

# What's holding back competition in energy markets?

Category: Energy, Product market regulation, Uncategorized  
written by oecdecoscope | April 1, 2026



*Electricity and natural gas markets power modern economies. They fuel industrial production and transportation services, enable digital infrastructure, and meet households' everyday energy needs. Because electricity and gas are inputs needed in almost every economic activity, how these markets perform matters beyond the energy sector itself.*

By Cassie Castle, OECD Economics Department

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A large body of evidence shows that well-designed, competitive energy markets can discipline prices, strengthen investment incentives, and support innovation. Competition forces firms to improve efficiency, adopt new technologies and respond to consumer needs. When competition is weak, those pressures fade (OECD, 2022). The result is not only higher energy bills, but wider consequences for businesses, households and economic performance.

According to a new OECD working paper based on the OECD

Product Market Regulation (PMR) indicators, countries have already undertaken significant reforms to support competition. For much of the 20th century, electricity and natural gas sectors were mostly organised as vertically integrated state-owned monopolies, with limited incentives for efficiency or innovation. A major wave of liberalisation reforms, particularly during the 1990s, transformed this model. Many countries made significant steps to unbundle monopoly networks, regulate third-party access to infrastructure and open generation and retail markets to new entrants.

Despite this progress, important gaps remain. The new OECD working paper examines the current state of the regulatory framework in the electricity and natural gas markets across 50 countries. It evaluates the extent to which these frameworks support competition by lowering entry barriers, ensuring non-discriminatory access to monopoly network services and reducing switching costs across the supply chain. Drawing on the latest update of the OECD PMR indicators, the paper shows that while legal liberalisation is widespread, key regulatory shortcomings continue to limit the full benefits of competition (see Figure).

## **The PMR Sector Indicator for Energy: Latest results**

### **Four issues stand out:**

**First**, in some countries the monopoly network infrastructure – transmission and distribution grids – remains weakly separated from competitive activities like generation, storage and retail supply. In electricity, around 10% of surveyed countries impose only accounting separation or no separation at all. In natural gas, this rises to around 16% of countries. Where vertical integration persists, firms have both the incentive to favour their own affiliates and restrict rivals'

access to essential networks. Stronger forms of unbundling, such as legal or ownership separation, provide more robust safeguards and are widely recognised as best practice.

**Second**, a number of countries continue to restrict households and small businesses from choosing their retail energy supplier and maintain broad retail price regulation beyond targeted support for vulnerable households. This is usually the case when the market is not yet fully competitive. Where entry barriers persist, switching costs are high, or wholesale markets do not function effectively, premature liberalisation can lead to poor outcomes for consumers. However, concerns about price volatility may offer an additional explanation for why regulated retail tariffs remain in place, sometimes alongside market-based offers, particularly following the 2021-2023 energy crisis. Sharp price swings prompted some countries to extend or maintain retail price regulation for small consumers, even in otherwise well-developed markets. The paper explores this tension further. While price controls can provide stability in periods of stress, open-ended measures risk distorting price signals, weakening competitive pressures over time and reducing the benefits of open markets.

**Third**, even where consumers are free to choose, many lack the tools to engage effectively in retail markets. Retail competition can only deliver meaningful benefits if consumers have access to the information needed to make informed decisions when choosing their supplier. Most countries require suppliers to provide detailed consumption and cost data in monthly bills, but only a few also offer independent price comparison tools. The low rate of roll-out of smart meters also limits the information available to consumers to understand their patterns of consumptions and select the most suitable tariff. Without active support to help consumers make informed choices, the time and effort required to compare offers and change supplier acts as a barrier, even when cheaper offers exist. Lowering these switching costs is

essential to making competition work in practice.

**Fourth**, in electricity markets, demand-side flexibility is increasingly important for grid stability and cost efficiency, helping manage peak demand and integrate variable renewables. However, explicit demand response is not universally available. Around 21% of the countries surveyed do not allow these programmes, and among those that do, roughly one-third restrict participation to industrial users, leaving smaller consumers, in particular households, largely excluded. Expanding household participation requires smart meter deployment to enable time-of-use and dynamic tariffs, alongside regulatory frameworks that permit dynamic pricing and aggregator participation. When these conditions are in place, households can shift consumption away from peak periods, reducing their energy bill, while limiting system costs and strengthening grid stability.

