

Green Steel World – Decarbonization in a European context

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Corporate Strategy
Swiss Steel Group

Essen
4th April 2023



Swiss Steel Group is one of the leading suppliers of special long steel solutions

1,663 kt

Sales volume
in 2022

>70

Locations

77%

Engineering
Steels

>30

Countries ...

15%

Stainless
Steels

~10,000

Employees

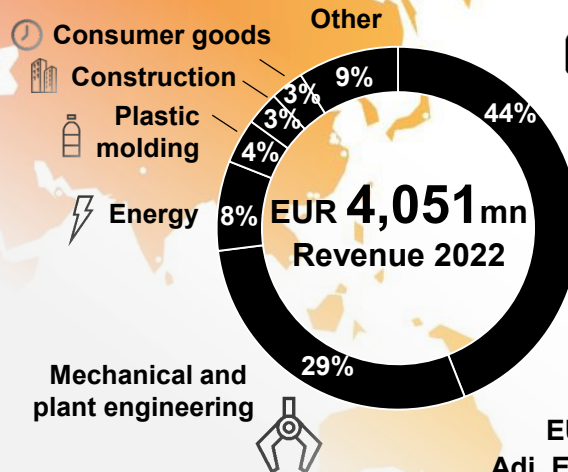
8%

Tool
Steels

>20,000

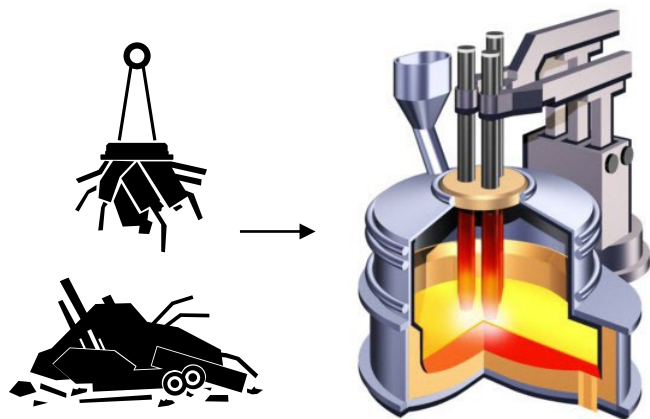
Customers

HQ in
Lucerne,
CH



SSG's production is 100% EAF-based, marking our products 'green by nature'

