



Recommendations for the Affordable Energy Action Plan

The upcoming **EU Affordable Energy Action Plan** offers a critical opportunity to address Europe's energy affordability challenges while accelerating its transition to net-zero. Putting the focus on renewables-based electrification, particularly through wind energy, offers significant economic and strategic benefits.

Wind already supplies 20% of Europe's electricity, enhancing the **competitiveness** of European industries by reducing reliance on costly fossil fuels. Without the wind and solar capacity added since 2019, the EU would have imported 92 billion cubic meters more of fossil gas and 55 million tonnes more of hard coal, costing €59 billion¹. The expansion of wind and solar also ensures **long-term price stability**, strengthens **energy security** for households and businesses, and reduces **dependency** on volatile global energy markets.

Moreover, the EU's 2040 climate target impact assessment sees the rate of electrification more than doubling by 2040, resulting in a **30% drop in the EU's final energy consumption** compared to today. This shift underscores the gains in efficiency that electrification will bring.

These recommendations outline **five key priorities**, focusing on:

- 1) Taxation to support electrification and renewables integration,
- 2) Efficient grids and flexibility solutions,
- 3) Expansion of reliable renewable electricity supply,
- 4) Supporting communities hosting renewables, and
- 5) Building a business case for industrial electrification.

1) Taxation to support electrification and renewables integration

Recent analyses show that many European countries impose higher taxes and levies on electricity than on fossil gas, creating an imbalance that hinders electrification for both residential and industrial users. To address this, the electricity excise duties should be at least reduced to the European minimum level², ensuring a fair and consistent regulatory framework across Member States while making electricity more competitive.

Many Member States impose taxes and levies in electricity bills to recover revenue for services unrelated to electricity generation or grid infrastructure, such as public services, state-owned television and radio, road construction, or public pension schemes. In Poland, for example, non-recoverable taxes and levies accounted for 38.8% of the total electricity price for non-household consumers in the first half of 2024³. Such costs should be paid by all energy users not only the electricity consumers. Such practices distort the true cost of electricity, burden consumers with unnecessary charges, and undermine affordability and competitiveness. And it prevents a level playing field with other energy sources, such as fossil fuels. Despite falling wholesale electricity prices driven by renewables, many Member States have failed to pass these savings on to consumers, instead maintaining or even increasing taxes and levies, which limits the benefits of lower prices.

¹ Ember, European Electricity Review 2025

² Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity

³ European Commission, Electricity Price Statistics, based on Eurostat data, 2024



- Remove non-energy-related taxes and levies from electricity bills to enhance affordability for all consumers, ensuring that consumer prices reflect lower wholesale electricity costs driven by renewables. As Draghi emphasised, electricity bills should no longer serve as a "cash cow" to feed public budgets.
- Align energy taxation with climate goals by ensuring a level playing field between electricity and fossil fuels, following the "polluter pays" principle.

2) Efficient grids and flexibility solutions

The **EU Action Plan for Grids** calls for €584bn in investments for electricity grids up to 2030, with the largest share required for national grid investments at both the transmission and distribution levels. Currently, most of these are financed through network tariffs. However, the projected scale of electricity grid investments, both onshore and offshore, is unprecedented. In some cases, it might not be politically viable for recover these costs through network tariffs for end users, particularly in countries developing their grids for energy exports to neighbouring countries.

The affordability of renewables-based electrification will also depend on whether Member States will manage to create fit-for-purpose regulatory conditions and scale up investments in non-fossil flexibility solutions such as energy storage and demand response.

- Increase transparency and justifiability of network tariffs: National Governments should collaborate at least regionally to enhance the comparability of their network tariff structures. This is crucial for securing public support for grid investments, especially those with significant cross-border impacts. These investments may be funded at the national level or through cross-border cooperation.
- Prioritise the pilot of the EU Competitiveness Coordination Tool for infrastructure investments,
 as mentioned in the EU Competitiveness Compass. To accelerate interconnections and overcome
 national differences, political coordination at regional level is essential, as current incentives for
 interconnection are insufficient. Greater market integration brings long-term benefits, not only for
 the EU as a whole but also for individual Member States, enhancing resilience to shocks, securing
 supplies, tapping into regional potentials, and ultimately lowering system costs.
- Prioritise the use of EU and national funds for grid expansion and optimisation: as it stands
 Member States are underutilising existing EU funding mechanisms, such as the Modernisation
 Fund, Innovation Fund, and Recovery and Resilience Facility (RRF), to build their transmission or
 distribution grids or non-fossil flexibility assets. The European Commission should strengthen
 accountability of Member States and provide clear guidance to ensure these funds are directed
 towards grids and flexibility.
- Apply prioritisation criteria to fast-track assessments of grid connection requests for the most strategic generation and demand projects, focusing on those that are further developed, have a financial commitment to reserve grid capacity, and contribute to system integration aligned with net-zero objectives. Prioritise co-located renewables with or without storage for grid connection assessment.
- Mitigate risks for TSOs and DSOs: in many countries, TSOs and DSOs face regulatory uncertainty regarding cost recovery, particularly due to asset underutilisation and supply chain constraints. Having traditionally operated in a regulated environment, they often lack experience in managing financial risks and debt. To address this, national Governments should review their TSO and DSO tariff frameworks to enable cost recovery for forward-looking anticipatory investments Additionally, they should work with the European Investment Bank (EIB) or national promotional



