

An aerial photograph of the Shanghai skyline at sunset. The sun is low on the horizon, casting a warm orange and pink glow over the city. The Huangpu River flows through the center, with the Oriental Pearl Tower and other skyscrapers visible. The text "FOSSIL-FREE STEEL & SUSTAINABILITY TRANSFORMATION" is overlaid in white, bold, sans-serif font.

FOSSIL-FREE STEEL & SUSTAINABILITY TRANSFORMATION

VOLVO GROUP

VOLVO GROUP

On the road



In the city



Off road



At sea



Volvo Construction Equipment

VOLVO

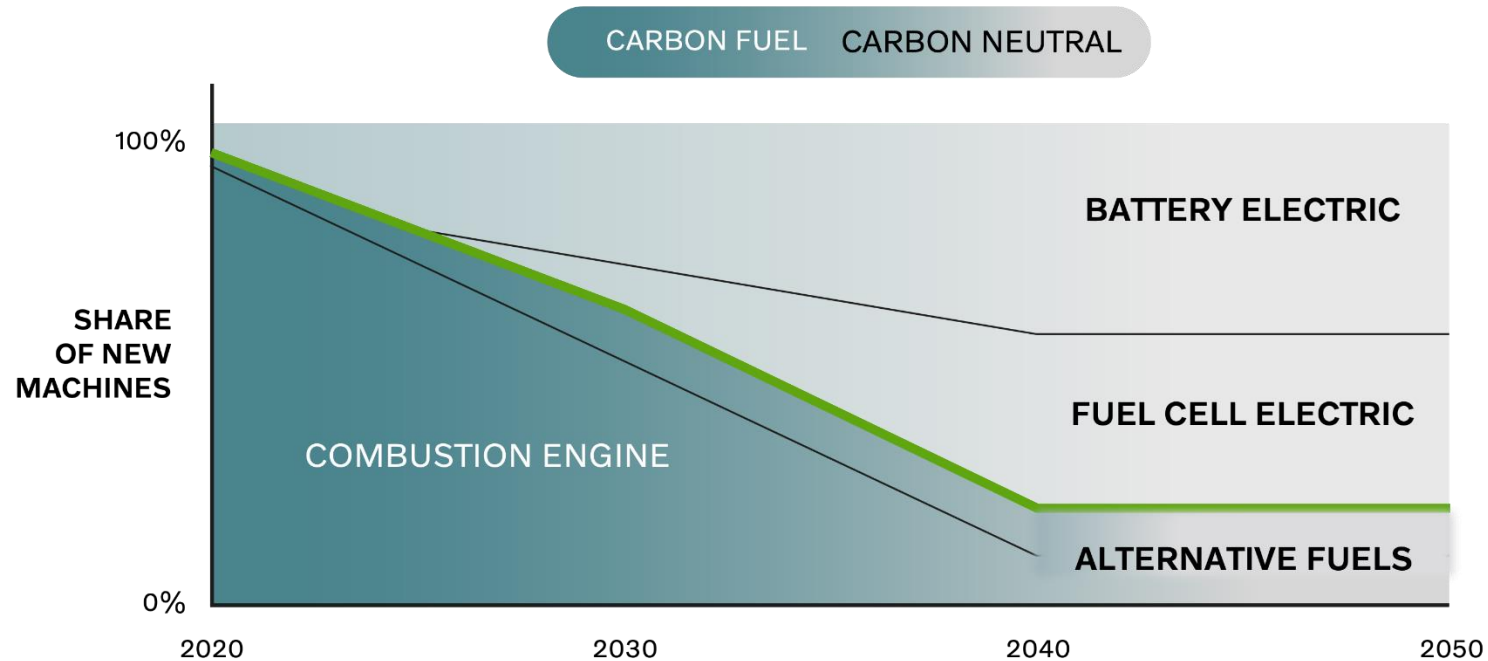
VOLVO IS SET TO REACH NET-ZERO VALUE CHAIN EMISSIONS BY 2040



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Towards 100% Carbon neutral 2040



