

Revamping Europe's energy system for competitive industries and quality jobs

Key policy recommendations for a revamped energy system that boosts competitiveness and jobs:

1. Ensure a secure and affordable supply of green energy

The upcoming Clean Industrial Deal (CID) is a major opportunity for enabling the green transition of the European energy system and heavy emitting industries by incentivizing investments in clean energy infrastructure and technologies, such as grid infrastructure and energy storage, and we call on policymakers to also include the enabling technologies needed for the transition, such as digitalization. An agile CID, paired with full implementation of existing rules and guidelines, will make green energy more affordable, accelerate decarbonization, improve security of supply and lead to economic growth and jobs.

2. Harmonise regulation and avoid unnecessary delays in administrative processes

Permitting remains a key hurdle for the deployment of renewable energy installations in the EU, with at least 27 different approaches across the continent resulting in complexity, uncertainty, and therefore limiting investment. Our grids need a swift upgrade to accommodate new electricity needs such as public charging for transport and other industries that are electrifying processes (e.g. steel). Investments need to be enabled, also in R&D, and we call on more use of regulatory sandboxes for pilot projects. We also call for a thorough discussion on energy taxation, which at present is amongst the highest in the world and penalises European industry.

3. Further integrate electricity grids to boost renewables uptake and efficiencies

To properly electrify industrial processes and support charging infrastructures, the EU needs to improve the integration of renewable energy into the grid, energy storage technologies, and inter-operability of technologies. This would allow for a more flexible electricity system and encourage the needed anticipated investments in order to optimize balancing. We call on legislators to build on the Electricity Market Design and follow the European Commission's Grid Action Plan to achieve these goals.

4. Promote training to increase the scalability of projects and guarantee a just transition across the Union

Qualified workforce is one of the conditions that need to be met to successfully realize the energy transition, and ensure it happens in a just and equal way through the continent. To this end, we call on Member States to make full use of funding mechanisms such as the "Just Transition Mechanism" while implementing the above recommendations and ensuring nobody is left behind as we move to upgrade our energy system.

In the report *The Future of European Competitiveness*¹, Mario Draghi states that Europe must bring down its energy prices and continue to decarbonize to make European companies competitive, which simultaneously offers an opportunity for Europe to make energy more affordable, lead in clean technologies, and revamp economic growth and competitiveness. Europe's dependency on foreign energy sources, together with non-harmonized energy policies and low investments in infrastructure, creates challenges for our energy resilience and price stability. On top of this, European energy taxes are higher than in peer regions. All this combined results in that we as Europeans have much higher energy costs than our competitors in e.g. US or China.

We therefore urgently need a revamp of Europe's energy policies, with a focus on incentives and simplification, to create energy self-sufficiency and resilience, lower energy prices and increase decarbonization to boost our competitiveness, economic growth and preserve the European welfare system. At the same time, this is also an opportunity for us. Through our decarbonization journey, we can leverage clean-tech and digitalization of the

¹ [*97e481fd-2dc3-412d-be4c-f152a8232961_en \(europa.eu\)](https://ec.europa.eu/economy_finance/press_corner/detail.do?lang=en&press_corner_id=97e481fd-2dc3-412d-be4c-f152a8232961)

energy system to innovate, scale-up and export solutions for green energy self-sufficiency. Therefore, the EU Green Deal and upcoming Clean Industrial Deal are major opportunities to rebound Europe's climate goals, ensure sustainable competitiveness, and secure continued emissions reduction, while incentivizing industries to invest in the green, clean, and digital transformation.

The CEO Alliance provides four policy recommendations for Europe's future energy system and industry. We urgently need to become more self-sufficient, reduce energy taxes, and decarbonize. Through this we can secure our industries' competitiveness, green and digital leadership, and geopolitical resilience.

1. Ensure a secure and affordable supply of green energy

Europe must increase investments in its energy system, both through financial mechanisms – such as direct funding, and legislative incentives. Current programs, such as the 2021-2027 Multi-Annual Financial Framework² and the additional recovery packages following the COVID-19 crisis, are important but insufficient for current and future challenges.