banks to develop tailored risk mitigation tools and guarantees. This can support the transition of the TSO and DSO asset base from a reactive to an anticipatory model over the next 10-12 years.

- Safeguard the existing market structure to realise the potential of non-fossil flexibility. While the existing EU electricity market design provides opportunities to incentivise such investments, certain national markets impose regulatory barriers or are not mature enough to provide long-term revenue stabilisation for such assets. Member States should set fit-for-purpose grid tariffs and taxes on non-fossil flexible assets rewarding their contribution to system integration in line with net-zero objectives. As per revised Electricity Market Design, they should also consider support schemes for non-fossil flexible assets when their electricity markets are not mature enough to provide fit for purpose revenue streams for these. Finally, Member States should set up national auctions for integrated renewable projects, including those co-located with storage, to accelerate the deployment of flexibility solutions.
- Facilitate private investment in grids while complying with existing unbundling rules:
 transparent public competition should be encouraged to allow private investors to participate in grid
 expansion, ensuring cost-effectiveness and affordability for end-users. Offshore cross-border
 infrastructure could benefit from regional offshore finance facilities as voluntary funding tools for
 both Member States and private investors, while ensuring that electricity unbundling rules are fully
 respected to maintain fair competition and market integrity.
- Enhance efficient electricity trading between the EU and the UK: it is crucial, particularly given the significant offshore wind potential in the North Sea. Addressing post-Brexit challenges in implicit electricity trading and develop streamlined trading arrangements will be essential to integrating complex offshore infrastructure, improving market efficiency, and reducing costs for consumers. This can be achieved through a serviced model of price coupling of Single Day-Ahead which would require minimal technical changes while fully adhering to the existing regulatory framework within the EU-UK Trade and Cooperation Agreement (TCA).

3) Expansion of reliable renewable electricity supply

To meet growing demand and replace fossil fuels, it is essential to consistently accelerate the deployment of renewables through stable regulatory and market frameworks in all countries. With near-zero marginal costs, renewables are dispatched first, pushing expensive fossil fuel plants further down the merit order or out of the market. As already experienced across the EU this reduces overall wholesale markets and makes electricity more affordable. Moreover, long-term contracts allow energy suppliers and corporate buyers to secure renewable energy at a fixed price. And businesses get access to competitively priced energy while ensuring long-term price stability.

- National Governments need to quickly implement the provisions of the reformed Electricity
 Market Design on electricity markets, grids and flexibility.
- Ensure auction models allow for commercially viable projects through auction systems that are fit for purpose. Contracts for Difference (CfDs), combined with Power Purchase Agreements (PPAs) wherever relevant, should be the go-to option, offering a fair and viable price for wind energy projects and Governments while also sharing risks. CfDs help de-risk investments, stabilise electricity prices, and reduce energy costs for both industry and households. Furthermore, combining CfDs and PPAs in the same project is a smart way to utilise both public and private capital.
- The EIB and Member States should make PPA offtake guarantees available to the market, derisking investments and increasing the uptake of PPAs. Additionally, to foster the internal market



and enhance collaboration between Member States, frameworks for competitive cross-border PPAs need to be strengthened, enabling broader market participation and more effective cross-border energy trading, including through longer-duration Financial Transmission Rights.

Scaling up wind energy will require swift action to overcome permitting delays, which
significantly drive-up project costs. Streamlining and digitalising permitting processes will
ensure faster deployment of wind projects, cutting costs and accelerating the energy transition.

4) Supporting communities hosting renewables

As the Draghi report states, there should be enhanced incentives for **direct consumption** of renewable electricity wherever this is the most efficient option.

Recommended actions:

Allow developers to offer discounted electricity prices to residents in communities hosting
renewable projects. This approach means that residents should see clear benefits from local
renewables, improving affordability and boosting public acceptance. Unlike general funds for
municipalities, direct benefits for citizens are more transparent. Germany has successfully
implemented this approach⁴.

