

Cefic Consultation Response – Electrification Action Plan

Persistent high energy costs have reached an unsustainable level for the chemical industry. As the largest industrial consumer of electricity (149 TWh, 2023), the high costs compared to other regions present an existential challenge. A rising number of chemical site closures attests to that.

Industrial competitiveness is necessary prior to progressing on electrification and decarbonisation. EU industry is currently in ‘survival-mode’ which undercuts its ability to mobilise capital for electrifying and decarbonising. Industrial operations in the EU need to become profitable again. To be broadly adopted, electrification needs to deliver competitiveness benefits and a clear business case for investing in the EU.

A number of additional barriers inhibits the adoption of electrification. These barriers are well established¹. They encompass, amongst others, higher operating costs, capital expenditures, the absence of mature technology for high-temperature processes, insufficient access to infrastructure, and a lack of demand pull measures for lower emission products. Especially at integrated sites, electrification can also distort the closely monitored steam / heat equilibrium.

Rather than review these barriers, **this paper outlines policy measures to remedy some of them.**

Regulation ought to enable decarbonisation options to compete on equal footing. The chemical industry is home to a myriad of processes, technologies and products. Reflecting that, the decarbonisation of the sector will feature a mix of options, contingent upon market demand, energy and feedstock costs/ availability, infrastructure availability and more.

The 50 €/MWh identified in the *Clean Industrial Deal State Aid Framework* should be a landing spot for total electricity costs – not just the wholesale price. The transition towards a more intermittent electricity system incurs additional costs that are not reflected in the wholesale price, but still affect consumers. To support a competitive industry, electrification, as well as hydrogen production, the Electrification Action Plan should work towards delivering electricity costs at an internationally competitive level, which includes both the reduction of wholesale prices and additional charges.

To that end, we urge policy makers to:

1. [Lower Total Electricity Costs](#)
2. [Improve Planning Certainty and Cost Transparency](#)
3. [Facilitate Infrastructure Access & Industrial Permitting](#)
4. [Develop a Market for Lower Emission Products](#)

¹ Barriers are described at length in the recent [Ecorys report](#) on the matter; Cefic contributed as an interviewee.

1. Lower Total Electricity Costs

a. Mitigate the Carbon Cost Component in Electricity Costs

- i. While the power sector is decarbonising, CO₂ costs still incur carbon leakage and affects industrial electricity costs. These can negatively impact the decision to electrify. Indirect cost compensation can be deployed on short-notice to alleviate some of these costs, provided the EU framework is sufficiently inclusive.

Recommendation²:

- Swiftly revise the 2020 guidelines with view to include the chemical industry.
- Include the production of secondary energy carriers generated from electricity, such as process steam, as an eligible product, as long as such secondary energy carrier is used for the production of other eligible products within the indirect cost compensation. This would support the transformation, particularly in the chemical industry, away from fossil-fuel-based steam supply to electricity-based steam supply.
- Support that revision by establishing, in the medium term, a pan-European mechanism that ensures a level playing field – with eligible companies receiving adequate reimbursement of the EU ETS cost included in electricity prices regardless of location.

b. Lower Taxes and Levies to the Legal Limit

- i. The Affordable Energy Action Plan rightly suggests to lower the taxation of electricity and remove non-energy cost components from bills. That can help lower the cost burden on industry and improve the business case for electrification.

Recommendation:

- Lower the taxation and network tariffs for electricity and natural gas, consistently across Member States.

c. Manage Network Tariffs to Facilitate Competitiveness and Electrification

- i. Rising networks costs – and limited visibility of their future development – can deter investments in electrification.
- ii. To minimise investments in new assets, we recommend in a first instance to prioritise the efficient utilisation of existing assets.
- iii. For assessing the externalities that users impose on the network, we emphasise that baseload users provide stability to the system and have a noticeably higher utilisation rate of grid assets than other consumer groups – which should be rewarded through lower tariffs. These factors should be considered in the tariffs charged to them, as should their exposure to international competition.

