First in fossil-free steel

Jonas Larsson, Director Environmental Affairs

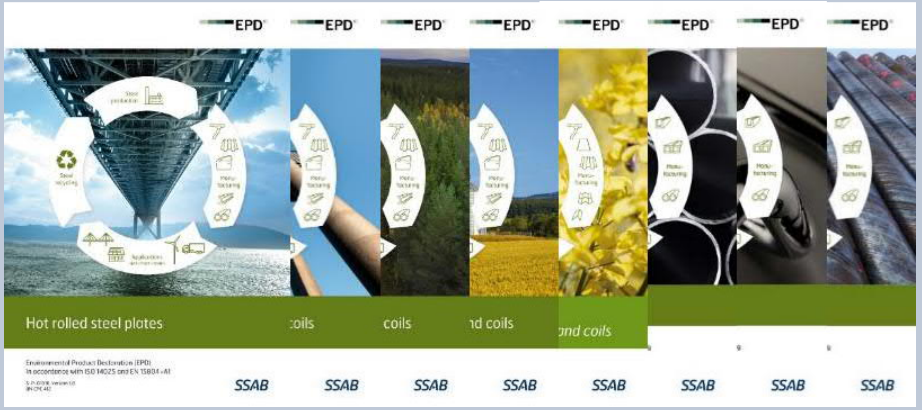
SSAB’s targets are science based

- SSAB's climate goal is approved by the Science Based Targets initiative
  - This means that the objective is scientifically based and in line with the Paris Agreement
- SSAB commits to 35% reduction in emissions
  - Absolute Scope 1&2 emissions by 2032 from a 2018 base-year
- Part of the overall SSAB roadmap
  - Fossil-free steel deliveries in 2026
  - A fossil-free company 2045

SSAB's Environmental Product Declarations

- Independently verified documents
  - Transparent and comparable information about the life-cycle environmental impact
  - Using LCA methodology
- All product groups
  - Hot rolled steel plates
  - Hot rolled steel sheets and coils
  - Cold rolled steel sheets and coils
  - Metal coated steel sheets and coils
  - Color coated steel sheets and coils
  - Tubular Products

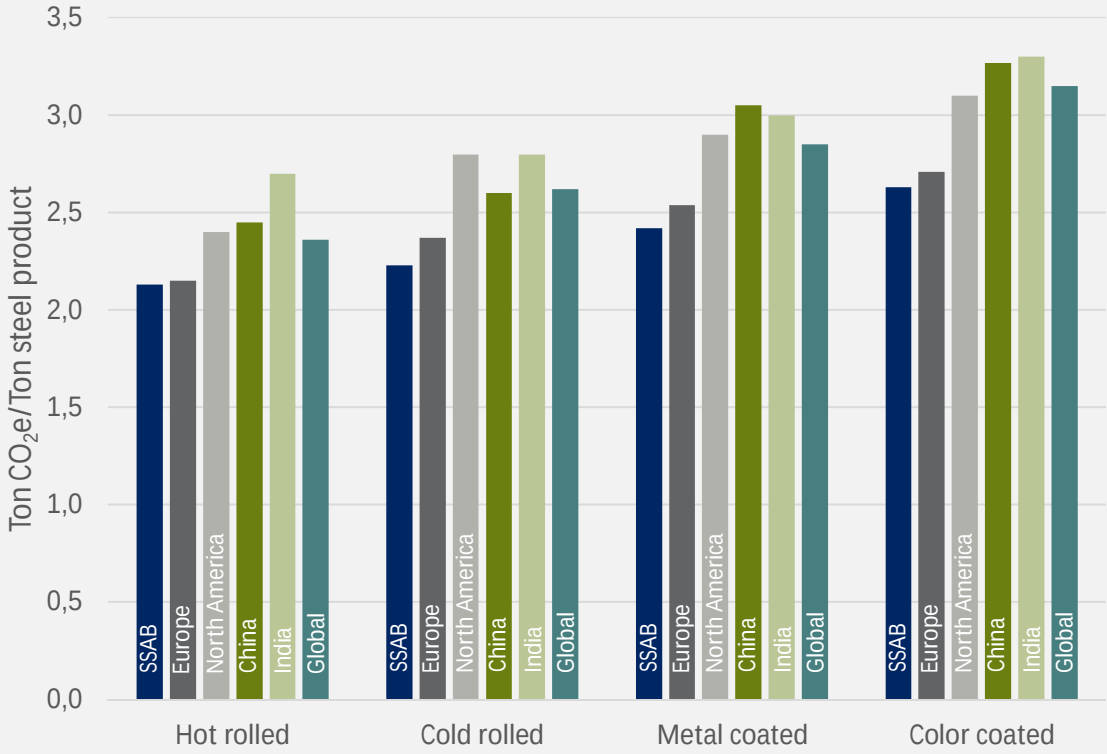
- Registered in the International EPD® System
  - www.environdec.com and www.ssab.com
  - Ruukki Construction EPDs are also available for Roofing and Components in the Finnish RTS EPD



SSAB is already today at the forefront

- SSAB's blast furnaces are among the world's most efficient in terms of CO_2e emissions
  - Environmental focus in process development
  - High-quality Swedish iron ore
  - Swedish and Finnish green electricity

