

SUSTAINABILITY

sikla
Together we build. siklasicher.

siFramo WITH XCARB®.

Same performance. Less CO₂



sikla.com

Introduction | XCarb® explained

Sustainable steel solutions for modern projects

With XCarb®, Sikla provides a lower carbon steel solution to improve the sustainability of the certified siFramo system, without compromising on safety, function or design.

Why XCarb®?

XCarb® steel significantly reduces CO₂ emissions through:

- ≥ 75 % recycled steel (scrap-based)
- Electric arc furnace (EAF) manufacturing instead of a blast furnace, cutting emissions by 86%
- 100 % renewable electricity used in manufacturing
- Use of alternative energy sources (e.g. biofuels, hydrogen)



Result

CO₂ emissions are approximately 0.3 per tonne of steel, compared to 1.8-2.0 for traditional steel.



Important to know

Sikla uses a recognised mass balance approach. Your XCarb® is credited and certified, even if individual components are not physically made of XCarb®. As all materials are processed together, customers receive certified CO₂ reductions that are audit-compliant and can be included in their own carbon reporting.



Where does XCarb® come from?

XCarb® is produced by ArcelorMittal, one of the world's leading steel manufacturers.

- European production sites
- Transparent sourcing
- Strict audit controls

Practical example

This example compares traditional steel against siFramo and siFramo with XCarb®. All three meet the same structural requirements and differ significantly in their CO₂ footprint. This clearly shows the impact of material choice on CO₂ reduction.

1. Traditional steel beam

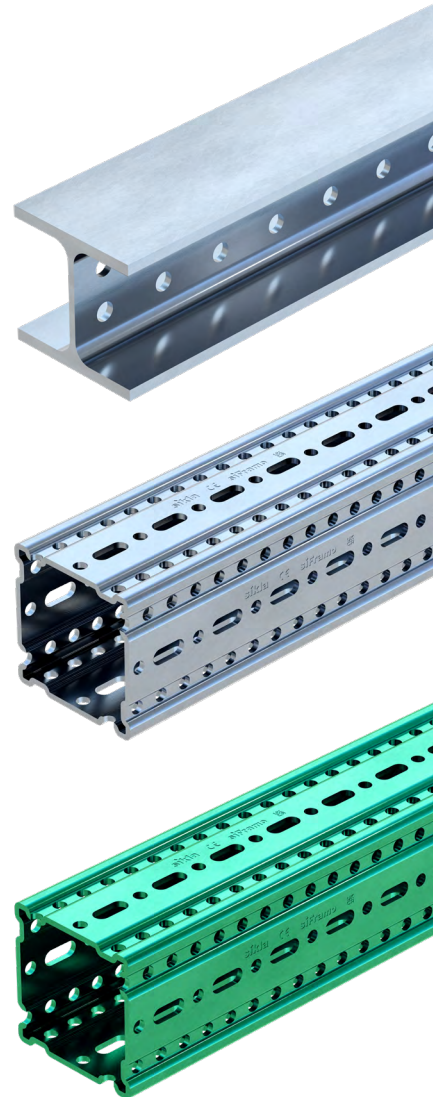
15.712,9 kg CO₂e = 100 %

2. Standard siFramo

12.082,6 kg CO₂e = 77 %

3. siFramo with XCarb®*

4.833 kg CO₂e = 31 %



Why are CO₂ emissions significantly reduced?

The reduction comes from the manufacturing process. XCarb® steel is manufactured using ≥ 75% recycled scrap in an EAF, powered by renewable energy.

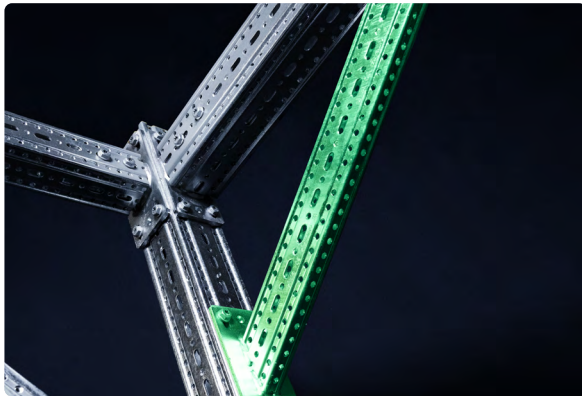
This reduces the carbon footprint from approximately 1.8–2.0 t to around 0.3 t of CO₂ per tonne of steel.

*The green colour siFramo is for illustration only. XCarb® steel is not green.

YOUR CO² BENEFIT

The benefits of siFramo & XCarb®

With siFramo and XCarb®, you can achieve **significantly lower CO₂ footprint, 69% less** than traditional steel structures. Performance remains unchanged with **load capacity, safety and appearance** all maintained to enable sustainable construction without compromising quality.



- Measurable, certified Scope 3 reductions
- Audit-compliant CO₂ documentation
- Advantage for sustainable tenders and ESG requirements
- Supports LEED, DGNB and other green building certifications
- High transparency through European production and strict audit controls

This makes siFramo with XCarb® a reliable solution for projects with high requirements for sustainability, efficiency and quality.

Building more sustainably together:

We can support you with:

- Project-specific CO₂ calculations
- Technical planning and engineering
- Documentation for ESG and audit compliance
- Guidance on certification requirements
- Support with optimised tender documentation
- Public sector and green building projects

Sikla: your solutions partner.



GET IN TOUCH NOW!

For questions or further information, please
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TOGETHER WE BUILD.

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Subject to technical changes.