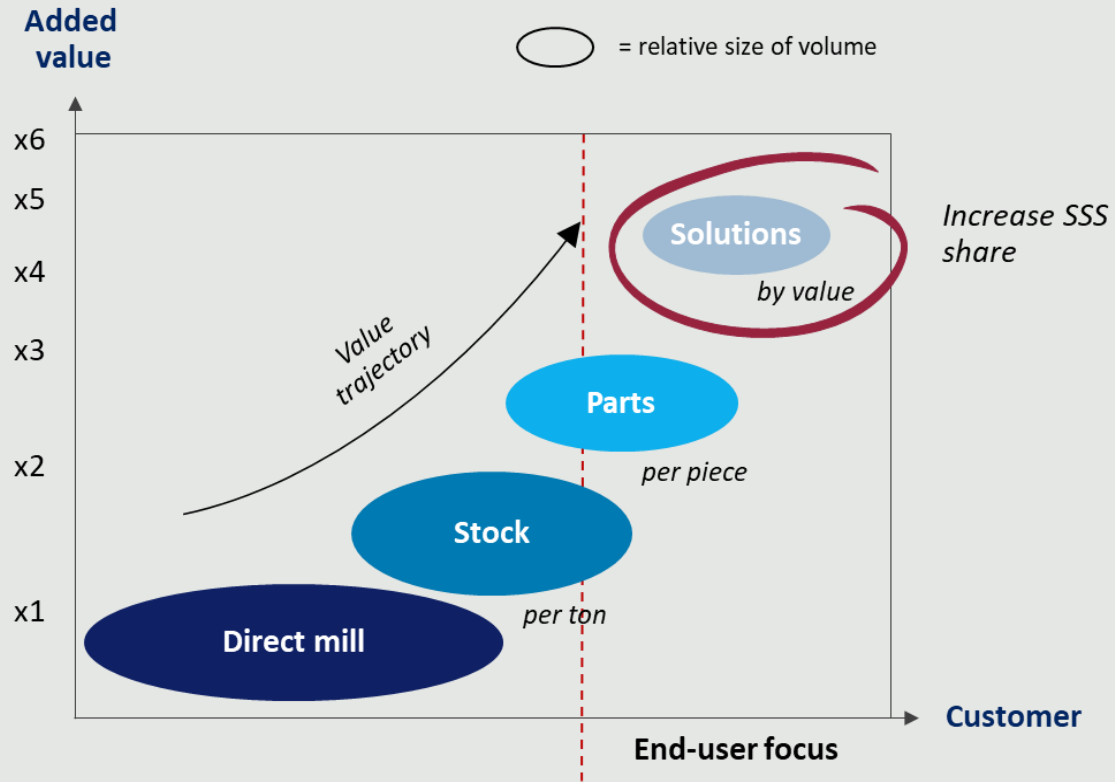
**Reach:** sales in more than 130 countries with +90 stock locations

**Awareness:** top of mind brands and networks across the globe

- SSAB Special Steels Stocks
- SSAB Special Steels Sales and Sales Local Office
- SSAB Special Steels Sales
- Limited or no SSAB Special Steels Sales

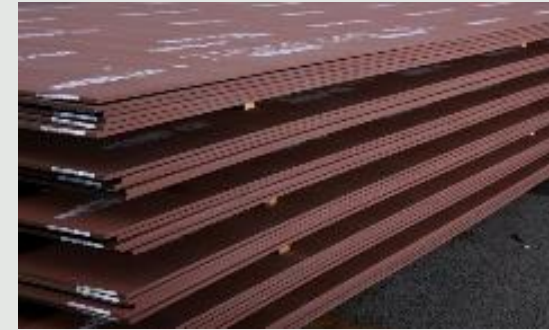
# Dedicated downstream business unit to drive value added

Downstream should support the climb on the “value added ladder”



## Example of solution

25 tonnes  
Hardox  
500TUF...



...processed  
and welded  
XMOR tray



**X5**

SEK/tonne  
in value  
added

# Upgrading with new products and designs

– optimizing customer productivity

1990-2000



2000-2010



2020-2030



Steel grade used

Hardox 400  
700 Material

Hardox 400  
Hardox 450

Hardox 500TUF

Design concept

Classic box shape  
with linear

U-shape being  
introduced

U-shape  
Arc shape

Material thickness

8-10 mm

5-8 mm

3-6 mm

Solution weight

4.5 tonnes

3 tonnes

2.3 tonnes

CO<sub>2</sub> reduction  
(2000-2022)



CO<sub>2</sub> saved:  
3.4 Mt



CO<sub>2</sub> fuel saved:  
54 Mt



CO<sub>2</sub> total saved:  
57 Mt



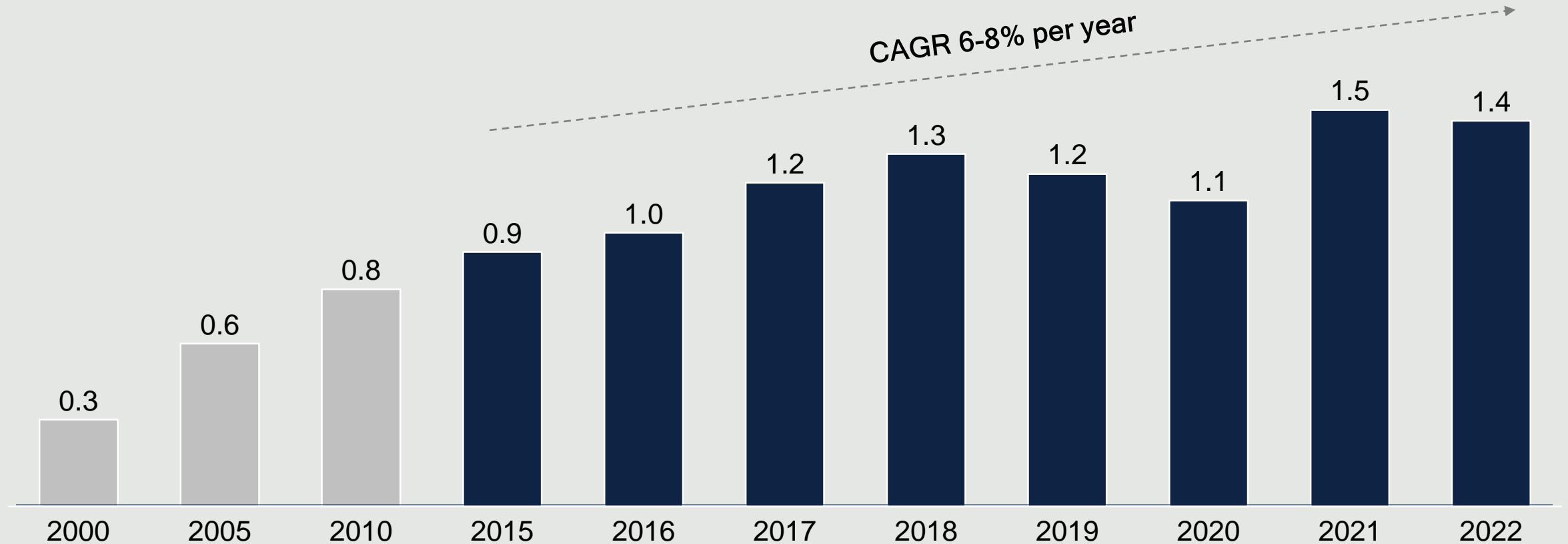
CO<sub>2</sub> reduction equals  
1.2 million cars

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# Growth strategy

# Successfully outpaced the market with a ~6-8% CAGR

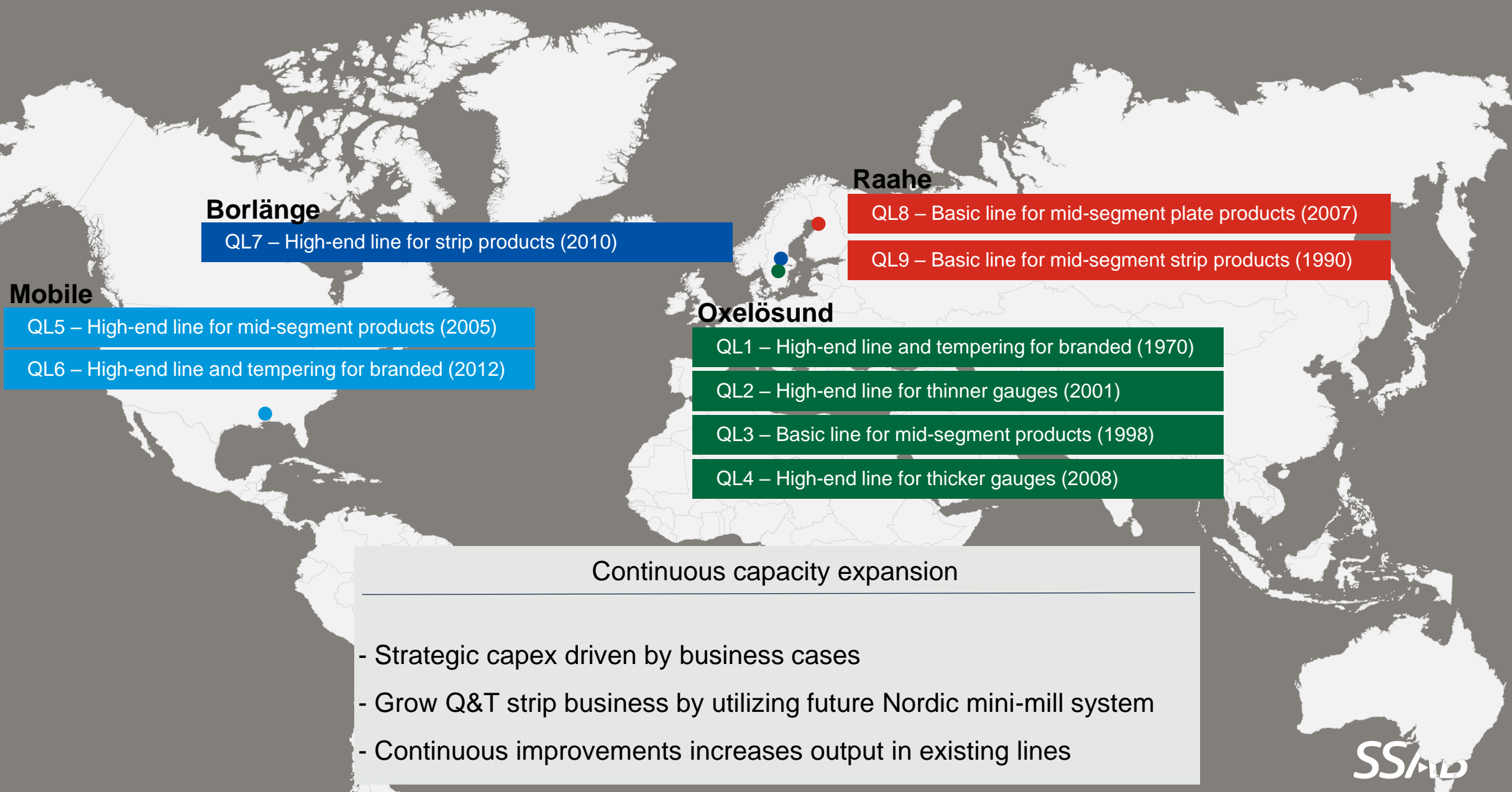
## SSAB Special Steels shipments



Special Steels division  
formally created 2015

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# Production capacity at four mills – a total of nine Q&T lines



## Continuous capacity expansion

- Strategic capex driven by business cases
- Grow Q&T strip business by utilizing future Nordic mini-mill system
- Continuous improvements increases output in existing lines

# SSAB Special Steels' outlook

Long-term growth target

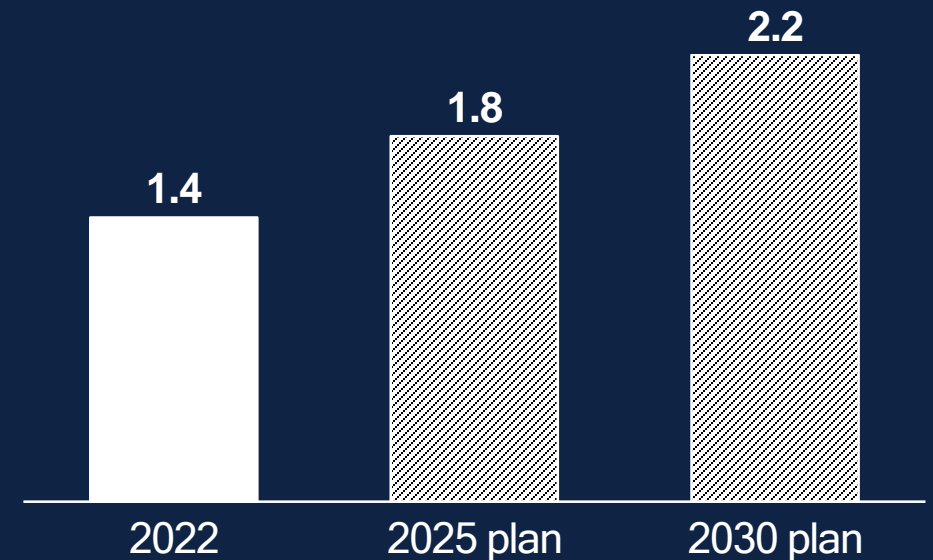
>2.2 Mt

in shipments 2030

~80%

Q&T material

Grow 80-100Kt per  
year



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A long-exposure photograph of a city street at night, showing vibrant light trails from cars in shades of blue, red, and yellow. The image is partially obscured by a dark blue diagonal shape on the left side.

# Nordic leader in premium steels

Olavi Huhtala  
EVP and Head of SSAB Europe

SSAB

# Strong contribution to overall Group strategy

## Market leadership

- Strengthening the position on SSAB's Nordic home market

## Product mix improvement

- Growth in Premium and Automotive AHSS
- Reducing volume of standard products outside Nordics

## Developing channels to market

- Synergies with Tibnor and Ruukki Construction

## Green transition

- Transforming the Nordic strip system from blast furnaces to efficient, EAF-based mini-mills
- Developing fossil-free offering

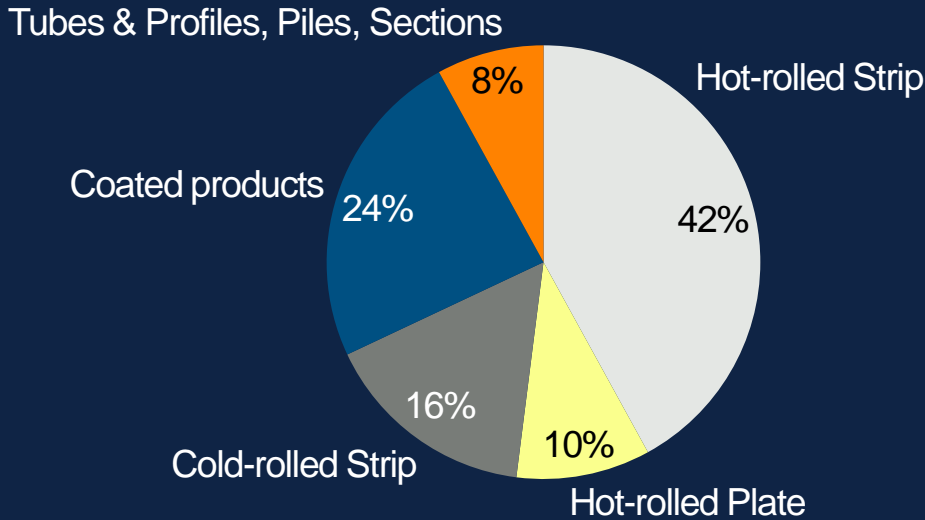


# Introduction

# SSAB Europe in brief

**50.1** BILLION  
SEK  
annual net sales in 2022

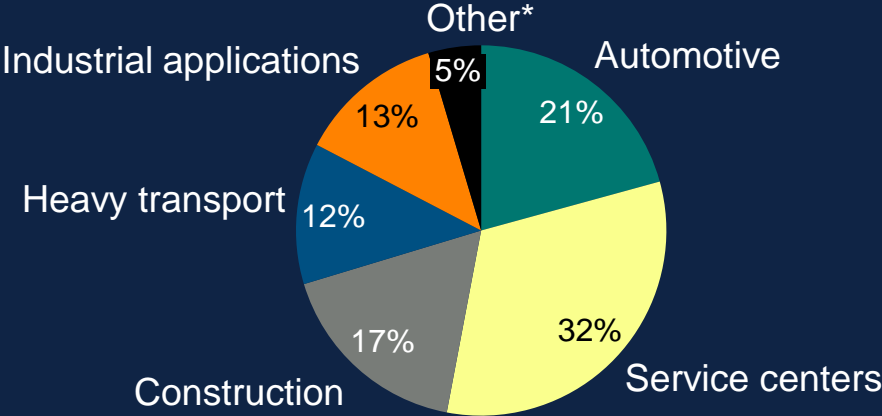
## Steel offering



**6,700**  
Professionals

Annual steel  
production capacity:  
**4.9** MILLION  
TONNES

## Core Segments

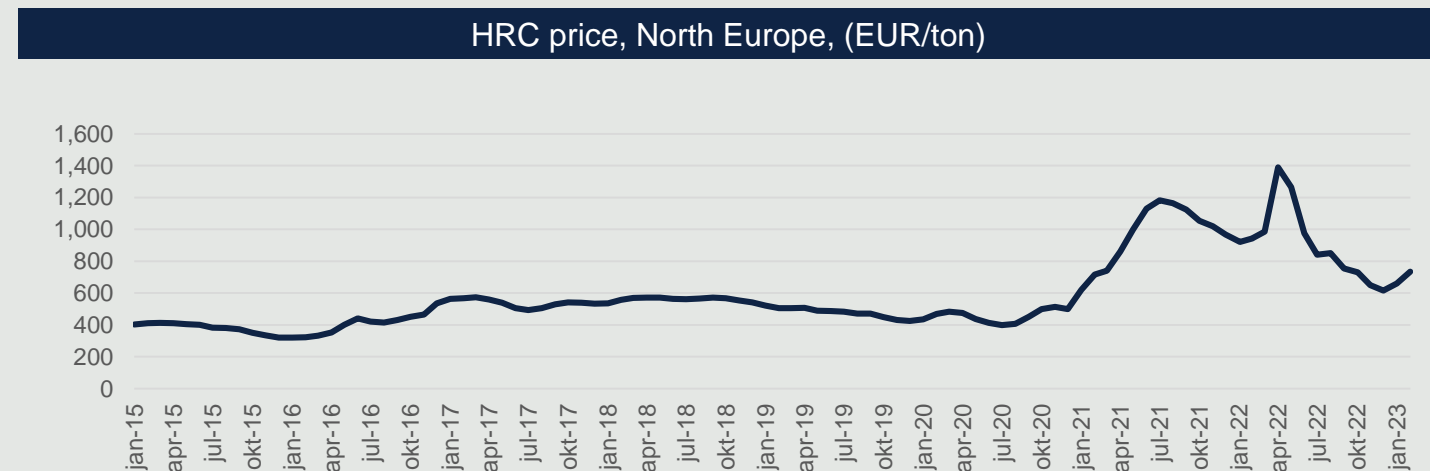
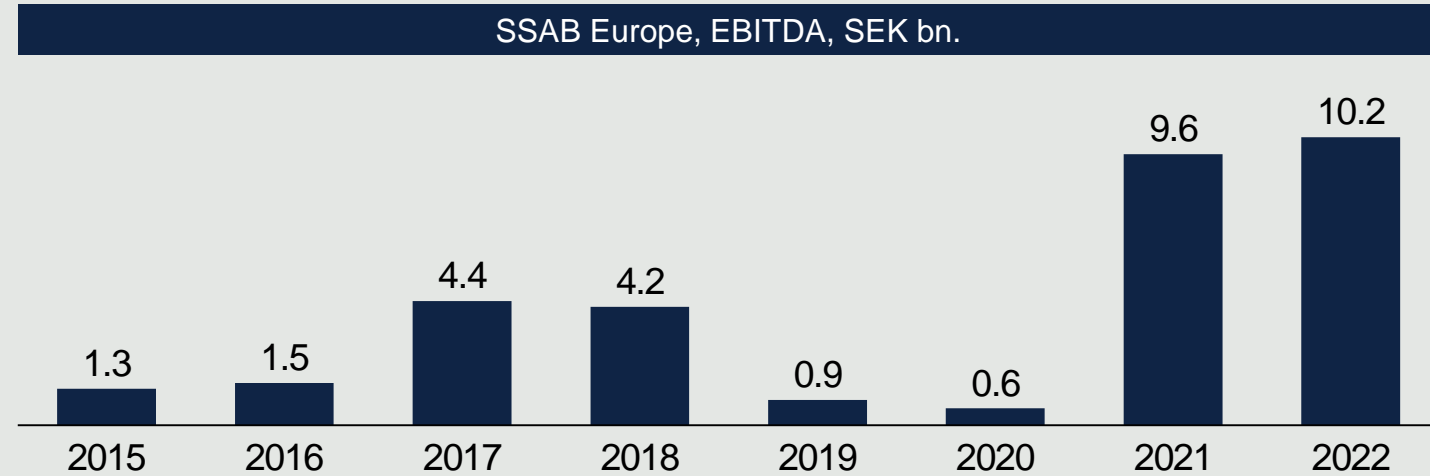


\*Construction machinery & Energy



# Record earnings in volatile market conditions

- Outbreak of Covid-19 stopped activity in the first half of 2020
- Rapid turnaround in demand late in 2020, successful ramp-up and record earnings
- Higher interest rates and inflation impacted second half of 2022, substantial destocking
- Market recovered at the end of 2022



# High earnings compared to peers

- Positive underlying earnings trend – focus on reducing volatility
  - Improving product mix
  - Continuous improvements – better efficiency and flexibility
- Well balanced between various segments and geographies



Peer group: ArcelorMittal Europe, ThyssenKrupp steel Europe, Tata Steel Europe and Salzgitter

