

ENERGY SECURITY REVISION

Advocacy input

WHY THE EU'S FOSSIL FUEL DEPENDENCY NEEDS TO BE TACKLED FIRST TO ENSURE ENERGY SECURITY

The European Union is once again experiencing the consequences of its **structural dependence on expensive fossil fuels**, an exposure that has proven to be not just the main cause of costly climate disruption, but also an economic liability and a strategic vulnerability. Recent crises have underscored how reliance on imported oil and gas leaves the EU highly susceptible to external shocks, price volatility, and geopolitical coercion. **Energy is not merely a commodity; it is a lever of power.** Supplier countries can, and do, weaponize fossil fuel exports to exert political influence, constrain foreign policy choices, and exploit divisions among Member States. Russia has long weaponised its energy against the EU, including before the full-scale invasion of Ukraine. The US is also using its energy as a weapon and even threatened the EU with losing 'favourable' access to LNG if it did not pass the trade deal.

Beyond immediate energy security concerns, fossil fuel dependence also carries deeper implications for **democracy**. Revenues from fossil fuel exports often sustain regimes with weak democratic accountability, indirectly linking European consumption to the reinforcement of authoritarian governance abroad. These revenues can also indirectly finance wars and aggression, such as Russia's full-scale invasion of Ukraine or the US and Israeli attacks against Iran. At the same time, sudden price spikes and supply disruptions within Europe fuel inflation with dramatic social consequences and provide a fertile ground for populism and disinformation. **Fossil fuel dependence is becoming a systemic risk. Reducing this dependency must therefore be elevated as a core pillar of the EU's Energy Security Framework.**

Achieving greater energy autonomy can not be the equivalent of diversifying fossil fuel suppliers. **It requires fundamentally reducing demand for fossil fuels through renewables based electrification, energy savings through efficiency and sufficiency, and the rapid deployment of domestic renewable energy and non-fossil flexibility.** In doing so, the EU can strengthen its strategic autonomy, shield its economies from external shocks, and protect the democratic foundations that underpin its political project. By reducing the demand for fossil fuels, space is created to be more selective - through non-price criteria - regarding which countries fossil fuels are still imported from and what level of dependency is deemed justifiable.

Given the inherent vulnerability due to the EU's fossil fuel and fossil gas dependency in particular, **the European Commission has the unique opportunity with the Energy Security revision to propose concrete measures to reduce dependency as a key lever for EU security and strategic autonomy.** These should be articulated around the following four principles.

PRINCIPLE NUMBER 1: EMBED DEMAND REDUCTION IN AN ECONOMY-WIDE FOSSIL GAS PHASE OUT FRAMEWORK

To structurally reduce the EU's fossil gas dependency and increase system resilience, the Commission and European Member States need to develop plans on how to structurally and orderly phase out their extreme reliance on fossil gas. This requires developing an **economy-wide fossil gas phase out framework across sectors (buildings, industry, power) as described in this [Ten Point Plan](#)**. A key component of such a phase out framework could be the introduction of **structural demand reduction** based on legal measures applied by Member States during the crisis in 2022, triggered by Russia's weaponisation of energy after the full-scale invasion of Ukraine. Renewables based electrification, energy savings and efficiency measures and behavioural change are positive measures to achieve lasting structural effect which need to be supported to ensure effective roll out. An increasingly large number of actors are advocating for [fossil gas demand reduction](#). The following points should be explored:

Demand Reduction: Build on the [demand reduction framework](#) of Council Regulation (EU) 2022/1369, which required a 15% cut in gas use. By 2025, EU demand had already fallen ~16% compared to the 2017–2021 average. Embedding a binding pathway in the Energy Security framework would shift from crisis response to proactive demand governance, strengthening energy security through lasting fossil fuel reduction. *[A mandatory annual reduction of 7–8% across all sectors \(power, industry, and buildings\) should be introduced to ensure structural change \(see Annex\)](#)*. Couple demand reduction to **Energy Efficiency First to achieve structural energy savings**. The revised Energy Efficiency Directive (EED) mandates a 11.7% reduction in final energy consumption by 2030 compared to 2020 projections. The expanded application of the Energy Efficiency 1st (EE1st) principle is crucial to make European businesses and households less exposed to fluctuating fossil fuel prices, including through structural demand reduction measures alongside operational energy efficiency. *[The energy security revision should crosslink both articles 3 on EE1st and 8 on the energy savings obligation to achieve structural energy savings](#)*. Finally, the *[5% reduction of peak electricity hours](#)* should also be reiterated which had a measurable impact on the gas demand. See complementary recommendations on mandatory gas, electricity and electricity during peak hours demand reduction, in this [document](#).