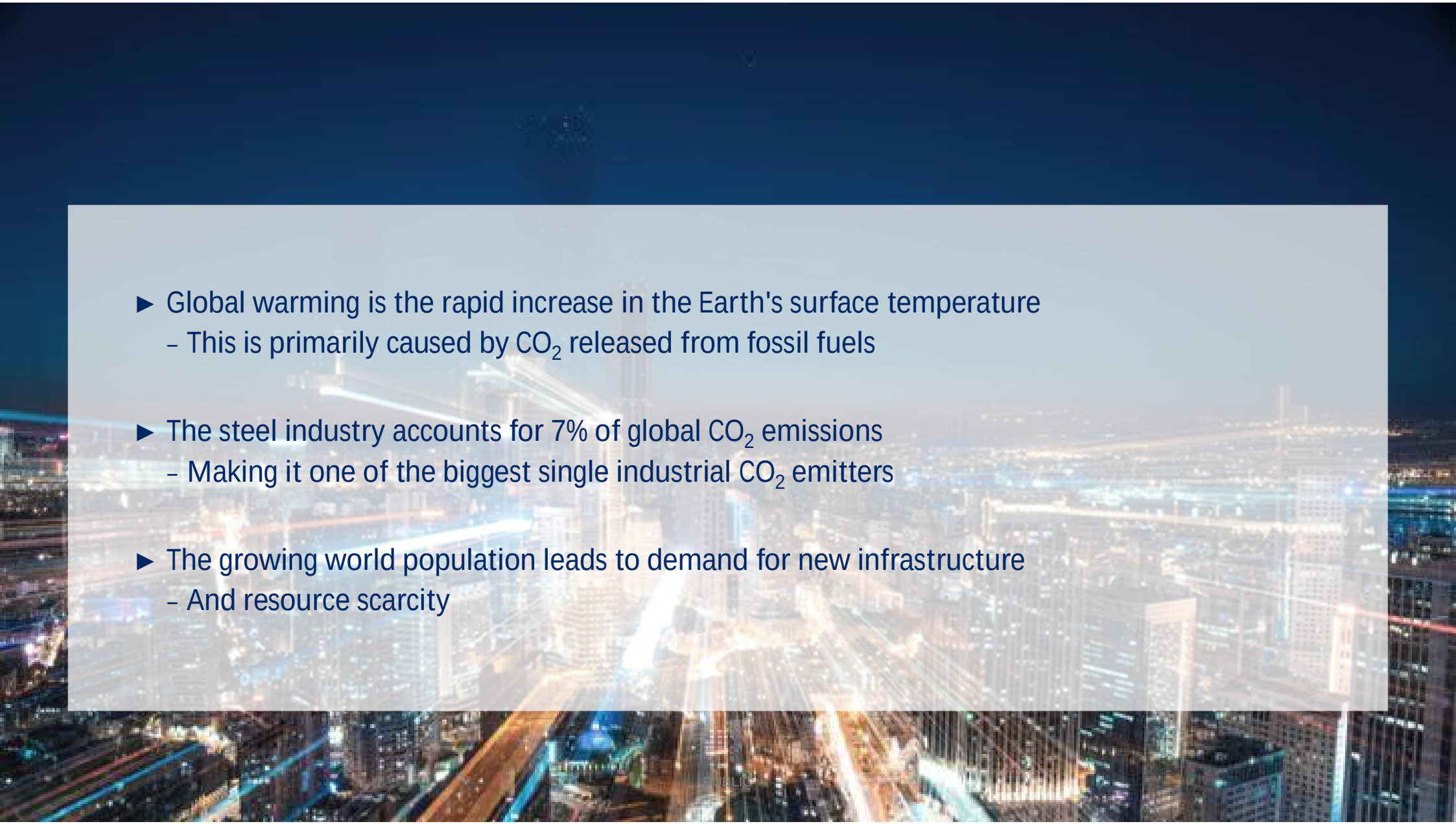
- The global average for CO_2e emissions is 10% – 20% higher than the SSAB production



Sources:
thinkstep, GWP benchmarking of BF route steel sheet, December 2019
SSAB's associated EPD data, March 2020