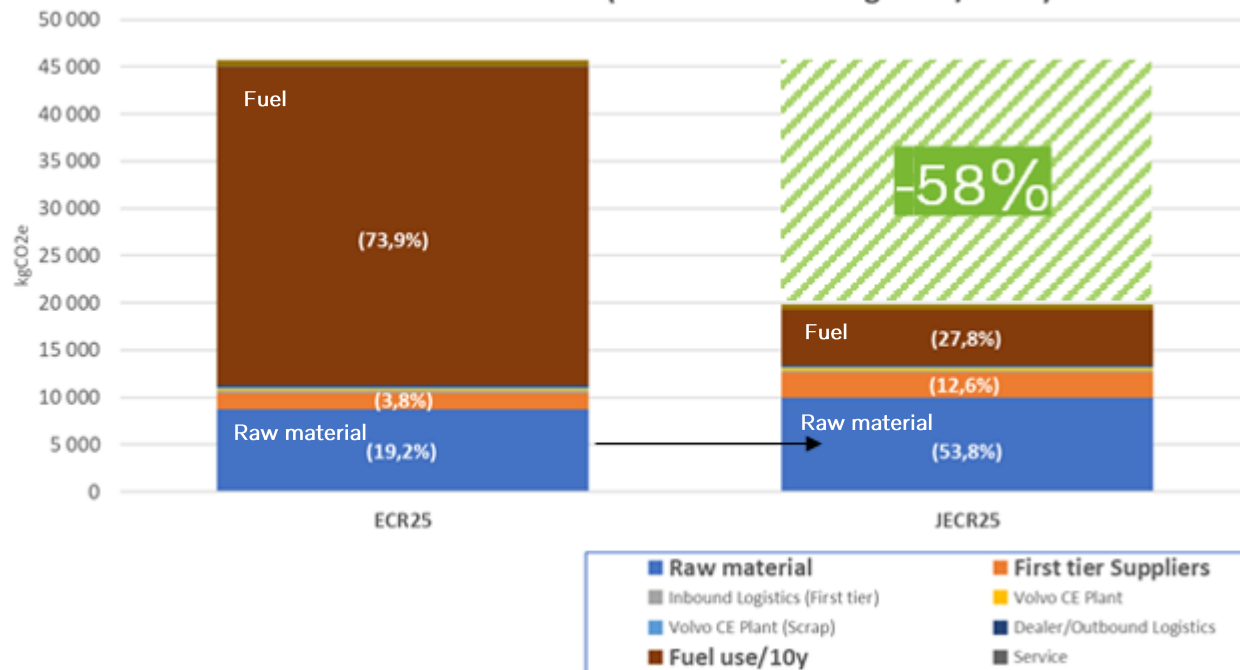
100% Fossil free shipment
Emissions & Raw material

Carbon Footprint over life time



Purchased goods & Services footprint share: 23% → 66%

Electric ECR25 <=> ECR25 (EU Grid-mix 290 kgCO₂e/Mwh)



Purchased goods & Services footprint share : 2% → 70%



STEEL PRODUCTION - CARBON FOOTPRINT

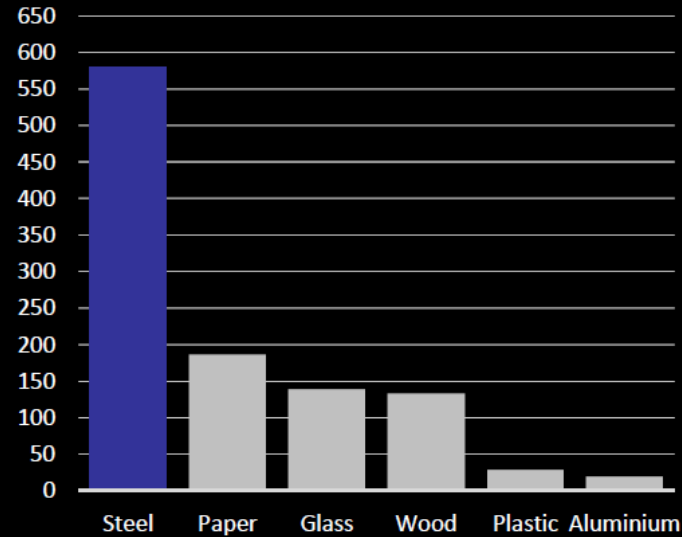
- Steel production globally: appr. 8% of world CO₂ emission
- Steel is the backbone of our products > CO₂ emissions from steel industry is a big part of our carbon footprint
- Global environmental targets need contribution from Steel industry
- Volvo committed to do a gradual transition to “close to Net zero emission steel”