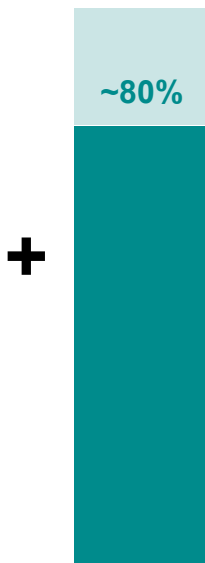
Steelmaking with electric arc furnace



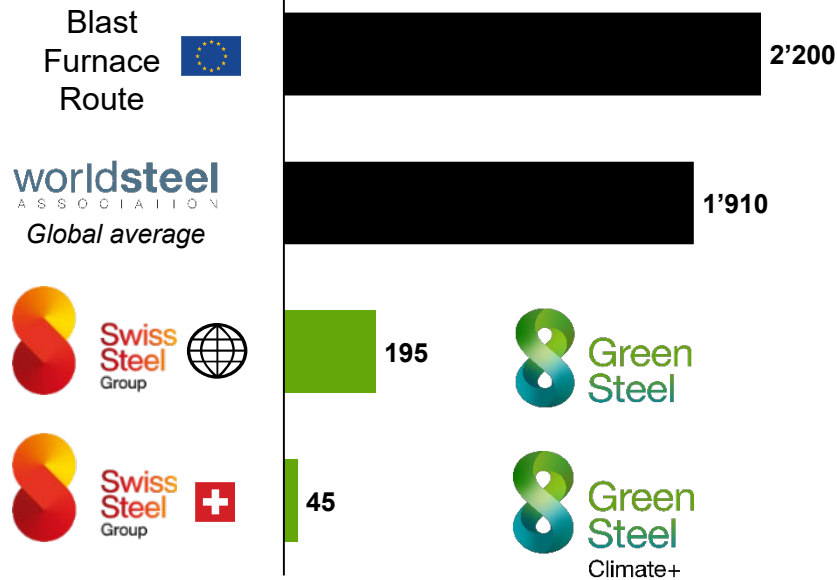
Scrap

Electric Arc
Furnace

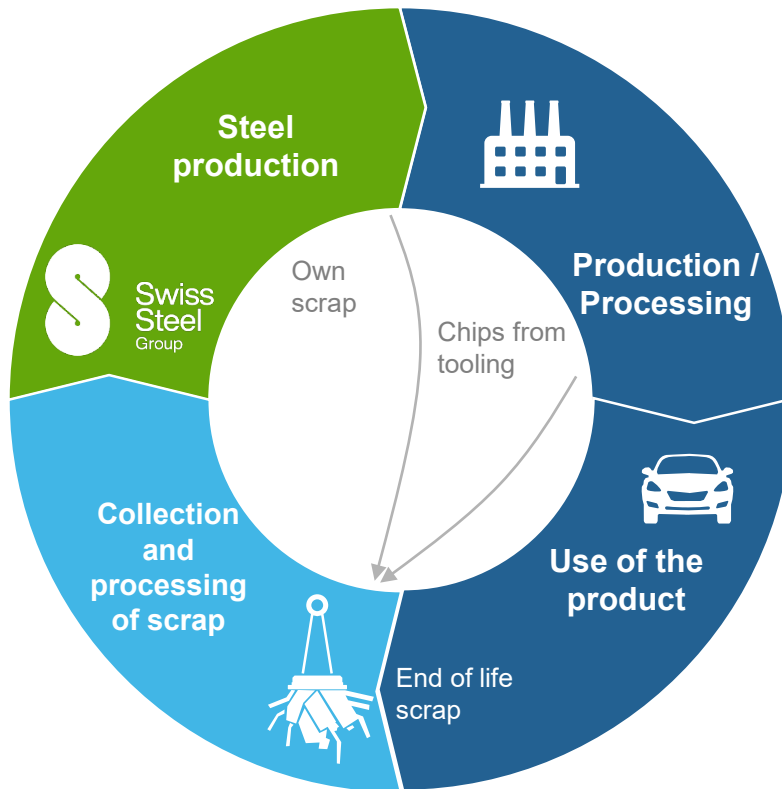
Decarbonized
electricity



Emissions (Scope 1+2)
kg CO₂ per ton of crude steel



Our use of scrap as a raw material makes us experts in circular economy



94%
Recycled metallic
input materials

~2 mn
Tons of scrap
per year

>100
Scrap types

We continue to move forward: We are committed to SBTi and will validate our decarbonisation roadmap this year



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Approved commitment May 2022

> Neutralizing the impact of any source of any residual emissions by permanently removing an equivalent volume of atmospheric CO₂⁴

Visit the [SBTi Net-Zero website](#) for more information, including the Net-Zero Criteria and Recommendations. For financial institutions, the approach to net-zero emissions targets across the value chain will be further developed.


Sign the commitment


Please sign this document and return a signed copy to the SBTi Operations Team at: commitments@sciencebasedtargets.org. The SBTi reserves the right to carry out due diligence reviews before accepting and publishing commitments.

This SBTi commitment letter can be signed by any organization representative, but the contact details of a managerial level point of contact in the organization is required in the information table below.

Once this commitment letter is processed and you have received formal confirmation over email, your organization will be recognized as "Committed" on the SBTi website and the partner websites of UN Global Compact and We Mean Business. Organizations committing to set a net-zero target will also be added to the UNFCCC Race to Zero website provided the organizations are eligible to join at this time.