SSAB

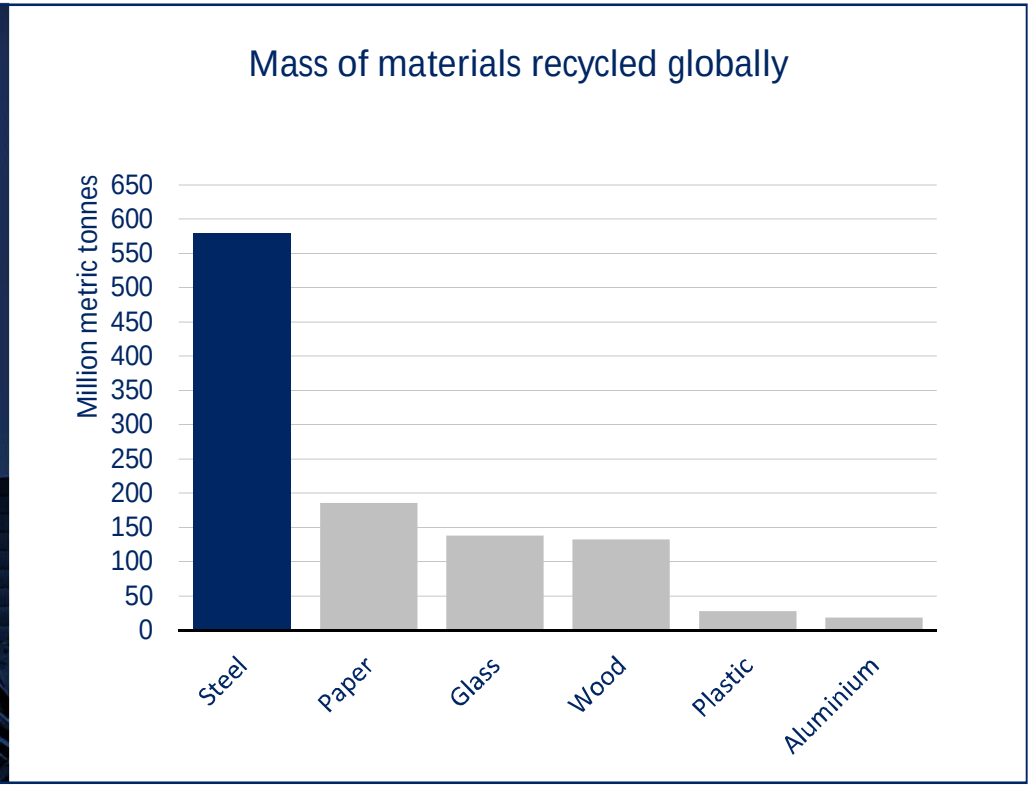

Why SSAB
is converting to
fossil-free steel



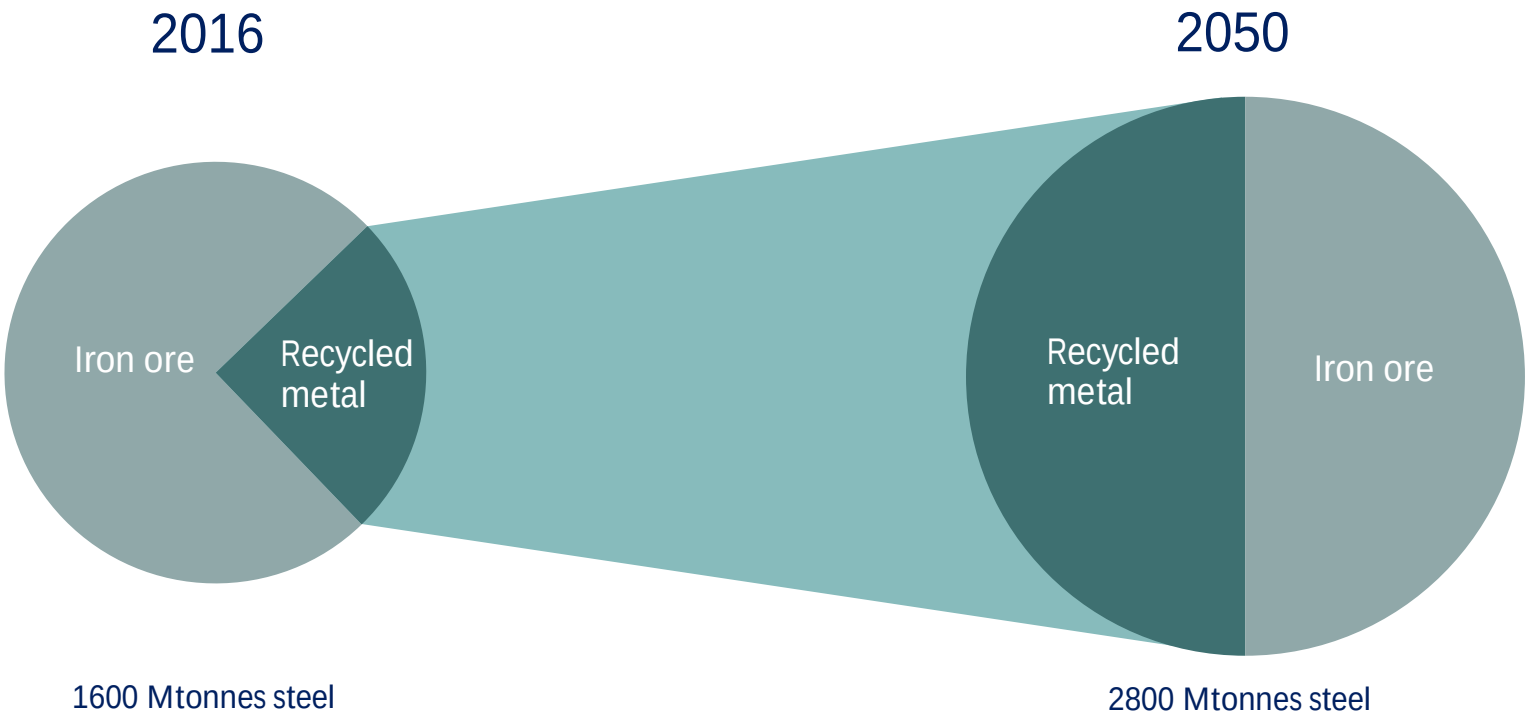
- Global warming is the rapid increase in the Earth's surface temperature
  - This is primarily caused by CO_2 released from fossil fuels
- The steel industry accounts for 7% of global CO_2 emissions
  - Making it one of the biggest single industrial CO_2 emitters
- The growing world population leads to demand for new infrastructure
  - And resource scarcity

Steel is the most circular material in the world

- More steel is recycled than all other materials combined
  - 100% recyclable indefinitely
  - Without loss of quality
  - Recycling rate above 85% worldwide
- Steel is used everywhere
  - Steel is critical when building society and infrastructure



Recycling will not be enough
– 50% iron ore-based steel will still be needed by 2050



