



E3G

FEBRUARY 2024

COUNTRY PROFILE – FRANCE¹

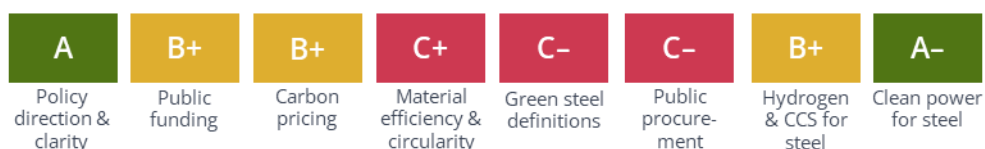
2023 STEEL POLICY SCORECARD

**KATINKA WAAGSAETHER, ALEKSANDRA WALISZEWSKA
& JOHANNA LEHNE**

Picking up the pace on steel decarbonisation

French coal-based steel production is concentrated in two sites, at Fos-sur-Mer and Dunkerque. This means that the new government policy of site-based decarbonisation roadmaps could make for a swift move away from coal-based steelmaking in France.

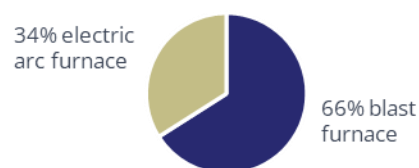
Country profile: France



Production capacity



Production methods



Source: Global Energy Monitor, 2023, 2023 Pedal to the metal



¹ This document supplements the main **2023 Steel Policy Scorecard report: Raising ambition on steel decarbonisation**.



E3G

France is making a number of positive policy moves, applying both policy sticks and carrots. What it does next will be key, from the ambition levels of site-based emissions reduction targets and green product requirements, to the conditionalities of public funding. Transparency on how companies intend to decarbonise and spend the public funding invested will be key to ensure accountability and progress.

Priority recommendations for French steel policy

- > Ensure transparency of the site-specific steel decarbonisation roadmaps. Incorporate the roll-out of clean electricity and hydrogen infrastructure.
- > Make public transition funding conditional on ambitious decarbonisation targets to which companies are held accountable through regular controls.
- > Develop a simple, clear and ambitious Triple E standard that has an explicit focus on steel and includes a progressive emission intensity threshold, in parallel with the development of ambitious green steel public procurement targets or requirements.

Transparent site-based roadmaps as keys to the French transition

Around two-thirds (66%) of France's steelmaking capacity is coal-based primary production; the remainder is secondary, scrap-based EAF production.² No new coal-based facilities are in the making, but there is lack of clarity on planned lifetime extensions (relining) of existing facilities.

French industrial decarbonisation policy moving away from sectoral emissions reduction targets and roadmaps to site-based ones. Fifty high-emission industrial sites have been identified, responsible for 10% of total national emissions.³ Two coal-based ArcelorMittal sites dominate France's steel-making capacity; together they are responsible for 25% of French industry's greenhouse gas emissions.

The French government has vowed to financially support the transformation of both sites. The expectation is that the new site-based roadmaps, not yet public, will increase the ambition of the wider steel industry's roadmap;⁴ the latter currently calls for a 31% emissions reduction target for 2030 (relative to 2015). Some H₂-DRI capacity is planned for one of the two sites, though with an initial

² Calculated from Appendix C in Global Energy Monitor, 2023, **Pedal to the Metal 2023**

³ Climate Action Network France, 2023, **France's top 50 Carbon-intensive Industrial sites**

⁴ French Government & the National Industry Council, 2022, **Towards a competitive, innovative, carbon-free and attractive French steel industry**



E3G

phase of natural gas-DRI. In parallel, the French government has earmarked a significant amount of R&D funding towards further development of net zero steel production technologies.

Planning for clean energy infrastructure for green steel

The French hydrogen strategy sets a good example on targeting priority sectors:⁵ 76% of its budget is dedicated to decarbonising heavy industry, including the steel sector.⁶ The government is also considering introducing a hydrogen production support scheme in form of a CfD. Due to its large share of clean baseload power (hydro and nuclear), France is also in a great position to integrate more renewables into its grid. But at the EU level, it has a relatively low power system decarbonisation target (for 2035).⁷ Despite this, the electricity infrastructure necessary for low-carbon steel is one of the pillars of the national decarbonisation strategy for this sector.