Nordic home  
market leader

*SSAB*

# Nordic home market strategy

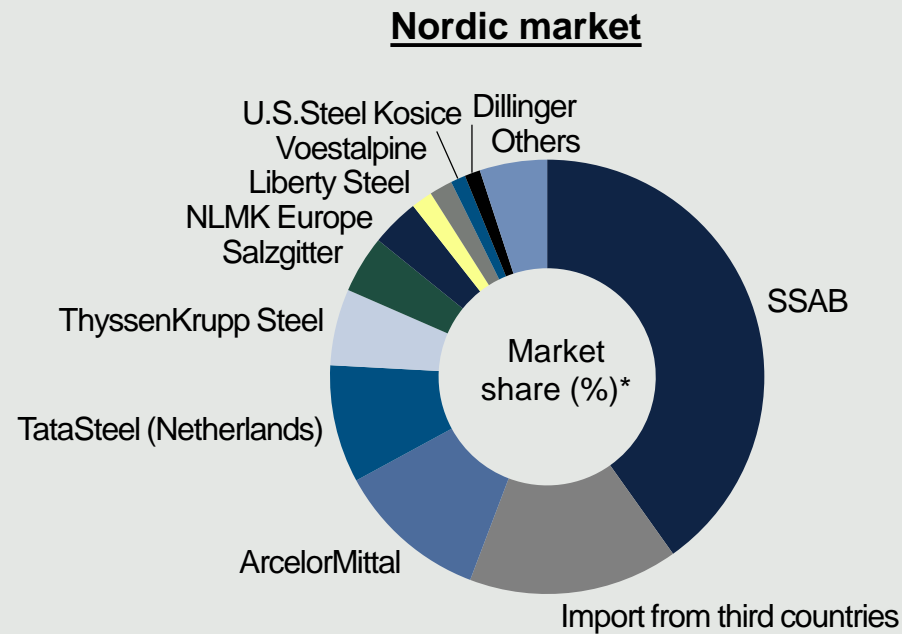
1. Trusted partner

2. Broadest offering

3. Unbeatable logistics

4. Most effective sales model

5. Synergies with Tibnor and Ruukki Construction



*Fossil-free steel strengthens long-term relationship with customers*

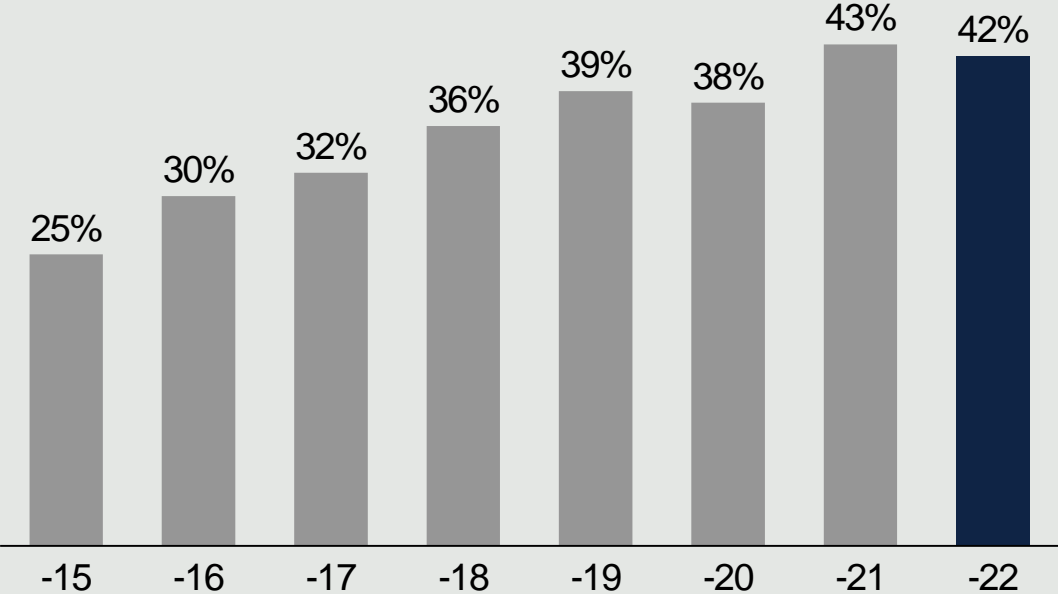
**SSAB**



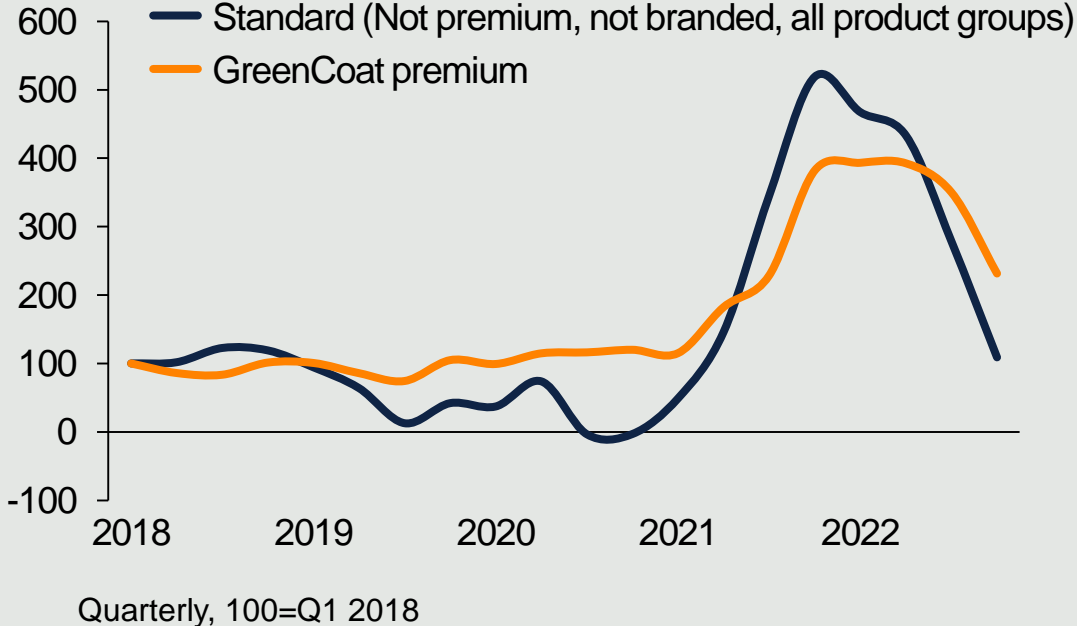
# Growth focus – Premium products

# Improving product mix

Share of premium and AHSS products (shipments)



Indexed gross margin per tonne



# Premium strategy – key success factors

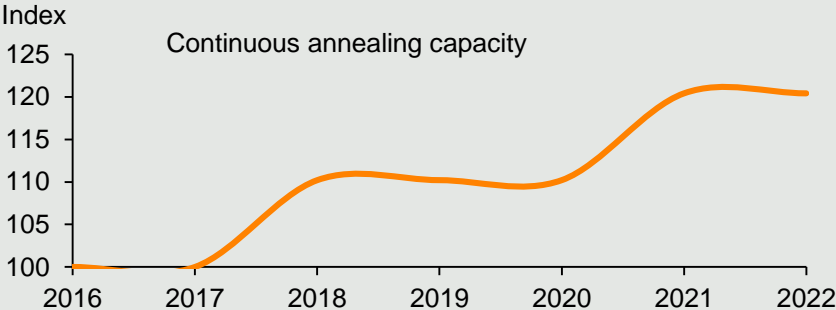
Strategic sales plan targeting growth segments

Product development – often with advanced customers

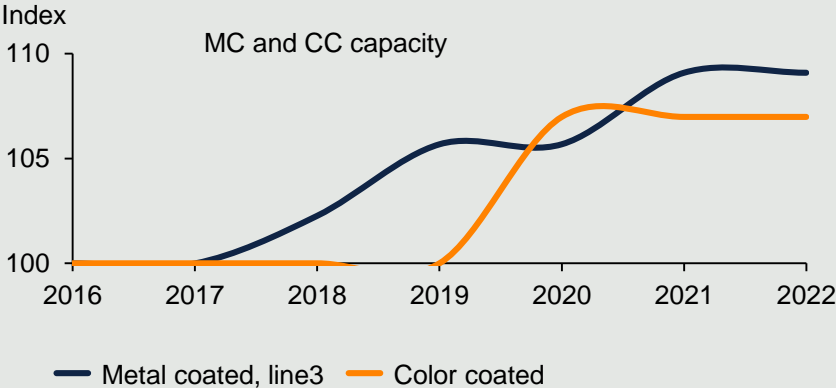
Growth based on investments and better efficiency

Reducing presence in some standard segments outside Nordics

Example of investment



Example of efficiency improvement



# Growth focus – Automotive AHSS

# Key driving forces for growth

Solid fundamentals for mobility demand



Need for weight reduction and better safety performance



AHSS has a strong competitive position



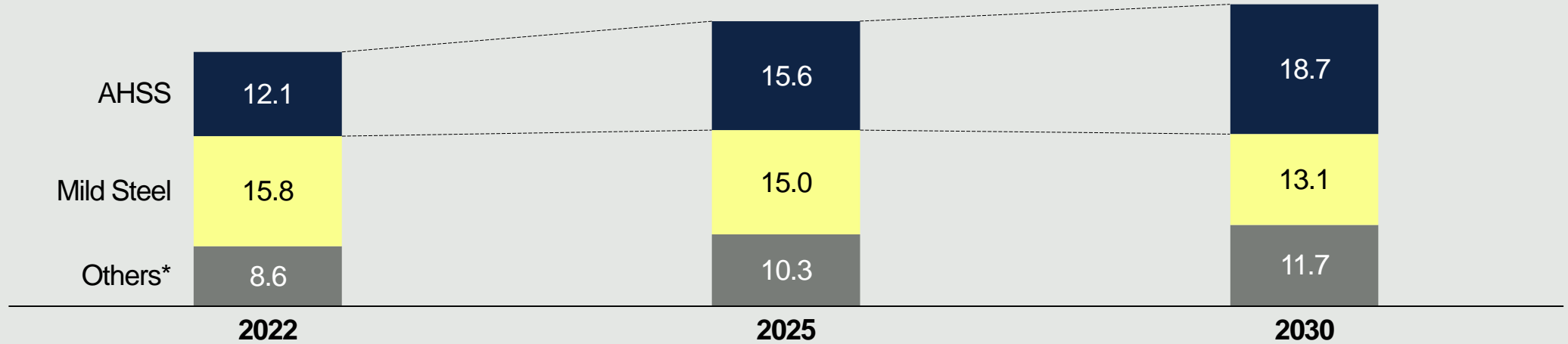
SSAB's world leading product offering



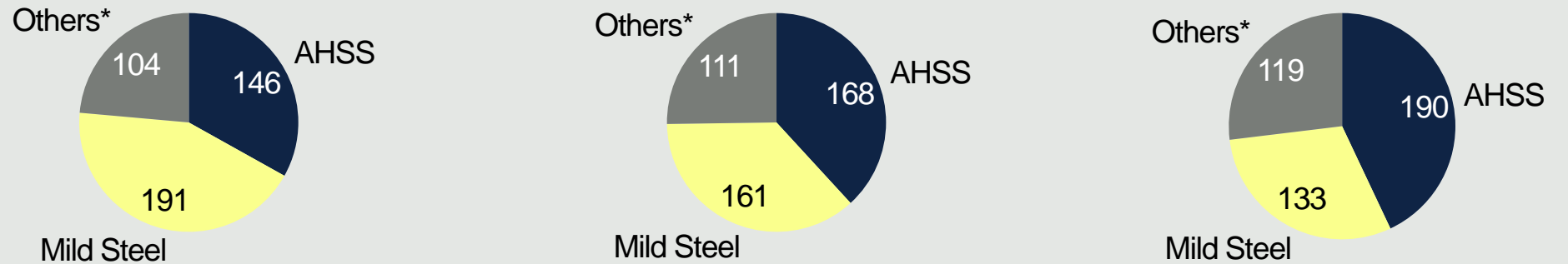
# Demand for AHSS expected to increase

– Driven by weight reduction and better safety performance

**Million tonnes net weight used in light vehicle car bodies\*\* including doors and closures produced**



**Estimated net kg per car body including doors and closures**

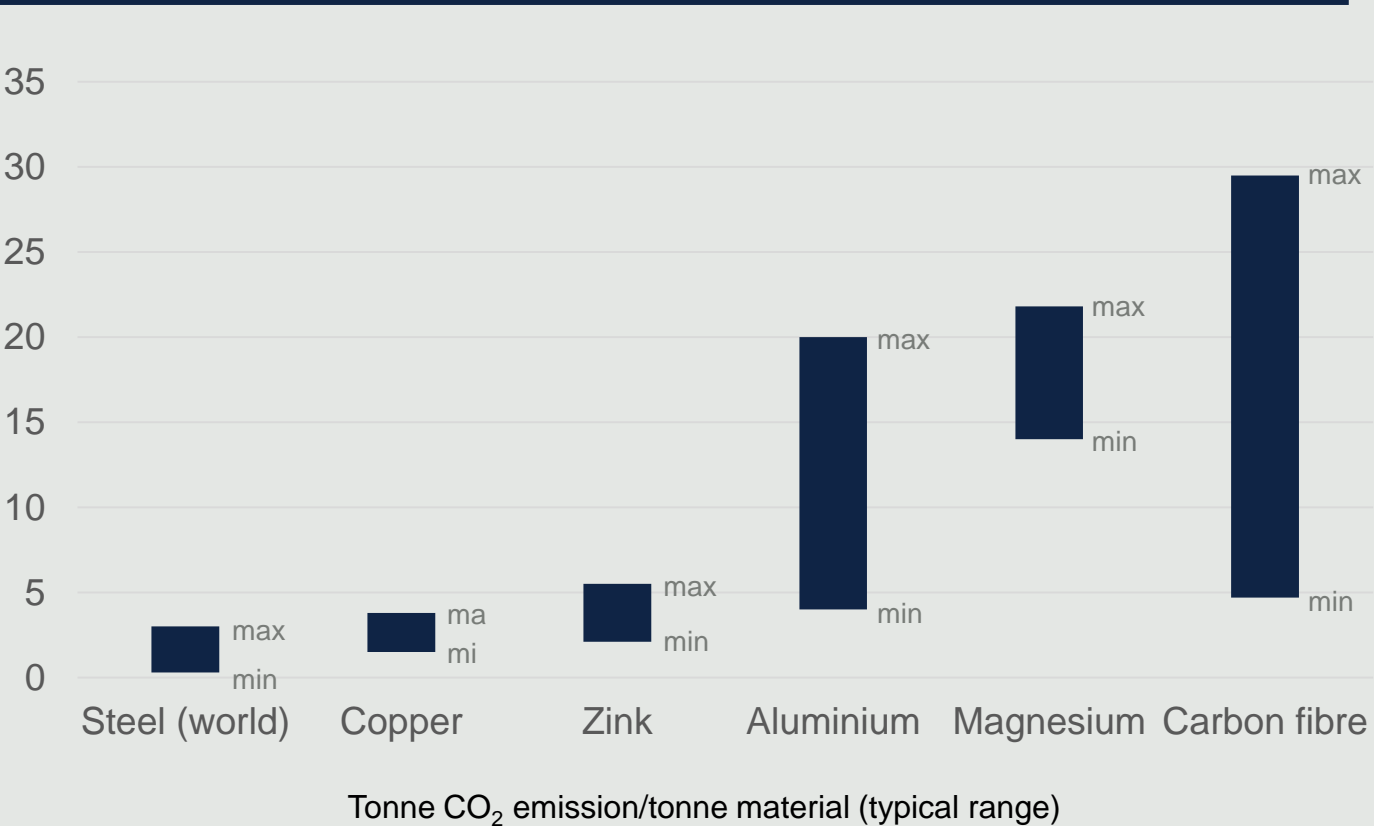


\*Others include aluminium, plastics and other materials \*\*Chassis, battery case and interior systems (incl seats) not included  
Source: Eurocarbody (2022), SSAB estimates for 2025 and 2030

# High-strength steels with strong competitive position

- Steel has well known properties
- Relatively low cost
- 100% recyclable – steel is the most recycled material in the world
- Low carbon footprint grows in importance
- Introducing SSAB Zero as a new benchmark in carbon footprint

Steel has a lower carbon intensity than many other materials



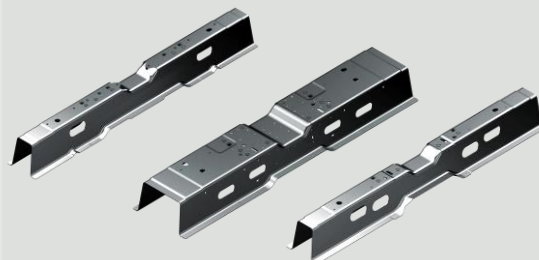
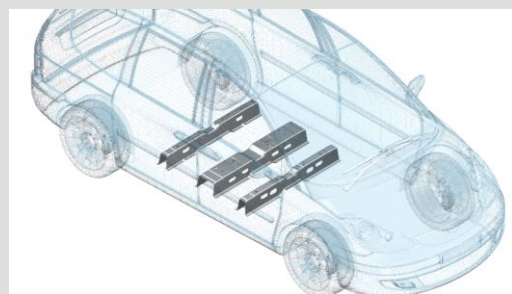
Sources: World Steel, European Aluminium Association, Boliden, MDPI, Climate Action, Nova-Institute GmbH, Copper Alliance, International Zinc Association, German Aerospace Center e.V. Note: The sources might use variations of the definitions of carbon intensity.



# SSAB's world-leading product offering



**Roof rail, several Ford models**  
Docol CR 1700M-UC



**Seat cross members for battery protection, ID. Buzz**  
Docol CR PHS2000-UC



**Lower-control-arm, Toyota Yaris**  
Docol HR 1000CP-UC



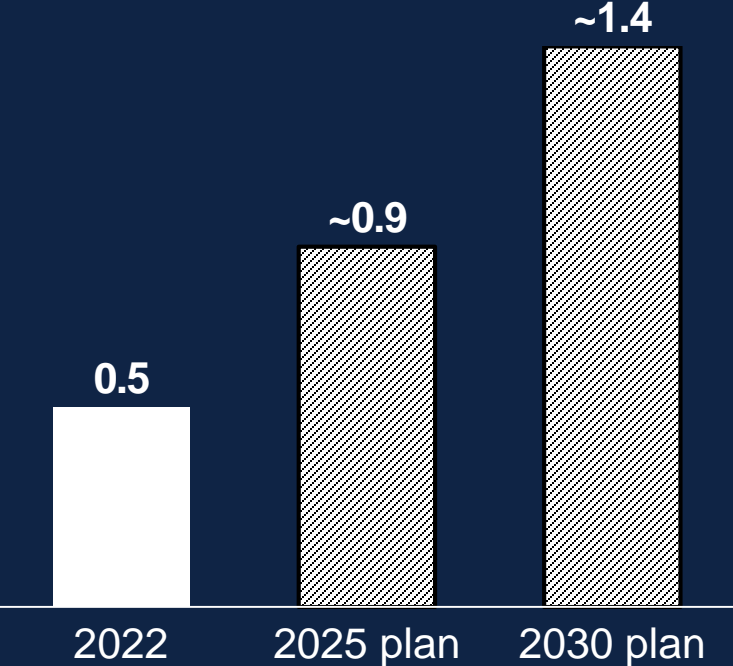
**Prototype Door-beam**  
Docol CR 1700M-EG



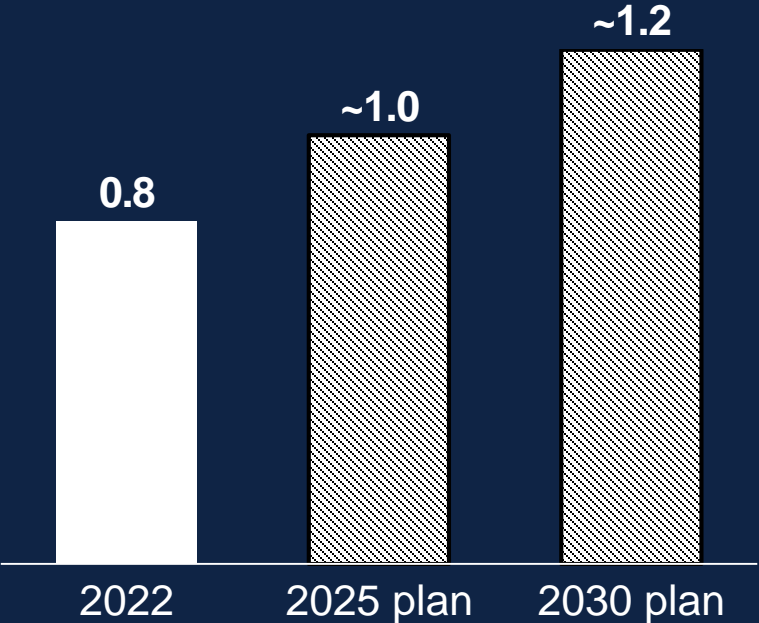


# New growth targets

Automotive AHSS



Premium products



Million tonnes

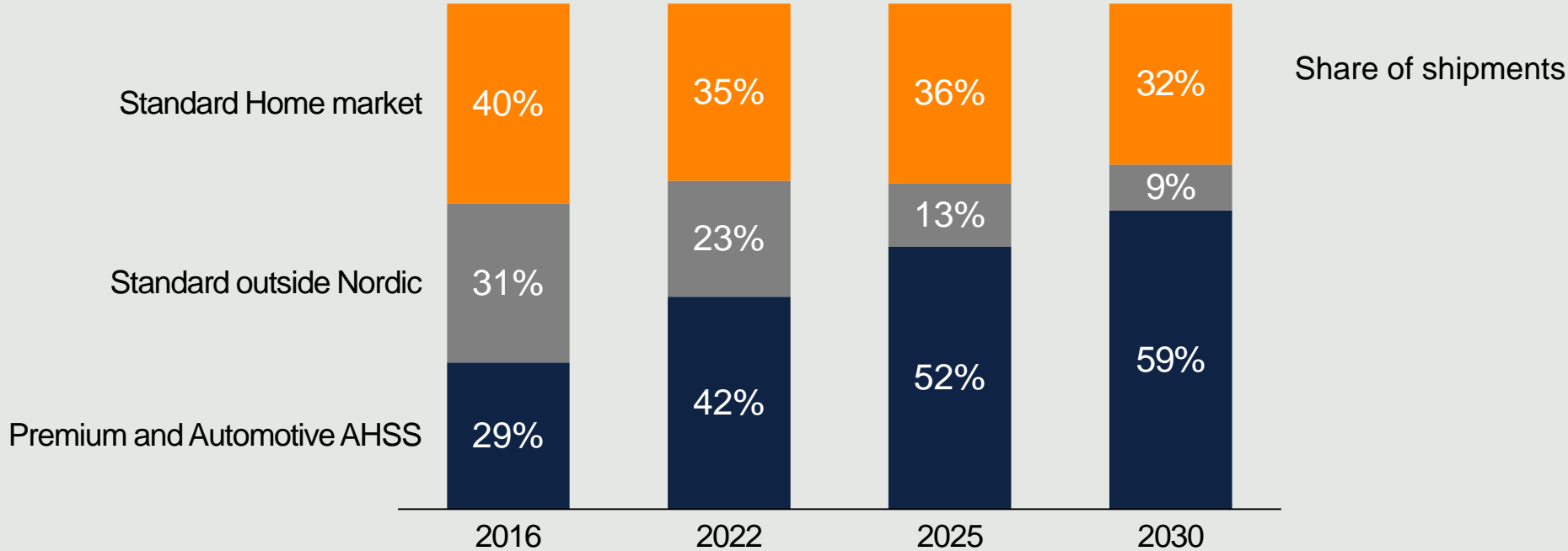


# Nordic market leader with improving product mix

Strengthen the Nordic home market leadership

Allocate more of the production capacity to premium and AHSS

Reduce shipments of standard products outside of Nordics



SSAB

An aerial photograph of a landscape. On the left, several parallel railroad tracks run vertically. To the right of the tracks is a road with a white semi-truck driving. Further right is a dense forest of green trees. A dark blue, curved shape overlaps the left side of the image, containing white text.