² See here our full views: [Cefic consultation response on ETS State Aid Guidelines review - cefic](#)

1. With that in mind, the distribution of tariffs amongst network users should be equitable and reflective of their grid usage and impact on the broader energy system.

Recommendation³:

- Operate the existing grid more efficiently, for instance by deploying dynamic line rating, upgrading existing conductors, to operating the grid more efficiently.
 - Changes to capacity ratings must not negatively impact baseload users, who require stable and predictable access to electricity.
- Utilise and expand EU-level and national public financing and financial guarantees to minimise the financing costs of grids – and thereby the cost of network tariffs – particularly for consumers exposed to international competition and carbon leakage, without unduly distorting the internal market.
 - A dedicated budget under next MFF ought to enable industrial electrification and facilitate the development of strategic infrastructure projects that bolster the transition to climate neutrality and industrial competitiveness.
- Utilise state aid provisions to alleviate network charges in the short-term as a response to the on-going crisis in EU industrial competitiveness – as suggested in the Action Plan for Affordable Energy.

d. Facilitate the Roll-out of Renewable & Low-carbon Generation and Storage

- i. The transition towards a more intermittent electricity system incurs additional costs that are not reflected in the wholesale price, but still affect consumers.
- ii. With that in mind, renewable and low-carbon generation, particularly combined with storage, lower the running hours of fossil generation and thereby reduce wholesale prices.
- iii. While the magnitude of their price-lowering effect is increasing, gas is still significantly overrepresented as a price-setter in spot markets, compared to its role in the generation mix.⁴ That is expected to remain the case at least until the mid-2030s.
 1. Due to the influence of the price of natural gas on power market prices, we also urge action to reduce the price of natural gas⁵.

Recommendation:

- Facilitate access to competitively priced long-term contracts for energy-intensive industries exposed to international competition.
 - Renewable and low-carbon generation that receives public support should retain part of its output for long-term contracts with priority access for energy-intensive industries exposed to international competition.

³ See here our full views: [Chemical-Industry-Views-on-the-EU-Grids-Package.pdf](#)

⁴ See figure 6 for a detailed breakdown: [ec1409c1-d4b4-4882-8bdd-3519f86bbb92_en](#)

⁵ See our full views in an up-coming paper (October 2025).

- Art.19a of the revised EMD introduces the right sense of direction and obligations on Member States to provide solutions in reducing costs by enabling grouping of demand and to ensure that counter-party risk guarantees are available.
 - More should be done at EU level to provide companies with alternative options in cases where these instruments do not materialise in time such as by creating a dedicated lending window within the EIB as centralised provider of financial guarantees.

e. Facilitate Flexibility To Lower System Costs

- i. On the margins, the deployment of voluntary flexible capacity – necessarily including both demand- and supply-side flexibility - may lower system costs, where it alleviates the need for peaking capacity, or lowers balancing & ancillary service costs.
- ii. Electrification may also unlock additional electrical flexibility, especially if a hybrid set-up is implemented (e.g. conventional fired boiler in combination with an e-boiler).
- iii. Utilisation of this flexibility will be determined by energy market conditions and should, at all times, provide a positive business case.

Recommendation:

- Facilitate the activation and deployment of flexible capacity through exposure to market signals , reduction of regulatory barriers, appropriate financial incentives for voluntary demand side flexibility and targeted support to on-site generation and storage⁶.

f. Encourage the Full Utilisation of Existing State Aid Levers to Scale Electrification

- i. The electrification of low/medium-temperature process heat and electrification of rotating equipment (pumps, compressors, ...) shows particular potential in the short-term.
 1. CAPEX/ OPEX support should look to drive to scale also GHG abatement technologies with high technology-readiness level (TRL), rather than focus exclusively on low-TRL innovation funding that targets electrification-based technologies.

Recommendation:

- Member States ought to utilise state aid frameworks to the best of their ability to scale electrification in industry.
- The EU Commission should highlight best practices in state aid practices to provide examples for Member States and facilitate approval by competition authorities.