Company name Swiss Steel Holding AG

 Lucerne, Switzerland 5th May 2022
Signature Place Date



Frank Koch
Managing Director




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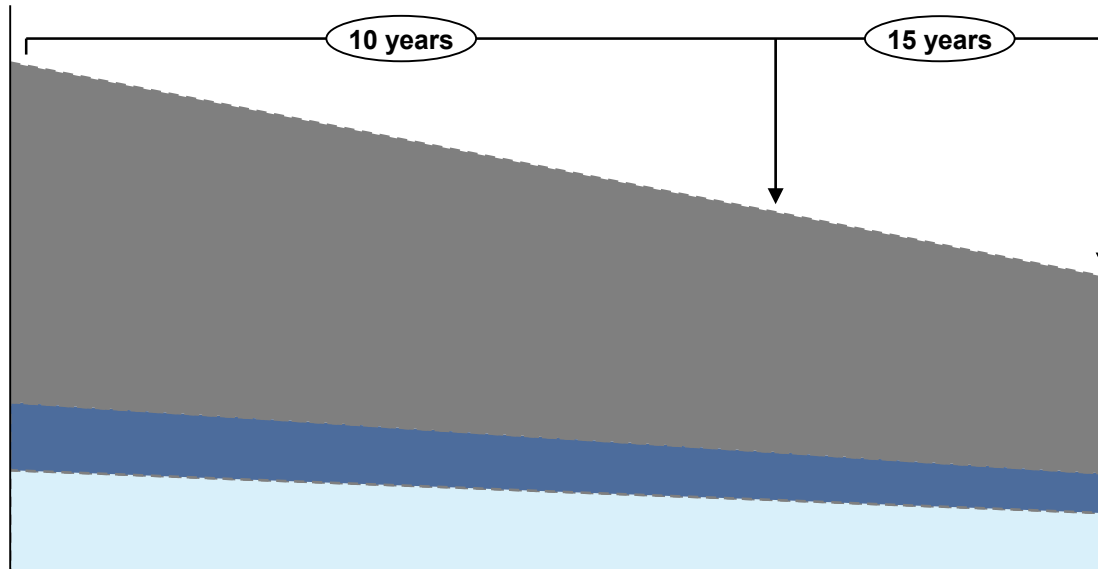
⁴ Residual emissions are emissions sources that remain unbalanced by the time net-zero is reached at the global or sector level in 1.5°C mitigation pathways with low or no overshoot ([Foundations for Science-based Net-Zero Target Setting](#), pp. 7, 32-34). For most companies this requires emission reductions of at least 90%, which implies neutralization of no more than 10% of base-year emissions when reaching net-zero.

#OurOnlyFuture commitments@sciencebasedtargets.org www.sciencebasedtargets.org/en/commitment

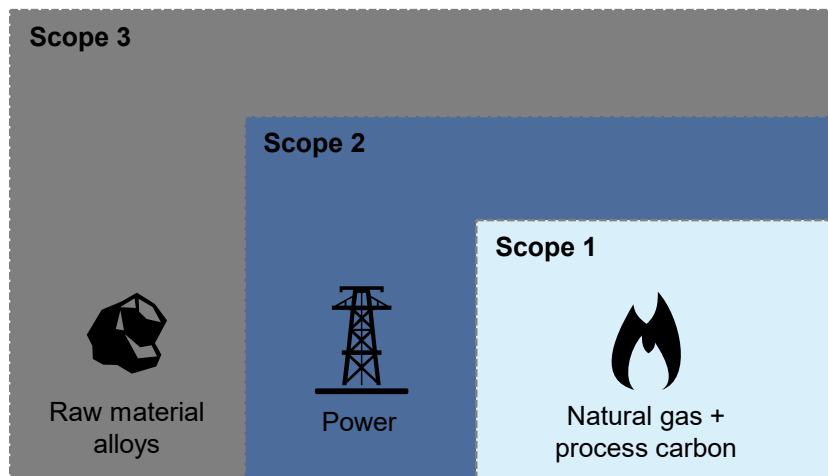
Illustrative SSG decarbonization roadmap In development