# Market leader North American plate

Chuck Schmitt

EVP and Head of SSAB Americas

SSAB

# Strong contribution to overall Group strategy

## Market leadership

- Maintaining leading position on SSAB's North American home market

## Product mix improvement

- Enable the launch of SSAB Zero products

## Developing channels to market

- Focus on end-user segments and reduce dependency on Steel Service Centers

## Green transition

- Providing knowledge and experience in EAF steelmaking



# Introduction

# Market-leading North American producer of quality steel plate and coil

**32.2** BILLION SEK

Annual net sales in 2022

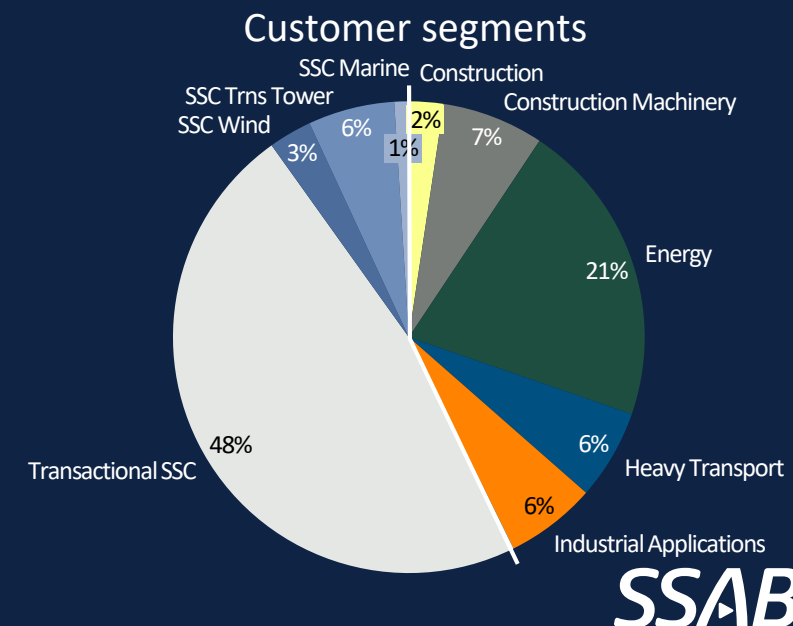
**600**  
Professionals

Annual steel production capacity:  
**2.0** MILLION TONNES

**38.8%**

EBITDA-margin in 2022

**#1** in quality

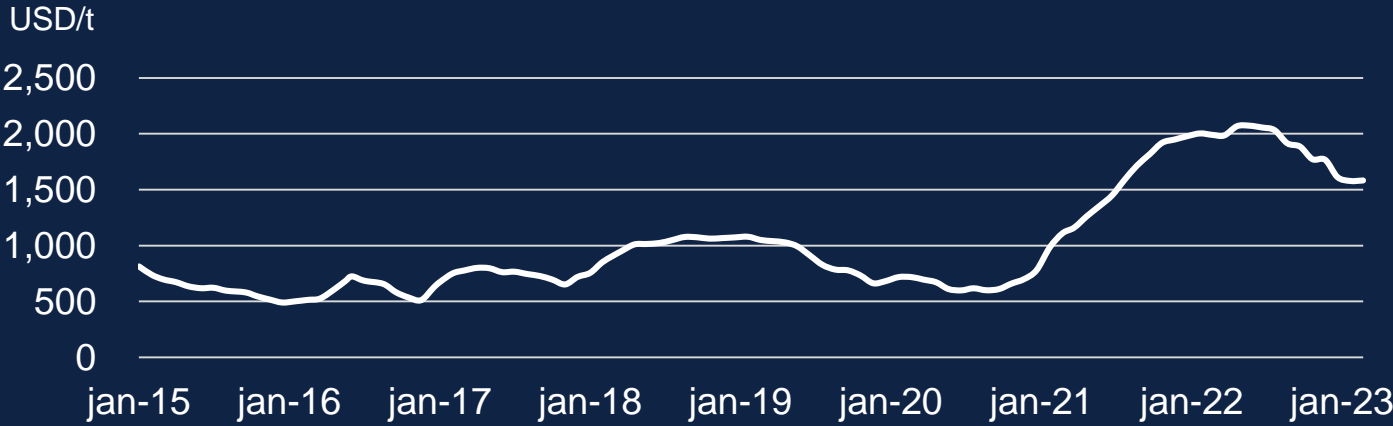


# Strong earnings

SSAB Americas,  
EBITDA, SEK bn



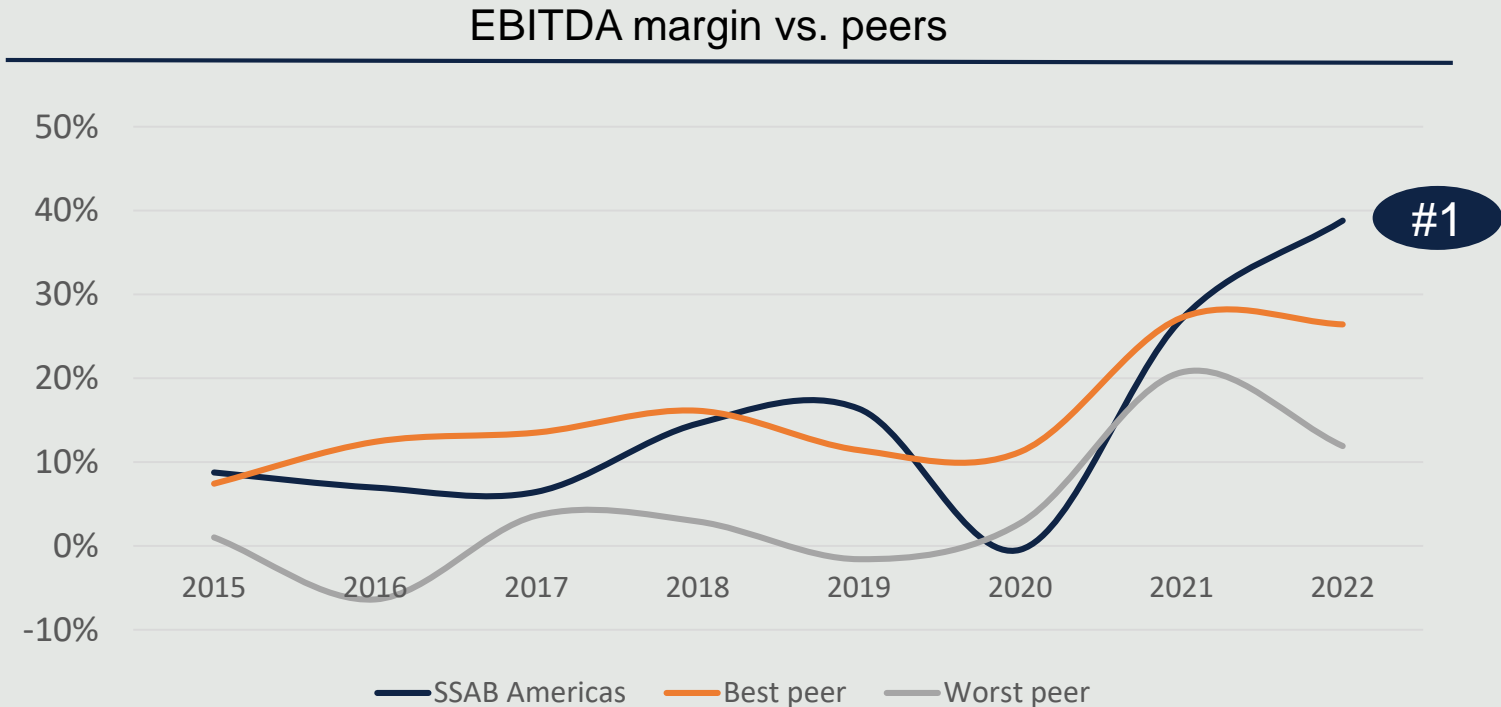
US heavy plate  
price, monthly





# Industry leading margins

- Focus on reducing volatility
  - Reducing transactional exposure to Steel Service Centers
  - Premium offering – fossil free



Peer group: Cleveland Cliffs, CMC, Nucor, Steel Dynamics, Stelco, TimkenSteel, US Steel



# SSAB in best-in class cost position

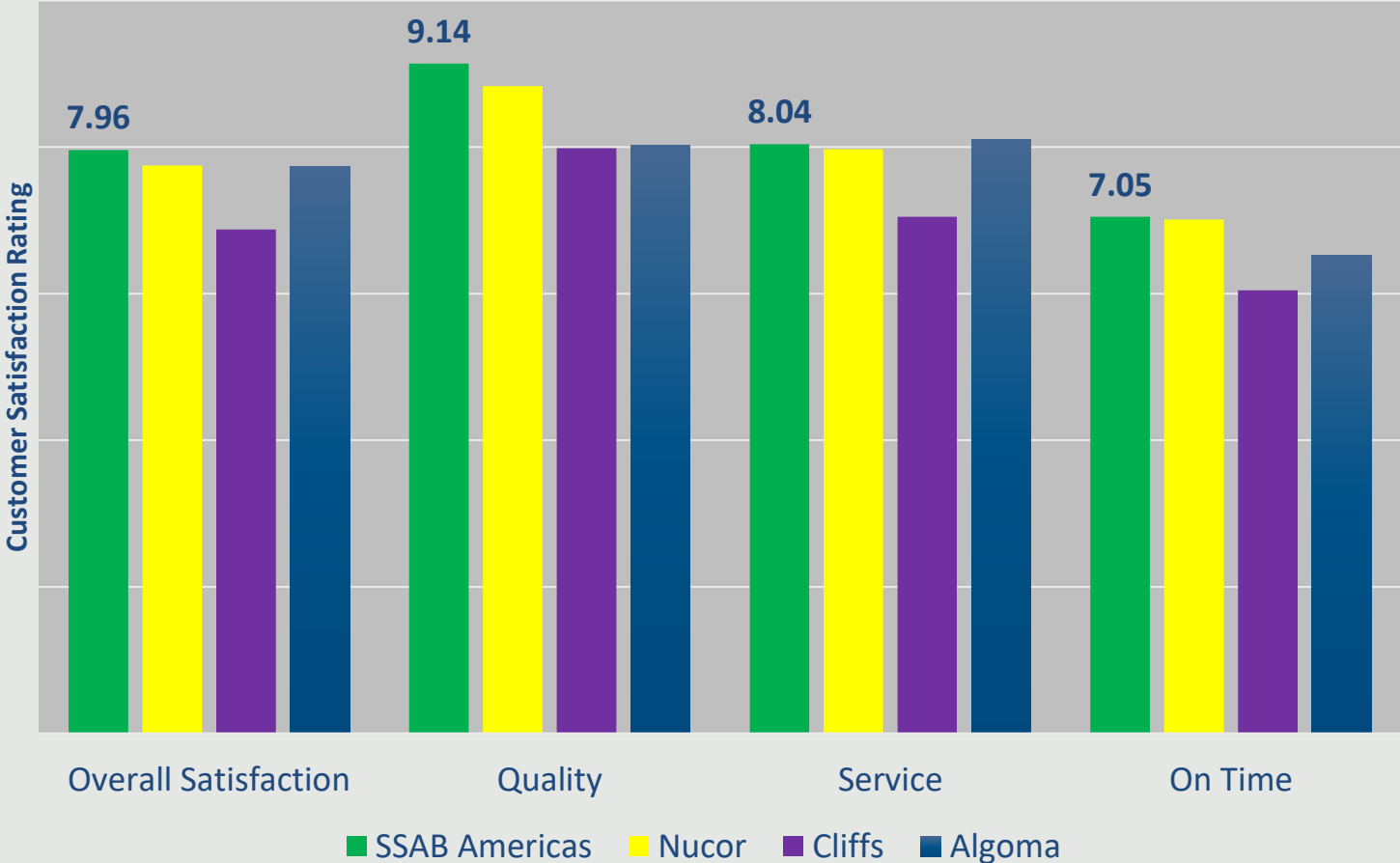
- Modern EAF set-up
- Continuous improvement to further strengthen productivity
- Maintain competitive production shipping model
- Flexible mini-mill operations close to customers
- Optimize scrap mix – using lower grades where possible



# Strong competitive position

## Examples from Jacobson Report

- Clear leader in quality
- Focus on improving on-time delivery



# Favorable home market dynamics

# Key driving forces support US plate demand

- Balanced supply-demand despite new capacity

## Infrastructure spending

- Extensive need for rebuilding US infrastructure
- Federal infrastructure bill expected to impact positively from 2023 and onwards

## Investments in energy production

- Support from Inflation Reduction Act
- Expansion of on-shore wind power continues
- Ambition to add 30 gigawatts of offshore wind power by 2030
- Power transmission

## Regionalized steel market

- Tariffs and quotas continues
- Higher demand for “melted in America”

## New local capacity from competitors

- Ramp up of new US plate capacity in 2023
- Partly different offering vs. SSAB

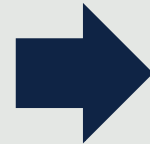
# Infrastructure bill elevates steel demand

Total IJA steel-containing  
infrastructure investment:  
\$850 billion

---

Reauthorization of existing  
infrastructure trust funds:  
\$393 billion

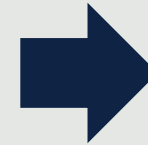
Additional investments:  
\$457 billion



\$100 billion  
in infrastructure  
spending

=

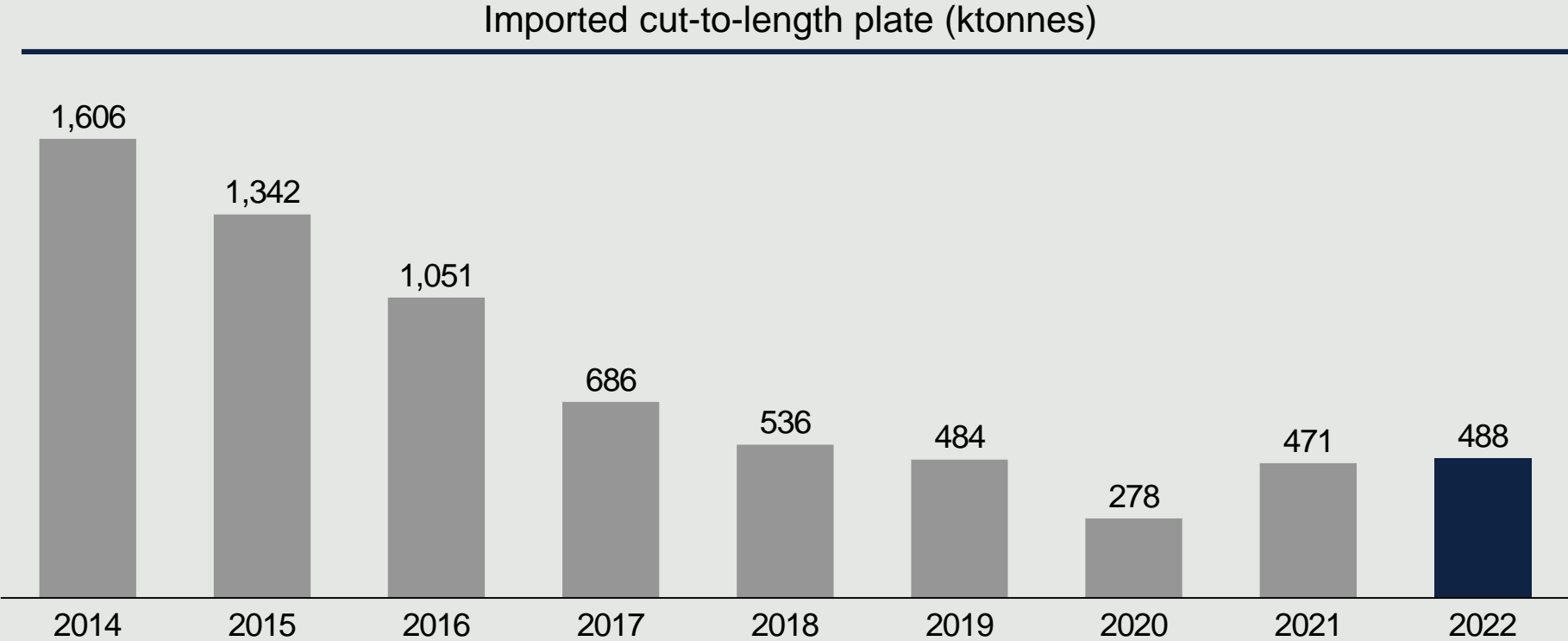
5 million  
net tons of steel  
mill products



40-45 million net tons  
of steel products

Of which,  
20-25 million net tons  
from additional  
investments

# More regionalized market – lower imports



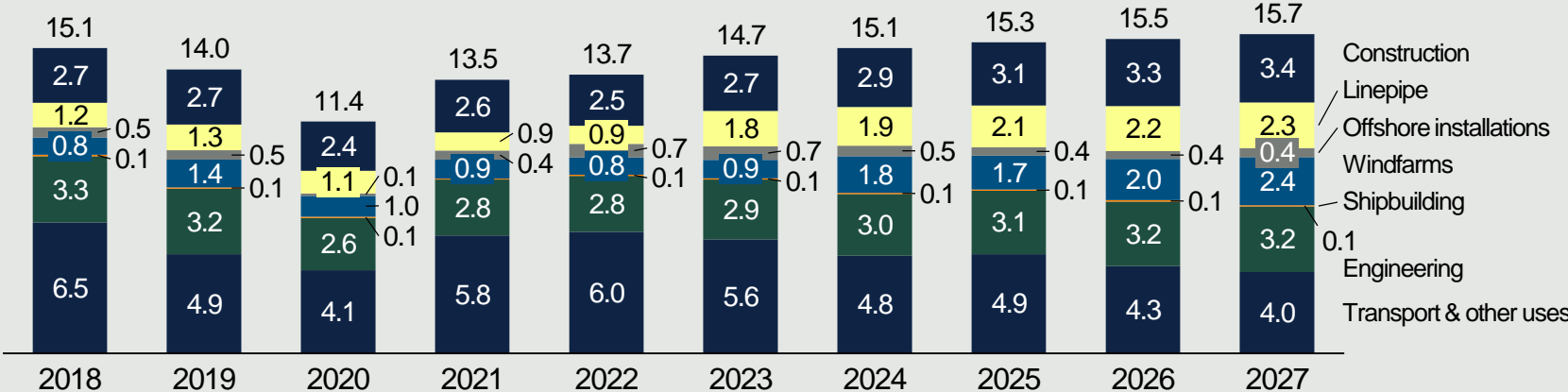
Source: SIMA, US Department of Commerce



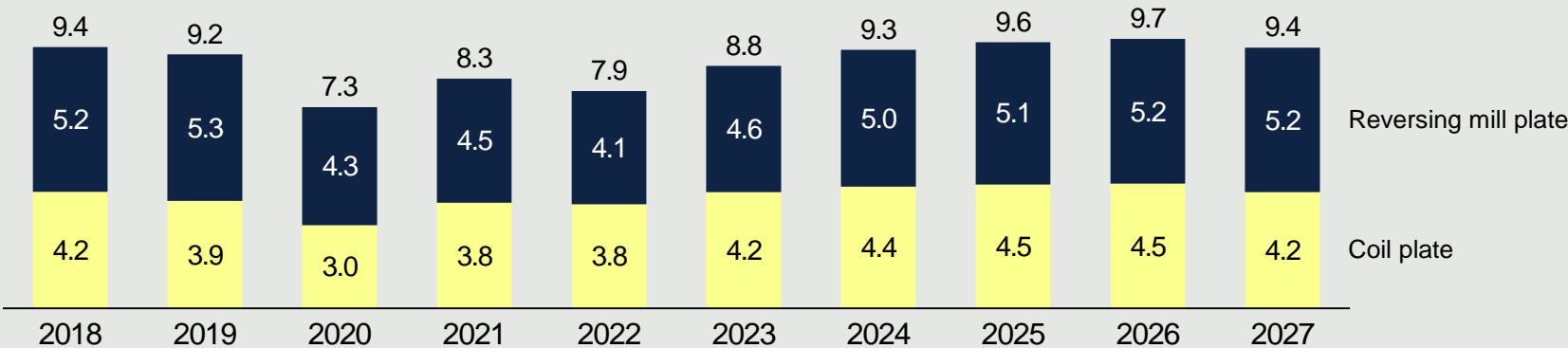
# Demand expected to increase in key segments

Examples from CRU forecasts for plate

North America  
Consumption by end-use (Mt)



USA  
Apparent consumption (Mt)





Uniquely  
positioned for  
zero-emission  
steel

*SSAB*

# Production start of SSAB Zero in Q1 2023



## Production based on recycled scrap and renewable electricity

- Operate EAF exclusively with electrical energy
- Our supplier has a goal to achieve 100% renewable electricity from 90% today

## Utilization of Biocarbon

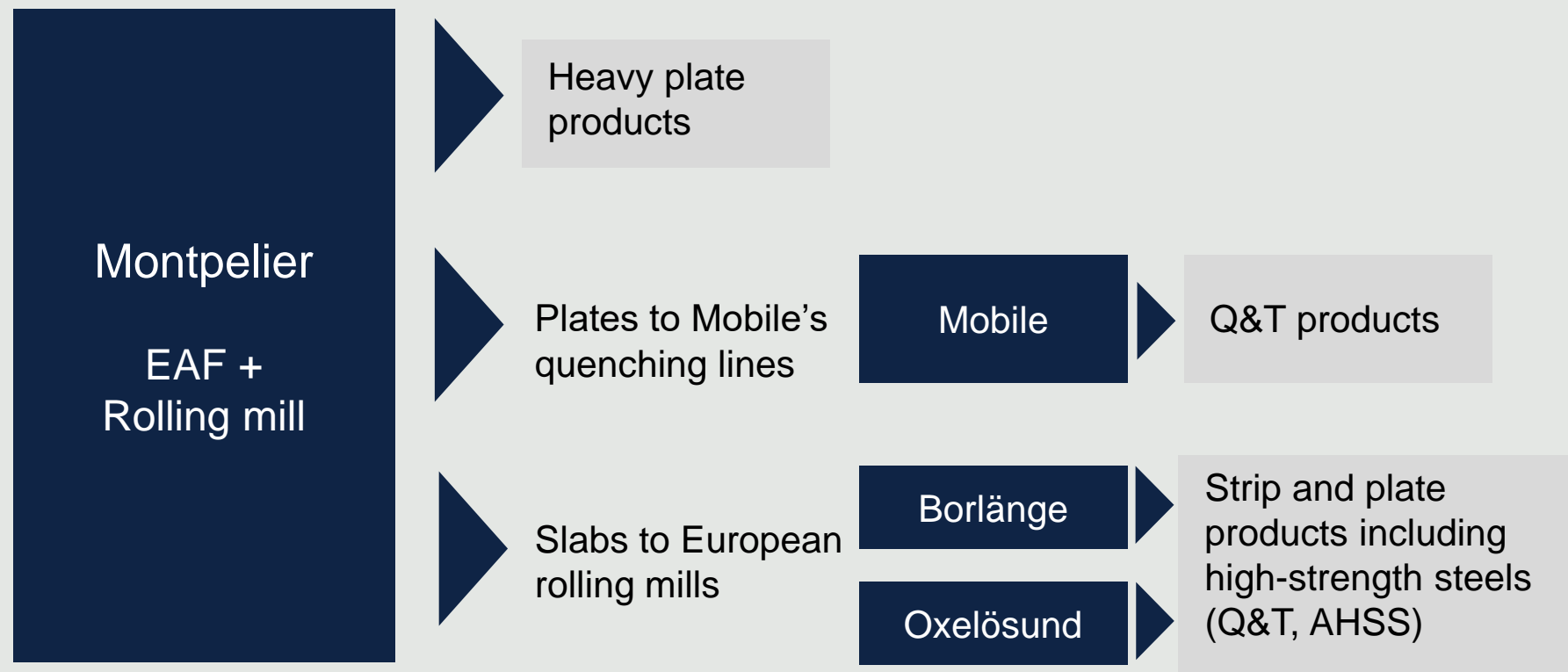
- Substitution of bio-genic sourced carbon for injection into the EAF
- Elimination of charge carbon as a metallurgical input

## Utilization of Biofuels

- Elimination of fossil based natural gas in the EAF
- Substitution of compressed Renewable Natural Gas in the primary end and rolling mill utilizing newly installed piping and flow control system

**SSAB**

# Flexible production system allows for a wide range of SSAB Zero products



# Our major customers demand a lower carbon footprint



JOHN DEERE

CATERPILLAR

THE GREENBRIER COMPANIES



GE Renewable Energy



CNH INDUSTRIAL

ARCOSA

TRINITYRAIL

valmont

SSAB

SSAB

# Leading sustainable product offering

Tony Harris

VP Head of Sales and Business Development

SSAB

# SSAB in the lead

# SSAB has built a leading position



HYBRIT -  
Joint Venture  
between SSAB,  
LKAB and Vattenfall  
formed in 2017



World-unique pilot  
plant started  
operation in 2020



World's first fossil-free  
steel rolled and  
delivered to Volvo  
Group in 2021



Pilot shipments to  
strategic customers  
500 tonnes in 2022

**SSAB**



# Several advantages of being first to market

– Pilot shipments started in 2021

Synergies from joint marketing efforts



Preparation for product qualification



Stronger relations to key customers



# First machine in operation

Produced by Volvo  
Construction Equipment  
and delivered to Swedish  
construction company  
NCC



# Strong customer demand



## Construction

*“Peab has ambitious climate and environmental targets, and this is an important step for us to reach climate neutrality by 2045”*



## Automotive

*“The Polestar 0 project is Polestar's ambitious goal to create the first truly climate-neutral car by 2030. The approach will encompass collaboration across the entire development process and value chain, from suppliers to retailers”*