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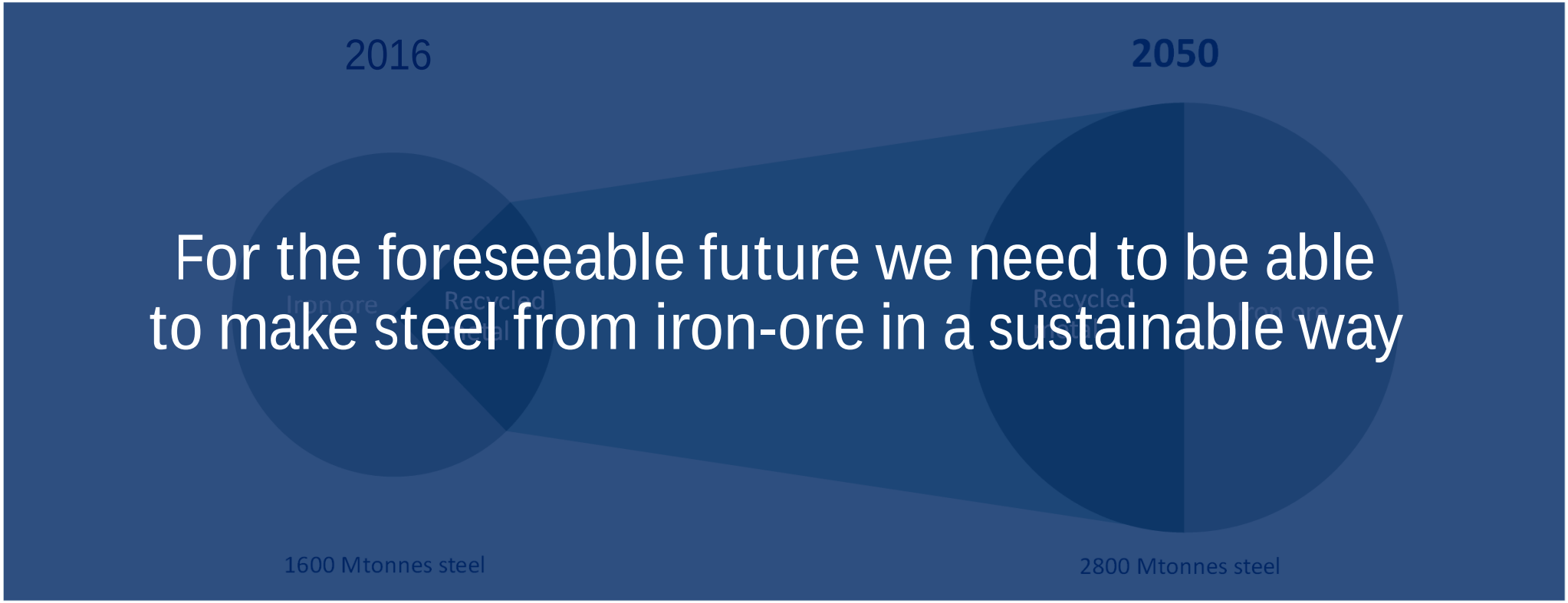


For the foreseeable future we need to be able to make steel from iron-ore in a sustainable way

Reducing the footprint of customer products

1

SSAB to introduce fossil-free steel in the market in 2026

- Launch of a premium product without fossil CO_2 footprint
- This means no fossil CO_2 emissions when producing this product, and a requirement to use fossil-free sponge iron