ILLUSTRATIVE

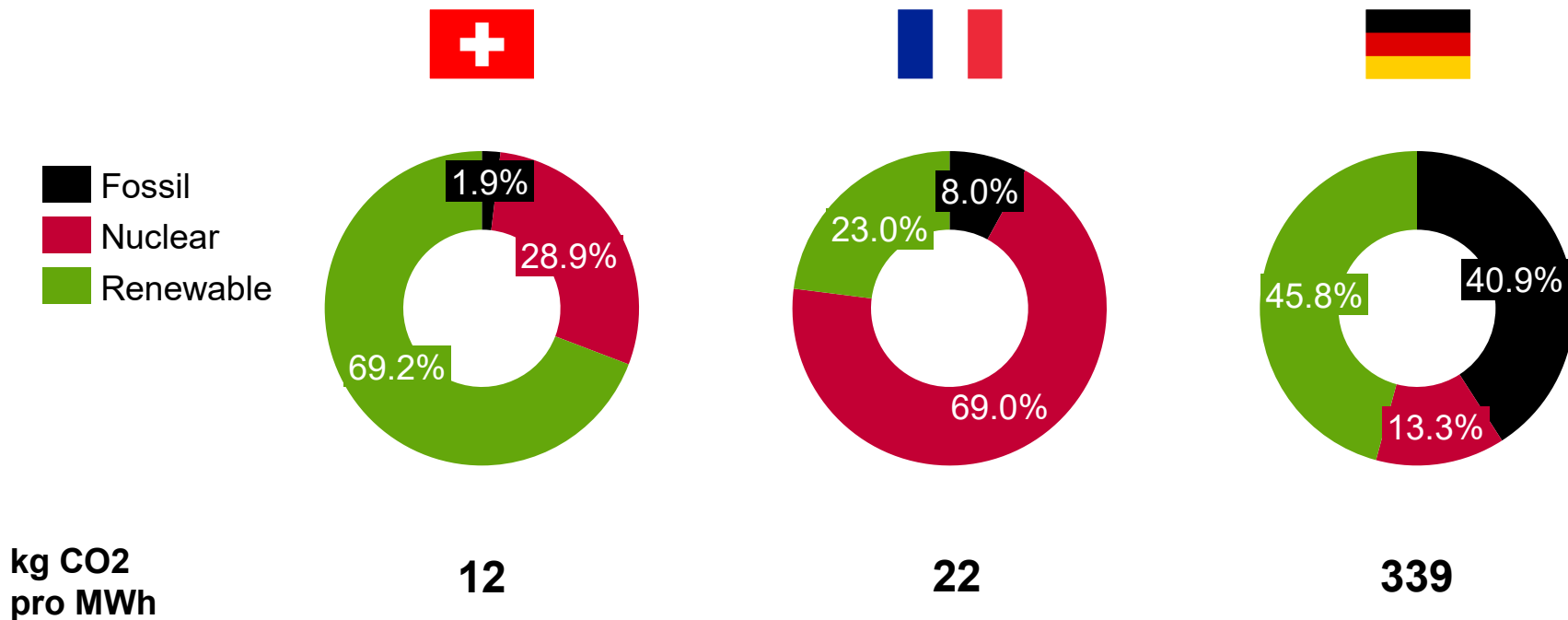


Emission Scopes 1-0-1

Emissions %-split per ton and main emitting sources

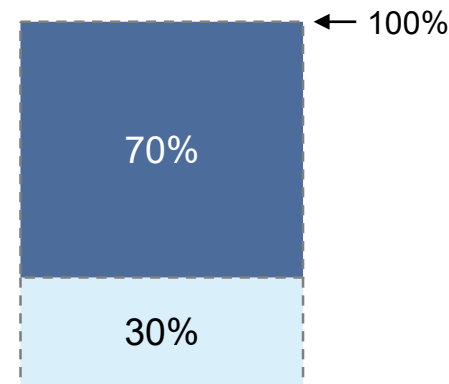
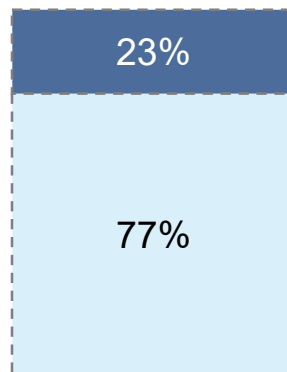
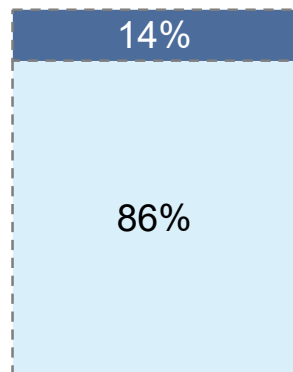
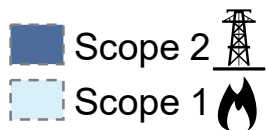