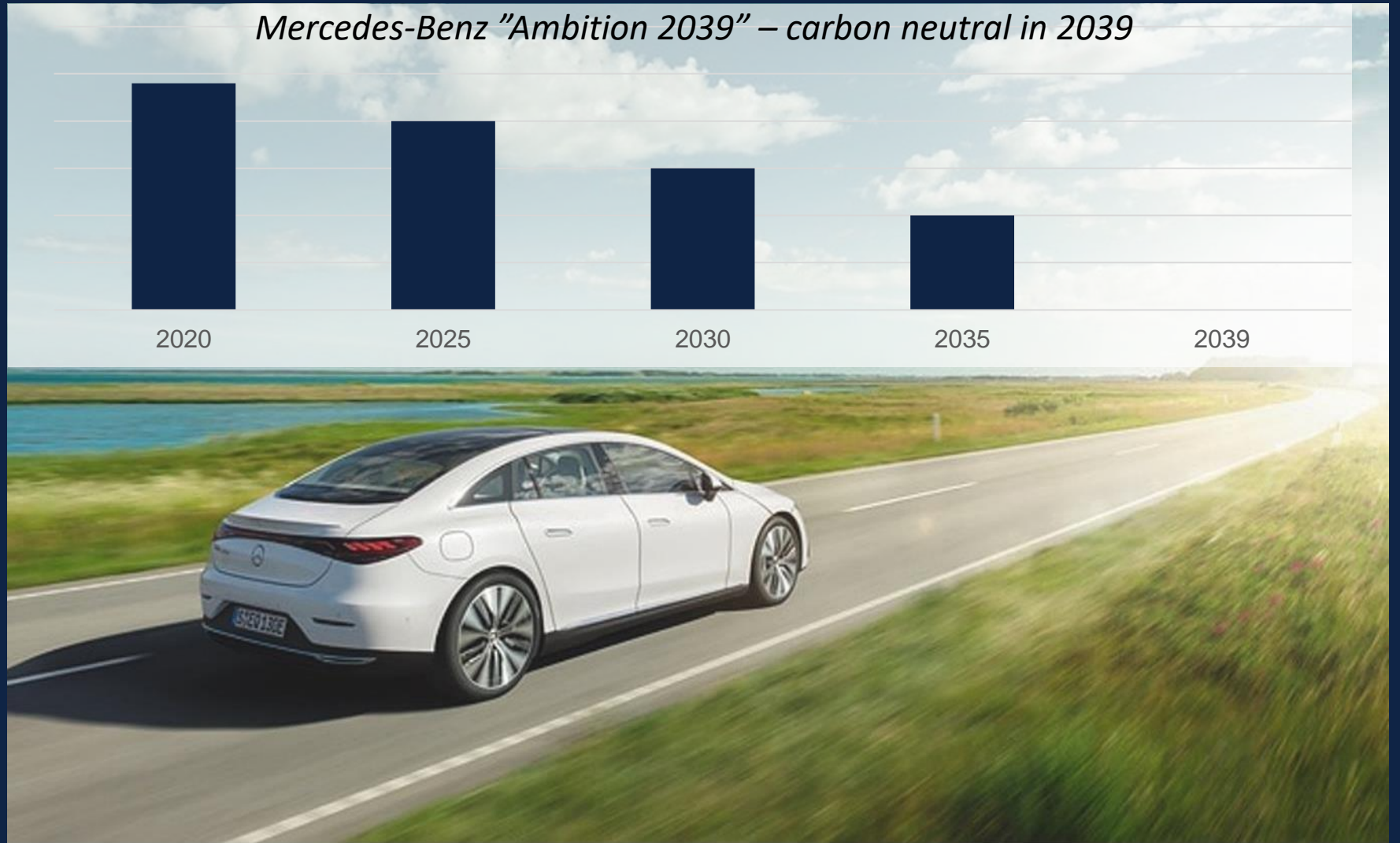
## Industrial Equipment

*“Cargotec's science-based target is to reduce value chain emissions by 50 percent by 2030”*

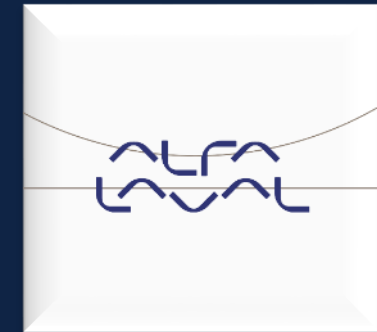
”Daimler is on its way to CO<sub>2</sub>-lean production – Swedish producer delivers green steel”

”The automaker is driving the decarbonisation of its supply chain: Starting in 2026 Daimler will be sourcing CO<sub>2</sub>-free steel from SSAB in Sweden.”

German financial paper  
Handelsblatt, September 2021,  
translation by SSAB



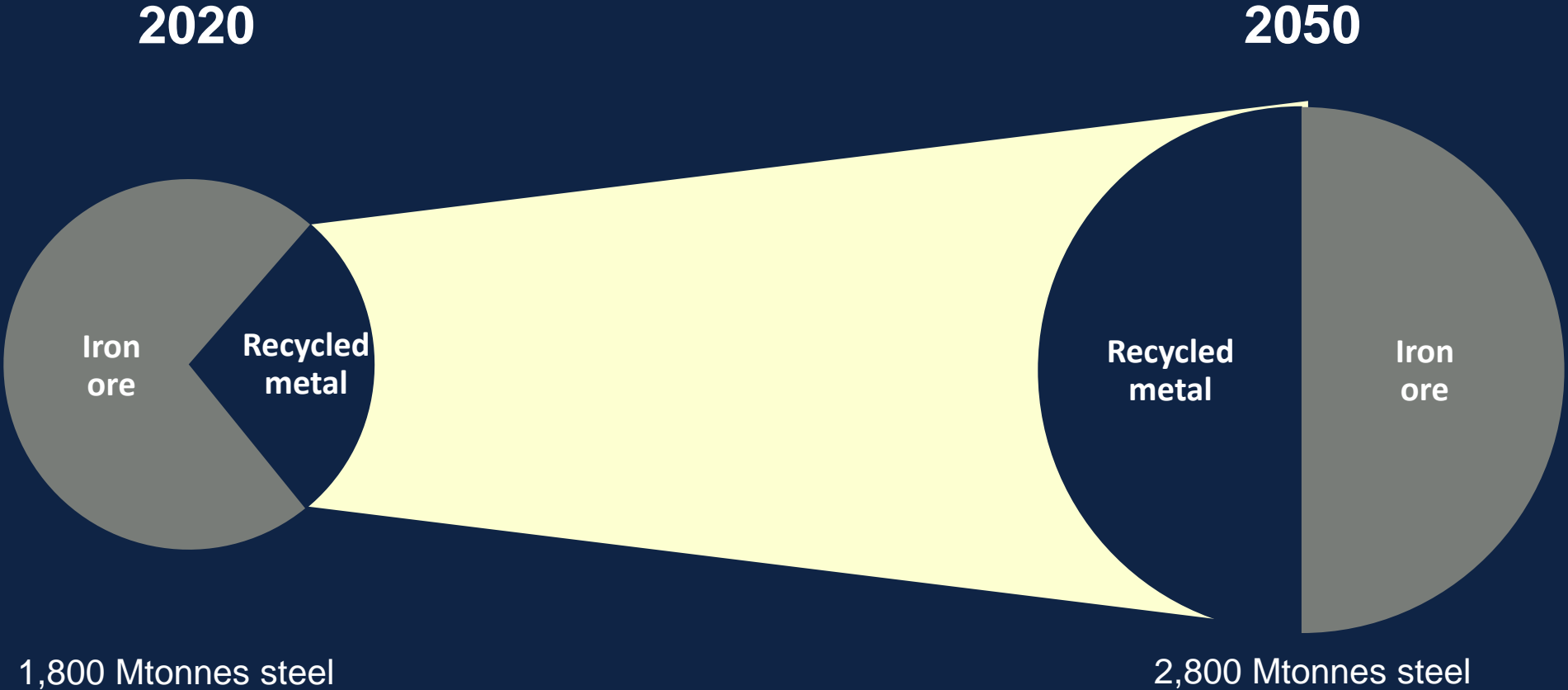
# SSAB in partnerships with leading companies



Leading the way to  
zero-emission  
products

**SSAB**

# Both recycled and iron ore-based steel will be needed



Source: Swedish iron and steel producers' association, Jernkontoret

# Introducing SSAB's zero CO<sub>2</sub> offerings



0.0

kg CO<sub>2</sub>e emissions per kg steel

Commercially available today

Pilot shipments today –  
commercially from 2026







- Fossil-free electricity
- Fossil-free fuels
- Fossil-free internal transports
- Fossil-free sponge iron based on the HYBRIT® Technology
- Iron based on external high-quality recycled steel



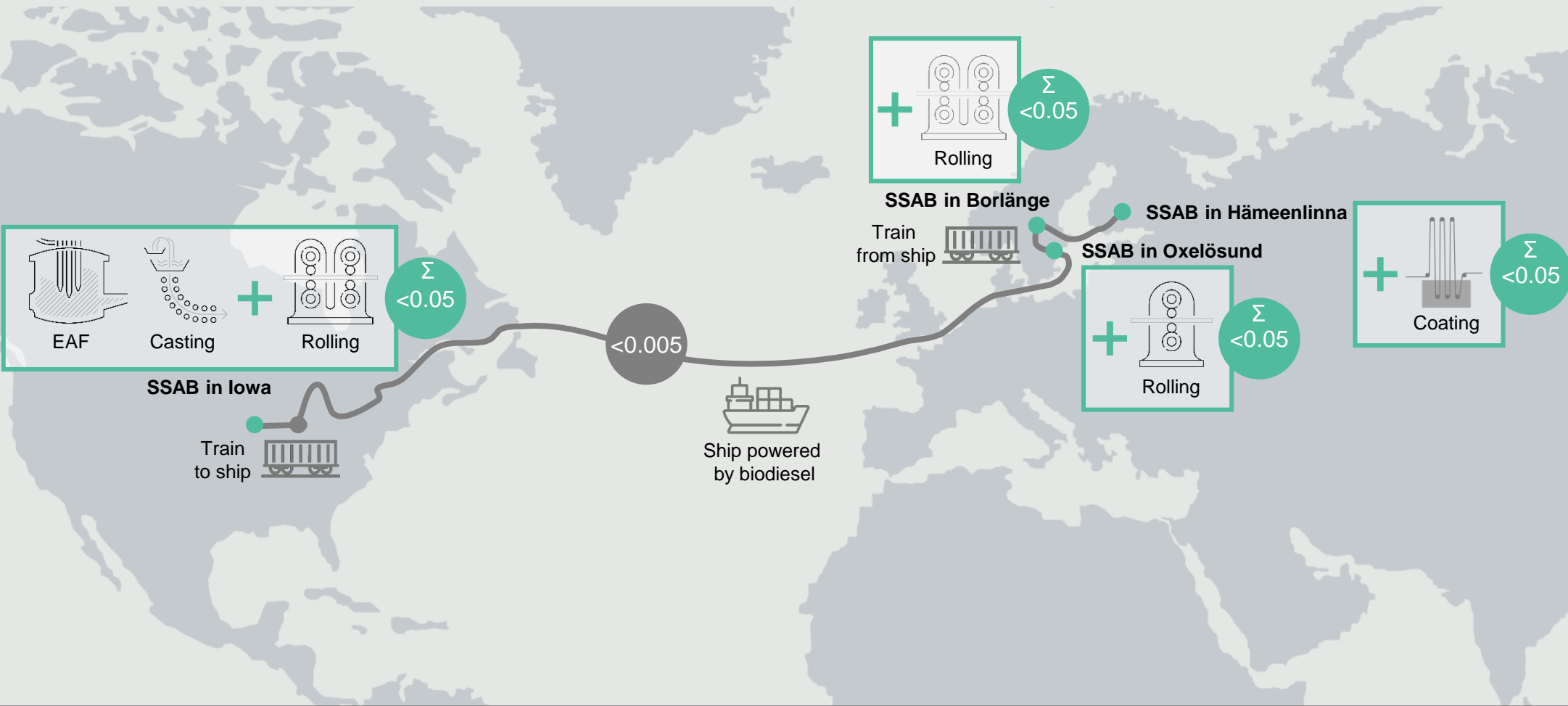
- Fossil-free electricity
- Fossil-free fuels
- Fossil-free internal transports
- Fossil-free sponge iron based on the HYBRIT® Technology
- Iron based on external high-quality recycled steel

# Why SSAB Zero™ is unique



1. Zero carbon emission in operations. Third-party verified
2. Fossil-free electricity, bio carbon and bio gas
3. No carbon emission offsetting or mass balancing allocation schemes

# SSAB Zero™ route 2023

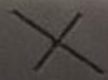


Total accumulated product carbon dioxide emissions in Scope 1 and 2 incl. transportation (tonne CO<sub>2</sub>e per tonne steel product target)



Total transportation carbon dioxide emissions (tonne CO<sub>2</sub>e per tonne steel product target)



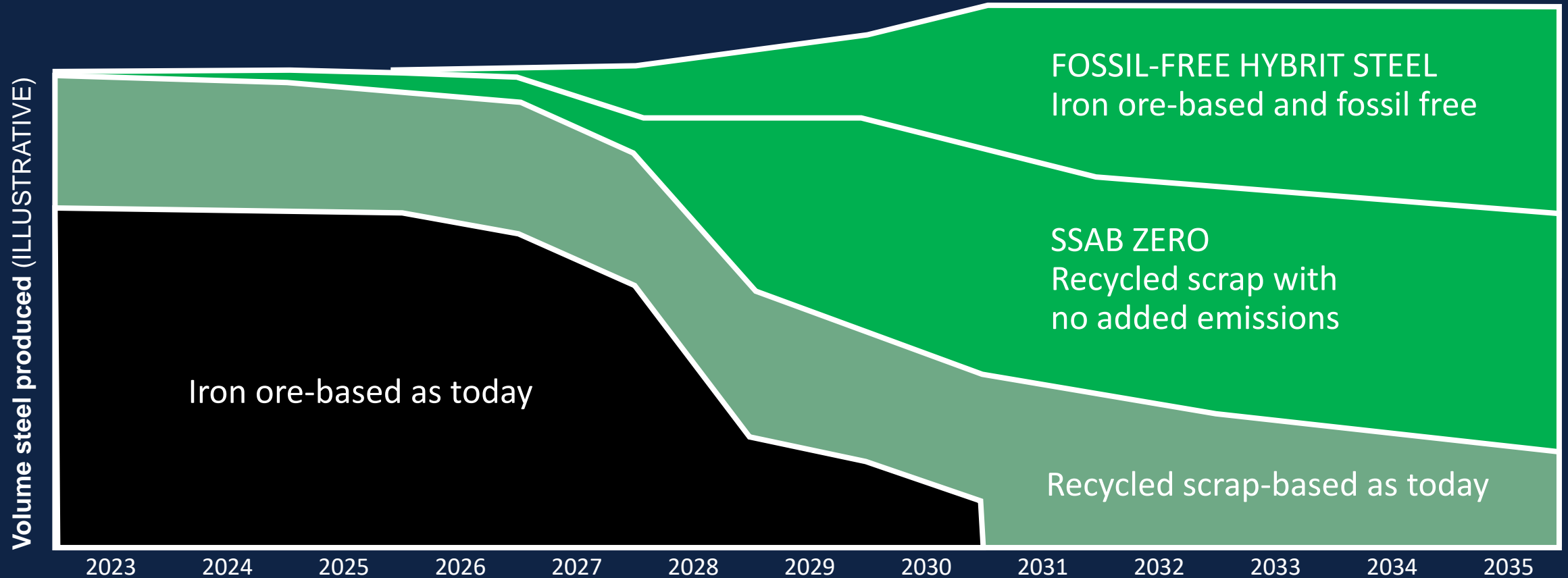


V O L V O

*“We are making big strides forward with the introduction of low emission materials made from recycled steel with SSAB Zero in our products. In parallel with the already introduced fossil-free steel, it is another step towards fully climate-neutral transport solutions, and our partnership with SSAB is accelerating this ramp-up”*

Martin Lundstedt, president and CEO Volvo Group

# Targeting a fully sustainable steel portfolio





0.0

kg CO<sub>2</sub>e emissions per kg steel

SSAB will produce steel based on both **virgin iron ore**  
and **recycled steel**

SSAB's sustainable offer provides customers with the world's lowest emission steel  
now and in the future

SSAB

SSAB

# Future production footprint

Carl Orrling  
VP Transformation

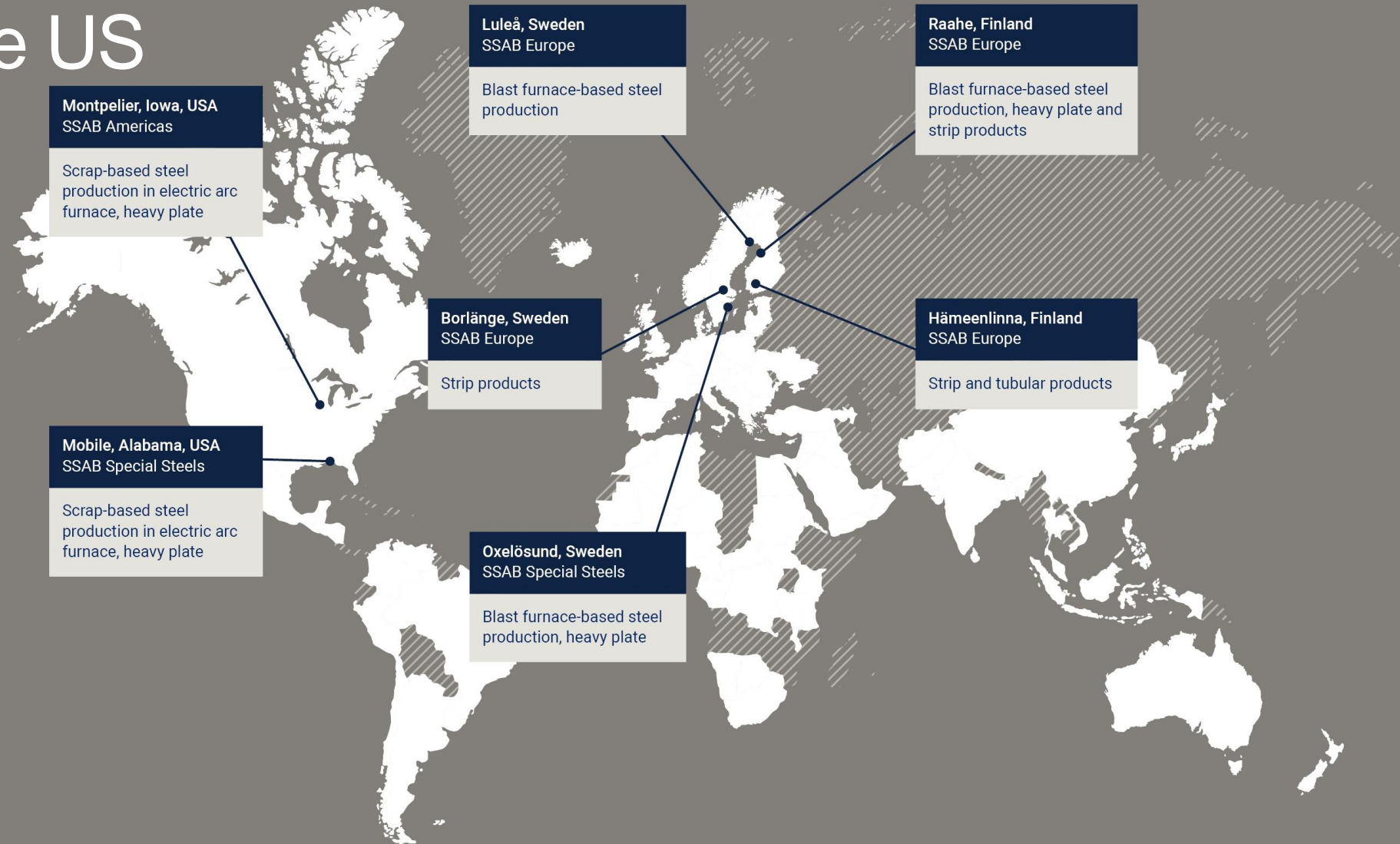
SSAB



# Introduction to SSAB's production system

# Steel mills in Sweden, Finland and the US

- Modern cost-efficient Electric Arc Furnace (EAF) mills in the US
- Oxelösund has world leading capability in plate rolling and Quench & Temper lines
- SSAB Europe's Nordic mills are characterized by aging machinery in certain areas, for example hot and cold rolling



# SSAB in a good starting position

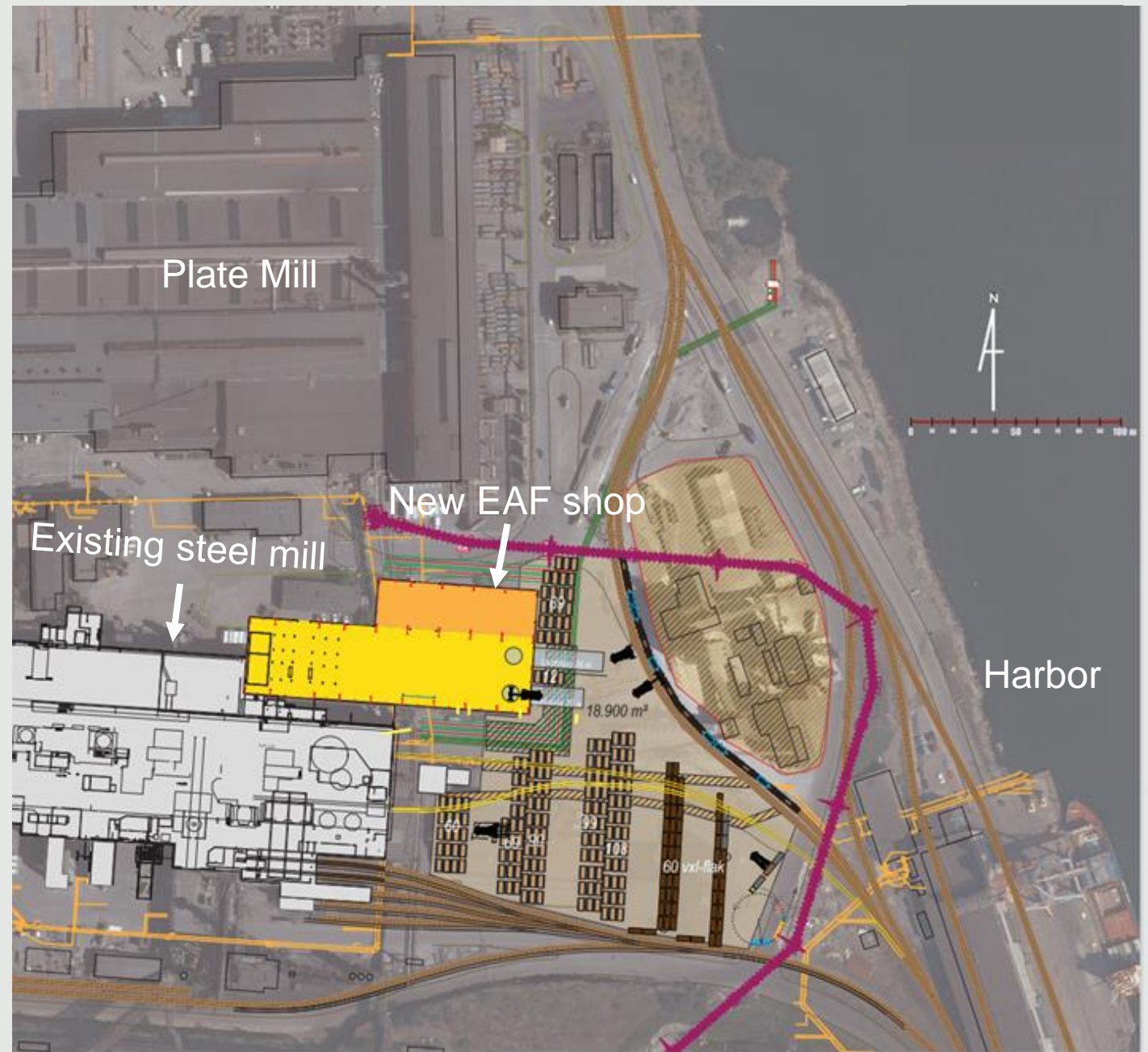
- Use experience from EAF-based production in the US, including the most advanced Q&T grades
- Pilot shipments of fossil-free sponge iron started in 2022
- Ability to qualify products already now