These findings point to an unfinished reform agenda. Legal liberalisation has advanced considerably, yet structural gaps still limit countries from enjoying the benefits of effective competition. Closing these gaps is becoming more urgent as energy systems shift toward higher shares of renewable and decentralised generation. Integrating variable supply requires greater flexibility through responsive demand and clear price signals. Competitive markets are key to delivering these adjustments efficiently. Completing the reform process is therefore not only about improving outcomes within the energy sector, but about supporting a more resilient energy system that underpins productivity and growth across the wider economy.

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For more information, please visit the OECD Product Market Regulation (PMR) webpage: <https://www.oecd.org/en/topics/product-market-regulation.html>

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# Wired for power: The energy behind the AI revolution

Category: Digitalisation, Energy, Uncategorized  
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*Artificial intelligence is fast becoming a defining driver of electricity demand in Europe. As AI deployment accelerates, the key constraint is shifting from computing power to the capacity of electricity grids to absorb large, continuous and localised loads. This blog examines how updating and modernising grid planning, connection rules and energy regulation are emerging as important enablers of AI's future in the EU.*

*By Ruben Maximiano and Wouter Meester, OECD Economics Department.*

## AI's energy reality

Dieser Blog ist auch auf Deutsch verfügbar: Strom – die treibende Kraft der KI-Revolution

AI is often discussed as though it operates independently of physical systems. In practice, AI depends on vast amounts of electricity. Its future will be determined not only by advances in algorithms and computing power, but also by kilowatt-hours – by the ability of electricity systems to deliver power reliably and at scale.

Training and running frontier models requires continuous and increasingly large volumes of power. According to the IEA, a typical AI-focused data centre already consumes as much electricity as 100 000 households, whilst the largest new facilities could require 20 times more, placing them on par with the consumption of small countries (IEA, 2025).

As a result, an important binding constraint on AI deployment is no longer generation alone. It is increasingly the capacity of electricity systems to absorb, transport and manage large, continuous and geographically concentrated loads without conflicting with other usages. As the recent OECD *Diagnostic Tool for Reducing Regulatory Barriers to Solar, Wind and Pumped Hydro Storage in the EU* report shows, tackling these also involve better regulations.

The importance of energy to AI roll-out is visible in corporate energy sourcing strategies. Big Tech companies now account for the majority of Corporate Power Purchase Agreements (PPAs) in Europe (see figure 1). Yet the scale and speed of AI deployment are already outpacing what traditional PPAs can guarantee. Hyperscalers are turning to direct investment in generation, including solar, wind and nuclear, to secure long-term supply.

Taken together, these developments point to the conclusion that the next frontier of AI policy is not only about how much

electricity is produced, but also about how grids are planned, reinforced and that to a significant extent depends on how grid investment and grid connection rules are regulated.

To address such barriers systematically in the EU, the OECD report *Diagnostic Tool for Reducing Regulatory Barriers to Solar, Wind and Pumped Hydro Storage in the EU*, identifies the regulatory bottlenecks that slow deployment of renewables in the EU and constrain grid availability, with clear parallels for policymakers seeking to adapt energy rules to enable AI deployment. As this blog is based on this work it refers mainly to EU practices and energy mix.

### **Global AI and local grids**

While global electricity demand from AI remains moderate (expected to reach 3% globally by 2030 and 4.5% in the EU)(IEA 2025, Ember 2025), its impact is highly concentrated. Data centres cluster in locations offering robust fibre connectivity, favourable cooling conditions, low electricity prices, and fast, reliable grid access. This concentration amplifies pressure on local grids and exposes the limits of existing planning and connection frameworks.