Electricity mix 2021 in comparison



Emissions per ton of crude steel in 2021 in comparison

kg CO₂ per ton
of crude steel



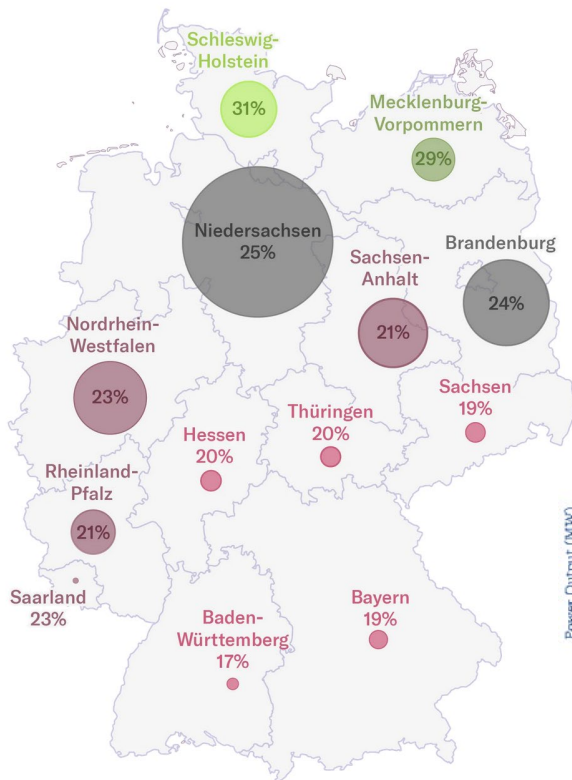
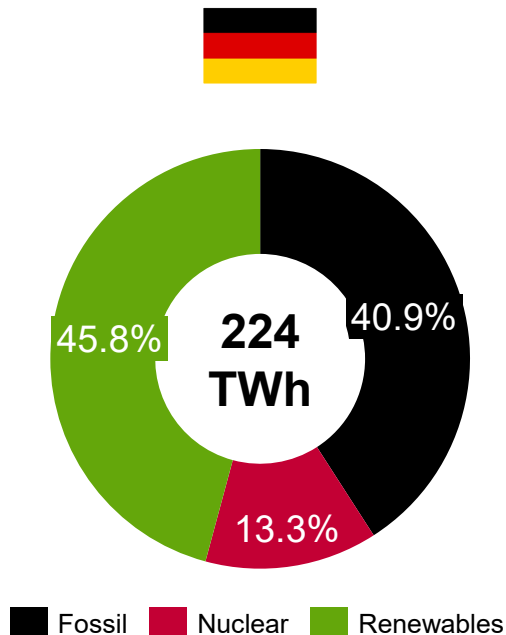
Ratio
Scope 2/Scope 1

0.16

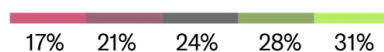
0.29

2.34

Germany must invest massively in renewable energies and rethink its energy policy



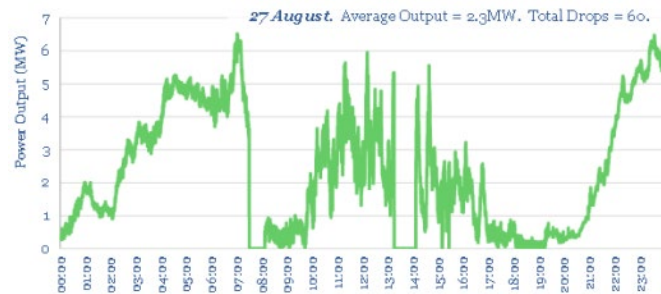
Color: average utilization of the turbines



Size of the circles: Number of turbines

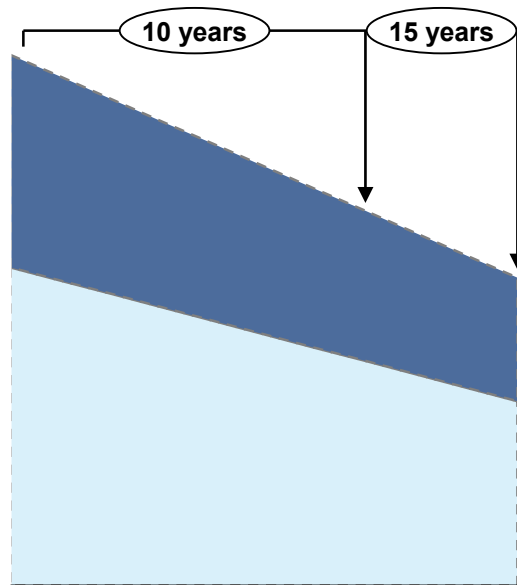


18'000 of 28'000 onshore turbines examined

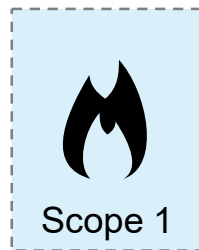
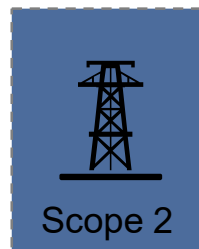


