

ERCST Feedback to the EU Commission public Consultation on the Clean Industrial Deal State Aid Framework (CISAF)

Authors

Andrei Marcu, Olivier Imbault, Chiara Cavallera, Ana Ruiz

1. Introduction

On February 26, 2025, the European Commission published the Communication on the “*Clean Industrial Deal: A Joint Roadmap for Competitiveness and Decarbonisation*” (hereinafter CID) – which is one pillar of the EU’s new Competitiveness Compass – announcing the intention to adopt a new State aid framework in the second quarter of 2025. The Clean Industrial State Aid Framework (CISAF) will support the objectives of the CID by guiding Member States on how to design State aid measures effectively to support it. It builds on the experience gained from the Temporary Crisis and Transition Framework (TCTF) and its transition provisions. Once adopted, CISAF will replace the TCTF and is expected to remain in force until 31 December 2030. The draft CISAF includes provisions for the following types of aid measures: (i) support for accelerating the rollout of renewable energy; (ii) aid facilitating industrial decarbonisation; (iii) measures to ensure sufficient manufacturing capacity in clean technologies; (iv) instruments to de-risk private investments.

The objective of this paper is to outline the principles and goals that should underpin the CISAF, but which may not be fully reflected in the current draft version.

2. CISAF and technology neutrality

CISAF represents an important step toward aligning EU state aid rules with the objectives of industrial decarbonisation.

A first statement must be that the framework falls short of delivering on one of the principles, that of technology neutrality. By prioritising certain technologies over others, the CISAF risks limiting the range of viable decarbonisation pathways available to industry.

For instance, the framework explicitly favors “non-biomass based” solutions for industrial heat, sidelining mature, cost-effective alternatives¹. Similarly, the narrow eligibility criteria for hydrogen-related investments and electricity further illustrate a prescriptive approach that may hinder innovation and delay progress. In addition, the framework seems to focus exclusively on carbon capture and storage (CCS) and does not appear to recognize other technologies such as Bioenergy with Carbon Capture and Storage (BECCS)². Furthermore, the list of technologies eligible for state aid under CISAF does not fully align with the broader scope of the Net Zero Industry Act, narrowing the range of supported solutions and undermining consistency across EU policies. Ensuring a genuinely technology-neutral framework is essential to harness the full spectrum of solutions needed to meet Europe’s climate and industrial goals.

¹ Industrial process heat remains one of the hardest sectors to decarbonize. Sustainable biomass, for example, offers a fast, technologically mature, and cost-effective renewable alternative to fossil fuels. (Point 73 CISAF downstream value chain)

² (Points 102 and 115 downstream value chain)

3. Key issues for consideration in the Clean Industrial Deal State Aid Framework

3.1 The CISAF is a step in the right direction, but it falls short on what is actually needed to make the transition happening, further improvements are needed