Opportunities for more ambitious green steel standards and using public procurement

Adopting aligned green steel standards and definitions seems to be an underleveraged policy lever in France. The lack of membership of international initiatives like the IDDI also suggests a lack of ambition towards setting targets for green steel public procurement. Green public procurement, beyond what is required by EU directives, is currently voluntary and not steel specific; however, sustainable development criteria are set to become mandatory in public procurement by August 2026 (as set out in the 2021 Climate and Resilience Law).

At the same time, France is working on a new, Triple E, environmental standard, aimed at rewarding the facilities that produce the greenest products. It is expected that Triple E-certified companies will have better access to public contracts, though the ambition of the standard – and whether it will encourage decarbonisation – is still to be seen.

⁵ IRENA, 2022, **Geopolitics of the Energy Transformation: The Hydrogen Factor**

⁶ RIFS, 2023, **France's Hydrogen Strategy**

⁷ Ember, 2023, **EU Power Sector 2030 Targets Tracker**; SP Global, 2023, **G7 Nations agree to decarbonise power sectors by 2035**



E3G

European Union membership providing direction

The EU member states assessed in our G7 Steel Policy Scorecard (France, Germany and Italy) benefit from an ambitious climate policy framework set at the EU level. While some of the new policy measures under the European Green Deal are yet to be transposed into national legal systems, they already help to boost scores for those three countries.

The European Green Deal set a high bar for emissions reduction among EU member states; it targets a 55% reduction by 2030 and climate neutrality by 2050. The Fit for 55 package, introduced to meet these targets, includes a number of policy files relevant to the steel transition.⁸ The reform of the EU ETS sets out a gradual full phase-out of free allocations for industry from 2026 to 2034.⁹ The EU Circular Economy (CE) Action Plan was released in March 2020;¹⁰ it includes a recent revision of the Ecodesign for Sustainable Products Regulation (ESPR), which foresees ecodesign product requirements for steel to be introduced in 2024.

EU-level funding options for steel decarbonisation are available for R&D (recently increased resources for steel under the dedicated Research Fund for Coal and Steel, private–public Horizon Europe Clean Steel Partnership, demonstration project support under Innovation Fund) and capital expenditure (Recovery and Resilience Fund – consisting of grants and loans), and more operational support is potentially in the pipeline as the European Commission is considering a CCfD scheme under the Innovation Fund. Any direct state aid to companies from national governments is also subject to Commission scrutiny.

The EU does not have the mandate to intervene in how member states decide to organise their energy mixes. However, its recent reform of electricity market design made system flexibility and certainty of long-term markets for renewables its core pillars.¹¹ The reform entails harmonisation of public renewables support schemes (CfD). The revenues can then be used for electricity price support for industrial consumers. Member states are

⁸ Council of the European Union, last reviewed 2023, **Fit for 55**

⁹ European Parliament, December 2022, **Press release - Climate Change: Deal on a more ambitious Emission Trading System**

¹⁰ EU, 2020, **Circular Economy Action Plan**

¹¹ Council of the EU, 2023, **Reform of electricity market design – Council reaches agreement**



E3G

also meant to work to remove barriers hampering the development of a long-term PPA market.

In terms of European hydrogen production, the REPowerEU plan sets a target of 10 Mt of green hydrogen to be supplied domestically.¹² The EU is also working towards a “low-carbon hydrogen” definition, having already adopted one for green hydrogen). Another revised directive on renewable energy (RED II)¹³ brought with it a target for 42.5% green hydrogen use in industry by 2030,¹⁴ rising to 60% by 2035. RED II also doubled the EU’s overall renewable energy target to 42.5% by 2030. These developments aim to green industrial energy use, but there is no indication of end-users such as steel being prioritised, if we take a newly launched support scheme for the production of green hydrogen – the European Hydrogen Bank – as a guide.¹⁵

¹² European Commission, 2022, **Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: REPowerEU Plan**

¹³ European Parliament, 2023, **European Parliament legislative resolution of 12 September 2023 on the proposal for a directive of the European Parliament and of the Council amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (COM(2021)0557 – C9-0329/2021 – 2021/0218(COD))**

¹⁴ European Parliament, 2023, **European Parliament legislative resolution of 12 September 2023 on the proposal for a directive of the European Parliament and of the Council amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (COM(2021)0557 – C9-0329/2021 – 2021/0218(COD))**

¹⁵ European Commission, 2022, **Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the European Hydrogen Bank**



E3G

About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

More information is available at www.e3g.org

Copyright

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License. © E3G 2024