Decarbonisation challenges differ depending on country

Illustrative SSG decarbonization roadmap
Only Scope 1 & Scope 2



Scope 1 Scope 2



Exemplary decarbonization measures

Local power mix

Green power certificates

PPAs

Electrification

Biogenic/recycled carbon carriers

Green hydrogen



✓

✓

✗

(✓)

(✓)

(✓)

✓

✓

✓

✓

✓

✗

(✓)

(✓)

(✓)

(✓)

(✓)




✗

Different types of green steel products offered

	Current offer			Offer under development	
Product-categories					
Description	<p>Swiss Steel Group produces steel exclusively with EAF technology and promotes recycling and the circular economy. The result is a total product offering with significantly lower carbon emissions compared to the industry average.</p>	<p>Green Steel Climate+ comprises products with a further reduced carbon footprint. These products are produced exclusively with electricity from renewable sources, such as wind, water or solar.</p>	<p>Green Steel Stainless+ is aligned with our stainless steel portfolio. It offers our customers a stainless steel product produced with a scrap content of at least 95%.¹</p>	<p>Green Steel Climate + H2 includes not only products produced exclusively with energy from renewable sources and green hydrogen.²</p>	<p>The Green Steel Net Zero product offers customers steel with fully compensated carbon emissions.</p>

We can provide you with the total product footprint of your individual product so you can control your upstream emissions

Scope 1+2+3 emissions of exemplary grades
kg CO2 per ton finished product

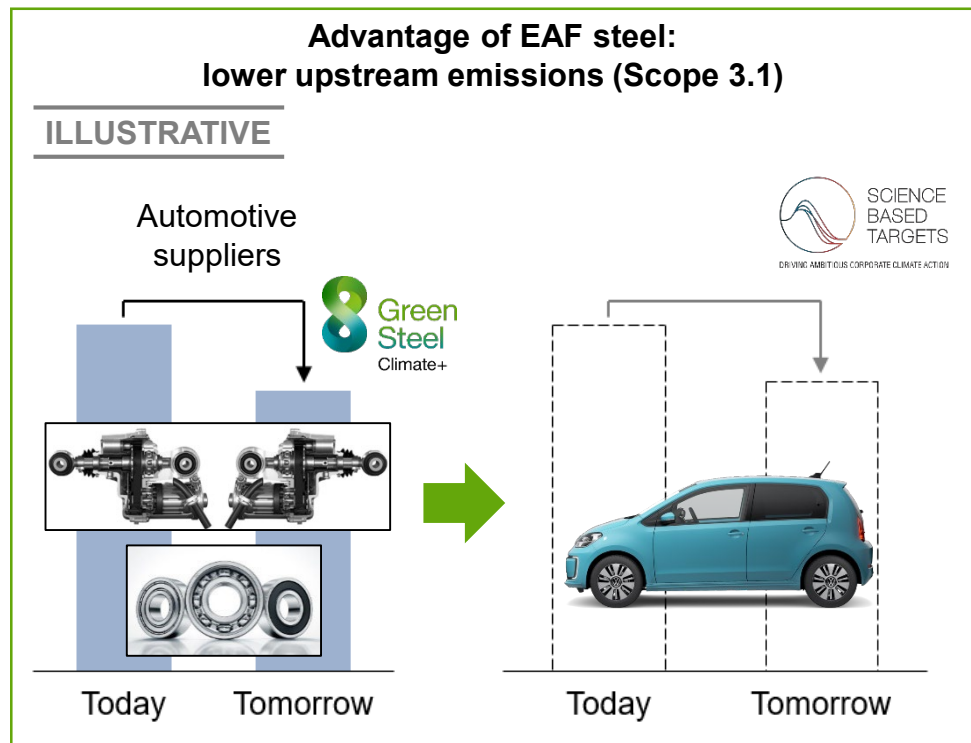
INDICATIVE	 Green Steel	 Green Steel Climate+	 Green Steel Stainless+
Bearing steel 100Cr6	~1050	~700	-
Rolled bar 1.7003	~320	~220	-
Stainless 4441	~8700	~8500	~1000

Our sites and products are certified



Green Steel from EAF producers hold answers to decarbonization questions – but holistic, cross-sector solutions are key for success

- **SSG EAF has a low CO2 footprint – empowering customers to a lower footprint today**
- **Procuring SSG EAF steel helps you and your customers reduce upstream emissions**



**Together.
For a future that matters.**