THE MOST RECYCLED MATERIAL IN THE WORLD

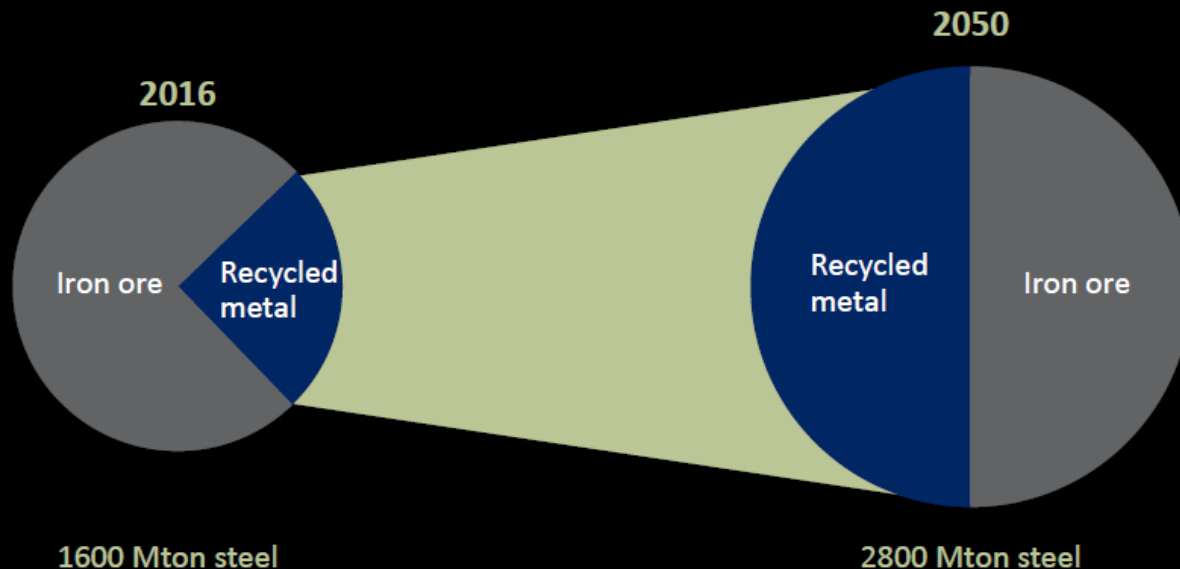
- The amount of recycled steel is more than all other materials together
- Steel can be recycled fully and indefinitely without loss of quality

Source: worldsteel Short Range Outlook March 2018



Scrap based steel production can't provide full sustainability solution!