EU Roadmap to phase out fossil gas imports with a particular focus on LNG and US LNG: In the wider context of a fossil gas phase out framework and structural demand reduction measures, tackling the EU's import dependency should be another priority. Given the [increased reliance on US LNG imports](#) and the inherent geopolitical and democracy risks, a specific point of attention should be given to US LNG. The [legal commitment](#) to phase out Russian fossil gas imports by 2027 should serve as a blueprint to *[establish a phase out roadmap for LNG imports with a particular focus on US LNG by 2032](#)*.

Timely and ambitious implementation of the [EU Methane Regulation \(EUMR\)](#), the first-ever EU Regulation reducing methane emissions from the energy sector and obliging oil and gas producers to monitor, report and verify (MRV requirements) methane emissions from their upstream supply chain. *[More resilience and energy security will come with a robust, well-implemented EUMR leading to reduced gas losses across the supply chain thereby supporting the EU's transition towards lower gas demand and a more efficient and reliable energy system](#)*.

PRINCIPLE NUMBER 2: INTRODUCING BINDING EU AND NATIONAL TARGETS FOR NON-FOSSIL FLEXIBILITY

Further developing Non-Fossil flexibility is the security principle number two, required to support and to secure the increasing build out of renewables. The Energy Security framework needs to give incentives to **prioritise non-fossil flexibility over fossil flexibility** by building on existing regulatory frameworks. The revised Electricity Market Design introduces national Flexibility Needs Assessments (FNAs), to be undertaken by Member States, to calculate the levels of non-fossil flexibility required in their power systems to integrate renewable power (see this [checklist](#)). EU countries will set objectives for energy storage and demand-side response and add them to their NECPs. Based on this, the EU Commission will initiate an EU Strategy on Flexibility to meet EU needs and should set a target on energy storage and demand response.

The Commission and Member States need to strengthen the role of clean flexibility in replacing the role that risky fossil gas currently plays in the energy system. The Flexibility Needs Assessments should be understood as an instrument not just to reduce renewables curtailment; but to support a more fundamental energy system transition. The Commission should strengthen also via the Energy Security revision the role that FNAs can play – making the national target setting a legally binding process; and prompting Member States to use them to reduce their reliance on fossil gas. *This binding target for non-fossil flexibility needs to sit in the Governance Regulation and for regulatory coherence, it should also be included in the revision of the Energy Security framework.*

PRINCIPLE NUMBER 3: REFORMING THE N-1 PRINCIPLE

The number three security principle of the revised energy security framework should be about avoiding incentivising fossil gas infrastructure such as emergency reserves under the N-1 principle. The N-1 principle is a back-up standard in energy systems requiring that the energy infrastructure (both gas and electricity) can continue operating normally even if any single component fails.

Recent examples in certain Member States show that there is a tendency to use the energy security imperative to invest into new fossil fuel infrastructure (e.g. FSRU as a strategic emergency reserve in Ireland, or in Germany 20 GW of extra gas power capacity). To avoid this adverse incentive, the N-1 principle needs to be reformed structurally to incentivise non-fossil flexibility infrastructure and disincentivise fossil gas infrastructure. The following ringfencing points should be integrated :

- The energy security revision should set an obligation on Member States to *prioritise non-fossil flexibility over fossil flexibility infrastructure.*
- In case, non fossil flexibility options are not available, *only fossil legacy (i.e. already existing infrastructure) reserves could be accepted under certain conditions:*
 - only for a limited amount of annual hours use,
 - coupled to mandatory reduction of gas demand and mandatory expansion of non fossil storage options.