- The 36-month deadline for supported projects to become operational – excluding offshore wind, hydropower (including storage), and renewable hydrogen production – is, in most cases, not feasible because this timeline may not reflect the practical realities and complexities of project implementation. In some Member States, companies may face waiting periods of up to two or three years merely to obtain the necessary permits. Therefore, removing this deadline altogether or replacing it with a more flexible five-year timeframe, with appropriate caveats for specific project components, such as establishing grid connections, would provide a more realistic timeline for project developers. (Point 37 CISAF upstream value chain)
- Member States must demonstrate that the aid scheme is limited to supporting investments that would not be undertaken in the absence of aid, taking into account existing policy tools, notably the EU Emissions Trading System (ETS). For decarbonisation investments in industrial installations covered by the EU ETS, the CISAF includes specific eligibility criteria. In particular, where greenhouse gas emissions prior to the investment exceed those of the 10% most efficient installations (as defined under the ETS benchmark regulation), the investment must reduce the installation's GHG emissions by at least 40% and brings the emissions below the relevant EU ETS benchmarks. However, given current technological maturity, cost structures, and sector-specific challenges, achieving such deep reductions in a single investment cycle may not be realistic for many EU ETS-regulated installations. If such a threshold is to be defined, it should be applied at the sub-installation level or reflect a defined percentage³ reduction relative to the former process, recognising that the objective is to support meaningful emissions reductions rather than enforce an absolute benchmark that may be unattainable in practice. (Points 85 and 86 CISAF downstream value chain)
- The Member State must demonstrate that the state aid granted under CISAF does not lead to an overall increase in the beneficiary's production capacity, except for minor technical increases of up to [5%] compared to pre-aid levels. This aims to ensure that aid focuses on decarbonisation rather than capacity expansion and avoids market distortions. However, this requirement may raise concerns as decarbonisation often involves adopting more efficient technologies, which could also increase production capacity, even if the primary goal is emissions reduction. Limiting capacity growth could place EU industries at a competitive disadvantage in the global market, where non-EU competitors may face fewer restrictions. While the rule supports decarbonisation, it may inadvertently discourage technological upgrades and limit industrial investments and increased industrial activity that the EU badly needs. (Point 103 CISAF downstream value chain)

³ To ensure proportionality and technical feasibility, the determination of this percentage should be informed by a robust impact assessment, taking into account sector-specific abatement potential and cost-effectiveness.

- The clawback mechanism⁴, especially the 70% minimum State share of surplus revenues, risks having a dissuasive effect on project developers. While it aims to safeguard public funds by addressing unforeseen additional gains, its rigid structure may undermine incentives for efficiency and innovation. (Points 121 downstream value chain)

3.2 Absence of a market-driven approach

- Placing the cost burden of the flexibility schemes on the base load consumers is problematic. As base load consumers contribute least to the demand for flexibility in the system, they should not be the primary bearers of these costs. The main drivers of flexibility needs are peak consumers and variable renewable energy sources, which introduce fluctuations that the system must accommodate. (Point 66 CISAF downstream value chain)
- When it comes to the role of natural gas in industrial decarbonisation, Member States must ensure that public support does not displace investments into cleaner alternatives already available on the market, nor create lock-in effects for fossil fuel-based technologies. Aid for decarbonisation projects relying on natural gas is only admissible if it demonstrably avoids such lock-in and does not undermine the uptake of more sustainable solutions. This is considered fulfilled when, among other conditions, the equipment is hydrogen-ready without substantial retrofitting and beneficiaries commit to transitioning to renewable or low-carbon gases (such as hydrogen) over the project's lifetime, with penalties in place for non-compliance. The possibility to use natural gas is seen as beneficial in the short term, as it enables the development and scaling of necessary technologies. Transitioning to hydrogen will enable significant emissions reduction. However, a degree of flexibility is needed given that in some industrial contexts, particularly in specific geographical areas, deploying hydrogen-based Direct Reduced Iron (DRI) or switching to hydrogen-fuelled processes may not be viable due to infrastructural, economic, or supply limitations. In such cases, carbon capture and utilisation/storage (CCU/CCS) may be the only feasible or the most-effective decarbonisation pathway. The current wording could penalise these projects if cleaner alternatives exist *in principle* but are not practically deployable in the given context. This rigid interpretation risks undermining viable decarbonisation routes that can be the most realistic given local constraints. (Points 100, 101 CISAF downstream value chain)
- The draft CISAF does not include detailed provisions specifically addressing the reopening of shut-down industrial facilities in Europe, such as aluminium smelters. Recommissioning these sites often involves significant costs, but with appropriate support, it could stimulate local industry, strengthen strategic value chains, and reduce import dependency. The CISAF can present an opportunity to provide such support and address this challenge effectively.