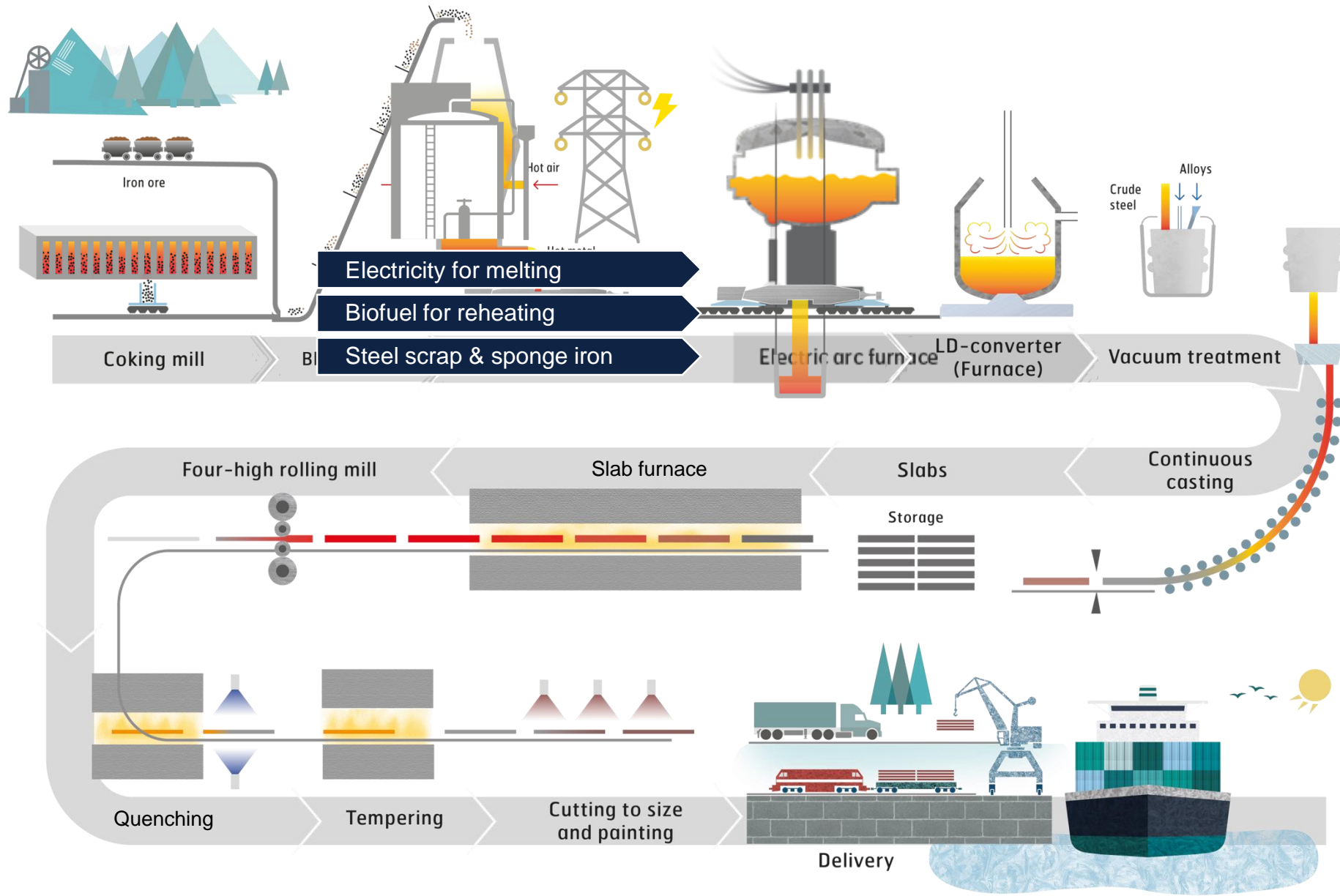
# Conversion of Oxelösund

# Oxelösund conversion

- Policy decision in Jan 2022
- Closing down coking plant and 2 blast furnaces
- Construction of Electric Arc Furnace
- New infrastructure for biofuels
- Expansion of scrap handling and efficient material logistics
- Rolling mill and Q&T lines remains
- Large site, ability to run new and old production system in parallel during transition period



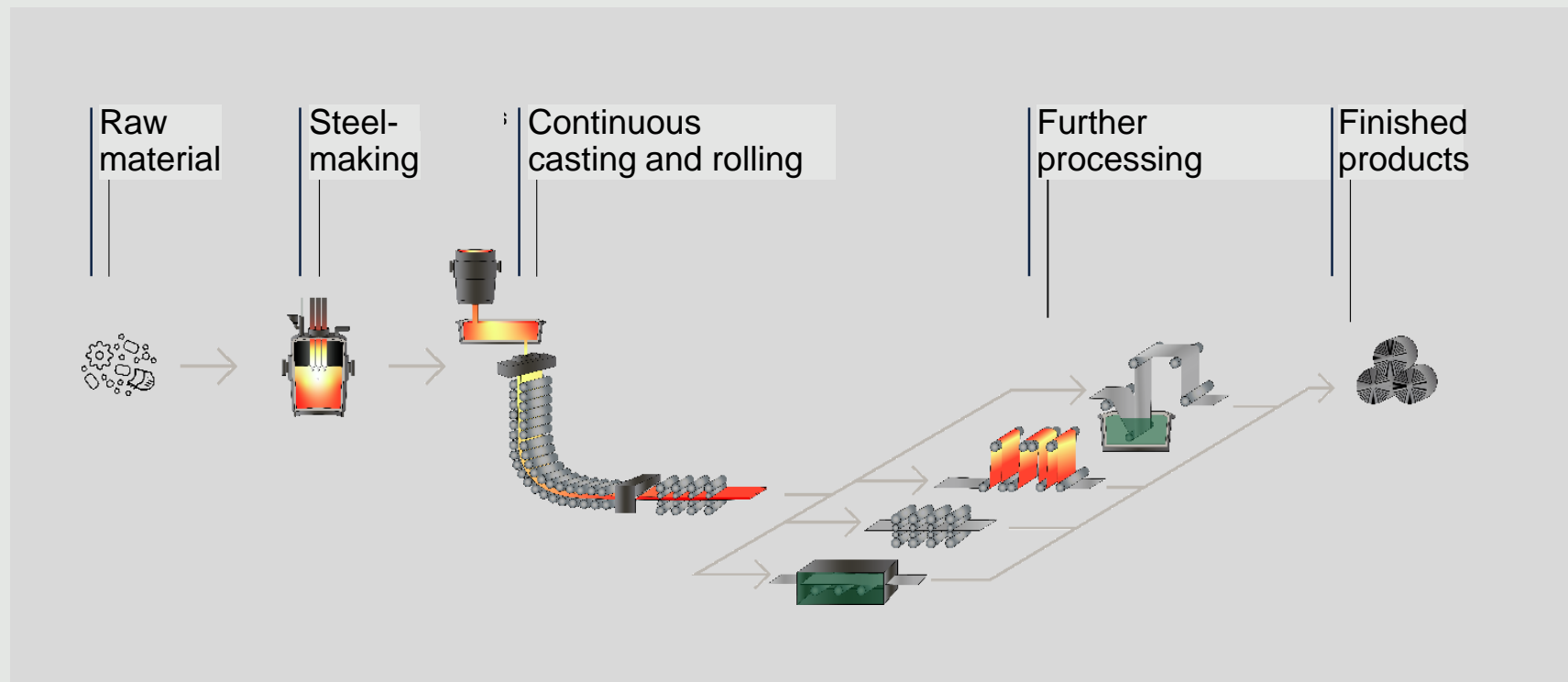




# Mini-mills in Luleå and Raahe



# The mini-mill concept



- Electricity-based process – well-integrated under one roof
- Short lead time; 3h from steel plant to coils
- Less heat loss since the hot slab can be rolled right away
- High degree of digitalization and automation
- Flexible load of scrap and sponge iron 0-100%

# SSAB sites well suited for mini-mills



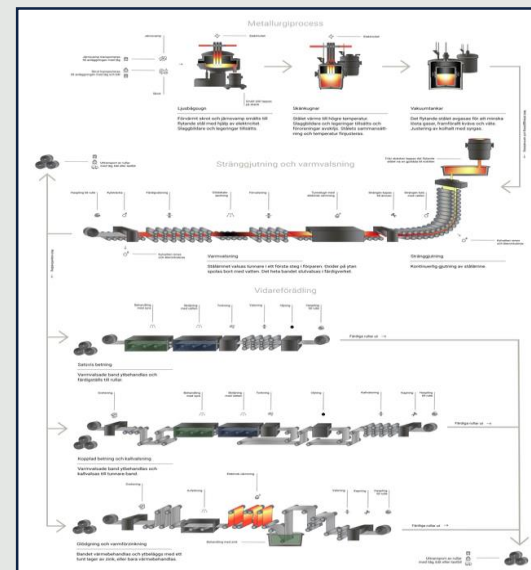
## Large sites

- Luleå ~400 hectares
- Raahе ~500 hectares
- Ability to run new and old systems in parallel



## Established logistics

- Direct access to harbors, railway, road transport
- Raw material handling capabilities



## Capacity in line with today's mills

- 2.5 million tons on each site which is ideal for mini-mill concept
- Potential for future additions – higher crude capacity, more advanced processing, hydrogen DRI etc.

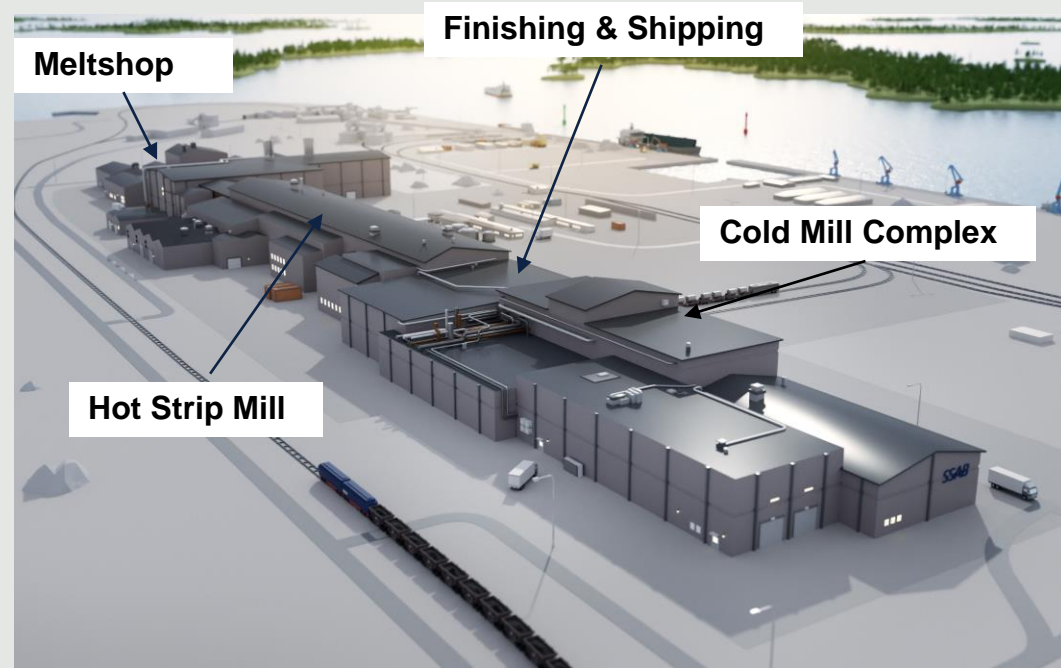
# Raahe mini-mill

- Policy decision in Jan 2022
- Close blast furnace, coking plant and strip mill
- Integrated process – steelmaking and direct rolling in one process line
- Option to add hydrogen DRI (Hybrit)



# Luleå mini-mill

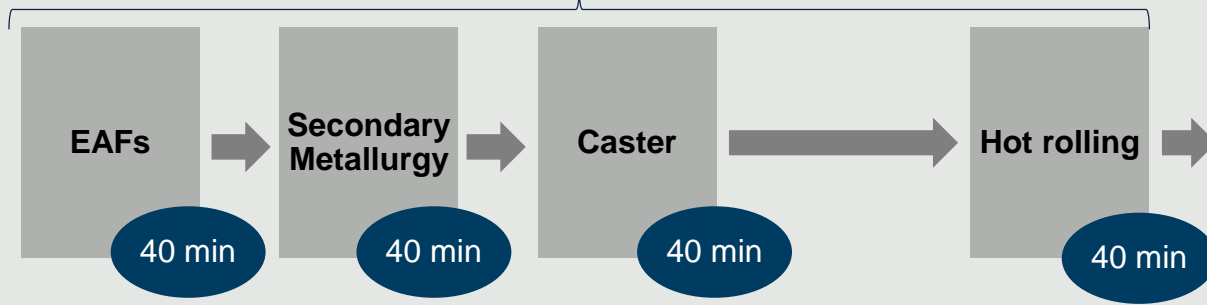
- Policy decision in Jan 2022
- Closing coking plant, blast furnace and steel plant
- Integrated process – meltshop, hot strip mill and cold mill complex in one facility
- Production of high-strength and premium steel for the European market
  - 3<sup>rd</sup> generation of AHSS products
  - New dimensions of AHSS and Q&T products up to 2 meters wide
  - Improved tolerances and new coatings
- Strip products for further processing in SSAB's downstream assets



# Operational flexibility – lead time and production adjustment

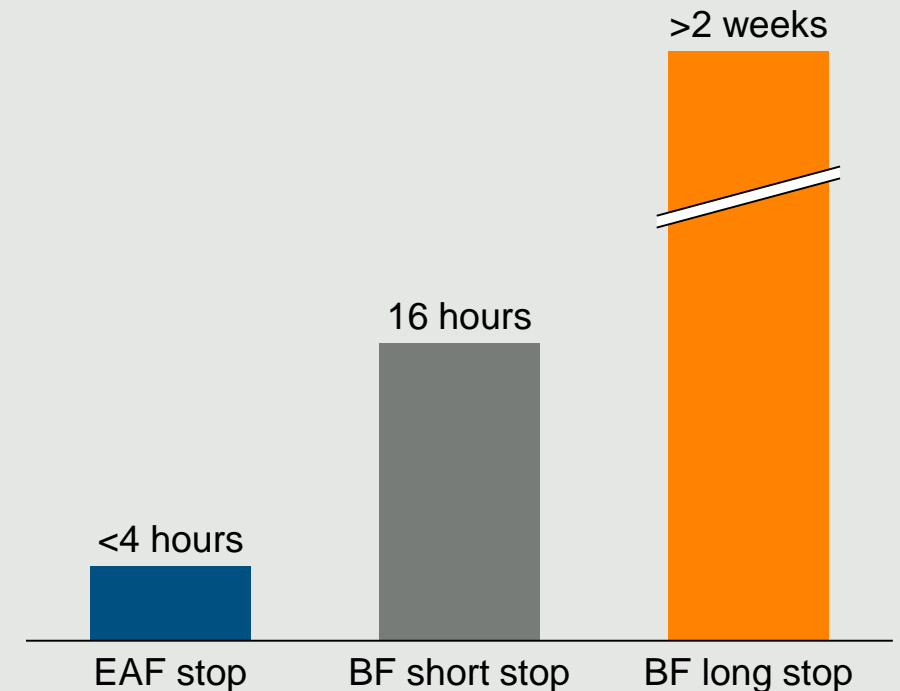
## Lead time

160 min from melting start to hot rolled coil = ~240+ ton strip coils/h



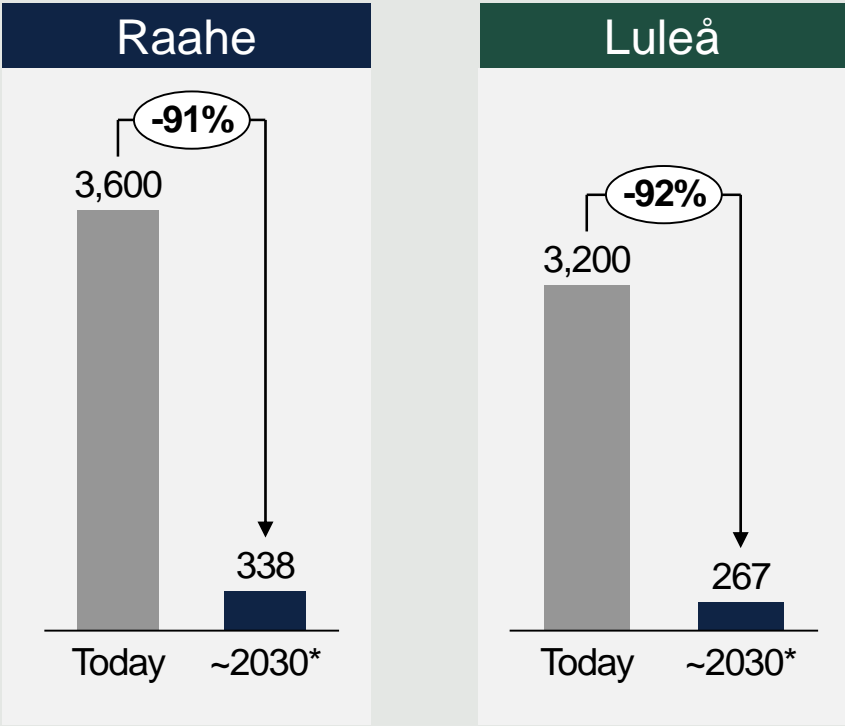
In total, lead time from mill estimated to be reduced from 6 weeks to less than 2 weeks

## Operational time to adjust production



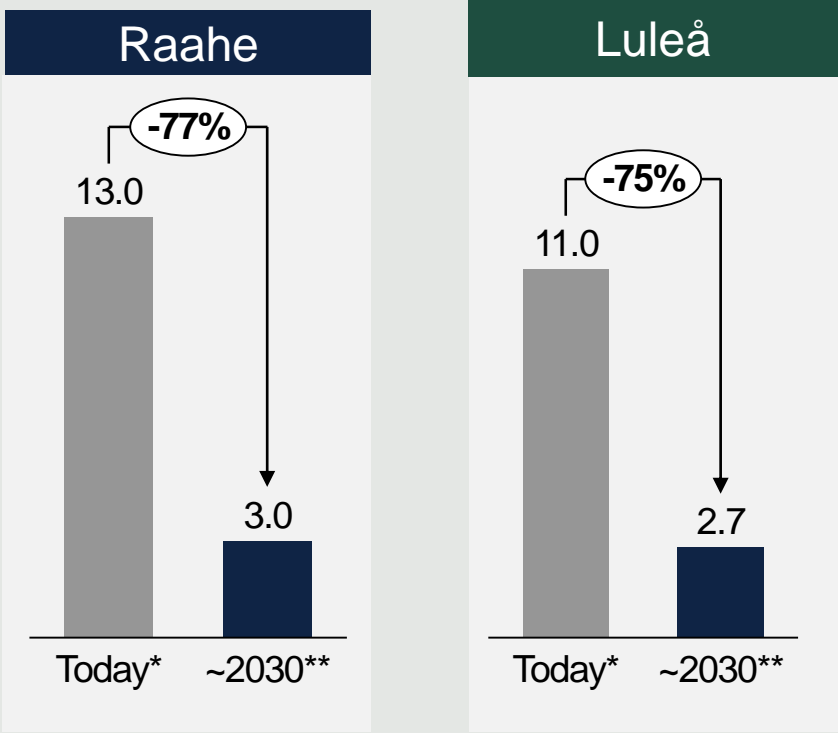
# Substantial reduction in emissions and energy consumption

Annual CO<sub>2</sub> emissions (ktonnes)



\*Long-term target to be all biogenic

Annual energy consumption (TWh)  
(Excluding sponge iron production)



\*Primarily coal for iron ore reduction

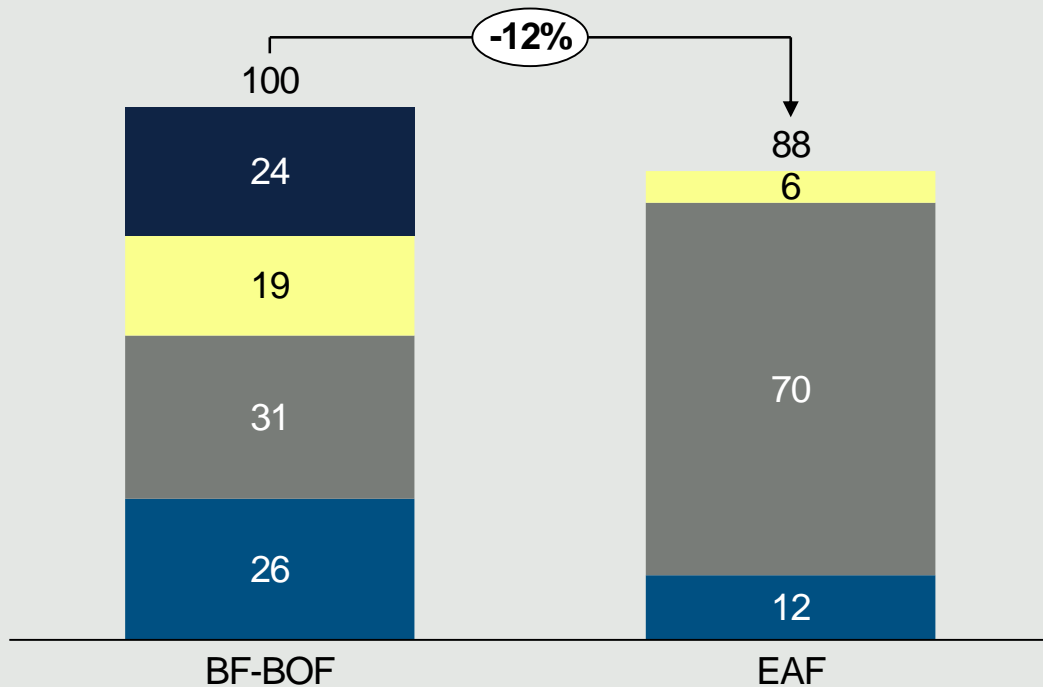
\*\*Primarily fossil free electricity



# More flexible and favorable cost structure

## SSAB Hot Rolled Strip Cost analysis, scenario 2030

CO2 Energy Raw Materials Fixed Cost



- SSAB will have a more flexible cost structure with the mini-mill's lower fixed costs per ton
- Higher emission costs in the EU will allow SSAB to reduce the overall cost with mini-mills, even with a higher variable cost per ton
- SSAB will move down the comparative cost curve in EU with the new mini-mills

- Source: SSAB analysis
- Note: Energy includes coal, electricity and gases

# Summary



# Summary

- US mills in good starting position on cost and emissions
- SSAB's European sites well suited for EAFs/mini-mills
- Step change in efficiency and cost – construction of state of the art mini-mills
- Built for fossil-free production from start
- More capacity for high-strength and premium steels



**SSAB**



# Sustainable raw materials

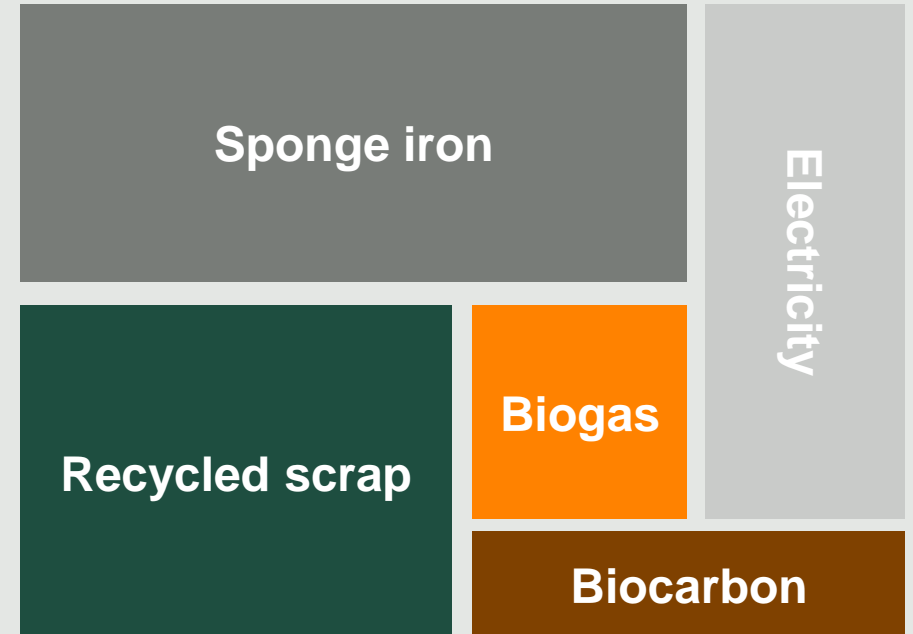
Viktor Strömberg  
EVP and Head of Strategy & Digitalization

