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COUNTRY PROFILE – ITALY¹

2023 STEEL POLICY SCORECARD

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A European leader in scrap-based production, held back by one major dirty site

Italy is the eleventh largest global producer, with strong renewables potential and a high share of electrified secondary steel production. It is a green steel player to be reckoned with. However, the country's direction on industrial and steel decarbonisation is confusing. It ticks some domestic policy boxes, including on hydrogen and clean electricity, and it benefits from EU-wide policies; yet Italy has recently pulled the plug on money budgeted to support the transition of its major remaining coal-based facility.

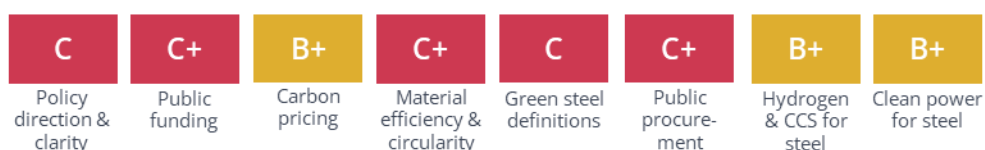
Italy shows promising signs of progress across policy levers, and is benefitting from EU-wide policies; but it shows no evidence of cohesive action or of setting a clear policy signal towards domestic steel decarbonisation. With a solid secondary scrap-based production share, and only one remaining coal-based facility left in the country, Taranto, Italy could become a green steel leader. Its 2024 G7 Presidency is the perfect opportunity for Italy to up its game and become a global leader on steel decarbonisation.

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



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Country profile: Italy



Production capacity



Production methods



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



Priority recommendations for Italian steel policy

- > Expand focus on and ambition for green steel public procurement, moving towards a threshold for embodied carbon.
- > Join international discussions on green public procurement by participating in the IDDI.
- > Prioritise decarbonisation of the Taranto site in the national budget (for instance as part of Italy's National Recovery and Resilience Plan).
- > Ensure that industrial decarbonisation is high on the agenda during Italy's 2024 G7 Presidency, moving G7 countries towards committing to financially supporting the phase-out of high-emissions technologies and a shift to near-zero emission technologies.

Failing to move on the one coal-based facility left

Italy is the eleventh largest global producer. It has a high share of secondary, scrap-based EAF production – 67%, twice that of its European counterparts.² Only 33% of its production is coal-based primary steelmaking. This is limited to one facility, Taranto, with a crude steel capacity of 11.5 Mtpa. However, in recent years, the plant has been running at a historical minimum, not even meeting half of its theoretical capacity.³ Taranto's industrial area is situated near

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

³ GMK Center, October 2023, **Acciaierie d'Italia needs to restore liquidity**



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its residential area; its size is comparable to that of the built-out area of the local community. It is also a major source of local air pollution, causing local protests and legal battles.⁴ The facility is a large employer, with a workforce of 8,200 people, a large number of whom are subject to a redundancy fund.

An addition of a DRI plant to the Taranto site has been announced. However, there is a lack of clarity as to the related phase-out of coal-based processes and public co-financing: recent (2022) and upcoming (2024) lifetime extensions (relining) for the coal-based furnaces confuse the picture. The majority shareholder at Acciaierie d'Italia – ArcelorMittal – has committed to paying their share.⁵ However, the current draft of the Italian National Recovery and Resilience Plan no longer includes resources to fund the planned H₂-DRI unit in Taranto, originally earmarked for this purpose.⁶ The plan does, however, still carve out over €2bn for hydrogen use in hard-to-abate sectors.

No pushing and minimal pulling to work towards decarbonising industry

The Italian government has to date put minimal emphasis on industrial decarbonisation; there are no sectoral emissions reduction targets or industry roadmaps. Instead, Italy relies on the 2019 Integrated National Energy and Climate Plan (NECP) which defaults to EU-ETS targets.⁷ National direction on industry and steel decarbonisation is thus largely absent. The 2024 Italian G7 Presidency provides an opportunity for Italy to change its course, making the Industrial Decarbonisation Agenda (IDA) a focus and point of advocacy.

There is no movement towards a set of aligned definitions and standards for green steel. Italy has, however, shown some progress in public procurement: the Minimum Environmental Criteria (CAM) include explicit mandatory minimum requirements for recovered and recycled material content in steel and for steel produced through the secondary (EAF) route.⁸ While no green steel public procurement requirements per se, these can be a starting point for green steel public procurement targets.

⁴ ECCO, 2022, **Taranto, primary steel production in the challenge of decarbonisation**

⁵ GMK Center, December 2023, **Acciaierie d'Italia shuts down blast furnace №2 for maintenance**

⁶ GMK Center, 4 August 2023, **Italy Proposes to cut funding for Acciaierie d'Italia DRI project**

⁷ Ministry of Economic Development, Ministry of Environment and Protection of Natural Resources and the Sea and Ministry of Infrastructure and Transport, 2019, **Integrated National Energy and Climate Plan**

⁸ Directorate-General for Circular Economy (EC), no date, **Green Public Procurement – Minimum Environmental Criteria: Current CAM**, accessed November 2023



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Some direction on green hydrogen and high clean power ambition

The Italian Hydrogen Guidelines seem to implicitly focus on green hydrogen: they set a target for electrolyser capacity (5 GW) that would be sufficient to decarbonise the country's current primary steelmaking capacity.⁹ The guidelines create favourable policy conditions for their construction and operation; they also dedicate funding to ensuring renewable electricity roll-out to fuel them. The guidelines recognise the necessity of hydrogen imports, but without providing any detail about volumes, origin and type of hydrogen. Italy's National Energy and Climate Plan clearly prioritises use of hydrogen in hard-to-abate sectors (including steel); it further highlights the necessity of industrial electricity consumers constructing additional RE capacity.¹⁰

However, regulatory barriers are stifling the development of both publicly deployed renewables and the private PPA market. This all while Italy is planning tremendous progress on clean power generally: it is the only EU country without a nuclear fleet planning to jump by more than its RES-E share target by 2030 compared to 2022 levels. However, Italy might be underplaying its ample solar and wind energy potential.¹¹ It is simultaneously planning to add the largest fossil gas-powered electricity generation among EU states (+24 TWh). Combined, Italy and Germany still account for 40% of the EU's power sector carbon emissions.¹²

⁹ Ministry of Economic Development, no date, **National Hydrogen Strategy - Preliminary Guidelines**

¹⁰ Ministry of Economic Development, Ministry of Environment and Protection of Natural Resources and the Sea and Ministry of Infrastructure and Transport, 2019, **Integrated National Energy and Climate Plan**

¹¹ Global Wind Energy Council (GWEC), 2021, **Offshore Wind Technical Potential in Italy**

¹² EMBER, 2020, **Vision or Division? What NECP tells us about the EU power sector in 2030**



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About E3G

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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.

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