Ireland illustrates these risks. In 2023, data centres accounted for around 21% of electricity consumption in 2023 up from 5% in 2015. Much of this has been concentrated around Dublin, where data centres consume roughly half of electricity produced. The resulting strain on the network raised security-of-supply concerns and led to the Transmission System Operator stop accepting applications for new data centres in Dublin until 2028 (Ember, 2025, CRU, 2025). In response, the national regulator is introducing a number of regulatory changes, including requirements for new data centres to install dispatchable generation or storage facilities on site.

The countries with more abundant and affordable electricity and stronger grids have a comparative advantage for the

location of data centres. For instance, the Nordic countries have become attractive AI destinations due to abundant energy, strong grids and low-carbon baseload (Ember 2025). More broadly, IEA analysis suggest that jurisdictions offering significantly faster grid-connection timelines could capture up to 20% more data-centre growth by 2030 (IEA, 2025).

### **How AI stresses electricity systems**

These pressures materialise across three interconnected timescales. In the long term, large AI campuses require transmission and distribution networks with sufficient hosting capacity, yet grid expansion and permitting often take 5 to 10 years. This makes anticipatory planning and co-ordination between data-centre siting, grid investment and local generation essential. Just as important is grid optimisation: improving system efficiency through digitalisation and AI-based system management.

In the medium term, inefficient connection rules have become a binding constraint. Long queues, speculative applications and first-come, first-served rules delay viable projects and distort planning. In real time, AI workloads introduce rapid power swings – far faster than traditional industrial loads - challenging frequency stability and voltage control.

Addressing these pressures requires regulatory frameworks that enable not only physical grid reinforcement, but also optimisation through digitalisation, flexibility procurement and stability services, and that allow system operators to invest in software and operational solutions alongside traditional capital assets.

The Diagnostic Tool shows that key elements of the regulatory system that contribute to address these pressures, would include:

- Anticipatory grid investment supported by clear cost-

recovery rules.

- Criteria-based connection queues to prioritise ready and system-beneficial projects.
- Hosting-capacity maps to guide efficient siting.
- Flexible access arrangements, including non-firm and hybrid connections.
- Tariff and market design that value flexibility and stability services.

## **How countries are responding**

Countries are increasingly adapting electricity regulation to manage the highly localised grid impacts of AI-driven demand. Governments are experimenting across different parts of the power system. In Europe, Italy is improving locational planning through detailed hosting-capacity maps; Portugal is reallocating unused capacity and simplifying storage licensing; the UK is reforming connection queues by prioritising projects that are “first ready, first connected”; the Netherlands is deploying congestion-management zones and prioritisation criteria; and Finland is integrating data centres into heat-recovery and clean-power strategies.

Despite this diversity, common policy lessons seem to emerge. Grid access can no longer be treated as a simple administrative queue and requires prioritisation based on readiness. Locational transparency is critical to guide efficient investment. Flexibility and digital optimisation must complement traditional grid reinforcement. Finally, grid planning and permitting need to become anticipatory rather than reactive. Countries applying these principles are better positioned to accommodate AI-scale demand while preserving reliability and affordability.

## **Powering the age of intelligence**

AI is reshaping electricity demand at a scale that is now central to economic strategy. Ensuring reliable, affordable

and low-carbon supply is becoming a prerequisite for attracting and sustaining digital investment. In the age of AI, competitiveness, autonomy and resilience will increasingly be determined not only by data and algorithms, but by the rules that govern the compute infrastructure and their electricity systems.

The OECD–EU Diagnostic Tool offers governments a practical roadmap to modernise regulatory frameworks and align them with the needs of an electricity-intensive digital economy.

**\*We will be launching the Diagnostic Tool today, 29<sup>th</sup> January. You may register here.**

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# **Powering competitiveness:**

# Europe's path to energy security and growth

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*by Ruben Maximiano and Wouter Meester, OECD Economics Department.*

Europe's competitiveness is increasingly linked to the availability of secure, affordable and reliable electricity. As electrification accelerates across industry, transport, heating and digital services, including AI data centres, power has become a strategic input to growth, investment and innovation, a point also underscored by the 2024 Draghi report. However, as outlined in a recent OECD report *Diagnostic Tool for Reducing Regulatory Barriers to Solar, Wind and Pumped Hydro Storage in the EU*, five key types of regulatory barriers slow the deployment of these technologies in Europe. This results in significant opportunity costs, especially in the European Union, where high import dependence exposes firms and households to price volatility, supply shock and higher prices.