⁶ See here our full views: [Cefic-Views-on-Industrial-Flexibility.pdf](#)

2. Improve Planning Certainty and Cost Transparency

a. Improve Cost Transparency for Consumers

- i. The Clean Industrial Deal State Aid Framework identifies 50€/MWh as the landing spot for power prices that can support a competitive industry and electrification, as well as hydrogen production. But that figure is only meaningful, if additional charges – that come on top of the wholesale price - don't grow out of proportion.
 1. In connection to that: the costs drivers in consumer bills are difficult to discern– making for uncertain investment decisions.
 2. Curtailment/ redispatch costs resulting from a more volatile power system, for instance, are just recuperated through network tariffs. These continue to increase dramatically. Limited visibility on the consumers' end of how these costs are constituted and will develop may deter investment decisions that increase exposure to these costs.

Recommendation:

- Create transparency for consumers – including industrial consumers – by breaking down cost-drivers in their electricity bills.
- Curtailment and redispatch costs are an untransparent but growing cost driver that need to be addressed by policy makers.
 - Limit the additional cost burden for network users by inducing system friendly behaviour in intermittent generators.

3. Facilitate Infrastructure Access & Industrial Permitting

a. Accelerate Grid Connection Times for Industrial Users

- i. Decarbonised, globally competitive energy supplies underpin the competitiveness of EU industry. However, they prove insufficient, if they cannot reach industrial consumers due to bottlenecks in infrastructure. In several counties, the waiting time to realise projects to increase electricity intake from the grid – necessary to electrify industrial processes – has nowadays reached 8-10 years.

Recommendation:

- Organising grid connection queues requires a more targeted approach beyond 'first-come-first-served,' if the EU is to meet its climate objectives. That approach should be harmonised, as much as possible, through EU-level guidance.
 - Prioritise grid connections to industrial users.
 - One avenue to do so would be to consider 'GHG abatement potential' as an additional criterion for organising grid connection queues.
 - Comparable transition related criteria already exist in multiple Member States for informing grid connections for (renewable) generation assets. They should be applied also for off-takers, in a harmonised manner.

- Where a significant share of a generation project's output is secured by an energy-intensive industrial consumer, this could justify prioritised ('fast lane') licensing and connection procedures. The same could be applied to non-site-specific capacity, such as storage, which benefits the broader system.
- Consider additional social/ locational criteria that prioritise grid connections and capacity expansions for existing sites and industrial clusters – which typically have an outsize impact on local economies and involve lower uncertainty than green-field projects that are still under development or permitting.
- Establish concrete milestones for project delivery to ensure that grid connection requests are genuine.
- Flexible or non-firm connection agreements can expedite the roll-out of grid connections to users with flexibility potential – but these should remain entirely voluntary and should not replace necessary development of grid infrastructure required to meet long-term decarbonisation goals.
- Public financing of infrastructure and connections will be necessary to avoid overburdening existing network users.

b. Accelerate the Permitting Times for Industrial Decarbonisation Projects

- i. Much has been done to speed up the permitting of energy supply and infrastructure projects. The immediate implementation of these measures is important.
- ii. It is also time to extend these measures to industrial projects on the demand side by extending the RED IV provisions on streamlining and accelerating the permitting process for renewable energy projects also to industrial sites and projects.

Recommendation:

- As part of the Industrial Decarbonisation Accelerator Act, ease permitting procedures for industrial decarbonisation projects.

4. Develop a Market for Lower Emission Products

a. Deploy a combination of market pull measures for low-carbon, circular products and supply-side support for industry, including both CAPEX and OPEX.

- In a first instance, industry requires a comprehensive scheme that establishes transparency and traceability for end-consumers, creating a market pull for low-carbon and circular products. Visibility is a pre-condition to tapping into a higher willingness to pay.
- In parallel, public financing measures can play a role in driving these products to scale. These measures may include VAT exemptions, extended producer responsibility modulations, demand side subsidies, tax breaks, as well as incentives in public procurement and minimum content requirements for renewable, low-carbon and circular products for customers willing to pay a premium.

Recommendation:

- Please refer to [our dedicated position on the matter of market pull measures](#) for a complete overview.

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About Cefic
Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 15% of world chemicals production.