- adjust peak gas delivery requirements for gas TSOs, for example, by revising the extreme temperature assumptions that gas grids must meet to ensure comfortable heating, as it entails that the entire system is designed around these high standards.
- Non-fossil flexibility solutions should be supported via the FNAs, with the introduction of national policy blueprints tailored to scale-up these different approaches – with new market mechanisms introduced to support their expansion.
- Meanwhile, as part of the commitment to a fossil fuel phase-out framework, subsidies for fossil fuels must be phased out, with the parallel introduction of a gas infrastructure exit strategy. *This could include placing fossil fuel assets outside the wholesale market e.g. as strategic reserve.*

PRINCIPLE NUMBER 4: DEFINE ENERGY SECURITY MEASURES FOR PROTECTED CONSUMERS

In the context of the revision of the Energy Security Framework and the Governance Regulation, there is a need to introduce an **EU-level definition of protected consumers** putting **vulnerable consumers** suffering from energy poverty at the center. This means that households facing energy poverty should not only be **protected in an emergency**, but also enabled to **benefit from targeted, long-term interventions** which will have benefits for the overall energy security and resilience. Therefore this requires an **EU level KPI to harmonise monitoring and accountability**.

While the current framework to capture energy poverty is quite fragmented, different elements exist. The **Energy Efficiency Directive provides a common definition for energy poverty**. Member States assess the number of households affected by energy poverty and, where relevant, to set national reduction targets in **National Energy and Climate Plans**, but implementation remains highly fragmented. Member States are also collecting data to define vulnerable households and SMEs in their **National Social Climate Plans**. But most Member States do not define reduction targets, timelines or robust policies and measures to address energy poverty.

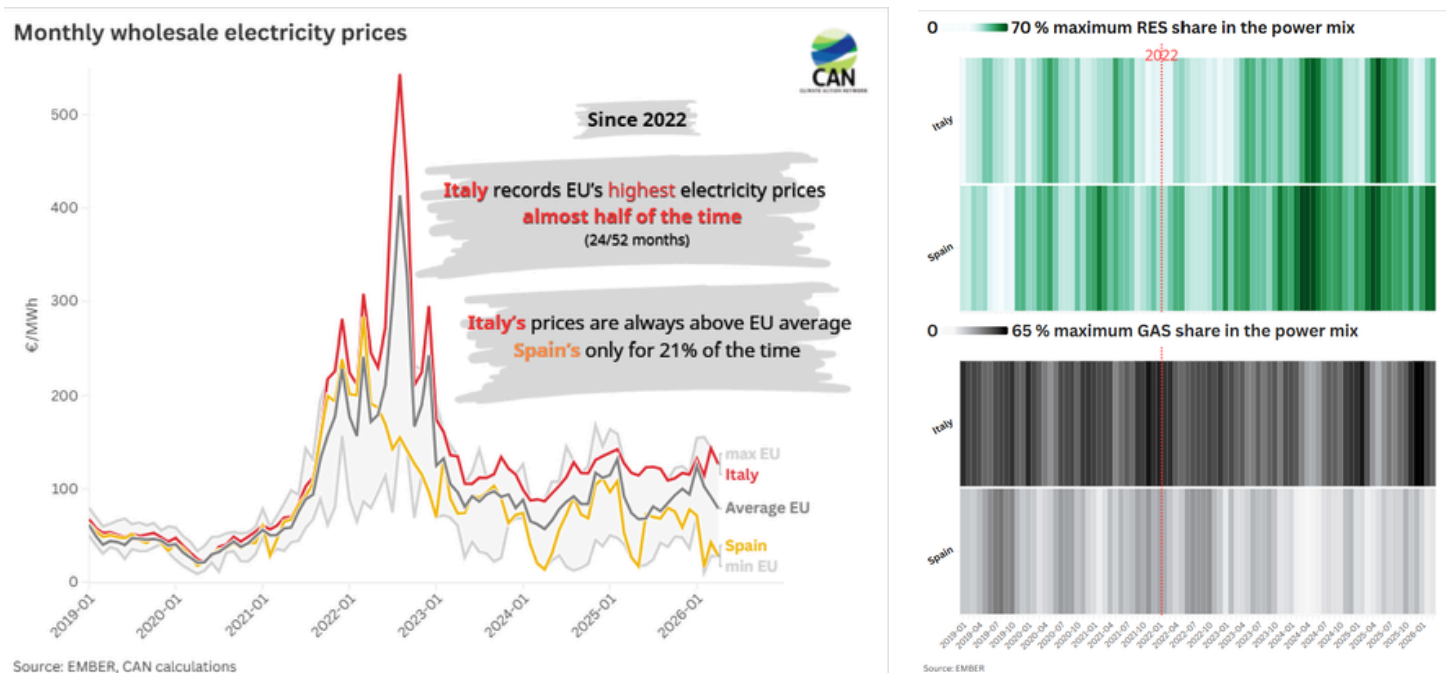
In the absence of a common KPI, this issue continues to be tackled mainly through short-term measures, such as non-targeted subsidies, renovations, rather than through structural solutions. Introducing an EU-level KPI to measure energy poverty under the Governance Regulation but also the Energy Security Framework should enable harmonised monitoring and accountability and support national policies in moving towards targeted, long-term interventions, also in emergency moments.