The 2021–22 energy crisis laid bare this vulnerability: the EU's energy import bill surged from EUR 137 billion in 2020 to nearly EUR 549 billion in 2022. Even after prices eased, the 2023 import bill remained well above historical levels.

## **Why the electricity system is changing and why rules matter**

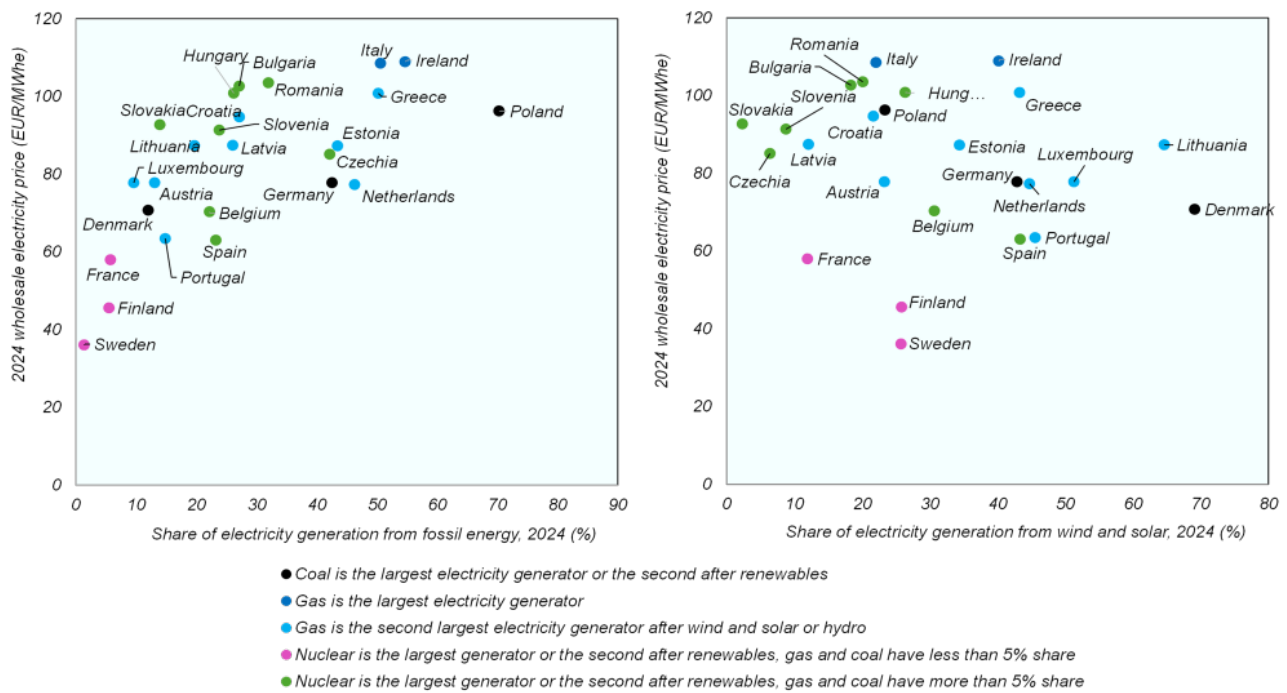
At the same time, Europe's power system is being reshaped by

technologies with fundamentally different system characteristics, including variable renewables, storage, demand-side response and digital controls. These resources increase the need for flexibility, real-time coordination across grids and more granular planning, particularly as new electricity-intensive loads, such as data centres, concentrate demand in specific locations. This transformation exposes the limits of regulatory frameworks designed for a centralised, thermal-based system. Ensuring the EU's energy security, including by delivering its new energy mix, depends on fit-for-purpose regulation as much as on physical infrastructure.

