



Energy crisis: suggestions of replicable energy efficiency measures to reduce energy demand through energy efficiency



Introduction

In 2022, the Russian invasion of Ukraine repositioned Europe's energy independence at the centre of the political debate, pointing to the need to find alternatives to phase out Russian gas imports. It also exacerbated the increase in energy prices, putting consumers, in particular low-income households, in a precarious situation and jeopardising the competitiveness of businesses across the EU.

The European Commission provided an answer to this challenge with the [REPowerEU plan](#), which combined a push for short-term measures to reduce gas demand and mitigate energy prices with a medium to long-term increase in ambition of the EU 2030 targets for renewables and energy efficiency. In practice, while the EU was successful in drastically reducing gas and oil imports from Russia, it largely solved the crisis by shifting countries of import: [according to Eurostat](#), the **EU energy import dependency rate remained relatively stable** between 2021 (55.5%) and 2024 (57%), with Russian fossil fuel imports partly compensated by gas imports from Norway and an important increase in LNG supplied by the United States. **In short, the 2022 energy crisis was not resolved by a structural change to make the EU more independent from energy imports.**

Today, the ongoing war in the Middle East is creating similar vulnerabilities, with prices for gas and oil increasing by 70% and 60% respectively, leading to an additional EUR 27 billion increase in bills for the same [amount of energy imported](#). This shows that the new energy crisis cannot be resolved by the same approach as in 2022. **It must be the moment for the EU to truly make itself more independent from fossil fuel imports thanks to energy efficiency**, alongside renewable energy and electrification, structurally improving its energy security and resilience.

This was recognised by the Commission President Von der Leyen, who [highlighted](#) on more than one occasion the need to reduce energy demand with immediate energy efficiency measures to mitigate the impact of the ongoing energy crisis, with a focus on renovation of buildings and renewal of equipment in industrial operations. In response to the crisis, the Commission released [AccelerateEU](#), a package of actions to provide short-term relief to European citizens and businesses. In the Communication, the Commission commits to putting forth several energy efficiency actions, including, among others, a catalogue of successful and replicable energy efficiency measures to inspire Member States.



The [Annexes](#) of the Communication already details a series of energy efficiency measures, including, among others, the obligation for companies to implement all energy efficiency measures that have a short payback period, zero-interest loans and subsidies for building renovations, and actions to promote energy-saving behaviours.

This non-paper lists a series of energy efficiency measures and best practices that can deliver **both rapid energy savings and a structural reduction of energy use**, to be integrated into the upcoming catalogue.

1 **Ensure the full implementation of the EU energy efficiency framework, namely the EED and the EPBD**

The Fit for 55 package led to the adoption of the 2023 Energy Efficiency Directive (EED) and the 2024 Energy Performance of Buildings Directive (EPBD). These pieces of legislation contain objectives to reduce energy demand, with specific measures for, among others, the buildings and public sectors, and to incentivise businesses to take actions to reduce their energy use.

As the deadline to transpose the EED was set for 11 October 2025, Member States must ensure that the legislation is fully implemented so it can lead to a long-lasting reduction of energy consumption, and therefore fossil fuel imports. **The European Commission should accelerate its transposition assessment and, in case of gaps, intensify its support to Member States** to ensure all provisions are being implemented as soon as possible and measures are being adopted on the ground.

Example: Czechia

In November, the European Commission opened [26 infringement procedures](#) for failure to communicate the full transposition of the recast Energy Efficiency Directive (EED). As of May 2026, the only country which completed its communication for the full transposition of the Directive by the deadline was Czechia.