ANNEX

Reduced fossil gas dependency means energy price relief and more energy security

In power markets, the share of renewables and fossil gas in the energy mix has a direct impact on electricity prices because of marginal pricing. In Spain, high penetration of wind and solar, technologies with near-zero marginal costs, often pushes wholesale prices down, since they displace more expensive generators from the price-setting position. By contrast, Italy relies more heavily on gas-fired generation, which typically sets the marginal price; when gas prices are high, this drives up electricity prices across the system. As a result, Spain has frequently experienced lower prices tied to renewable output, while Italy has seen structurally higher prices due to its greater exposure to fossil fuel costs.

Figure 1: High RES penetration + reduced gas dependency = lower electricity prices



Proposal for an annual gas demand reduction

Overall EU gas demand in 2025 decreased by approximately 16% below pre-crisis levels (2017–2021 average), reflecting a combination of measures and policies triggered by the Russian full-scale invasion of Ukraine. This decline has been accompanied by an accelerated deployment of renewable energy sources, but at the same time demand destruction in several energy-intensive industry sectors.

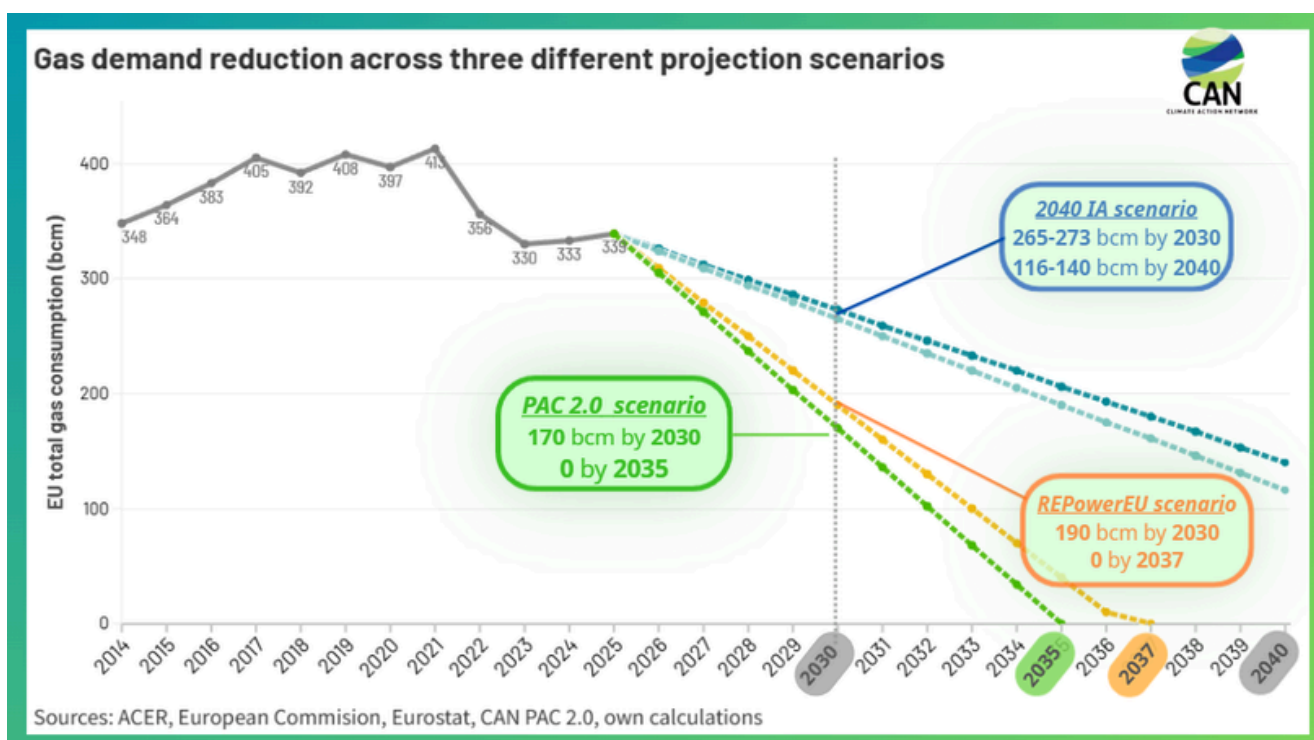
Looking ahead, it is crucial to continue reducing gas demand while ensuring that economic sectors are not adversely affected. Measures targeting structural changes should be sustained and further strengthened.