# Our raw material transformation

Reducing iron ore with metallurgical coal in blast furnaces

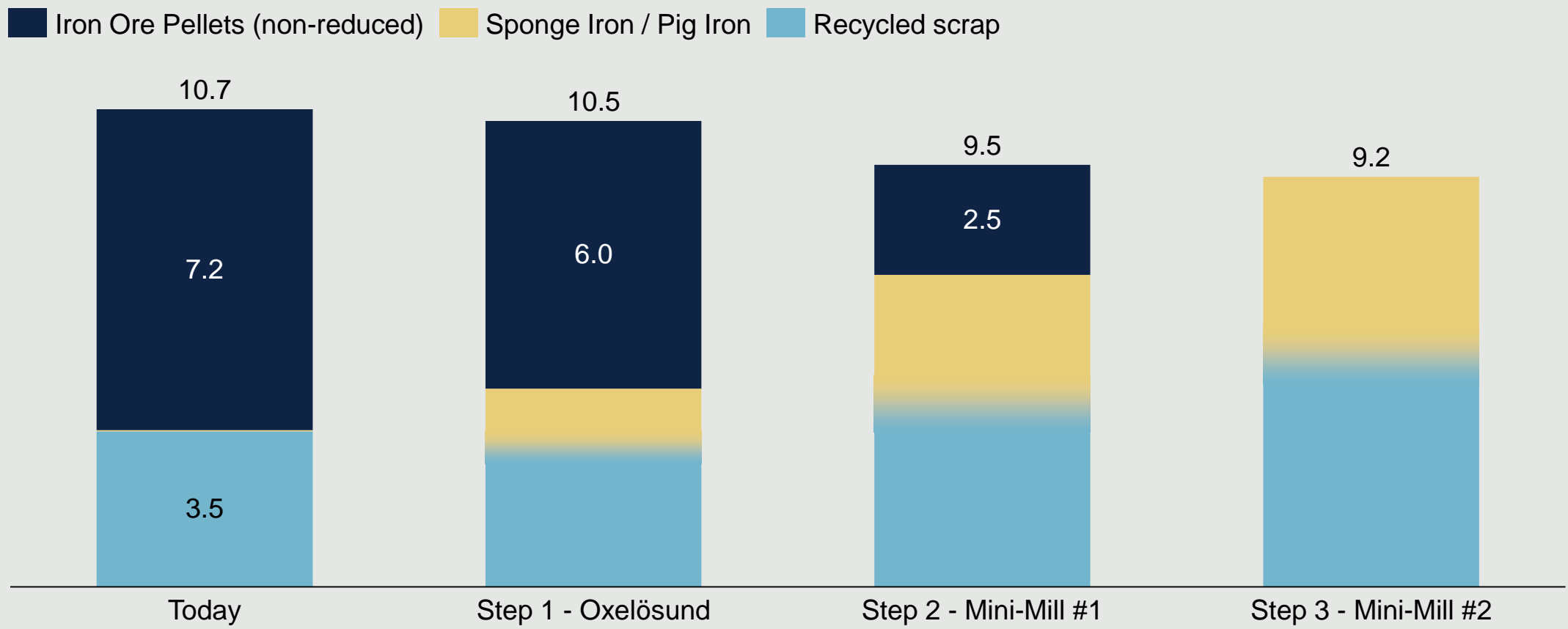


Flexible mix of recycled scrap and sponge iron, using fossil-free energy



# Sequential journey towards more sponge iron and scrap

**SSAB iron carrier source, MTON**



# SSAB sponge iron strategy

Based on unique partnership with LKAB, securing fossil-free iron ore/sponge iron

## Hybrit pilot and demonstration plant

- Hybrit pilot plant in Luleå used for pilot shipments of fossil free steel
- 1.35 Mt Hybrit demonstration plant planned
- SSAB with exclusive rights to source the sponge iron from Hybrit plants

## LKAB Partnership for full industrialization

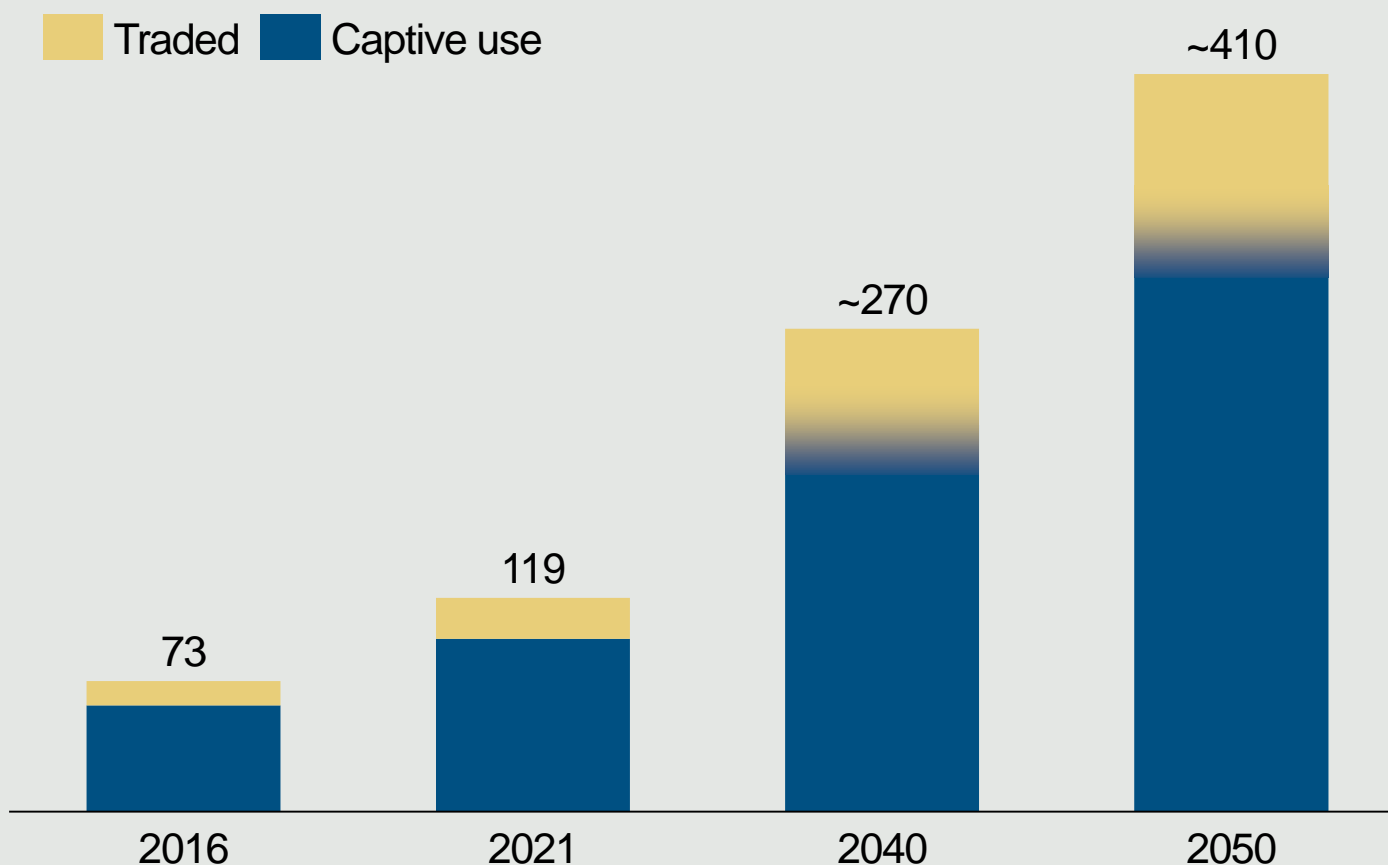
- LKAB partnership to build the most efficient value chain and share benefits
- LKAB is planning to convert Malmberget to 5.4 Mt sponge iron (today Malmberget supplies SSAB's blast furnaces)

## Option to build captive DRI plants based on HYBRIT technology

- Both SSAB and LKAB has option to build own DRI plants based on HYBRIT technology and IP in the Nordics
- Certain potential in geographies like the United States, and/or depending on the timing of LKAB's roadmap

# Sponge iron will eventually be a liquid global market

Global sponge iron production, Mt



- Total global production ~120 Mt today
- Small commercial market ~22 Mt / 19%
- Substantial growth of DRI production coming decades
  - Both hydrogen and natural gas
  - Both steel and mining companies investing
- A liquid market for sponge iron will emerge

# Difference between scrap and scrap

## High quality scrap



- ▶ **Sought after by EAF steelmakers** due to strictly defined and known analysis
- ▶ **Constrained supply on commercial market** today – ~20 Mt traded in EU

## Low quality scrap

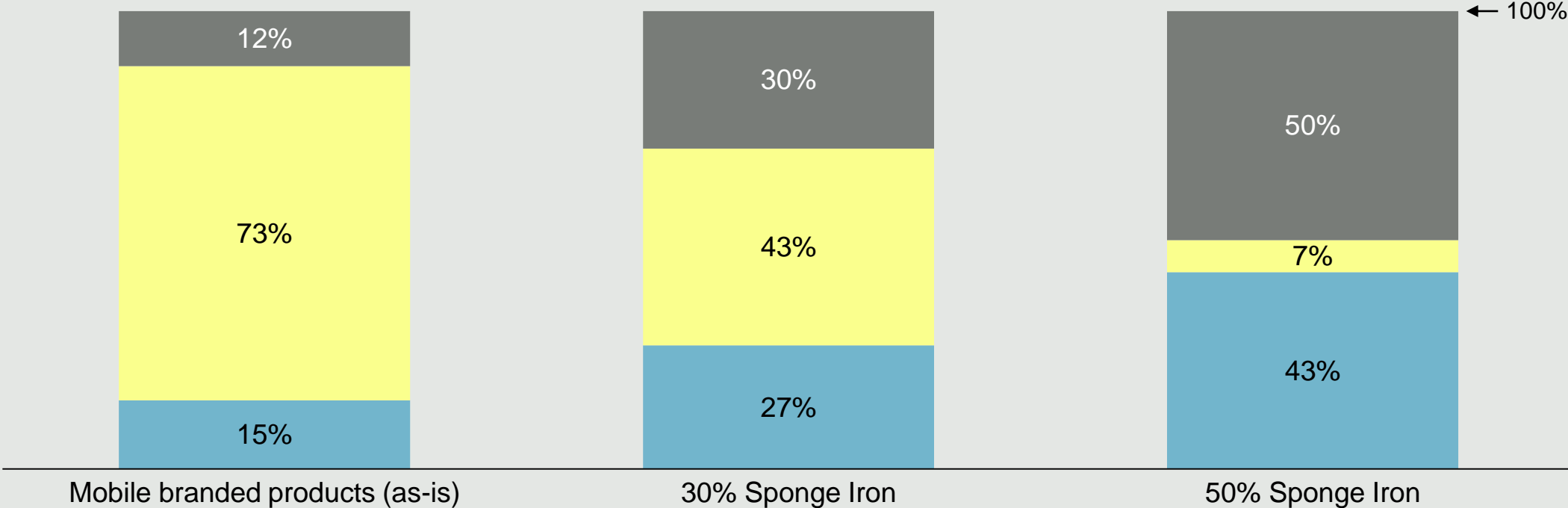


- ▶ **Mixture of different steel grades** with a broader tolerance for trace elements
- ▶ **Generally available on the commercial market**, with ~27 Mt exported out of the EU today

# Sponge iron enables more usage of low quality scrap

## Illustrative examples

■ Sponge Iron / Pig Iron   ■ High Quality Scrap   ■ Low Quality Scrap



**Note:** Calculative example for reaching the same levels trace elements by combining different purities of iron carrier



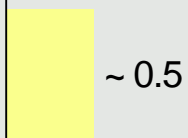
# SSAB's scrap strategy with three avenues

**Internally falling  
high quality scrap**



- Scrap generated within SSABs network
- High quality scrap with known chemical composition

**Customer return flows  
of high quality scrap**



- Circular flows with SSAB customers
- High quality scrap for SSAB due to the known chemical composition

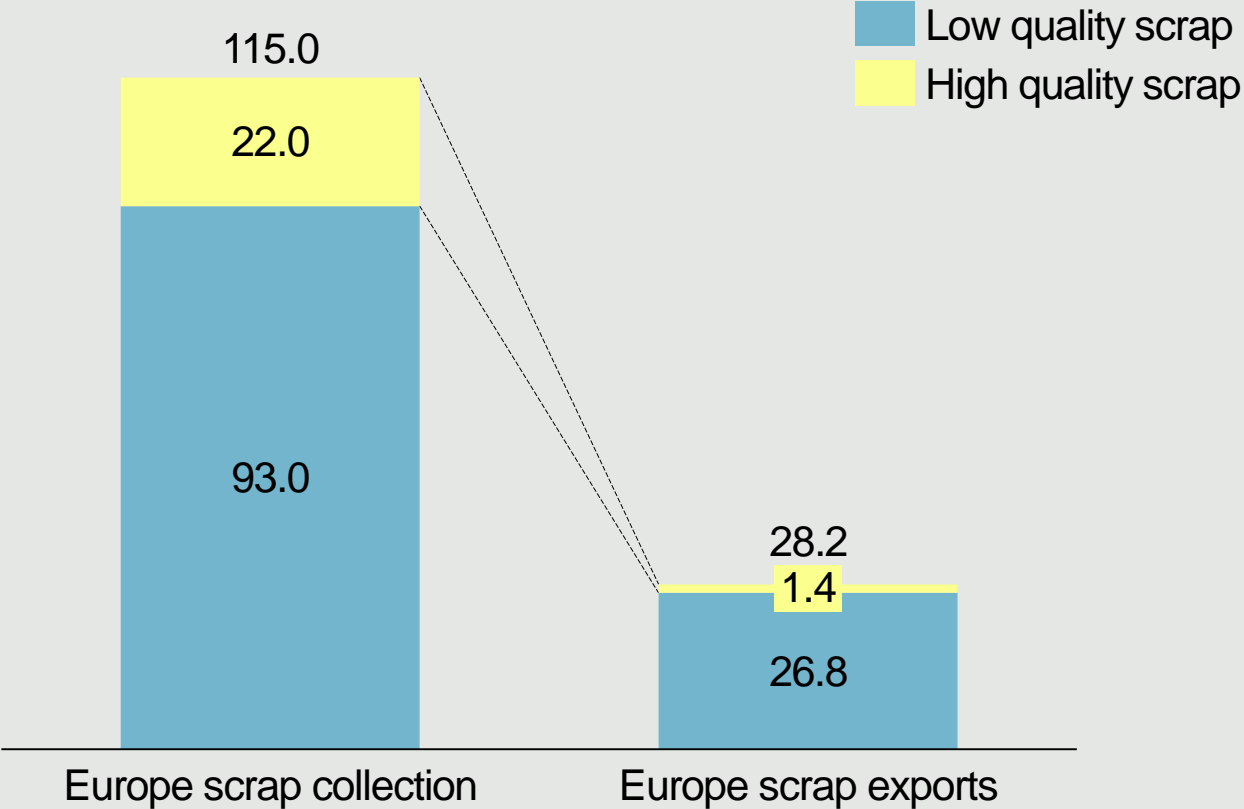
**Partnerships with  
scrap companies**



- Partnerships to source scrap from the open market
- Volume and mix depending on the level of sponge iron

# Europe is the world's largest exporter of recycled scrap

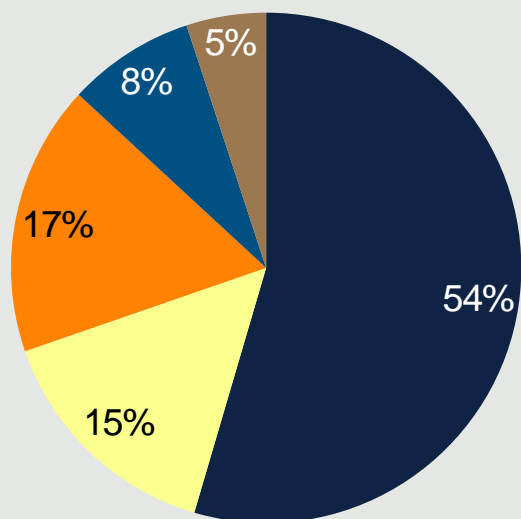
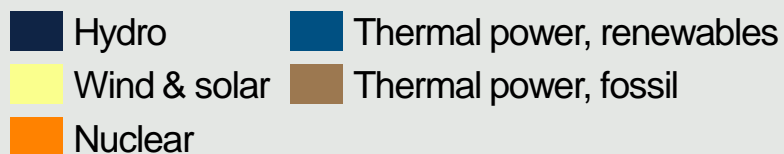
Europe (EU+UK) scrap market, MTON



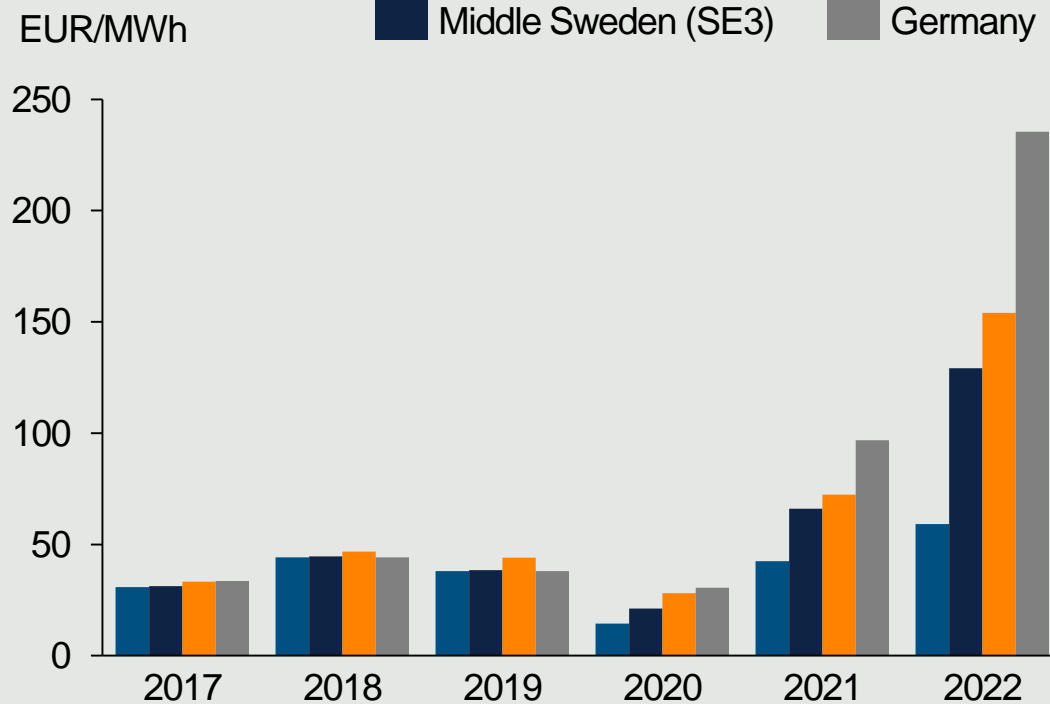
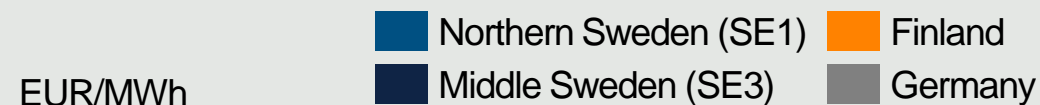
Source: Eurostat

# The Nordic energy system has a competitive advantage

## Fossil-free mix



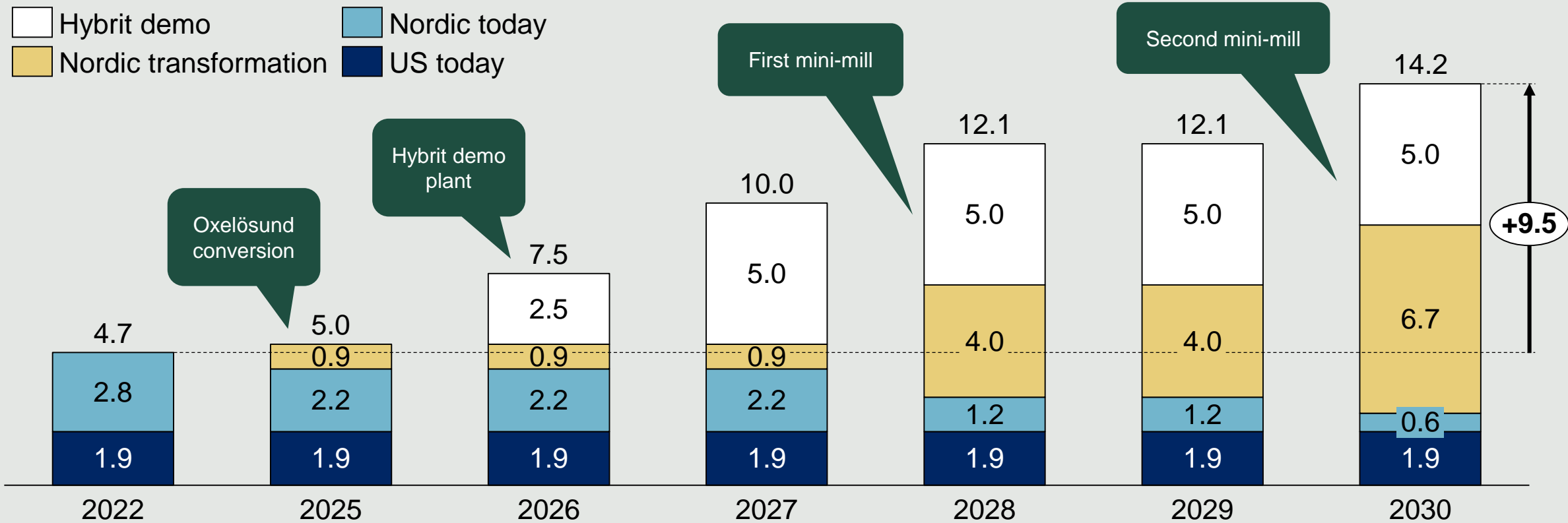
## Competitive prices



# SSAB needs ~9.5 TWh for the transformation

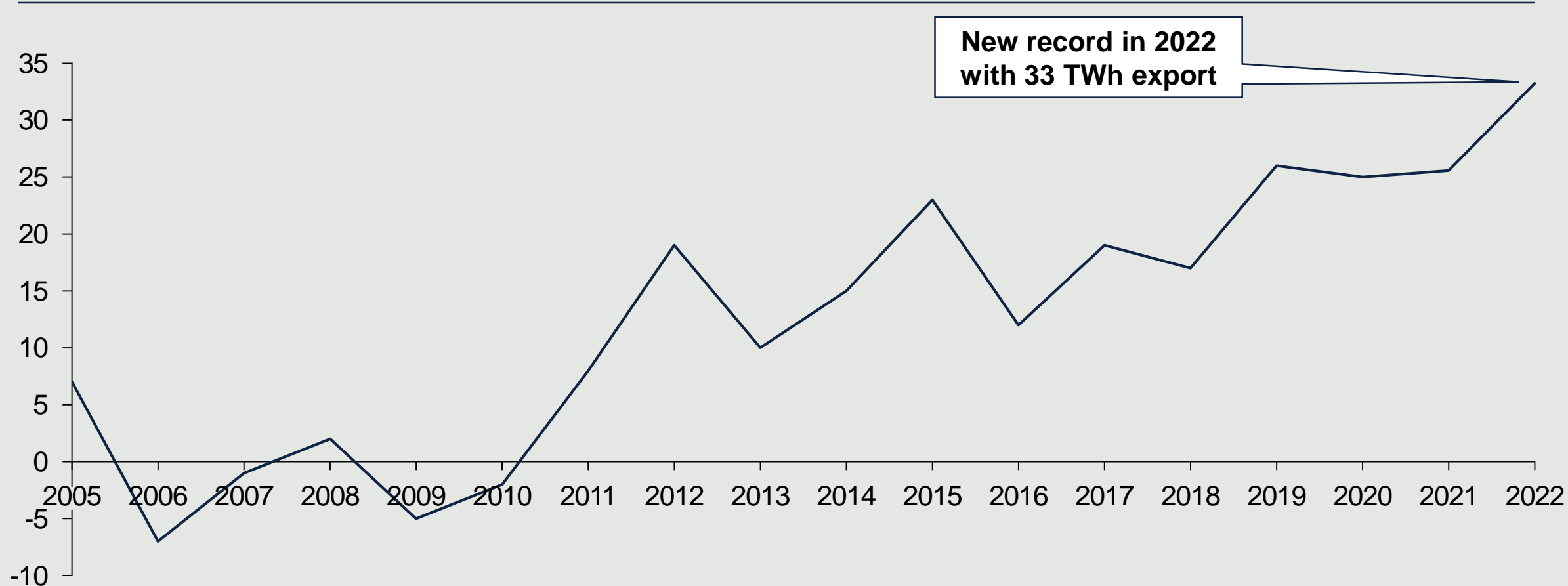
(including the Hybrit demo plant)