Showcase how to best adapt national Energy Savings Obligation

One of the core measures in the EU energy efficiency framework to fast-track the delivery of energy savings is the Energy Savings Obligation (ESO) established in the Energy Efficiency Directive. The revised ESO has already been adjusted to reflect the lessons learnt from the 2022 energy crisis with, namely, an increased annual energy savings rate. It also placed a limitation on the counting of energy savings stemming from direct fossil fuel combustion and introduced the ringfencing of a certain amount of energy savings to be delivered among people in energy poverty and vulnerable consumers. The revised ESO must now be fully transposed by Member States, **ensuring that the measures adopted every year, and the delivered savings, contribute even further to the reduction of fossil fuel imports**. The European Commission could offer guidance and showcase best practices of Member States that have adequately and timely adapted their national legislation to fit the new ESO rules.

Example: Spain

The Spanish government just adopted a revision of its Energy Saving Certificates scheme, stemming from Article 8 EED, that will both support the **roll-out of heat pumps in buildings and industry and reduce taxation for energy renovations**. Importantly, heat pumps replacing fossil fuel-powered equipment are awarded a multiplier on the energy savings they deliver, pushing at the same time energy efficiency improvements, electrification, and reduction of fossil fuel consumption. Other incentives for renovations, beyond the replacement of heating systems are also provided, showing how those actions work in synergy.

Example: Austria

The new Sanierungs offensive programme from Austria combines support for energy renovations with support for replacing fossil heating systems, making renovation and heating modernisation work in tandem and offering a structural, long-term solution to making buildings more efficient and resilient. The savings stemming from these energy efficiency actions can be fully counted under the revised ESO.





Example: Poland

In 2018, Poland launched its Clean Air Programme, a national financial scheme to support building renovations for single-family residential building owners. This includes support to replace fossil-fuel based heating devices into modern and decarbonised electric heating technologies, including heat pumps, with EUR 22 billion earmarked for the programme. In 2025, the programme's second phase included 100% subsidies for the most vulnerable, mandatory energy performance audits, and the end of subsidies for gas boilers. The programme is reported by Poland under its Energy Savings Obligation and is projected to deliver 25% of Poland's obligation.

3 Direct energy efficiency improvements firstly towards the ones that need it the most

As mentioned by President von der Leyen in her statement on 13 April “measures should be targeted to vulnerable groups”. However, tax rebates or capping oil and gas prices, although important in the short term, will not solve the EU dependency on volatile fossil fuel prices.

This is why vulnerable consumers must also be supported financially and technically to undergo long-term energy efficiency improvements. Low-income households often struggle with upfront investments or awareness of the available solutions to improve their homes. Even more so because the most vulnerable citizens often live in the worst-performing buildings and energy efficiency measures are crucial to alleviating energy poverty.

Example: France

France recently increased its objective under its Energy Savings Obligation by 27% for the period 2026-2030 compared to the period 2023-2025 and specified that one quarter of the savings must be delivered among energy-poor households, **going beyond the earmarking that would be required by the EED** (around 11%).

Example: The Netherlands

The [Dutch National Insulation Programme](#) offers support for vulnerable households while aiming to provide structural building improvements. It aims to insulate 2.5 million homes by 2030, with a focus on the worst-performing ones. To date, municipalities have applied for support covering more than 490,000 homes.

Example: Ireland

Ireland's [Warmer Homes Scheme](#) provides fully funded energy renovations to citizens who receive welfare payments and enables vulnerable households to access funding for works such as insulation, efficient lighting, or renewable heating systems. Over 135,000 homeowners have received support from this scheme. In parallel, Ireland also has an [agreement with the European Investment Bank](#) to guarantee renovation loans.

4 Support businesses to adopt energy efficiency solutions

In addition to citizens, businesses are also heavily impacted by the increase in energy prices for their operation, with negative effects on their competitiveness. In a time of high energy prices, the most competitive company is the most energy efficient one. **As found by a [recent EIB report](#), firms that implement energy efficiency measures outperform those without these measures**, and this benefit improves as their energy intensity increases. Energy efficiency also makes businesses “structurally more resilient to future price shocks”, resonating with the current situation.

This is why financing schemes and technical support are also needed for businesses that wish to increase their energy performance, for example, as a result of the energy audits required under [Article 11 of the EED](#).