### **Competitiveness increasingly depends on affordable, “always-on” electricity**

In addressing its energy security, Europe has already made important progress. Since Russia's invasion of Ukraine, renewable energy has expanded substantially, helping to cushion price shocks (see Figure 1). Evidence suggests that EU countries with higher shares of wind and solar in their electricity mix tend to exhibit lower wholesale prices on average (Figure 2), reflecting the declining technology costs and the downward pressure renewables place on marginal pricing. Moreover, recent system-level modelling by WindEurope shows that, even once the additional cost of grids, storage and backup capacity are taken into account, a renewables-led pathway is the lowest-cost option for Europe's power system.

**Figure 2. Relationship between the average wholesale electricity prices and the share of electricity generation from wind and solar in EU Member States, 2024**



Source: OECD calculations based on Ember Yearly and Hourly Electricity Data

Yet the next wave of electrification will put (even greater) pressure on the EU’s electricity system. For example, in the EU, demand from data centres could rise from around 96 TWh in 2024 to about 236 TWh by 2035, increasing their share of total electricity use from 1.5% to nearly 6%.

**Energy system upgrades require regulatory upgrades – and a tool to help deliver them**

This increasing electrification, with more decentralised generation, new flexibility technologies and large, concentrated loads such as data centres, requires regulatory frameworks that are aligned with these new system characteristics.

In this context, regulation increasingly functions like infrastructure itself: it must be planned ahead of need, operate reliably, and remain aligned with system needs. Outdated or fragmented rules quickly become binding constraints on investment, adding years to project timelines and raising costs. As such, modernising and simplifying

regulatory frameworks have become a strategic lever of energy security and competitiveness.

Recent EU legislation, including the Renewable Energy Directive III, provides an important foundation. Implementation at national level, however, will determine whether projects proceed from pipeline to operation.

Across EU Member States, five recurring regulatory barriers consistently slow deployment and undermine system efficiency:

First, unclear or restrictive legal frameworks create uncertainty and deter market entry, particularly for newer solutions. Where rights and permitted uses have been clarified – such as enabling dual land use for both agriculture and PV solar in France and Italy – deployment has accelerated; where ambiguity persists, projects stall.

Second, insufficient remuneration for new system services limits investment, for instance in flexibility. Many frameworks still do not reward services such as inertia or fast frequency response on a standalone basis, despite their growing importance for system stability. Ireland's recent market reforms to remunerate these ancillary services illustrate how rule changes can unlock these services.

Third, infrequent and inefficient spatial planning and permitting remain a major drag on investment. Complex, sequential procedures involving multiple authorities often result in long timelines distorting siting decisions and raising financing costs. Where procedures have been simplified, impacts have been immediate and significant: reform to grid-permitting rules in Germany have enabled the Federal Network Agency (BNetzA) to approve roughly four times more transmission-line kilometres in 2024–25 than in previous years (see figure 3).

Fourth, outdated grid-connection rules create artificial bottlenecks. First-come, first-served queues allow speculative

projects to hold capacity delaying viable investments. Sweden's readiness-based connection rules show how prioritisation can improve outcomes without new infrastructure.

Finally, grid-investment frameworks still contain structural disincentives that limit system optimisation. Regulation often favours capital-intensive network expansion while constraining anticipatory investment, flexibility procurement, and digital solutions. In some Member States, system operators cannot recover the costs for non-wire alternatives, even when these are faster and cheaper than traditional reinforcement.

These barriers can add years to project timelines and increase financing costs. They affect not only renewable developers but also energy-intensive industries, such as AI infrastructure and advanced manufacturing, that require stable, low-cost electricity to remain competitive.

To address these barriers systematically, the OECD has developed the *Diagnostic Tool for Reducing Regulatory Barriers to Solar, Wind and Pumped Hydro Storage in the EU* for the European Commission. The Tool helps policymakers at national and sub-national levels identify where rules are misaligned with system needs, prioritise reforms, and coordinate implementation – providing a practical roadmap for accelerating electrification while strengthening both energy security and competitiveness.

With clear rules, coordinated planning and tools such as the OECD Diagnostic Tool, the EU can move from energy dependence toward electric resilience – strengthening both economic competitiveness and energy security.