SSAB electricity needed, TWh per year

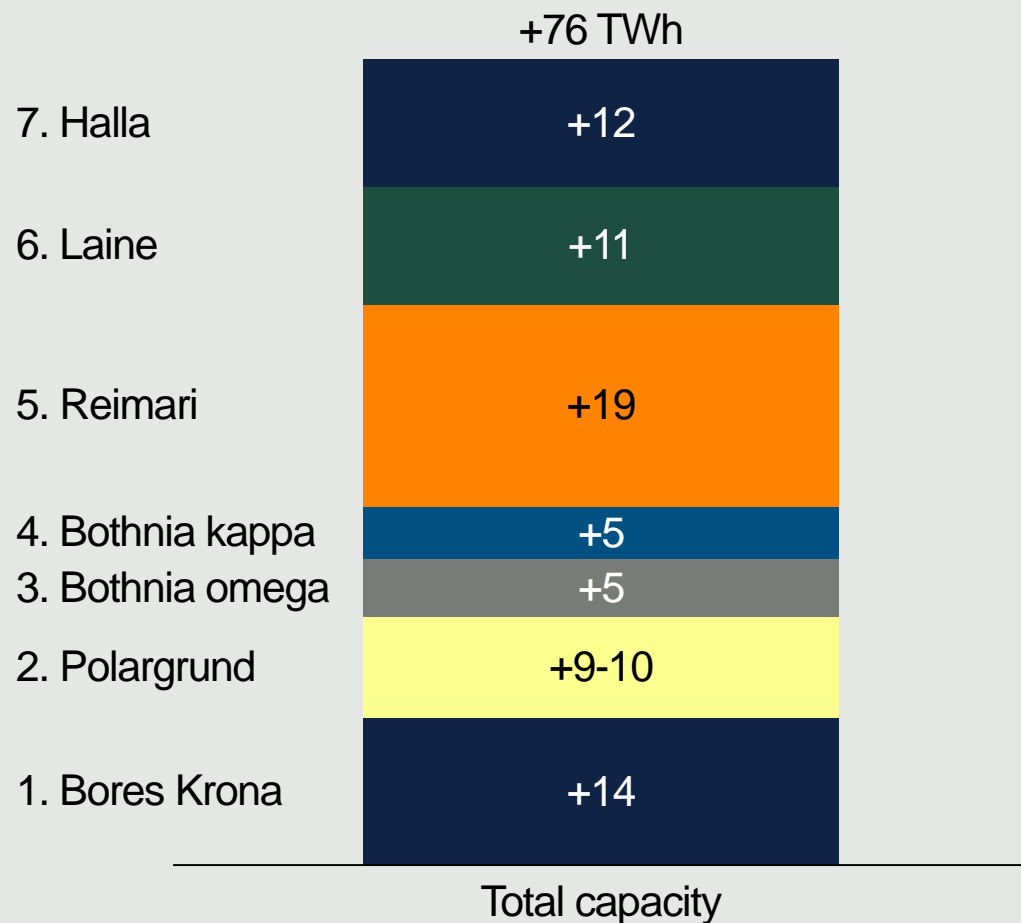


# Significant net export last decade

Net export of electricity from Sweden, TWh per year



# Ambitious plans for offshore wind in SE1 and Finland



# Summary

# Key takeaways

- Phasing out iron ore and coal usage in blast furnaces saves about 30 TWh of thermal energy, replaced by 9.5 TWh electricity
- SSAB will have new flexibility between sponge iron and recycled scrap
- Partnership with Hybrit and LKAB secures SSAB's access to competitive sponge iron
- Competitive advantage of fossil-free low cost electricity in the Nordics



SSAB

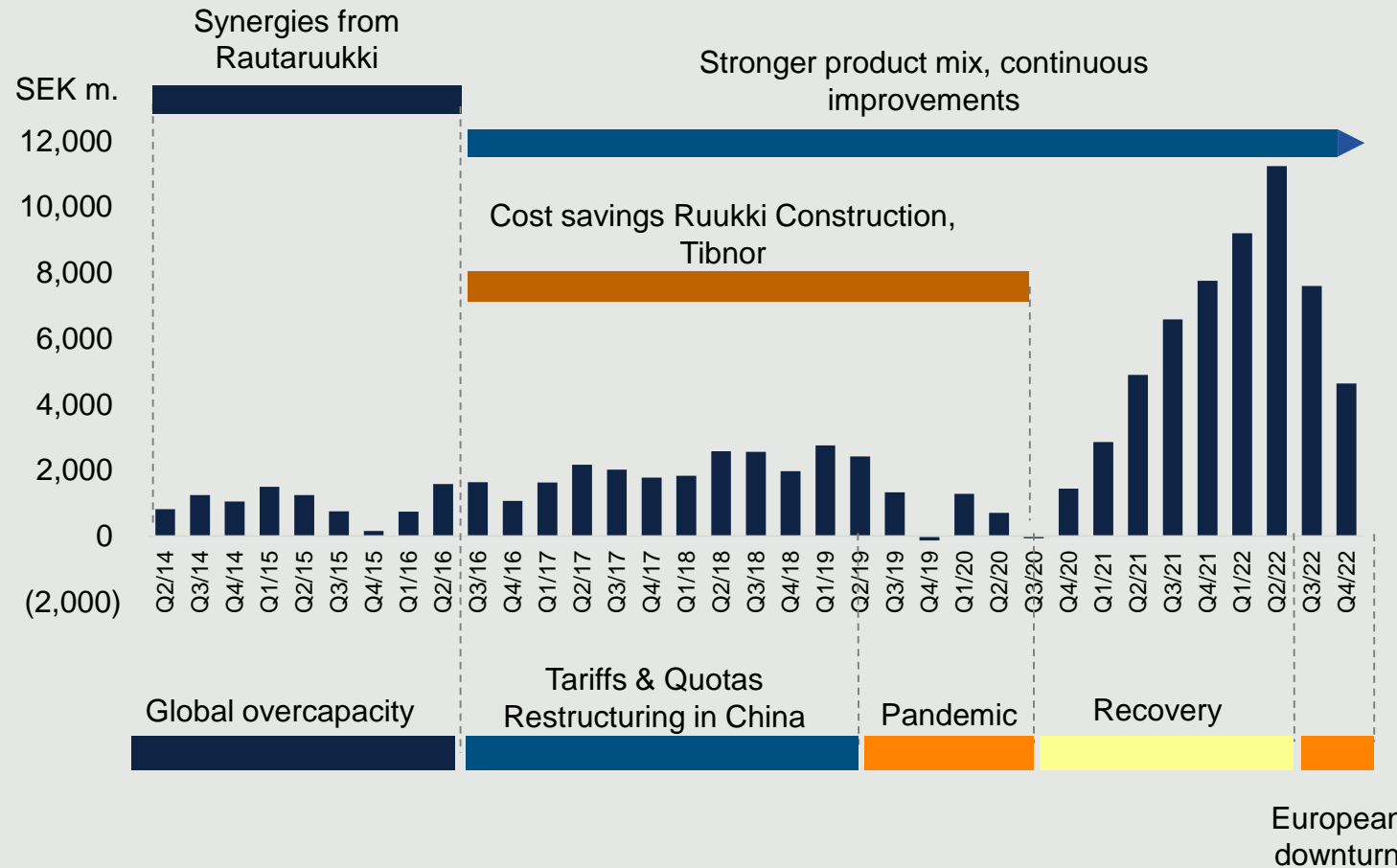


# A more profitable SSAB

Leena Craelius, EVP and CFO

# Robust financial performance

# Strong earnings



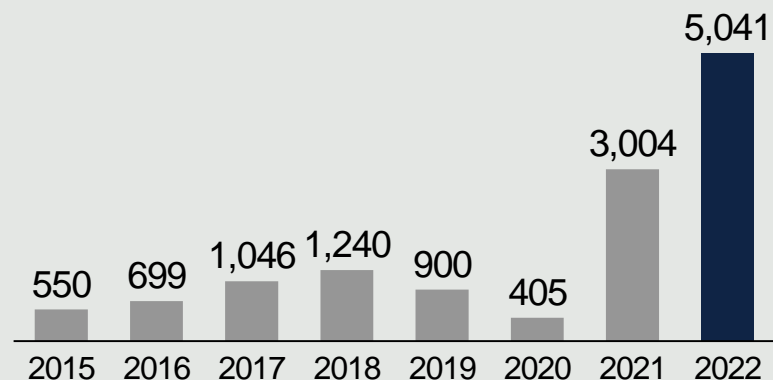
- Volatile market conditions in recent years
- Underlying trend of improving earnings since 2014
- A combination of a healthier steel industry and SSAB initiatives

# Two consecutive years of record earnings

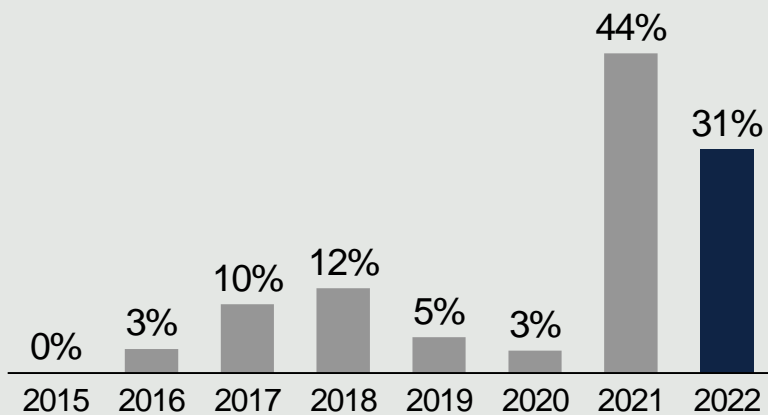
Earnings per share (adj), SEK



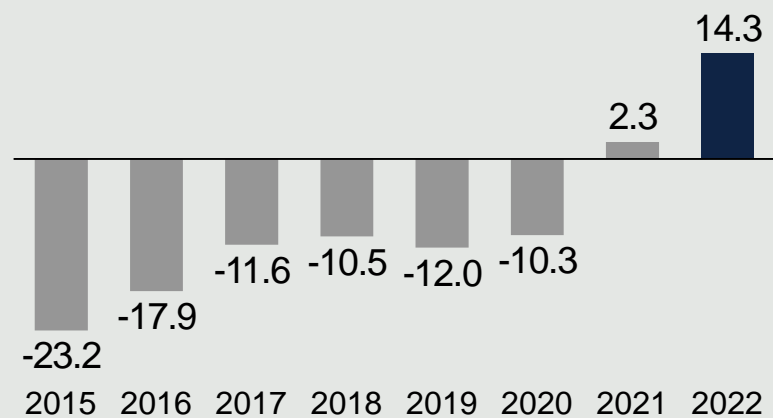
EBITDA per tonne (adj), SEK



Return on capital employed (adj)

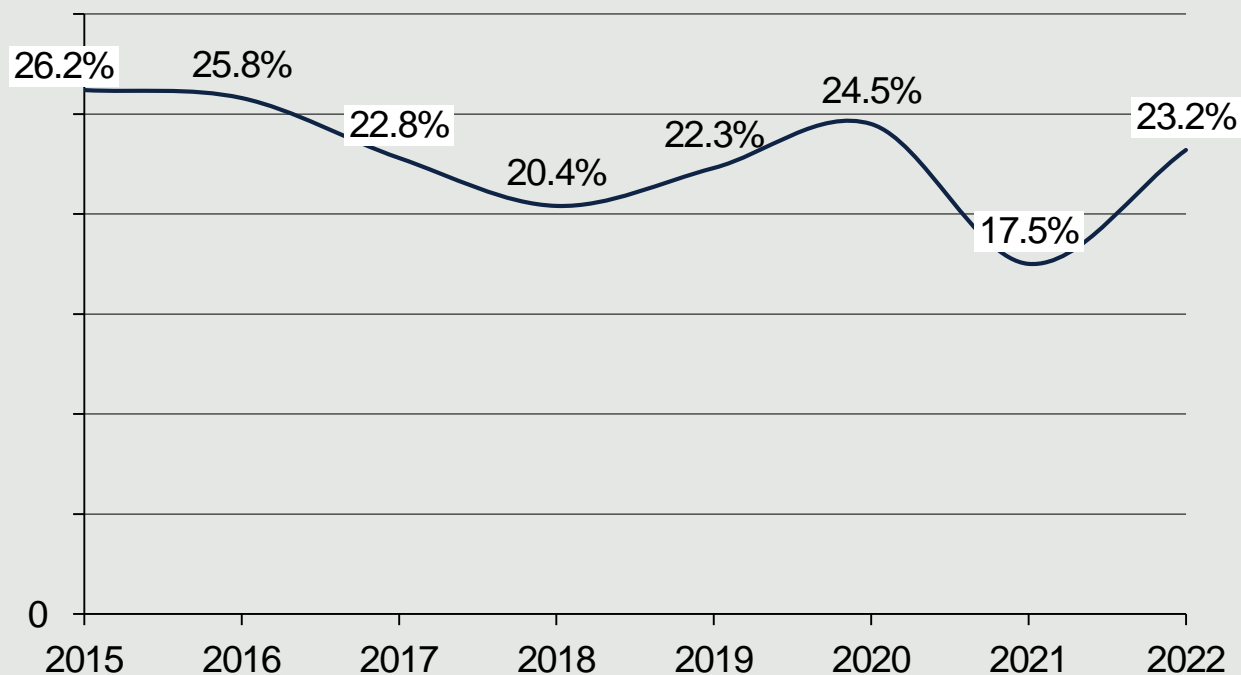


Net debt, SEK bn



# Working capital focus

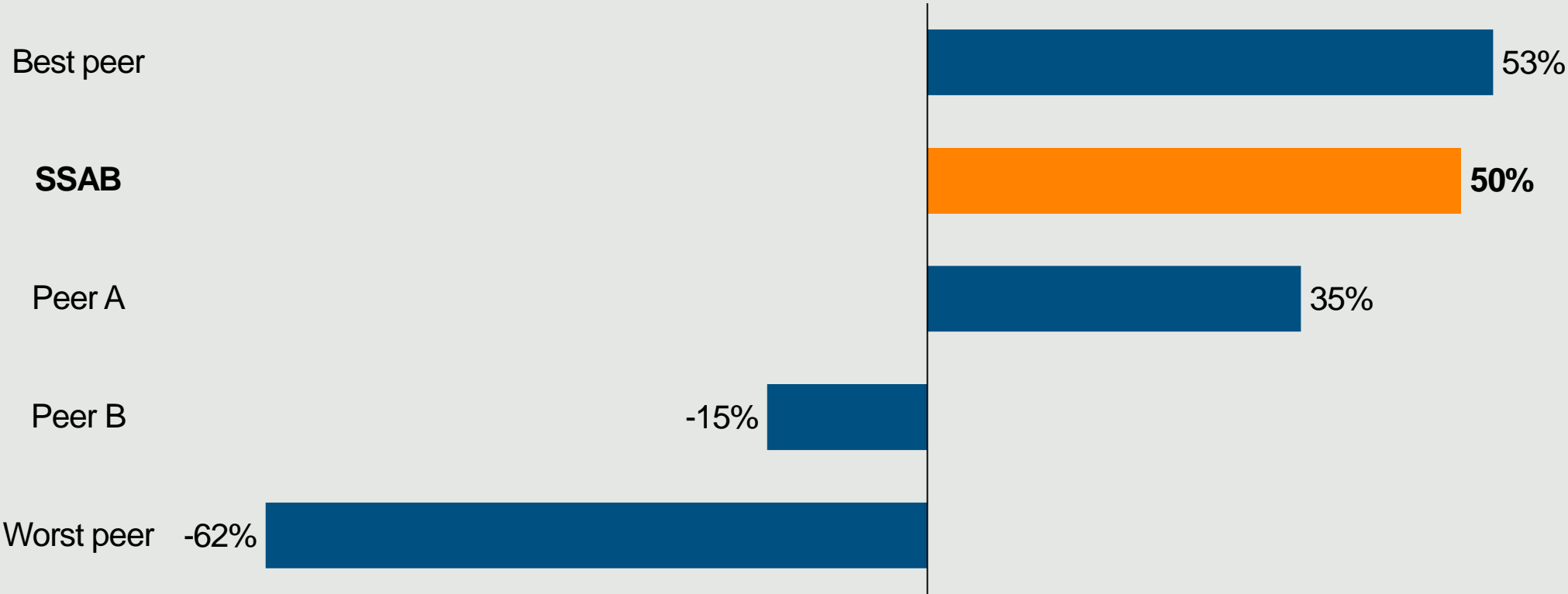
## Net operating working capital/sales



- Disturbances in supply chain during 2022 due to Russia's invasion of Ukraine – higher inventory
- Measures implemented to reduce working capital
- Transformation will provide a step-change in NOWC/sales ratio

# Industry-leading cash flow generation

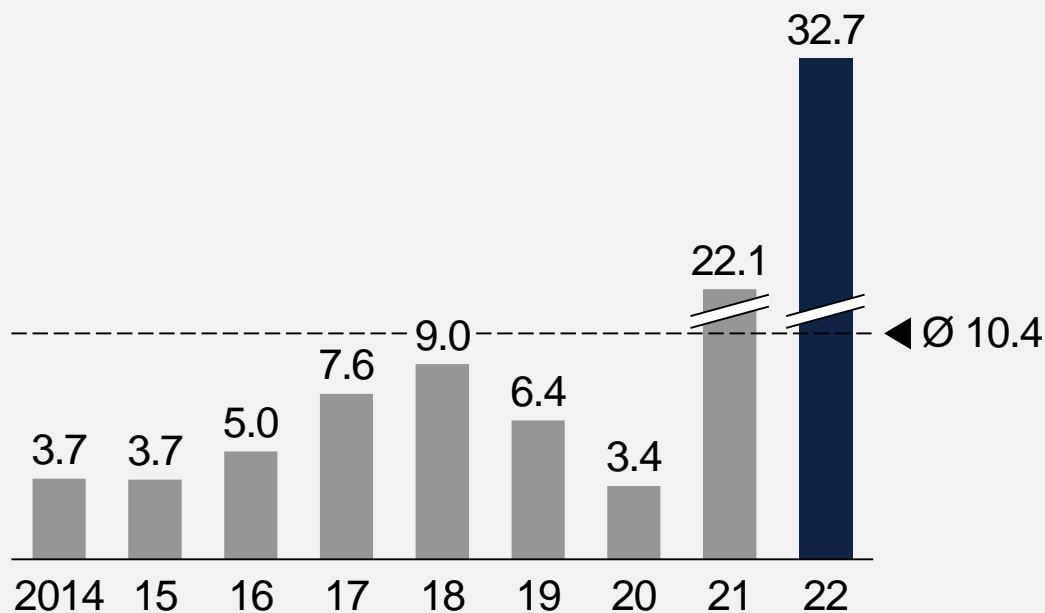
Cumulative cash conversion 2017-2022 (Operative cash flow before strategic investments/EBITDA)



# Favorable outlook for healthy earnings level

## Historical earnings

SSAB EBITDA (Adj. SEK bn)



## Healthier over the cycle profitability

Indications that the historical average earnings could be a conservative assumption



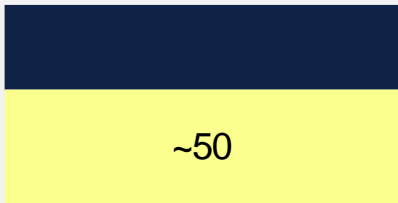
- Not fully reflecting SSAB's achievements
- Not fully reflecting industry changes

Good conditions to finance investments for the transformation and pursue the dividend policy

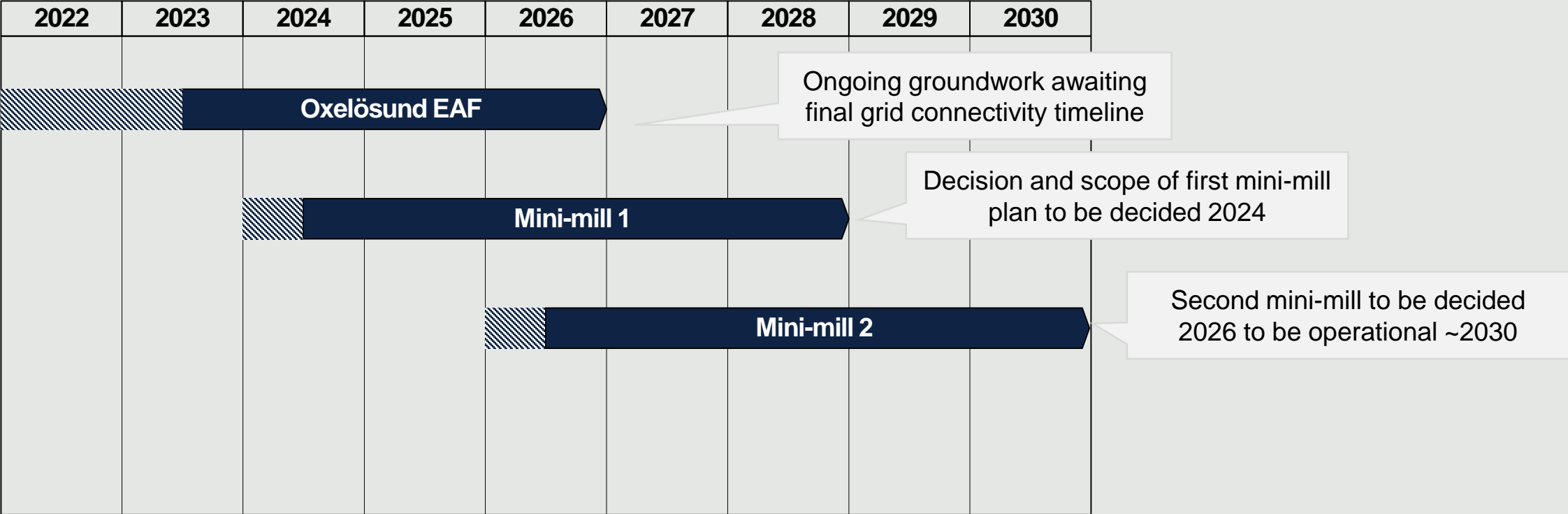


# Investments to build a stronger company

# Three long-term strategic alternatives for 2045

Options	Reinvest in current technology	EAFs at all sites by 2045	Accelerated transformation
Description	<ul style="list-style-type: none"> <li>Rebuild coke ovens</li> <li>Reline blast furnaces</li> <li>Maintain existing rolling mills</li> <li>Cost of CO<sub>2</sub> emissions</li> </ul>	<ul style="list-style-type: none"> <li>Replace current blast furnaces with EAFs</li> <li>Design EAFs based on limitations of existing steel mills</li> <li>Modernize existing rolling mills</li> </ul>	<ul style="list-style-type: none"> <li>Replace Nordic strip system with modern mini-mills</li> <li>Design for efficiency and fossil-free from the start</li> </ul>
Indicative CAPEX 2021-2045*	<p>SEK &gt;70bn</p> 	<p>SEK &gt;80bn</p> 	<p>SEK ~85bn</p> 
Annual earnings improvement	<p><b>Negative</b></p> <p><b>Not possible</b></p>	<p><b>Marginal</b></p> <p><b>Not attractive</b></p>	<p><b>SEK &gt;10bn</b></p> <p><b>Policy decision</b></p>

# Sequencing of investments coming years - base case



Strategic investments estimated to be in the region of SEK 50bn.  
Outcome will depend on final specification of each project