To explore the potential for further reductions, three different projection scenarios have been considered as presented in Figure 1: REPowerEU, PAC 2.0, and the Impact Assessment (IA) performed by the European Commission in support of the 2040 climate target.

- The **REPowerEU target** is ambitious, calling for a 53% reduction in gas consumption by 2030 compared to pre-crisis levels, corresponding to an approximate 8% annual reduction compared to average consumption 2017-2021. While REPowerEU formally ends in 2030, continuing this reduction rate beyond 2030 would theoretically lead to zero gas consumption by 2037.
- The **PAC 2.0 scenario** is even more progressive, aiming for a gas phase-out by 2035, which translates into a 58% reduction in gas consumption by 2030 compared to pre-crisis (approximately 7% annual compared to average consumption 2017-2021).
- The **European Commission’s IA scenarios** assess the impact of the Climate Law for the 2040 target are comparatively less ambitious. Considering the EU’s decision to achieve 90% emissions reduction by 2040, this analysis focuses on Scenarios 2 and 3, as the 2040 target lies between the projections of these scenarios. Under these pathways, projected gas consumption would be 265–273 bcm by 2030 and 116–140 bcm by 2040, representing a reduction of more than 200 bcm compared to 2025 levels.

Embedding a binding reduction pathway within the Energy Security framework would mark a **shift from reactive crisis management toward proactive demand-side governance**, ensuring energy security not only through diversification of supply but also through a permanent reduction in fossil fuel dependence. According to the analysis, a possible reduction rate could be an annual 7–8%, assuring that structural measures are in place.

Figure 2: Gas demand reduction across different projection scenarios for 2030 and 2040



RESOURCES

ACER, 2026, [Key developments in electricity and EU gas markets](#)

CAN, 2024, [PARIS AGREEMENT COMPATIBLE SCENARIOS \(PAC\) 2.0](#)

European Commission, 2024, [SWD/2024/63 final – Impact Assessment on the 2040 Climate Target](#)

Eurostat, 2025, [Supply, transformation consumption of gas](#)

For the conversion of gas quantities, [conversion factors from BP](#) were used



Climate Action Network Europe asbl
rue d'edimbourg 26, 1050 Brussels, Belgium
Tel: +32 (0) 28944670, fax: +32 (0) 2 8944680
e-mail: info@caneurope.org
www.caneurope.org

Climate Action Network (CAN) Europe



[@caneurope.org](https://twitter.com/caneurope.org)



[@can.europe](https://www.instagram.com/can.europe)



info@caneurope.org



www.caneurope.org