**\*We will be launching the Diagnostic Tool on 29<sup>th</sup> January. You may register here.**

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# The OECD Energy Support Measures Tracker: Looking back to move ahead

Category: Energy,Uncategorized

written by oecdecoscope | April 1, 2026



*By Cassandra Castle, Assia Elgouacem, Giuliana Sarcina, Enes Sunel, and Jonas Teusch*

In the past few years, the global economy has experienced two major crises: the COVID-19 pandemic and Russia's war of aggression against Ukraine. The recovery from the pandemic and the war have both amplified tensions in the energy sector and provoked a surge in energy prices.

## **The fiscal response to the energy crisis has been large, especially in Europe**

*The 2023 OECD Energy Support Measures Tracker*, released on 6 June 2023, shows that in 2022, support measures in response to higher energy prices had a gross fiscal cost of 0.7% of GDP in the median OECD economy, rising to over 2.5% of GDP in some European countries (Figure 1). By way of comparison, these costs exceed what the median OECD country spends on unemployment benefits and are about half of the expenditure on family and child benefits. Comparable levels of fiscal support are foreseen for 2023 in the OECD as a whole. However, the actual cost of support will heavily depend on the evolution of energy prices.

## **The 2023 OECD Energy Support Measures Tracker provides comprehensive data and information on energy-crisis related fiscal support measures**

Documenting the measures governments have implemented to face the energy price shock and being able to compare them across countries, remains critical to improving support policies and building resilience against future crises. The 2023 Tracker systematically catalogues support measures in place from February 2021 to May 2023 in 41 countries – 35 OECD countries and 6 non-OECD economies (Brazil, Bulgaria, Croatia, India, Romania and South Africa).[1] The data have been collected and processed by OECD country, fiscal and energy policy experts and validated by national administrations.

The dataset provides granular information to comprehensively characterise individual support measures. These include start

and end dates, gross fiscal costs, type of support and delivery mechanism, main beneficiaries of the measures (indicating whether vulnerable households or firms from specific sectors are targeted, and, where applicable, summary information on the differentiation of support between beneficiaries) and the impacted energy carriers (such as diesel, gasoline, electricity, natural gas). The sheer number and diversity of the measures makes classification challenging.

The 2023 Tracker classifies more than 550 support measures into two main categories: (1) price measures (e.g. reduced energy taxes and energy price caps), estimated to cost USD 422 billion in 2022-23; and (2) income measures (e.g. transfers and tax credits to consumers), estimated to total USD 383 billion in 2022-23. Within income measures, a distinction is made between measures that reduce the average price of energy in consumers' energy bills and measures that are unrelated to the level of energy consumption (Figure 2).

The measures – which were implemented swiftly amidst uncertainty, political economy constraints, and a focus on administrative simplicity – affect the behaviour of firms and people in different and significant ways, and may contribute to or detract from important longer-term policy objectives. Income support can maintain incentives to save energy whereas price measures weaken them, propping up demand for fossil fuels and effectively acting as a negative carbon price. Among income measures, those that are unrelated to the level of energy consumption tend better to preserve incentives for energy efficiency improvements than those that reduce the average price in the energy bill paid by consumers.

### **Measures were rarely targeted and increased the incentive to consume fossil fuels**

Untargeted support measures make up the majority of the estimated total cost of support in 2022-23 (Figure 3). Among

these, energy price support measures account for over 50% of total spending and carry substantial non-fiscal implications. While price support measures are straightforward to design and often politically popular, they weaken incentives to save energy and are rarely targeted (over 92% of energy price support measures are untargeted), meaning that they tend to disproportionately support better-off households.

## **A clear taxonomy of measures and data can enable the design of better energy support policies when they are needed**

Energy prices are receding, but possible renewed tensions in energy markets due to geopolitical developments and bottlenecks along the energy transition may result in higher energy price volatility in the future. Preparing government policy for possible new energy price spikes requires data and information on how support measures affect the behaviour of households and firms, their impact on public finances and their unintended consequences. The OECD Tracker is a resource for policymakers to do just that.