⁴ According to point (9)(c) CISAF a 'claw-back mechanism' is a mechanism by which the Member State receives an appropriate share of any additional surpluses generated by an aided project, defined as the difference between the actual ex post cash-flows of the project and the forecasted cash-flows of that project based on the factual scenario on which the funding gap is calculated

3.3 Insufficient demand-side support – CISAF primarily targets supply

- One of the key shortcomings of the CISAF is its lack of emphasis on market pull and demand-side measures. The current framework remains heavily skewed toward supply-side interventions, focusing primarily on boosting production capacity and infrastructure for clean technologies.
- However, to truly accelerate the green transition and ensure long-term viability of emerging technologies, particularly in areas like carbon removals, a more balanced and market-driven approach is essential. This means not only supporting the supply of clean technologies, but also actively fostering demand through appropriate incentives, procurement policies, and market creation mechanisms⁵.
- By adopting a more holistic perspective that integrates both supply and demand considerations, the framework could drive stronger innovation, encourage private sector engagement, and create more sustainable market dynamics for clean industrial solutions.

3.4 While the CISAF may alleviate CAPEX costs, it does not address OPEX, creating investment uncertainty

- While the CISAF may alleviate CAPEX costs by allowing more flexible public support for upfront investments in clean technologies and industrial decarbonisation, it does not address the equally critical issue of OPEX. Operating costs remain a major barrier to the competitiveness of low-carbon industrial production in Europe. Persistently high electricity prices, along with the elevated and volatile cost of natural gas, place a heavy burden on energy-intensive industries. These factors significantly impact the day-to-day viability of projects, undermining the investment security that CISAF seeks to build. The two-sided Contracts for Difference (CfDs) limited to renewable electricity outlined in CISAF are unlikely to fully address these cost challenges. A more technology neutral approach is needed.

3.5 Despite the stated goal of simplification, the conditions in the CISAF introduce additional complexity

- **Electricity:** the rationale behind the numerous conditions related to indirect emissions from electricity used in decarbonisation projects receiving aid risks overcomplicating the electrification process. For instance, projects must either be located in bidding zones where the renewable electricity share exceeded 90% or where emissions intensity was below 18 gCO₂eq/MJ in the previous year; alternatively, they must use fully renewable electricity, or demonstrate, based on NECP projections, that the additional electricity demand will be entirely met with new renewable or low-carbon generation capacity without increasing peak demand or fossil-based generation. While these provisions are meant

⁵ For instance, extended producer responsibility, demand-side subsidies, tax breaks, and public procurement incentives, when combined with a robust certification framework, can be considered as supportive measures.

to safeguard climate integrity, their cumulative complexity has a high probability to deter investment or delay project deployment. (Points 98, 111 CISAF downstream value chain)

- **Hydrogen:** the CISAF provisions for hydrogen may result in a reinforcement of the Renewable Energy Directive hydrogen industry mandate, rather than supporting a broader, more inclusive and technology-neutral approach to hydrogen deployment. While the framework allows for a mix of renewable, biomass-based, and low-carbon hydrogen, it sets stringent conditions on the composition of that mix. Aid schemes supporting hydrogen-related investments must ensure that projects use either exclusively renewable hydrogen or a combination of renewable hydrogen, hydrogen produced from biomass that complies with the sustainability and greenhouse gas emissions savings criteria set out in Directive (EU) 2018/2001 and its implementing or delegated acts, and low-carbon hydrogen (as defined in Article 2(11) of Directive (EU) 2024/1788 of the European Parliament and of the Council of 13 June 2024 on common rules for the internal markets for renewable gas, natural gas and hydrogen and its implementing or delegated acts). Where such a combination is used, the share of renewable hydrogen must be at least equal to the average share of electricity from renewable sources in the Member State concerned, as measured two years prior to each year of operation, [plus 10 percentage points]. (Point 82 CISAF downstream value chain)
- **Technologies list:** The list of technologies eligible for State Aid under the CISAF is not fully aligned with the Net Zero Industry Act, as the CISAF's list is more restrictive. Greater alignment with existing EU legislation is necessary to ensure coherent and effective policy implementation. (Point 122 CISAF midstream value chain). Additionally, the requirement obliges the beneficiary to commit to using the latest commercially available, state-of-the-art production technology with regard to environmental emissions for the production of goods defined in point (122). However, this condition may present challenges due to the distinct specificities of different Member States. (Point 137 CISAF midstream value chain)
- **Emissions reduction:** Investments reducing GHG emissions or improving the energy efficiency of industrial activities can be eligible, irrespective of the technological solution used, provided they deliver (i) a reduction in direct greenhouse gas emissions resulting from the activity concerned compared to the situation without the aid, or (ii) a reduction of at least [20]% in the energy consumption of the beneficiary's activity per unit of output compared to the situation without the aid. However, excluding projects that lead to large reductions in indirect emissions might disincentivize key decarbonization pathways. (Point 72 CISAF downstream value chain)