# Manageable financial risk profile

**Well-defined guidelines**

**Financial framework**

**Healthy financial position**

**Favorable financial outlook and an attractive business case**

**Manageable financial risk profile**

**Investment flexibility**

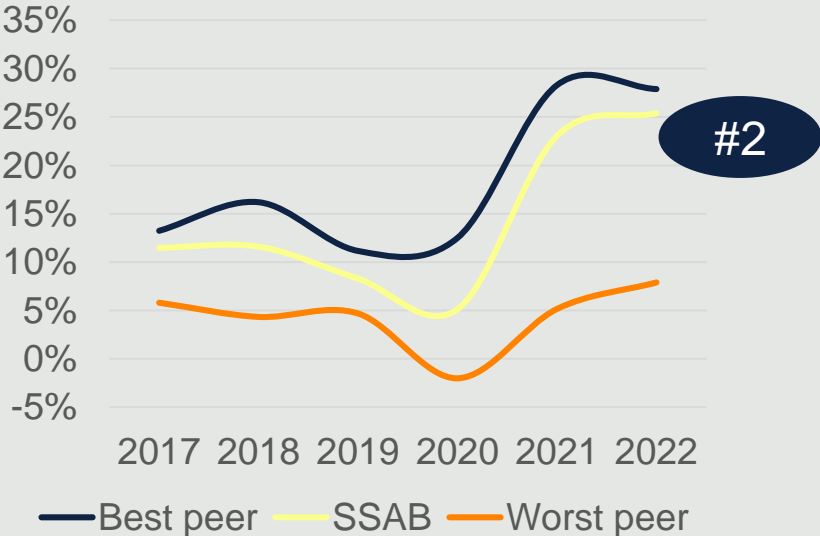
**Financing options**

**Options to adapt roadmap**

**Favorable green financing options**

# Financial targets – track record

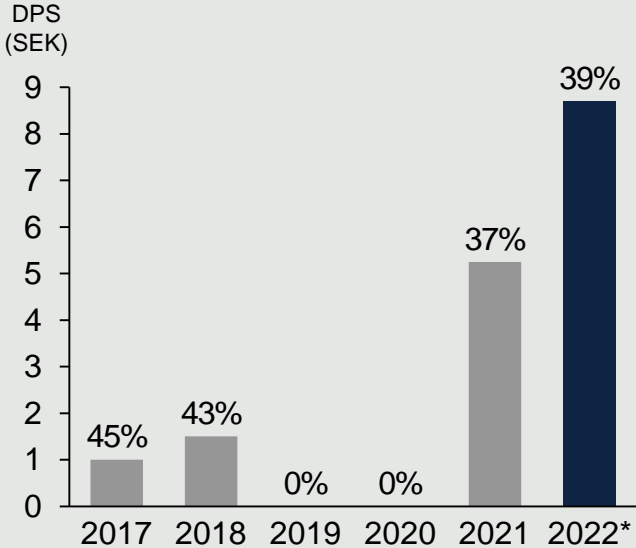
**Profitability**  
- EBITDA margin vs peers



**Capital structure**  
- Net debt/equity <35%



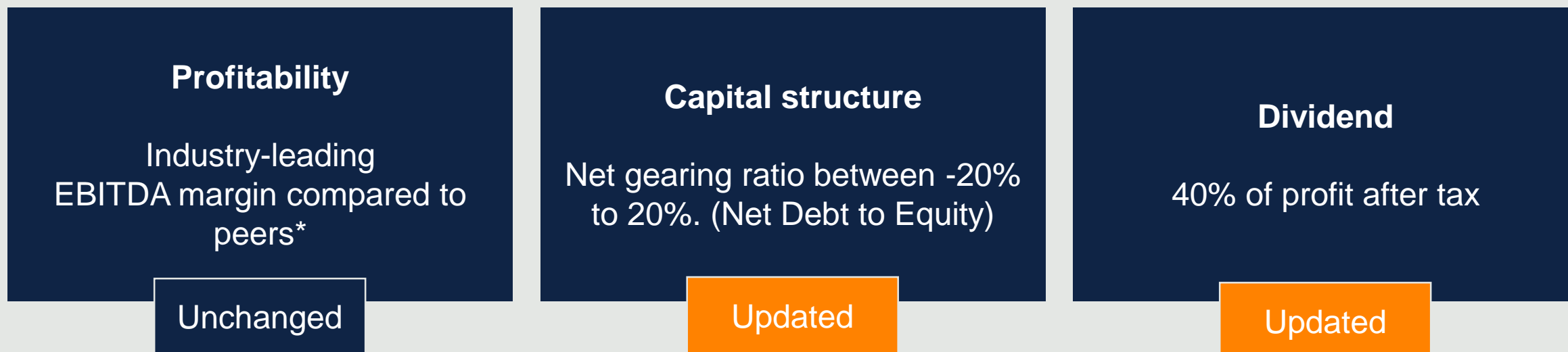
**Dividend**  
- 30-50% of profit after tax



\*2022 Board proposal



# SSAB financial targets



*Before determining the yearly dividend proposals and capital structure adjustments, the management and board of directors will evaluate the capital needs for the coming years based on market outlook, capex plans and other considerations.*

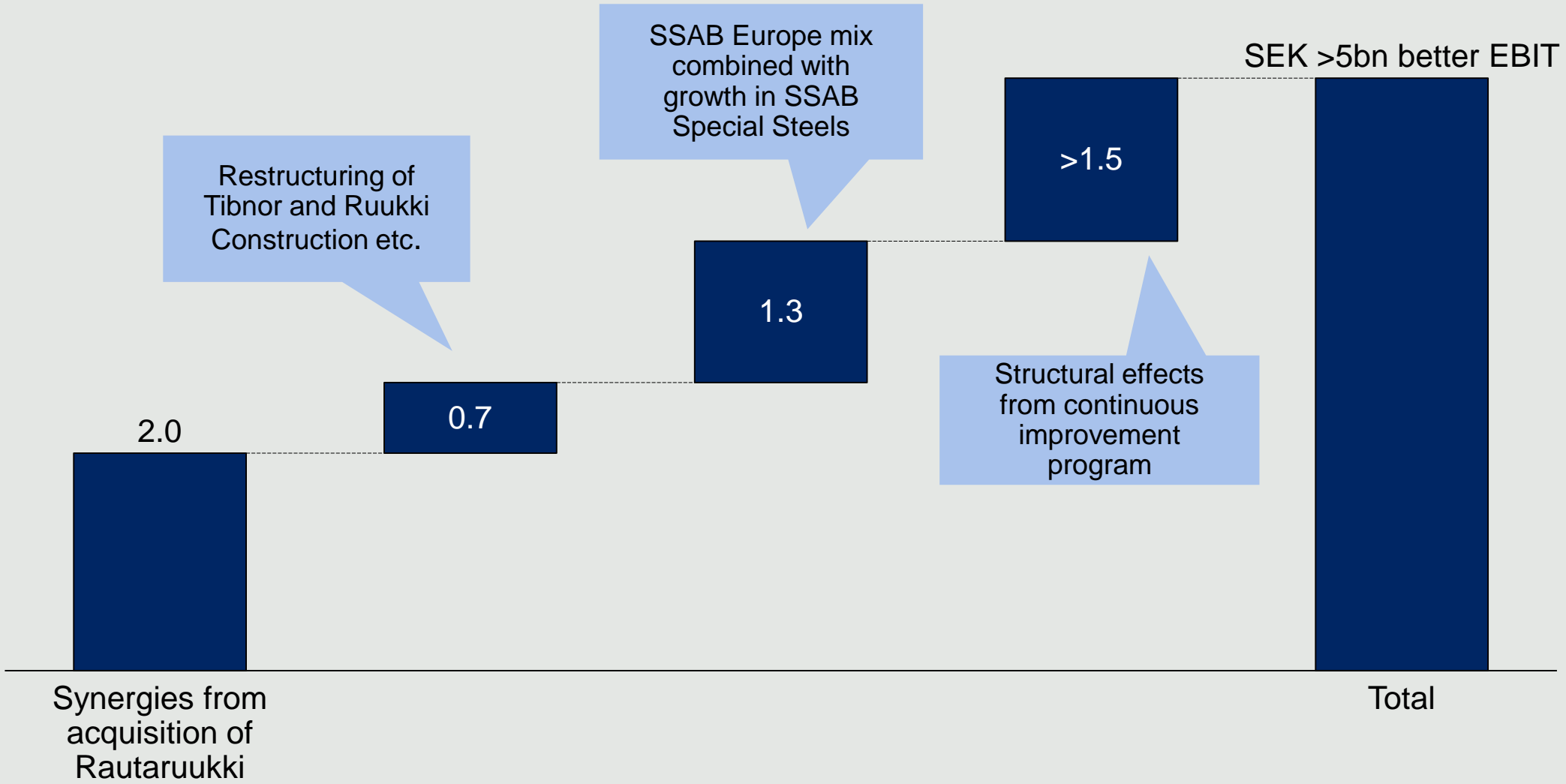
\*ArcelorMittal, Nucor, Salzgitter, Tata Steel Europe, ThyssenKrupp and US Steel

# Summary – SSAB taking the lead

Martin Lindqvist, President and CEO

SSAB

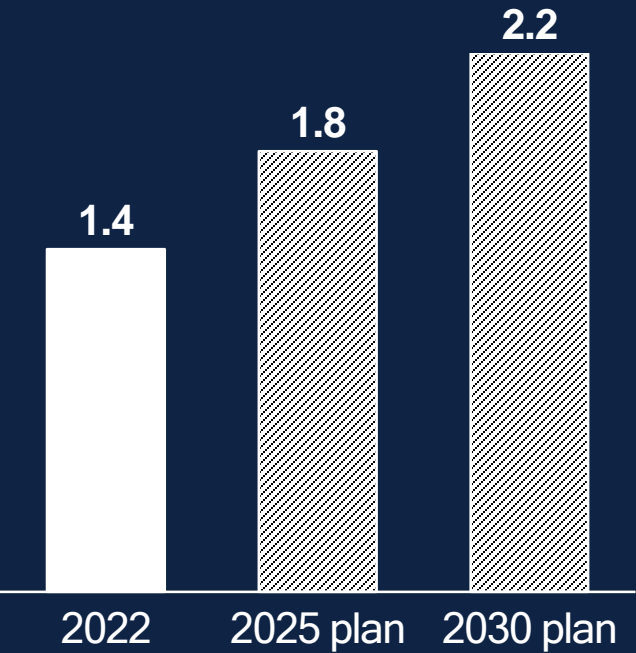
# We have built a more resilient SSAB



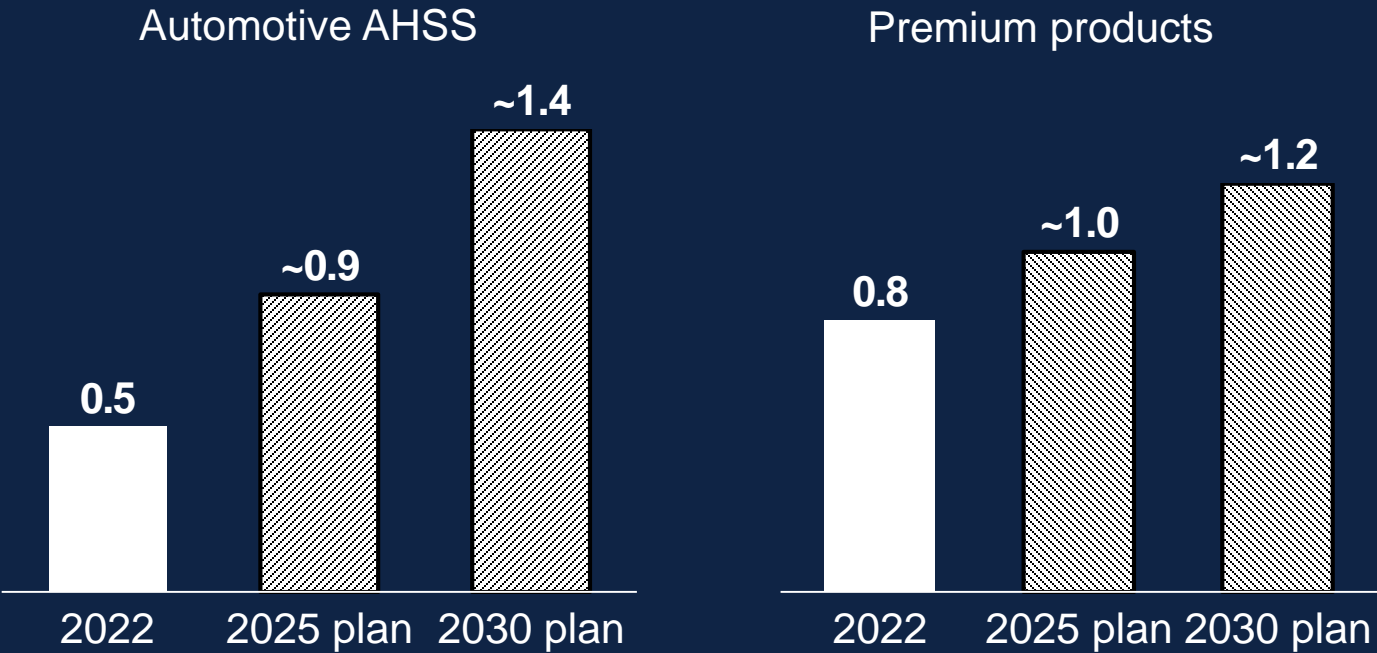


# Mix improvement continues – new growth targets

SSAB Special Steels



SSAB Europe



Million tonnes



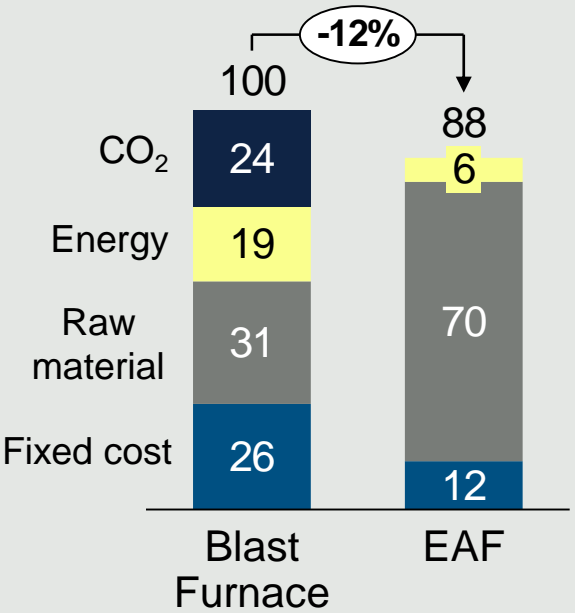
# Launch of SSAB Zero

- Zero carbon emission in operations. Third-party verified
- Fossil-free electricity, bio carbon and bio gas
- No carbon emission offsetting or mass balancing allocation schemes
- Zero emission steel is a premium product – premium estimated at EUR ~300/tonne

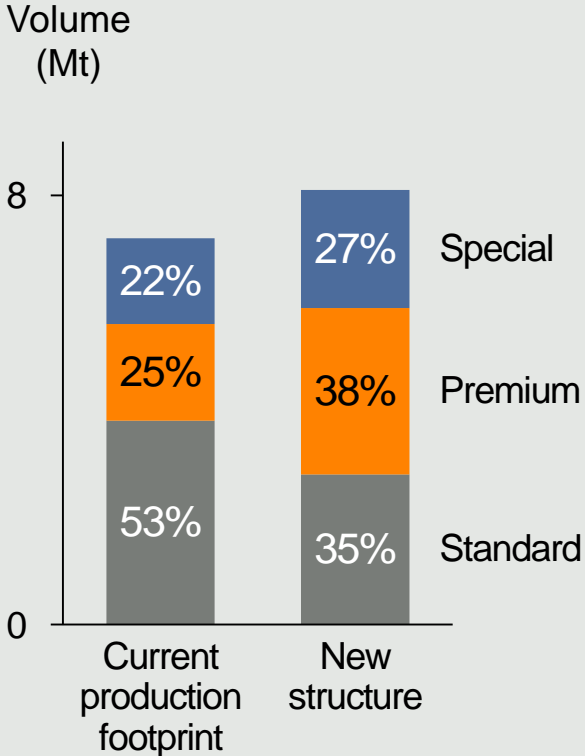


# Main components of earnings uplift

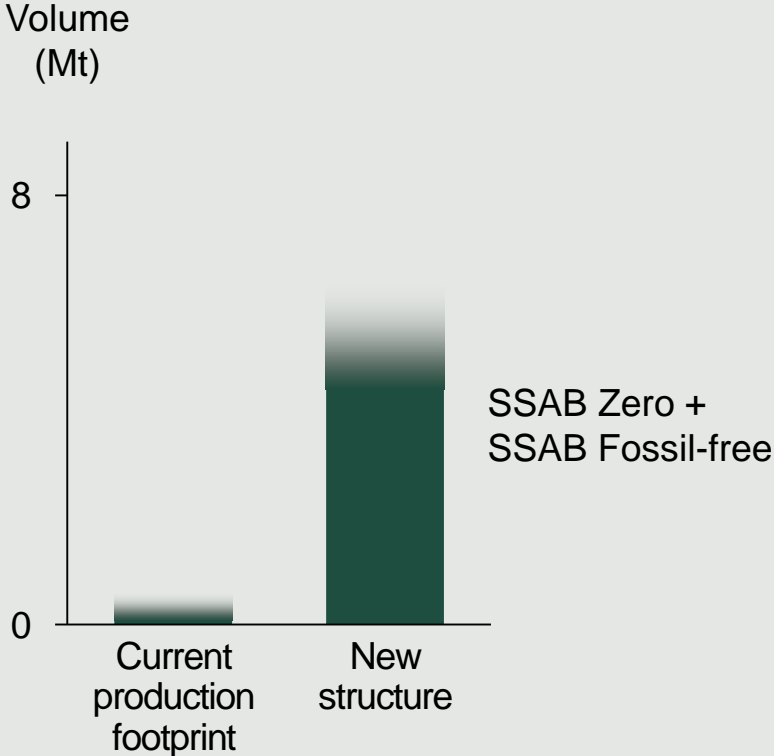
Cost benefit (indexed)



Commercial strategy

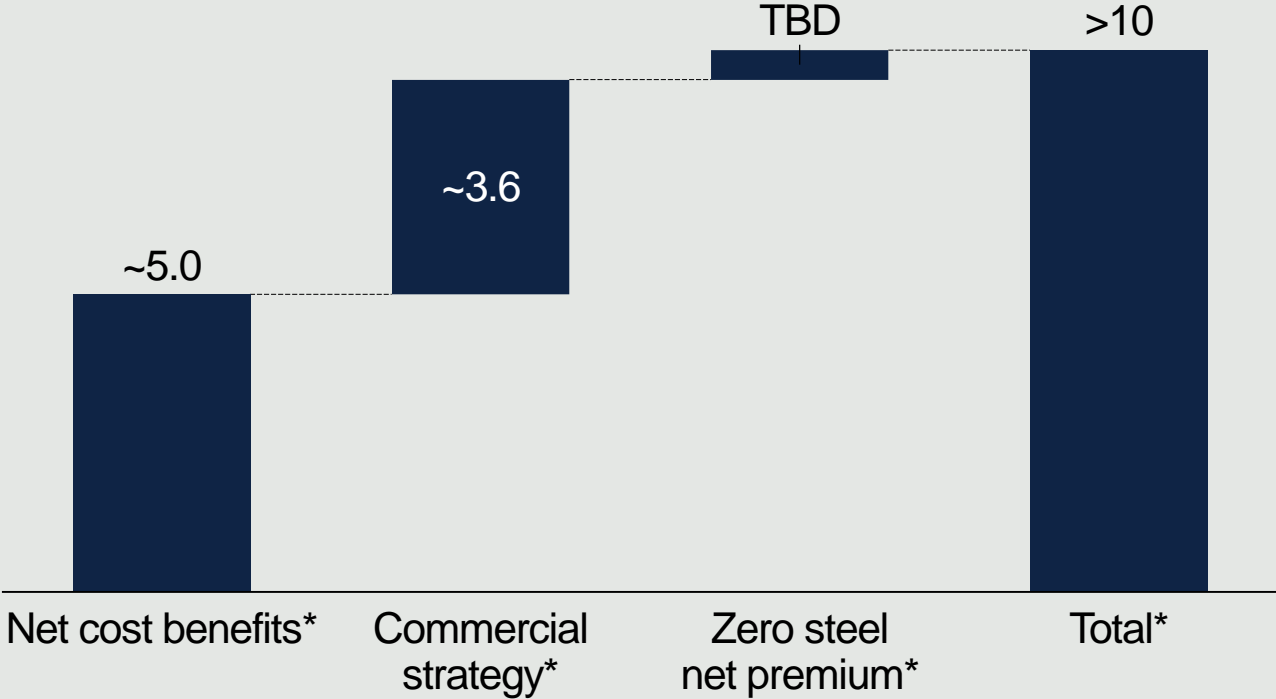


Zero emission steel



# Positioned for industry-leading profitability

## Transformation benefits >2030 (SEK bn)



\*Benefits refers to annual earnings improvement compared to a scenario where SSAB keeps current blast furnace system

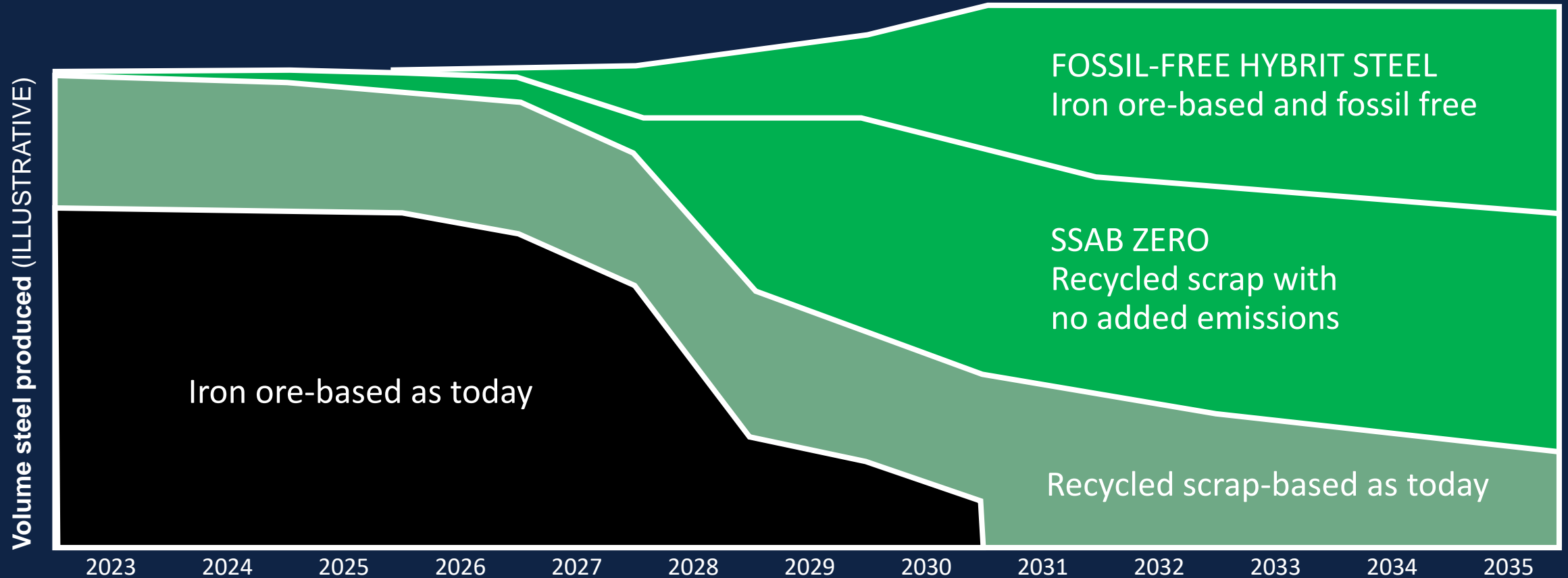
# Future production footprint

- US mills in good starting position on cost and emissions
- SSAB's European sites well suited for EAFs/mini-mills
- Step change in efficiency and cost – construction of state of the art mini-mills
- Built for fossil free production from start
- More capacity for high-strength and premium steels



**SSAB**

# Transform SSAB to a fully sustainable steel portfolio



# Summary

- We have built a more resilient SSAB
- Mix improvement continues – new growth targets
- Launch of SSAB Zero
- Transform SSAB to a fully sustainable steel portfolio
- Future production footprint improves flexibility and cost position



SSAB