RECYCLING IS NOT ENOUGH



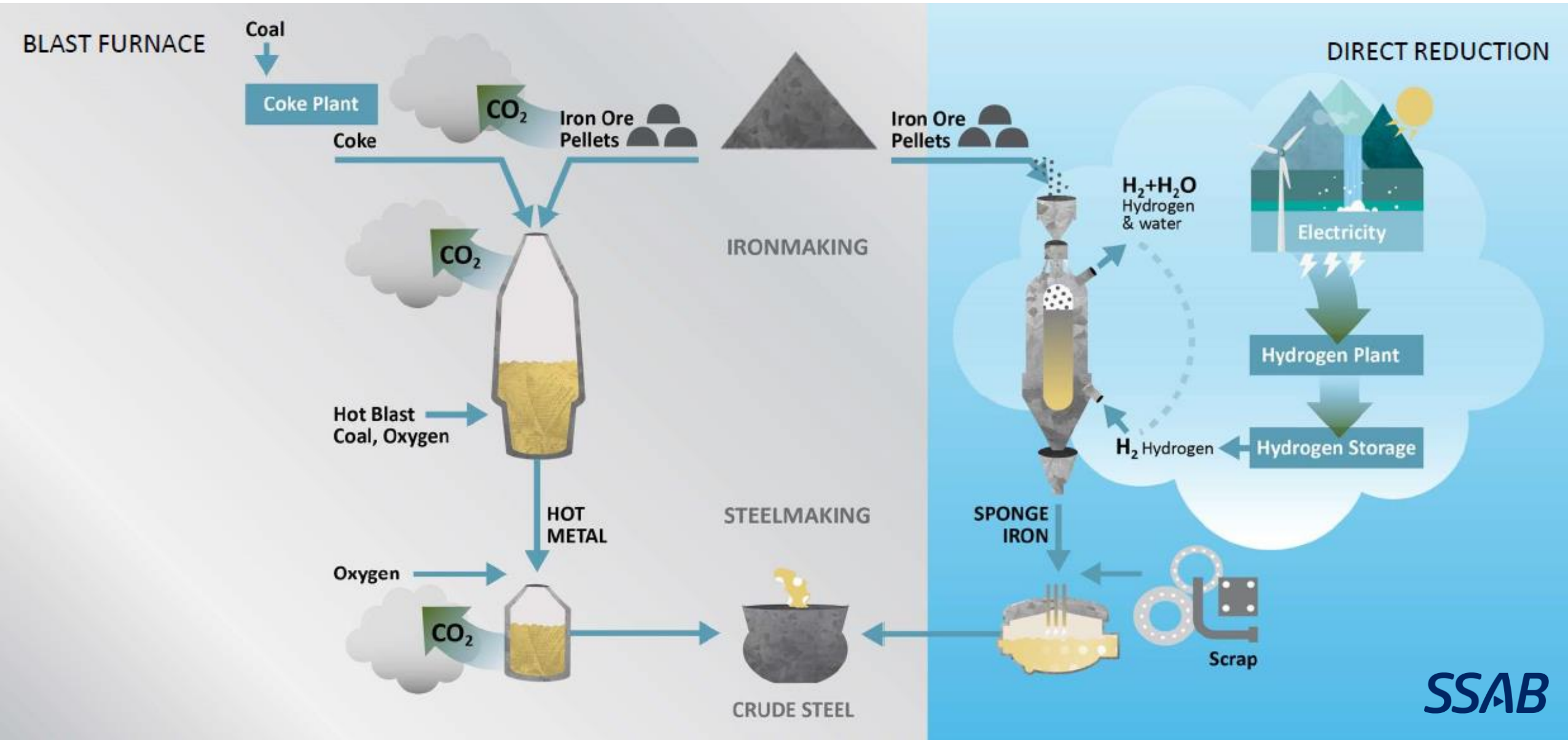
V O L V O

SSAB



Volvo Group and SSAB entered partnership for Fossil free steel 2021

FOSSIL-FREE STEEL MAKING, HYBRIT - SSAB



Shared verification for low volume serial production

Chemical composition

Micro structure

Non-metallic inclusions

Austenite grain size

Base microstructure (Nital etching)

Mechanical and process tests

Tensile testing (EN ISO 6892-1:2019)

Impact test (EN ISO 148-1:2016)

Hardness (SS EN ISO 6506-1:2014)

Process tests

Thermal cutting

Bending (SS EN ISO 7438:2016)