In March 2023, the European Commission adopted a proposal for a Net Zero Industry Act (NZIA)³, and the Commission has, in its political guidelines for 2024-2029, announced a Clean Industrial Deal (CID) with a focus to bring down prices and decarbonize our energy system. We look forward to welcoming the CID, and believe if done in the right way, will lead to the much needed green transition of the European energy system and heavy emitting industries. Within this context, the CEO Alliance calls upon EU and national policymakers to provide the necessary funds to increase the EU's capacity in technology manufacturing and to stimulate private capital, which will ultimately contribute to the energy transition and to our security of energy supply.

We expect the CID to incentivize and prioritize investments in clean energy infrastructure and technologies, such as grid infrastructure and energy storage, and call on policymakers to also include the enabling technologies needed for the transition. A higher level of digitalization of the energy system will enable a higher utilization level of our electric grids, improvements in maintenance, efficient use of increasing numbers of 'prosumers' and the necessary flexibility for upgrading our energy system. To this end, ubiquitous connectivity (such as 5G Standalone) is key, and therefore digitalization must be treated equally with clean tech and grid solutions, and be included in the forthcoming CID proposal, thereby also reflecting the suggested actions in the Commission's Digitalization of Energy Action Plan⁴.

Abundant clean energy at affordable prices is key to ensure EU competitiveness. Specific measures to achieve affordable energy prices are embedded in the recent reform of the Electricity Market Design such as: Power Purchase Agreements (PPAs) in the electrification of industrial processes, providing long-term price signals and stability. The text also introduces instruments to hedge financial risk of clean energy and carbon costs such as Contracts for Difference (CfDs), which can incentivize investment in renewable energy installation. In addition, more developed and increasingly digitalized electricity grids would lead to structurally lower energy prices already in the short-term (e.g., avoidance of renewable curtailments). We need to accelerate private and public anticipatory investments in grids and deliver industry connection demand to the grid. Taxes and levies need to be harmonized, as currently, electricity prices for EU companies and homes are burdened with taxes and other charges not associated with supply. The reduction of energy taxes and levies on electricity prices is necessary to provide affordable energy. With these instruments, industry could benefit from lower, stable electricity prices.

The Fraunhofer study on direct electrification of industry⁵ shows that in different industrial sectors there are various processes where heat is used at different temperatures. It is therefore difficult to classify the entire industry as one; instead, we need to consider the different industrial processes within it. Different industries

² [Multiannual financial framework 2021-2027 \(europa.eu\)](https://european-council.europa.eu/media/e3000420/1/162222main_en.pdf)

³ [Net Zero Industry Act - European Commission \(europa.eu\)](https://ec.europa.eu/economy_finance/net-zero-industry-act_en)

⁴ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13141-Digitalising-the-energy-sector-EU-action-plan_en

⁵ [Direct electrification of industrial process heat](https://www.fraunhofer-efz.de/en/press-releases/2023-09-20-direct-electrification-of-industrial-process-heat)

face different challenges and opportunities regarding their decarbonization, which can be grouped in to three main industrial segments:

- 1) Industries for which direct electrification is currently technically possible and, should they opt for it, could become competitive in the short- to mid-term. These are industries where industrial applications require heat under 500°C (e.g., food & drinks, pulp & paper, chemistry, textile, etc.).
- 2) Industries where industrial applications requiring heat above 500°C.
 - a) Heating needs for which electricity-based technologies already exist (e.g., hot rolled steel, non-ferrous metal processing, container glass, etc.).
 - b) Heating needs for which electricity-based technologies are still under development (e.g., cement, flat glass, lime, etc.).
- 3) Industries that are currently electrified, but under significant competitiveness pressure in the short-term and with limited alternatives for energy efficiency gains e.g., primary aluminum, steel form electric arc furnace, etc.).

According to this analysis, the Clean Industrial Deal should adopt a differentiated yet comprehensive approach that addresses the specific needs of each of the industrial segments described, while implementing cross-cutting measures to support overall industrial decarbonization.