## **Interactive dashboard: Energy measures 2022/23**

### **More information**

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[1] The government of Iceland has not taken any energy support measures. The Tracker also includes information on another

five countries, for which it was either not possible to quantify the gross fiscal cost of the energy support measures (Argentina, China, Hungary and Indonesia) or these were deemed to have no impact on budget deficits, as is the case of measures providing credit and equity support (Switzerland).

**See also:** 2026 OECD Energy Support Measures Tracker **and accompanying blog: Crude Awakening: Why energy shocks demand more than quick fixes.**

The sharp rise in energy prices linked to the Middle East conflict is reviving a familiar policy dilemma. When energy costs jump sharply, governments come under pressure to shield households and firms. As of March 2026, governments across the OECD have acted swiftly to shield households and firms from rising fuel costs.

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# What are the economic and environmental effects of the European Union Emissions Trading Scheme?

Category: Energy

written by oecdecoscope | April 1, 2026



By Daniel Nachtigall, OECD Environment Directorate and Antoine

Dechezleprêtre, OECD Directorate for Science Technology and Innovation

The European Union (EU) put forward an ambitious climate mitigation target of reducing greenhouse gas (GHG) emissions by at least 55% below 1990 levels by 2030. How will the EU deliver? Carbon pricing – through the European Union Emissions Trading System (EU ETS) – is expected to deliver a large part of the emissions reductions. Under an ETS, installation operators can trade GHG emission permits with each other, ensuring that emissions are reduced cost-effectively. Launched in 2005, the EU ETS is the world's first international ETS, covering over 14,000 energy-intensive plants across 30 European countries, accounting for around 40% of the EU's total GHG emissions. From the outset the EU ETS raised concerns about its environmental effectiveness and potential negative economic effects for the European industry by putting regulated firms at a disadvantage vis-a-vis their foreign competitors.

A recent paper 'The joint impact of the European Union emissions trading system on carbon emissions and economic performance' published by OECD authors in the leading Journal of Environmental Economics and Management sheds light on this concern. Based on an earlier OECD working paper, the study is the first comprehensive, European-wide analysis of the impact of the EU ETS on both carbon emissions and economic performance of regulated companies during the first two phases of the system's existence, from 2005 to 2012.

The study uses data for carbon emissions of installations from the national Pollutant Release and Transfer Registers (PRTR) of France, Netherlands, Norway and the United Kingdom, complemented with data from the European PRTR. It also includes economic data of firms for all European countries to investigate the impact of EU ETS on various economic dimensions, including employment, fixed assets, profits, and revenues. The study makes use of the EU ETS inclusion