3.5 Clarifying interactions of the CISAF with other State Aid Frameworks and Funding Instruments

- Clarity is needed on how the CISAF will interact with existing State Aid frameworks and EU funding instruments, particularly in terms of overlaps, synergies, and potential conflicts, to ensure a streamlined and coherent process for accessing support without inconsistencies in compliance. While CISAF is not intended to address all funding needs independently, its successful implementation depends on a clearly defined perimeter and transparent articulation of its integration with other funding sources. Establishing clear rules on the cumulation of aid and interactions with various EU

and national mechanisms is essential to avoid a fragmented, “patchwork” approach that could undermine investment certainty and hinder smooth implementation across projects.

4. Conclusions

- **CISAF and technology neutrality:** Although the Clean Industrial Deal State Aid Framework (CISAF) is designed to support industrial decarbonisation and boost Europe’s competitiveness, it falls short of fully embracing technology neutrality, a key principle. By favoring certain technologies over others, it risks stifling innovation and overlooking cost-effective, mature alternatives.
- **The CISAF is a step forward, but improvements are necessary:** While the CISAF represents progress toward aligning state aid rules with industrial decarbonisation goals, it does not adequately enable the necessary transitions at the required pace. The framework’s approach, including stringent emissions reductions targets and timelines, may not be feasible for many industries given the current technological readiness and permitting bottlenecks. Further refinement is needed to balance ambition with the practical realities of industrial transformation.
- **Absence of a market-driven approach:** the CISAF lacks strong features to genuinely promote a market-driven approach, for instance, in its treatment of flexibility schemes. Additionally, certain technologies are prioritized over others, although they may not be the most cost-effective in certain locations. A more market-oriented approach would allow for a more balanced allocation of costs, incentivise innovation across all viable solutions, and enhance the cost-effectiveness of the industrial decarbonisation effort.
- **Insufficient demand-side support:** while the CISAF focuses on supply-side support, it lacks addressing the demand-side challenges that are equally critical to achieving industrial decarbonisation. There is a need for more comprehensive support mechanisms that incentivize demand-side innovations and improvements, which would complement the supply-side investments and facilitate a more balanced, holistic transition to low-carbon industrial practices.
- **Limited scope for operational expenditure (OPEX) support:** while CISAF helps to mitigate capital expenditure (CAPEX) costs by supporting upfront investments, it fails to tackle the ongoing operational costs that represent a significant barrier to the competitiveness of low-carbon industrial production. High electricity and natural gas prices are persistent challenges, and without addressing the operating costs, the framework risks leaving industrial projects exposed to economic volatility, thus undermining their long-term viability.
- **Increased complexity despite simplification goals:** despite the European Commission’s intention to simplify the CISAF, the framework introduces additional complexities. The detailed and technical requirements may create barriers to investment.
- **CISAF and Funding Instruments Interaction:** Clear guidance is needed on how the CISAF interacts with existing State Aid frameworks and EU funding instruments, ensuring a well-defined perimeter, transparent integration with other sources, and clear rules on aid cumulation to avoid fragmentation and ensure smooth project implementation.