



State aid: Commission approves German €550 million direct grant and conditional payment mechanism of up to €1.45 billion to support ThyssenKrupp Steel Europe in decarbonising its steel production and accelerating renewable hydrogen uptake

Brussels, 20 July 2023

The European Commission has approved, under EU State aid rules, two German measures to support **ThyssenKrupp Steel Europe** ('tkSE') in decarbonising its steel production processes and accelerating its uptake of renewable hydrogen. The measures will contribute to the achievement of the [EU Hydrogen Strategy](#), the [European Green Deal](#) and the [Green Deal Industrial Plan](#), while helping to end dependence on Russian fossil fuels and fast forward the green transition, in line with the [REPowerEU Plan](#).

The German measures

Germany notified to the Commission its plan to support tkSE in decarbonising its steel production processes in its Duisburg site and accelerating the uptake of renewable hydrogen.

The aid will take the form of: (i) a **direct grant** of up to €550 million to help tkSE decarbonise its steel production, and (ii) a **conditional payment mechanism** to support tkSE accelerating the phase-in of renewable hydrogen in its steel production processes.

The **direct grant** will support the construction and installation of a direct reduction plant and two melting units in Duisburg, which will replace an existing blast furnace. Natural gas, initially used for the operation of the new direct reduction plant, will be gradually phased out and, as of 2037, the plant will be operated using only renewable hydrogen.

The **conditional payment mechanism** will cover, during the first ten years of operation of the new direct reduction plant, the additional costs of procuring and using renewable hydrogen instead of low-carbon hydrogen. The application of the conditional payment mechanism is subject to yearly verifications by an independent expert on the actual volumes and price paid for the renewable hydrogen consumed. tkSE will organise a competitive tendering process to select hydrogen suppliers, which the German authorities will monitor.

The new installations are envisioned to start operating in 2026 and are expected to produce 2.3 million tonnes of hot metal per year with reduced CO₂ footprint, which will substitute an equal quantity of hot metal currently produced through the conventional blast furnace route. Once completed, the project is expected to avoid the release of over 58 million tonnes of carbon dioxide over the project lifetime. tkSE has committed to actively share the technical know-how gained through the project with industry and academia.

The Commission's assessment

The Commission assessed the measures under EU State aid rules, in particular Article 107(3)(c) of the Treaty on the Functioning of the European Union ('TFEU'), which enables Member States to support the development of certain economic activities subject to certain conditions, and the [Guidelines on State aid for climate, environmental protection and energy 2022](#) ('CEEAG').

Germany selected tkSE's project in the context of an open call in 2021, to form part of an IPCEI on hydrogen technologies and systems. tkSE's project intends to reduce greenhouse gas emissions in the beneficiary's steelmaking processes. As aid for the reduction of greenhouse gas emissions, including through support of decarbonisation projects, is one of the main categories of aid allowed by the CEEAG, the measure was best suited for assessment under these guidelines.

The Commission found that:

- The measures facilitate the **development of an economic activity**, in particular the production of steel through less carbon-intensive processes. At the same time, it supports the objectives of key EU policy initiatives such as the [European Green Deal](#), the [EU Hydrogen](#)

[Strategy](#), the [Green Deal Industrial Plan](#) and the [REPowerEU Plan](#).

- The aid has an '**incentive effect**', as the beneficiary would not carry out the investments in green steel production without the public support.
- The measures are **necessary** and **appropriate** to promote the production of green steel. In addition, they are **proportionate**, as the level of the aid corresponds to the effective financing needs.
- The measures have sufficient **safeguards** to ensure that undue distortions of competition are limited. In particular, if the project turns out to be very successful, generating extra net revenues, the beneficiary will return to Germany part of the aid received, under a strict claw-back mechanism. Furthermore, the project is subject to independent monitoring to verify its progress towards the phasing out of natural gas and phasing in of hydrogen, and to ensure that the aid is not used to increase tkSE's production capacity. Finally, tkSE will disseminate the technical know-how gained through the project.
- Additional **safeguards** apply to the **conditional payment mechanism**. To ensure the competitiveness of the hydrogen prices and keep the aid amount to the minimum necessary, tkSE will organise a widely advertised competitive tendering process for both renewable and low-carbon hydrogen, which the German authorities will monitor.
- The aid brings about **positive effects** that outweigh any potential distortion of competition and trade in the EU.