5) Building a business case for industrial electrification

Electrification is key to affordable industrial decarbonisation. As it stands electricity only covers 4% of industrial heating processes which accounts for two-thirds of total industrial energy consumption. A recent Fraunhofer study⁵ shows that by 2035, direct electrification could meet 90% of Europe's industrial energy needs. Sectors requiring low and medium temperature ranges, such as paper and pulp, food and beverages, and certain segments of the chemical industry, can already electrify their processes using heat pumps, e-boilers, and thermal energy storage. Together, these sectors account for around 40% of the total industrial process heat demand in the EU. However, the required upfront investment is significant, and while electricity costs will drop over time as renewables grow, these industries will face a cost gap initially. Making this transition to electricity affordable is crucial to maintaining European industrial competitiveness in the long term.

- State aid for CAPEX and OPEX investments in industrial electrification: Extend and make
 permanent the provisions in the Temporary Crisis and Transition Framework, ensuring that
 OPEX is included as an eligible cost. Without this, industries will lack sufficient incentives to
 electrify.
- Transition finance to support heavy industries: Provide conditional, temporary financial support for OPEX in energy-intensive industries transitioning to electrification, including wages during shutdowns and retraining programmes.
- Establish a European Electrification Bank: Create a dedicated body to support industry electrification with financial and technical assistance, streamlining funding sources and ensuring an efficient transition.
- Bridge the cost gap with public schemes: Implement Carbon Contracts for Difference (CCfDs) or other schemes to support CAPEX and OPEX and offset decarbonisation costs. However, it is crucial that these public schemes are accompanied by a clear mandate to electrify. For illustrative examples, see the box below.

⁴ Federal Government of Germany, <u>Renewable Energy Sources Act Levy Abolished</u>, June 29, 2022.

⁵ Agora Industry and the Fraunhofer Institute for Systems and Innovation Research (Fraunhofer ISI), Direct Electrification of Industrial Process Heat: An Assessment of Technologies, Potentials, and Future Prospects for the EU, 2024.



- Create lead markets for climate-neutral products. Use public procurement and non-financial
 measures, like carbon accounting or product labels, to drive demand for green products and
 facilitate market entry.
- Smartly harmonise the use of ETS (Emissions Trading System) indirect cost compensation across EU Member States: the ETS indirect cost compensation is a key tool in safeguarding energy-intensive industries from carbon leakage and provide revenue for industrial decarbonisation. While all EU Member States are now required to use ETS revenue for compensation, there is a lack of uniformity in how these funds are allocated. A more homogeneous approach at the European level would prevent disparities and foster a more competitive and cohesive European industrial sector.

The Affordable Energy Action Plan provides a unique opportunity to tackle energy affordability while driving Europe's transition to a sustainable, electrified economy. By strategically supporting electrification, integrating renewables, and investing in efficient grid systems, Europe can strengthen its energy security, reduce dependence on fossil fuels, and foster industrial competitiveness. Prompt and decisive action on these recommendations will ensure a cleaner, more affordable energy future for Europe's citizens and industries.

Examples of national public support schemes designed to accelerate industrial electrification:

- The **Dutch SDE++** (Stimulation of Sustainable Energy Production and Climate Transition) scheme supports industrial decarbonisation and cutting natural gas consumption by subsidising CO2 reducing technologies. It compensates the unprofitable component of sustainable solutions, making them cost-competitive with fossil-based alternatives. The scheme funds low- and high-temperature heat solutions, including heat pumps, e-boilers, and thermal storage, to replace gas-powered systems. Subsidies are allocated on a competitive basis for 12-15 years, using a bidding process based on €/tCO₂ avoided, with a correction factor for fossil fuel and CO₂ cost reductions. To accelerate innovation, the scheme applies domain fencing, reserving dedicated budgets for technologies that require higher initial subsidies but are crucial for long-term **CO₂** and gas reduction goals, particularly low-temperature heat solutions.
- Germany's Climate Protection Contracts (CPC) scheme provides 15-year Carbon Contracts for Difference (CCfDs) for energy-intensive industries to transition to low-carbon production. The contracts compensate the difference between an agreed CO2 strike price and the EU ETS price while also adjusting for changes in energy input costs through a dynamisation component. Projects must be innovative, require significant investment, substitute fossil fuels, and achieve a predetermined reduction of CO₂ emissions.
- Italy's Energy Release 2.0 initiative offers energy-intensive companies the opportunity to purchase
 electricity at a reduced rate of €65 per MW hour. Companies can buy electricity and corresponding
 guarantees of origin and repay the same amount over 20 years at the agreed price. Companies must
 commit to constructing new renewable energy generation capacity, with the requirement that the
 new plants have at least twice the capacity of the agreed-upon surrender agreement.