Such improvements can be implemented quickly and have rapid effects on industries' energy consumption, also leading to a lower energy demand in the national energy system. Building on existing schemes, such as the European Investment Bank scheme for Small and Medium Enterprises (see below), **the Commission should fast-track available tools for businesses to access financial and technical support for energy efficiency upgrades, also with the support of the European Energy Efficiency Financing Coalition.**

Example: European Investment Bank

In November 2025, the European Investment Bank Group and the European Commission launched a EUR 17.5 billion financing initiative to support energy efficiency improvements in SMEs. The goal of the scheme is to have more than 350,000 companies across Europe undergoing energy efficiency actions in the 2025-2027 period, and to mobilise a total investment of over €65 billion by 2027 for this effort. With the ongoing energy crisis, SMEs should make use of this opportunity to reduce their energy costs.

Technological Example

Scaling up thermal insulation in industrial boilers, ovens, pipes, going beyond the level required for safety reasons and process control, can save up to 14 Million Tonnes of Oil Equivalent (Mtoes). The EU-wide TIPCHECK auditing tool provides a good example of how to empower industries to do so, helping industries to identify inefficiencies and implement improvements, leading to significant energy savings. More importantly, industrial insulation measures generally have a very short payback time, often less than 2 years.

Example: Spain

In its NECP, Spain indicates two measures to facilitate the penetration of energy saving technologies in industry, which are financed through a combination of the Energy Certificate Facility, public aid programmes, and voluntary agreements. These measures promote the replacement of industrial equipment with more efficient ones and the installation of Energy Management Systems. They delivered around 1,600 GWh of savings in 2024 and are projected to deliver 16.3 Mtoe of energy savings between 2021-2030.

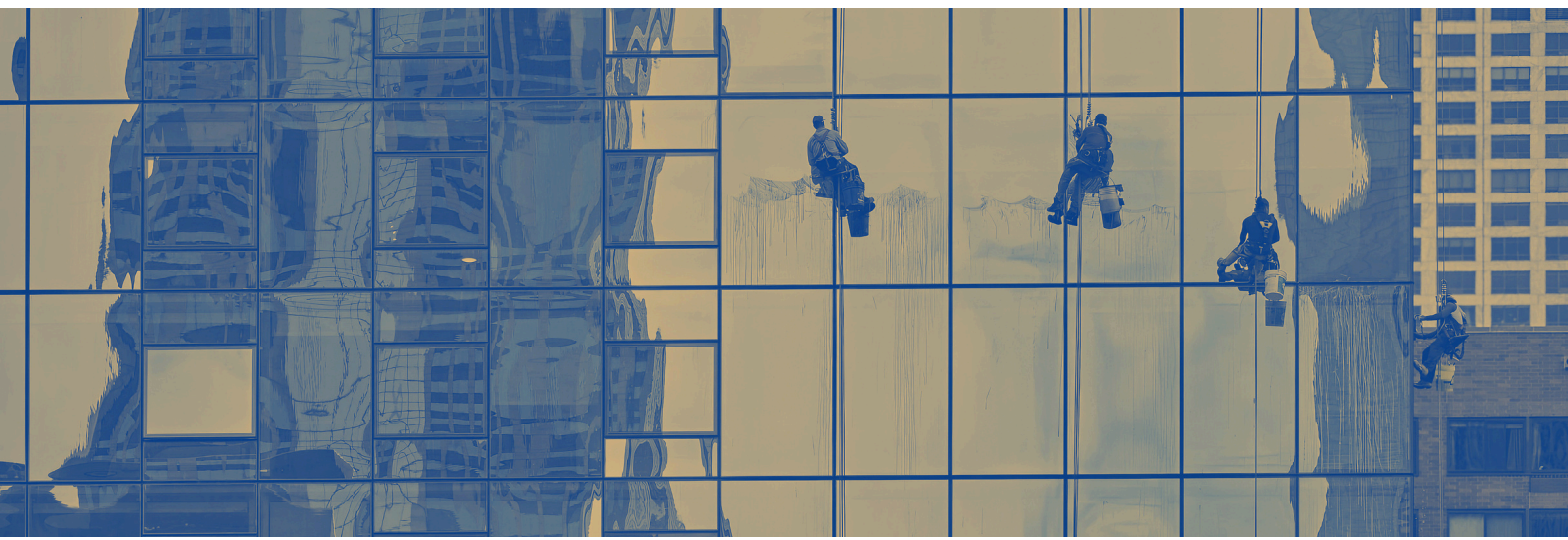
5 Accelerate and reduce the costs of electrification with energy efficiency