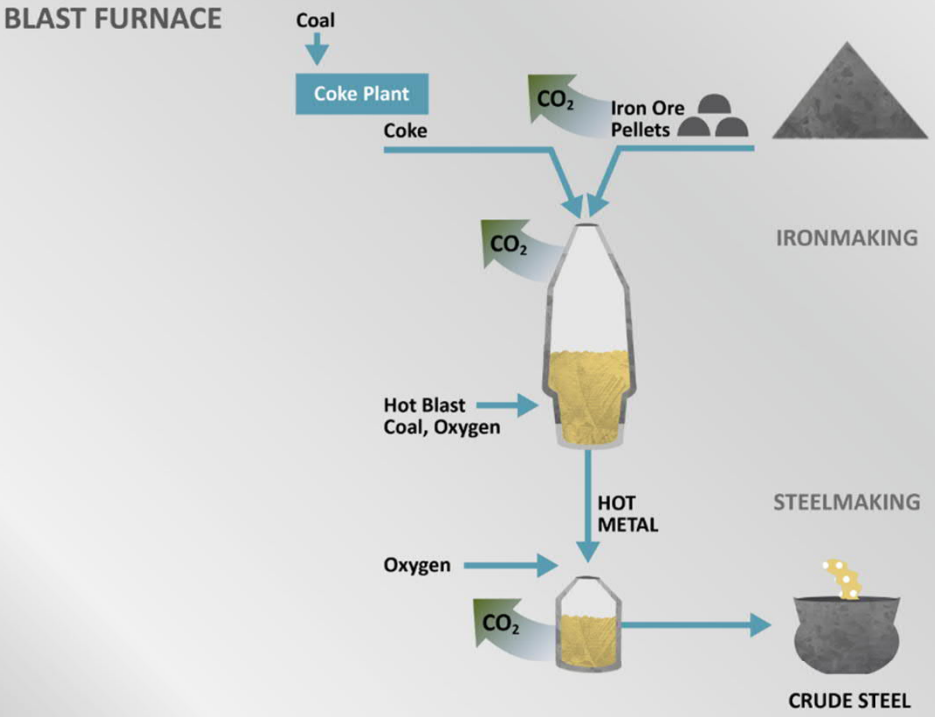
2

SSAB to have leading sustainability performance; fossil free by 2045

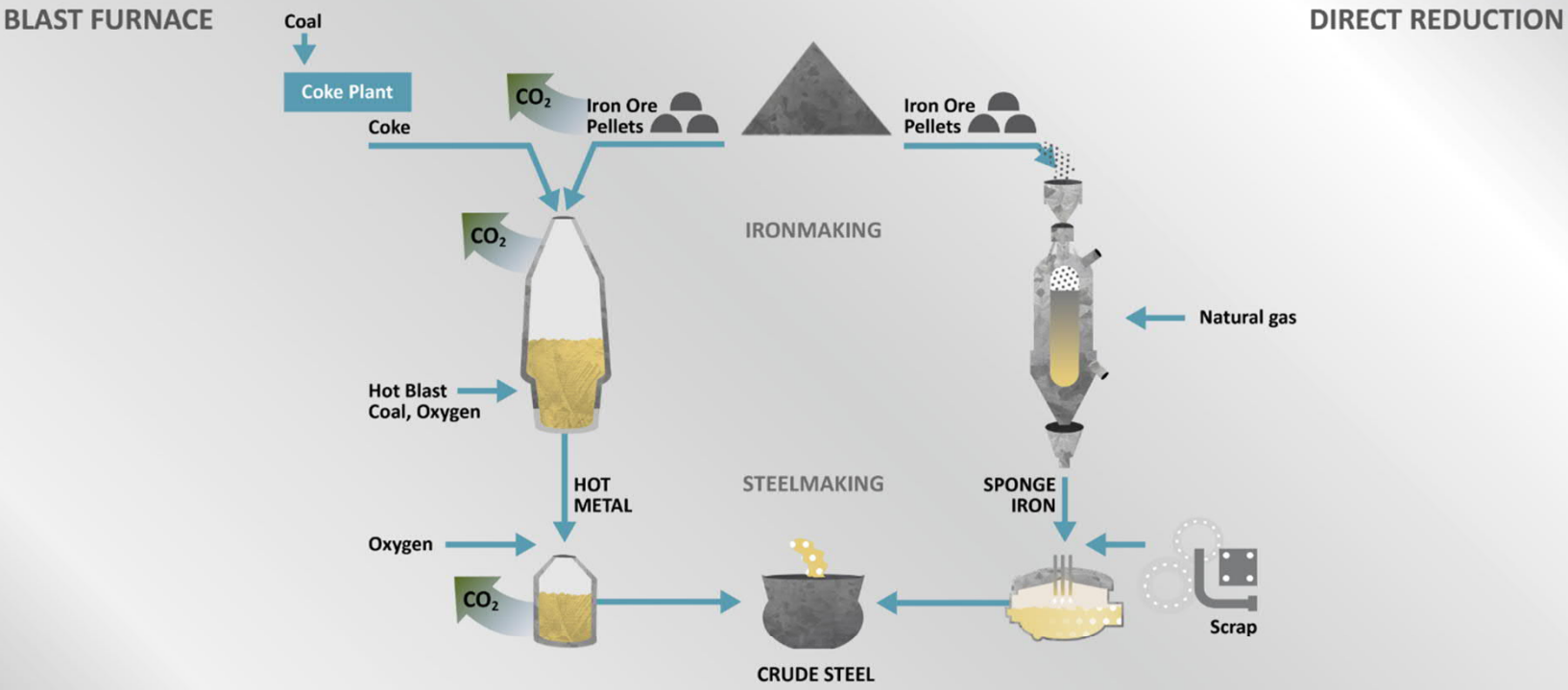
- To be fossil free within the entire operation by 2045, by stepwise reducing CO_2 footprint
- This means net zero CO_2 emissions from our own operations and purchased energy