On this basis, the Commission approved the German aid measures under EU State aid rules.

Background

The 2022 [Guidelines on State aid for climate, environmental protection and energy](#) ('CEEAG') provide guidance on how the Commission will assess the compatibility of aid measures for environmental protection, including climate protection, and energy which are subject to the notification requirement under Article 107(3)(c) TFEU.

The new guidelines, applicable as from January 2022, create a flexible, fit-for-purpose enabling framework to help Member States provide the necessary support to reach the Green Deal objectives in a targeted and cost-effective manner. The rules involve an alignment with the important EU's objectives and targets set out in the European Green Deal and with other recent regulatory changes in the energy and environmental areas and cater for the increased importance of climate protection. They include sections on aid for reduction of greenhouse gas emissions including through support for renewable energy, energy efficiency measures, aid for clean mobility, infrastructure, circular economy, pollution reduction, protection and restoration of biodiversity, as well as measures to ensure security of energy supply, subject to certain conditions.

The 2022 CEEAG aim to help Member States meet the EU's ambitious energy and climate targets at the least possible cost for taxpayers and without undue distortions of competition in the Single Market.

With the [European Green Deal Communication](#) in 2019, the Commission reinforced its climate ambitions, setting an objective of net zero emissions of greenhouse gases (GHG) by 2050. The [European Climate Law](#) in force since July 2021, which enshrines the legally binding 2050 climate neutrality objective and introduces the intermediate target of reducing net GHG by at least 55% by 2030, sets the ground for the '[Fit for 55](#)' package of legislative proposals presented by the Commission on 14 July 2021 and now well advanced toward adoption. The revision of the [Renewable Energy Directive](#) and the [Energy Efficiency Directive](#) have been provisionally agreed by EU co-legislators with more ambitious binding annual targets to increase the production of energy from renewable sources and reduce energy use at EU level. The renewables agreement raises the EU's binding renewable target for 2030 to a minimum of 42.5%, with the ambition to reach 45% of renewables by 2030.

In July 2020, the Commission published its [EU Hydrogen Strategy](#), setting ambitious goals for clean hydrogen production and use, and launched the European Clean Hydrogen Alliance, bringing together the [European hydrogen community](#) (industry, civil society, public authorities).

In February 2023, the Commission published the [Green Deal Industrial Plan](#) to enhance the competitiveness of Europe's net-zero industry and support the achievement of climate neutrality.

The non-confidential version of the decision will be made available under the case number SA.105244 in the [State aid register](#) on the Commission's [competition website](#) once any confidentiality issues have been resolved. New publications of State aid decisions on the internet and in the Official Journal are listed in the Competition Weekly e-News.

Quotes:

These measures enable Germany to support ThyssenKrupp Steel Europe's plans to decarbonise its steel production processes and to fast-track its renewable hydrogen uptake. At the same time, they ensure that competition distortions remain limited also thanks to safeguards that the German authorities will closely monitor. This will contribute to the greening of one of the most polluting sectors, while helping reduce Germany's dependence on imported fossil fuels and develop the renewable hydrogen value chain in the EU.

Margrethe Vestager, Executive Vice-President in charge of competition policy - 20/07/2023

Press contacts:

[Arianna PODESTA](#) (+32 2 298 70 24)

[Nina FERREIRA](#) (+32 2 299 81 63)

General public inquiries: [Europe Direct](#) by phone [00 800 67 89 10 11](#) or by [email](#)