Electrification and energy efficiency are mutually reinforcing. On one hand, electrification improves the efficiency of both the EU energy system and end-uses, leading to lower energy consumption for a similar level of services. On the other hand, energy efficiency, by reducing energy demand across sectors, enables a faster and more affordable electrification of the EU economy through a reduction of the investment needed to expand the grids.

This combined effect of electrification and energy efficiency measures will fast-track the phasing out of imported fossil fuels. **The Commission should lay out suggestions of measures to increase both energy efficiency and the electrification rate, such as renovation of buildings, combining insulation and electrified heating & cooling systems.** These could include rebalancing energy taxation to favour energy efficiency and electrification and directing public money towards incentives to install energy efficiency solutions.

Example: France

The French Government just published a list of new measures to fast-track electrification of its economy, with the support for electrification moving from EUR 5,5 billion to EUR 10 billion every year until 2030. It announces, among others the end of gas boilers in new builds, the installation of one million heat pumps every year and a social leasing of 50,000 more electric vehicles from June onwards. This increase of funding is welcomed, it should, however, be additional to, and not come at the expense of, existing funds for other energy efficiency measures.





Example: Czechia

Czechia's [New Green Savings Programme](#) focuses on providing support for renovation of homes and buildings, as well as the replacement of heat sources with heat pumps, among others. It has already supported 500,000 beneficiaries between 2009 and 2024. It is now funded through the Modernisation Fund after initial support from the RRF, showing how strategic EU funds can be used to maintain a long-term and structural energy savings programme.

Example: Belgium

The [Belgian government recently announced measures](#) to rebalance energy taxation in favour of energy efficiency and electrification. This will be done progressively from 2025-2029, reducing the taxation of electricity compared to other energy sources.

Support the shift towards long-term energy savings actions

Many Member States are once again adopting support schemes that help consumers pay for their fuel bills. According to [a recent analysis from the International Energy Agency](#), the Energy Crisis Policy Response Tracker, this is the most common response to the crisis, with many nations adopting policies and schemes to reduce fuel prices as a reaction to the war in the Middle East.

Even though these support measures are necessary in the short term, the **limited available public funding should be redirected towards supporting structural energy efficiency improvements**, as well as promoting energy communities that support citizens in using their energy in a more efficient way, while producing their own renewable energy.

Example: Energy communities

Energy communities can be mobilised to deliver energy savings in the residential sector. Households that join an energy community also implement energy saving measures to ensure their renewable energy production is maximised; research has shown that their energy use can be cut by up to 28%.

Following the publication of the Citizens Energy Package, the upcoming catalogue of measures should incentivise Member States to increase their support for Energy communities.

Example: Spain

Studies show that following the installation of thermal submetering devices or heat cost allocators, building occupants are more attentive to their consumption, leading to an adjustment of consumption behaviour that results in 15 to 30% of energy savings without compromising comfort.

In Spain, submetering data is used to bill residents based on their own consumption, but legislation also mandate its use to detect system malfunctions and unusual deviations in heating, cooling, and domestic hot water demand, triggering inspections and corrective measures when abnormal consumption patterns are identified, avoiding unnecessary energy waste.





The Coalition for ENERGY SAVINGS