The HYBRIT technology

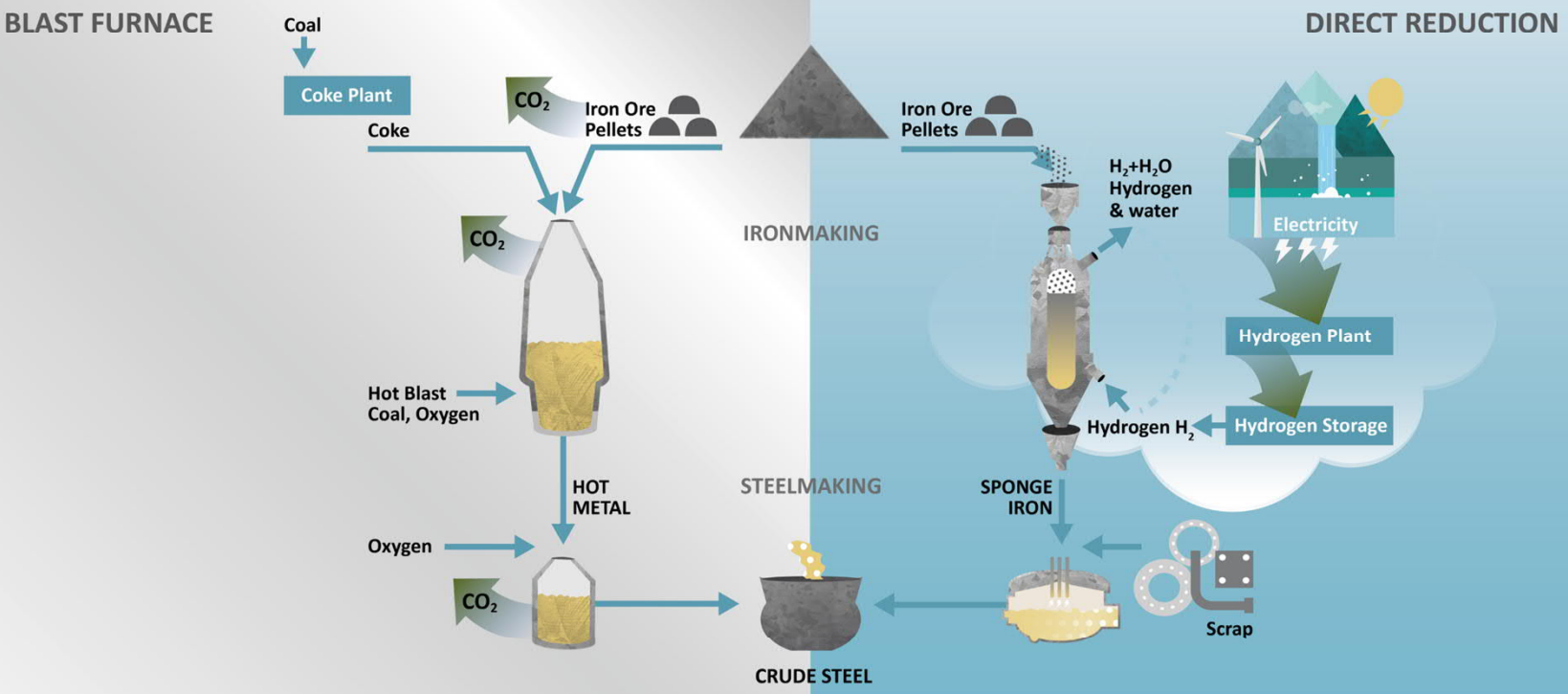
Two ways to make steel from iron ore today



Two ways to make steel from iron ore today



HYBRIT – Fossil-free steelmaking



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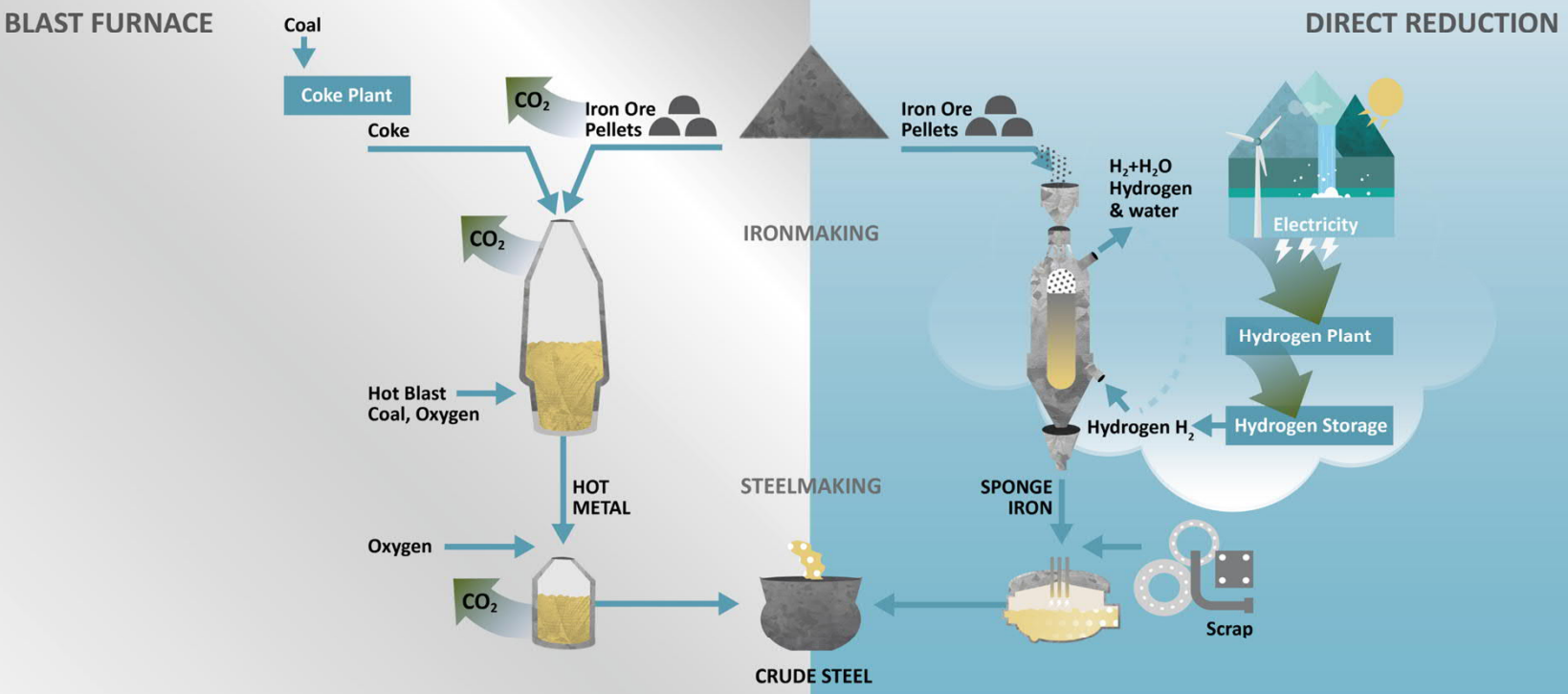