We need to accelerate the decarbonization process and the expansion of electrification through renewables and smart grids, thereby reducing our dependence on fossil fuels, mitigating energy volatility and increasing security of supply. To this end, we support Draghi's vision calling for restoring the security of supply chains for critical technologies by strengthening the EU's capabilities and assets across the entire value chain, covering end products and service platforms. Ultimately, with electrification based on green electricity and higher added value in Europe's energy system, we will improve autonomy, economic growth and jobs, and secure energy supply.

2. Harmonise regulation and avoid unnecessary delays in administrative processes

Permitting remains a key hurdle to the realization of the deployment of renewable energy installations in the EU. Lengthy and complicated administrative processes delay or jeopardize the deployment of charging infrastructure for battery-electric vehicles, construction of battery plants and other green industry installations, and the deployment of digital infrastructure. But this is not the only issue, the need of a rapid expansion of electricity grids is required to achieve all the aforementioned goals and for electrification in general.

We have 27 different regulations and disparities in processes, even within single Member States, which adds to the complexity and uncertainty of the process. For instance, the Commission recommendation on auction design for renewable energy⁶ found that processes are extremely slow. We need priority zones where we can deploy renewables more quickly, entailing the deployment and reinforcement of the required network assets, and there should be tacit approvals by default in case of a lack of response from public administration. The goal should be to move towards a more efficient, simplified, and harmonized regulatory framework across the EU27. Removing barriers will allow companies to reduce unnecessary costs and attract capital needed to invest and innovate.

The identified barriers also hamper the investments needed in research and development in renewable technologies. Member States tend to have stiff regulatory frameworks which do not allow for the full take-off of innovative solutions. In that regard, some Member States have already started implementing innovative frameworks such as regulatory sandboxes for pilot projects⁷ to try and prevent unnecessary barriers. This should be further encouraged and is why the CEO Alliance calls on Member States to put into action the recommendations of the Commission on permitting⁸ and their national regulatory authorities to adopt technology-enhancing regulation policies.

⁶ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13141-Digitalising-the-energy-sector-EU-action-plan_en

⁷ [Regulatory sandboxes in the energy sector - Publications Office of the EU \(europa.eu\)](#)

⁸ [Recommendation and guidance on speeding up permit-granting for renewable energy and related infrastructure projects - European Commission \(europa.eu\)](#)

In this context, we welcome proposals in the Draghi report on transposing and implementing existing legislation on renewables permitting, extended to grids, addressing the lack of resources at the disposal of national permitting authorities, accelerating permitting for related infrastructure and flexibility projects, as well as the networks necessary to integrate additional renewable energy capacities into the energy system or launching EU-level auctions for cross-border flexibility and renewables capacity. Moreover, grids need to accommodate new needs of electricity such as light and heavy-duty vehicles (LDV and HDV) public charging and other industries that are electrifying processes, e.g. steel.

Lastly, the current taxation system in the EU is outdated and does not reflect the “polluter pays” principle and the state of urgency the energy system has to adapt to. The Energy Taxation Directive in force was last updated in 2003 and gives too much advantage to fossil energy products compared to renewable and low carbon energy products. If we do not unify taxation in the EU, there is no way we can have a level playing field. Today we have national, regional, and local taxation which harm the business case. As mentioned in the Letta report, electricity prices are higher in the EU than in the US, which is mainly due to taxes and levies of up to 40% in the EU, versus 10% in the US. Moreover, the US offer a “tax credit system” on renewables that supports local competitiveness without increasing prices for consumers. This paired with already higher base prices in Europe is a heavy burden. As the Draghi report points out, it is necessary to implement a harmonized energy taxation framework in the EU, based on the “polluter pays” principle and consistent with the EU’s energy and climate targets and, additionally, stop subsidizing fossil fuels. The energy taxation playing field needs to be lowered and leveled, and used strategically to reduce the cost of (green) energy. Our call is to national and European policymakers to tackle this issue and give a competitive advantage to renewable and low-carbon energy products in the EU.

3. Further integrate electricity grids to boost renewables uptake and efficiencies

According to the International Energy Agency (IEA), electrification with renewables is the most efficient way to decarbonize our economy, but to get on track with the Net Zero Emissions by 2050 Scenario the speed of this increase will need to double to reach the 2030 milestone.⁹ Europe has the natural resources (wind, water, sun) to build a green, autonomous, and competitive electrified energy system based on renewables that can be the lever of our competitiveness and respond to the growing demand of consumers and industry.