Roll forming

Welding

Machining

Surface evaluation

Steel properties not affected vs conventional steel

VOLVO

WORLD'S 1ST
FOSSIL-FREE STEEL

VOLVO

SSAB

**WORLD'S FIRST VEHICLE
BUILT USING FOSSIL-FREE STEEL
FROM SSAB, OCT 2021**



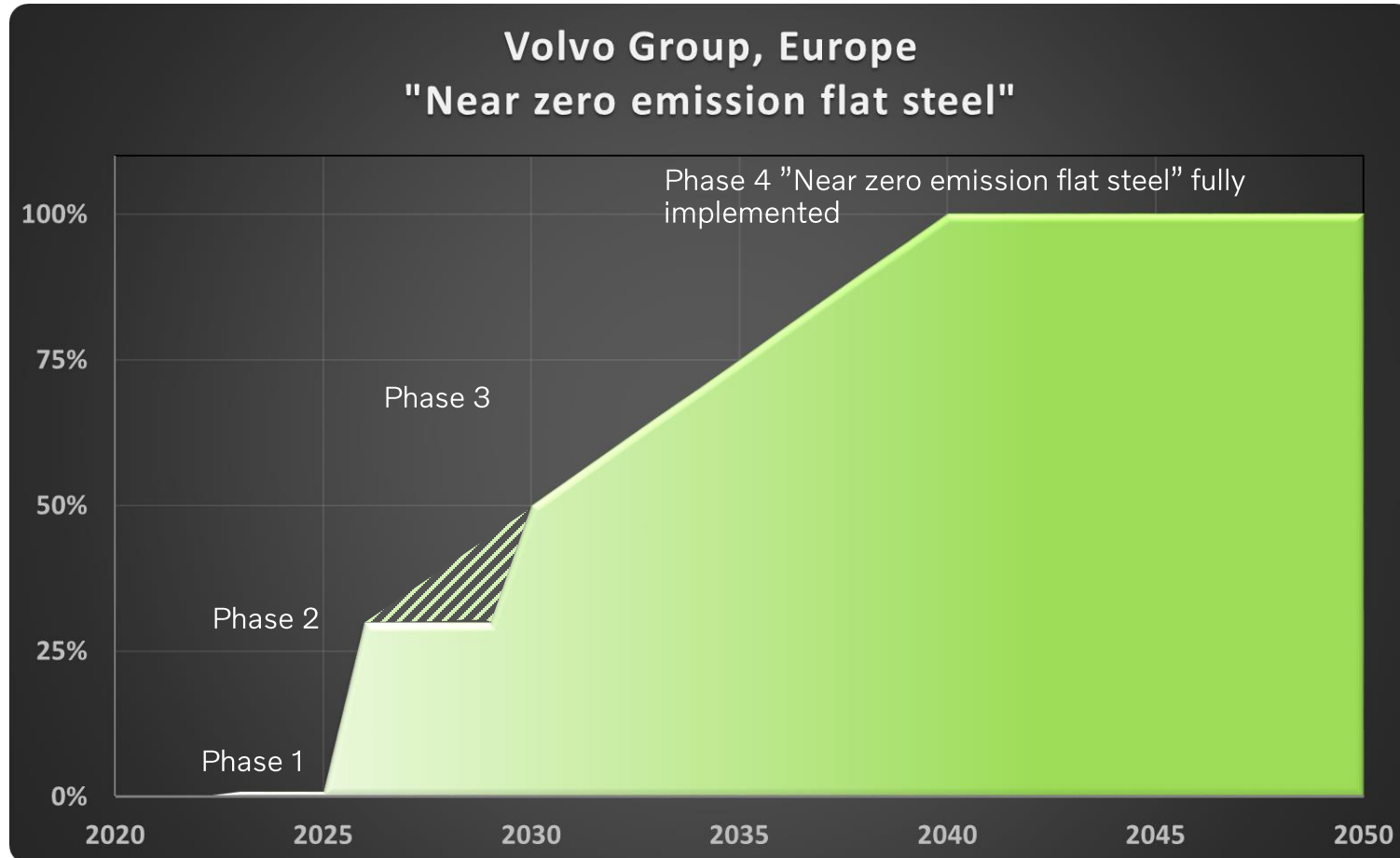
**WORLD'S FIRST CUSTOMER VEHICLE BUILD WITH
FOSSIL-FREE STEEL, JUNE 2022**



Frame rails in Volvo trucks
Limited serial production started Q3-2022

“Near zero emission flat steel”

Potential implementation scenario Volvo Group Europe (example, work in progress)



Milestones

2020 - 2025, phase 1:

- Single vehicles and limited serial production

2026, phase 2:

- Implementation for selected areas

2026 - 2040, phase 3:

- Reach targets within "First Movers coalition" with min 10% implementation for Volvo Group (global) 2030
- Gradual extension of "Near zero emission flat steel"

2040, phase 4:

- Transformation ready for all Volvo flat steel products

Summary

- ▶ Volvo is set to reach net-zero value chain emissions by 2040 and contribute to reach Global Sustainability targets
- ▶ One step of the sustainability journey is to prove possibility to use Fossil free steel in real products w/o major impact current processes

Thanks for listening!

BUILDING THE WORLD WE WANT TO LIVE IN