HYBRIT would eliminate ~90% of SSAB's total CO_2 emissions

2016-2017
Pre-feasibility Study

2018-2024
Feasibility Study & Pilot plant trials

2026 –
Demonstration Plant

SSAB starts up the world's first pilot plant for fossil-free steel

On August 31st Swedish Prime Minister Stefan Löfven started up the plant together with Isabella Lövin, Minister for Environment and Climate and Deputy Prime Minister

SSAB

The first fossil-free steel rolled in July 2021

HYBRIT Luleå
pilot plant

First products reaching the market in 2026

Pilot plant trials

Hydrogen storage pilot

Demonstration plant

Site decision

Erection start

Start-up

Oxelösund Arc Furnace

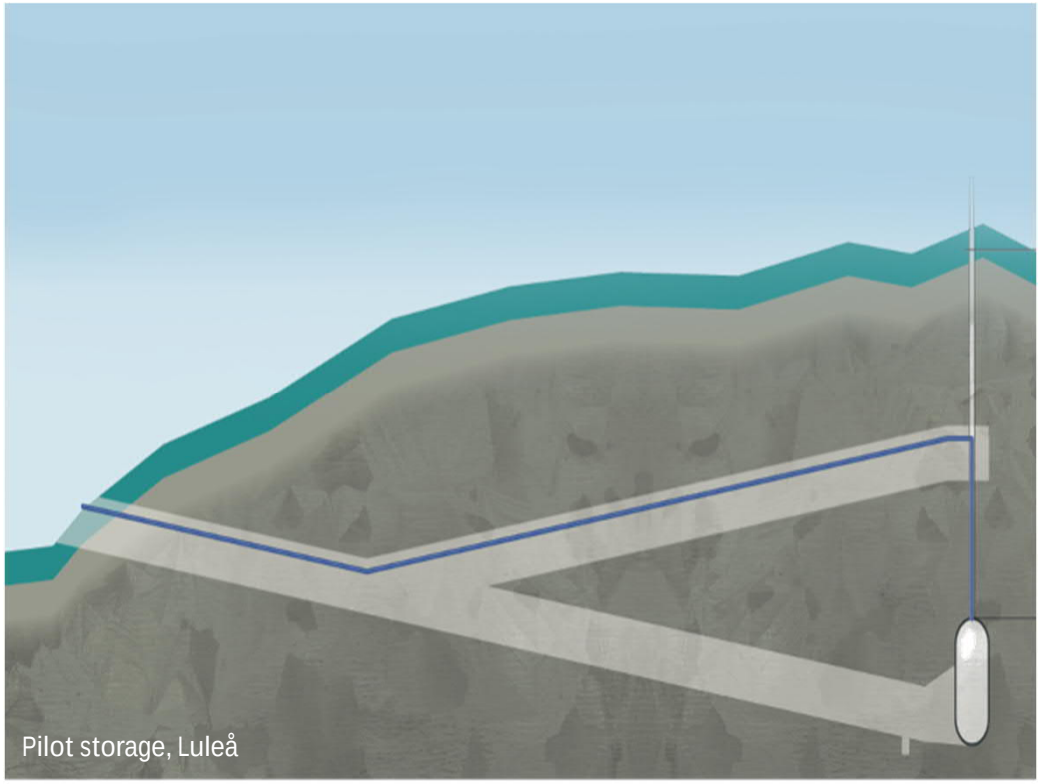
Customer + partnerships

Commercial deliveries

2020 2021 2022 2023 2024 2025 2026

Hydrogen energy storage in the rock

- Pilot storage ready 2022
  - 100 cubic meter hydrogen storage 30 meters below ground
  - Probably the world's largest LCR (Lined Rock Storage) hydrogen storage
  - Next to the HYBRIT pilot plant in Luleå
  - To ensure required pressure, balance hydrogen production and stabilize grid
- Full-size storage
  - 100 000-120 000 cubic meter hydrogen storage
  - Storing hydrogen equivalent to 100 GWh power
  - Corresponding to roughly a week of sponge iron production for the Gällivare demonstration plant


Pilot storage, Luleå

SSAB

Go fossil free

Be the first to offer fossil-free products

Fossil-free mining

LKAB will reduce energy consumption and CO_2 emissions to reach a positive CO_2 balance by 2045

+

Fossil-free electricity

Vattenfall's goal is that both the company and its customers will be completely fossil-free within one generation

+

Fossil-free steel

SSAB will reduce CO_2 emissions by closing blast furnaces and use HYBRIT technology, becoming a fossil-free company by 2045