However, to properly electrify industrial processes and support charging infrastructures, the EU needs to improve the integration of renewable energy into the electricity grid, energy storage technologies, and interoperability of technologies. This would allow for a more flexible electricity system and encourage the needed anticipated investments in order to optimize balancing.

According to the European Commission’s “Grid Action Plan”¹⁰, electricity consumption in the EU is expected to increase by around 60% between now and 2030. The European energy system must become fully digitalized to accommodate for a decentralized, more efficiently used and flexible system, where renewable power production is phasing out fossil fuels. To accomplish this, we need to also urgently invest in 5G Standalone connectivity everywhere. In total, the European Commission foresees a necessary investment to reinforce the grid and to create new interconnections worth €584 billion. Currently, there is no EU-wide legislative text that takes this matter into consideration. The recent revision of the electricity market design did not address in detail network charges and network investment costs. There should be a broader reflection on this matter.

It is positive that the Draghi report calls for developing innovative financing models and competitive mechanisms to support the uptake of grid and interconnector deployment, given their nature of being long-term investments through funding instruments ranging from providing public guarantees, de-risking long term loans, financial products provided by the EIB or national development banks, equity or quasi-equity financing solutions, and cost-sharing financing initiatives across member states.

Electricity markets still present physical constraints due to the lack of capacity allocation at interconnection points in some regions, or due to the lack of harmonization between bidding zones. This situation prevents fully leveraging the potential of the EU single energy market. Together with ENTSO-E and system operators, the EU

⁹ [Electrification - Energy System - IEA](#)

¹⁰ [Commission’s communication, Grids, the missing link - An EU Action Plan for Grids, COM/2023/757 final](#)

should carry out a deep reflection on how to create a more integrated, flexible, and efficient electricity system that contributes to climate neutrality in 2050. The common energy market allowed for a continued flow of energy across the EU in past years, but also showed the limits of the pressure that it can bear in its current state. Industries need a safe supply of energy at a stable level, which only a flexible market can provide.

4. Promote training to increase the scalability of projects and guarantee a just transition across the Union

Adequate funding, performant regulatory frameworks, and reinforcement of the electricity grid will not deliver their full potential if they are not coupled with the right expertise. The entire European economy needs qualified workforce. Not only is this a condition to successfully realize the energy transition of the economy, but also to ensure that no one is left behind in the process and that employment is created from it. As underscored by the European Centre for the Development of Vocational Training, “many education and skill policies currently in force might require adaptation or reform to accommodate up- and reskilling needs and mobility.”¹¹ This will require targeted investments and efficient policy measures to draw the workforce where necessary.

We therefore welcome the creation of the “Academies” through the NZIA, calling on the swift implementation of the measures. In that regard, we also call on Member States to make good use of available funding mechanisms such as the “Just Transition Mechanism”¹² which allows Member States to identify territories most impacted by the green transition and that can help identify potential re-skilling areas.

We urge the European institutions and politicians to take action and adapt the regulatory framework for energy systems by increasing incentives and simplification, stimulate energy self-sufficiency and resilience, lower energy prices and increase electrification and decarbonization to boost our competitiveness, economic growth and preserve the European welfare system.

The CEO alliance remains committed to playing our full part to achieving this. As Draghi highlighted: “The reasons for a unified response have never been so compelling – and in our unity we will find the strength to reform”.

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About the CEO Alliance: We are a cross-sector action tank consisting of leading European companies representing key industry sectors, with ~1.6 million employees and ~EUR 560 billion annual revenue. We use our broad platform to make decarbonization of European industry happen. In spite of the challenging times we firmly believe that the only way forward for a competitive, prosperous, resilient and sustainable Europe is an acceleration of the transition to green energy and technology. Further information about our work is available on our website, www.ceo-alliance.eu.

¹¹ [The green employment and skills transformation - Publications Office of the EU \(europa.eu\)](https://ec.europa.eu/euro-observatory/publications/2024/01/the-green-employment-and-skills-transformation)

¹² https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism_en#introduction