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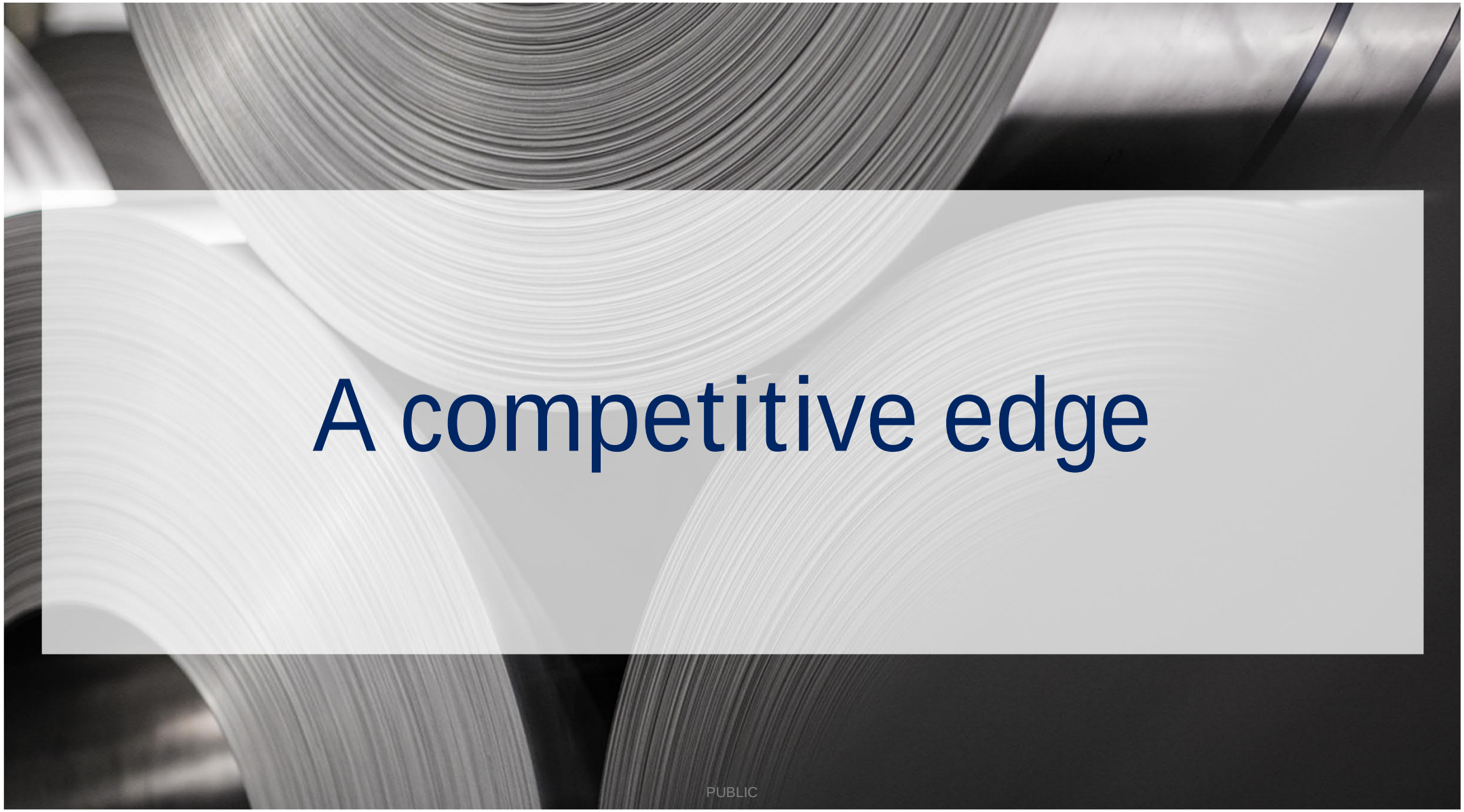
Fossil-free value chain

SSAB customers using fossil-free steel, aiming for carbon-neutrality, starting 2026



Three ways to reduce environmental impact

- Use better steel
  - Reduce your footprint with low CO_2 steel

- Use steel better
  - SSAB high strength steels makes products lighter and stronger
  - Reduce CO_2 emissions in the use phase

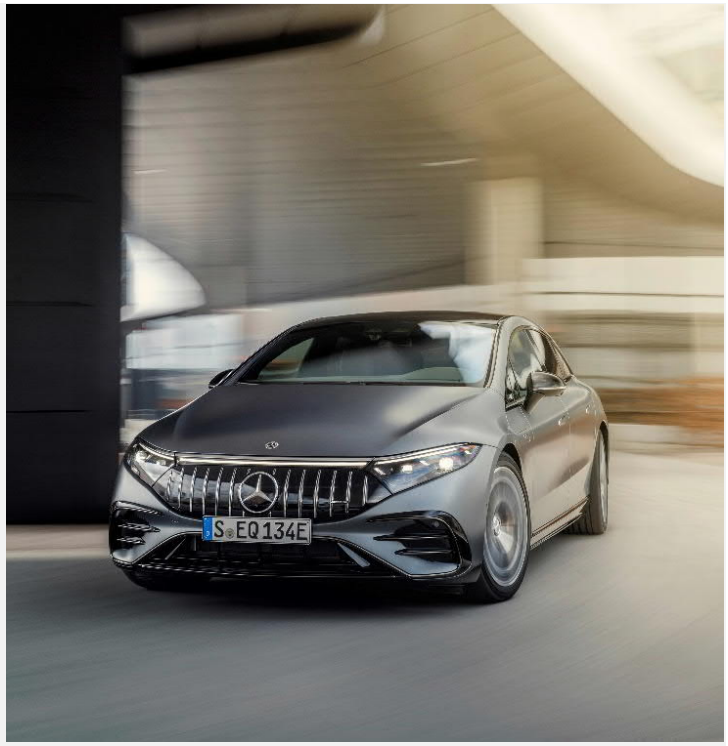
- Go fossil free
  - Be part of a fossil-free value chain
  - Be the first to offer fossil-free products

Customer partnerships - the way forward

A proven fossil-free value chain

World’s first fossil-free plates
– rolled in Oxelösund

Fossil-free steel to Volvo Group
– load carrier for mining and quarrying



A number of new strategic agreements

Partnership with 6 customers so far (+ Ruukki Construction)

Want to know more?

www.ssab.com/fossil-free
www.ssab.com/sustainability