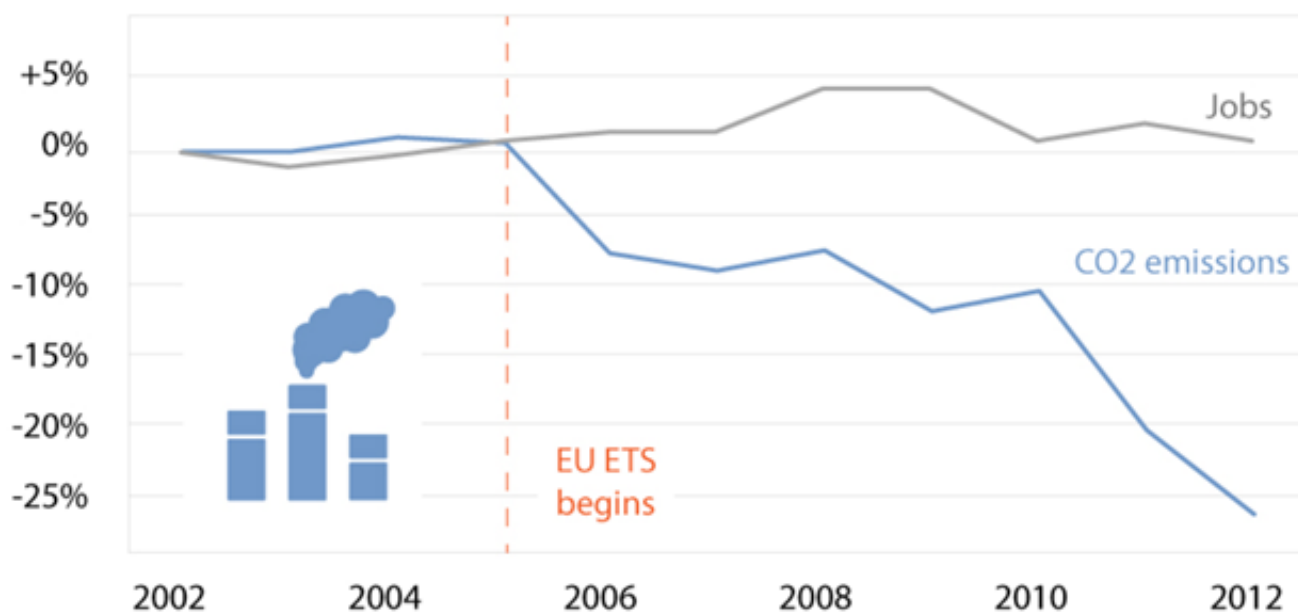
criteria, according to which installations below a certain capacity threshold do not need to participate in the carbon market. It compares installations or firms operating in the same country and the same sector and of similar characteristics, but which fall under different regulatory regimes since the launch of the EU ETS.

So what does the study tell us?

***The EU ETS reduced emissions while not negatively affecting economic outcomes***

The EU ETS led to a reduction of carbon emissions of around 10% between 2005 and 2012 but has not had any adverse impact on employment (see Figure 1). Most of the emissions reductions were observed in the second trading phase of the EU ETS and were primarily driven by larger installations. This is in line with the observation that pollution control technologies are capital-intensive and involve relatively high fixed costs. There is also evidence that a more generous allocation of free allowances results in a weaker reduction of emissions.

**Figure 1. The impact of the EU ETS on jobs and CO<sub>2</sub> emissions**



*Note:* The graph shows the percentage change on CO<sub>2</sub> emissions and number of employees by year of firms participating in the EU ETS versus those not participating.

*Source:* Based on Dechezleprêtre et al. (2018) and Dechezleprêtre et al. (2023)

The study also finds that the EU ETS has not had a negative effect on regulated firms' revenue, profits, fixed assets and jobs. In fact, the EU ETS seemed to have led to an increase of revenues and fixed assets of regulated firms – contrary to what could have been expected. One explanation could be that the EU ETS induced regulated firms to increase investment – likely in carbon-saving technologies – which, in turn, may have increased productivity.

***More research is needed to reflect more recent developments in carbon pricing***

In its first eight years of existence, the EU ETS effectively reduced carbon emissions without negatively affecting the economic performance and competitiveness of European regulated firms. This is in line with recent literature reviews on the effects of carbon pricing on environmental and economic outcomes. While these results demonstrate that concerns about negative effects of the EU ETS on the competitiveness of the European industry have been vastly overplayed, more research is needed to assess these findings against new realities. In fact, the period between 2005-2012 was characterised by relatively low permit prices of EUR 20/tCO<sub>2</sub> on average and a generous allocation of free allowances. From mid-2020, permit prices were fluctuating around EUR 80t/CO<sub>2</sub>, so it remains to be seen whether these findings hold true in a high price environment.

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This is in line with *previous OECD work (OECD, 2021) and findings from* recent literature reviews on the effects of carbon pricing on environmental and economic outcomes.

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*This blog article was cross-posted on the OECD Environment Focus platform, which aims to increase dialogue on a variety of environmental topics among policy makers, experts and the general public.*

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# Greece: Achieving the green economy transition

Category: Energy

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Greece faces challenges from a warming climate and high investment costs for the green transition.

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# **Rising energy prices and productivity: short-run pain, long-term gain?**

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Energy price increases hamper firms' productivity in the short-term, but could generate positive productivity gains in the medium term.

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# **Confronting the energy crisis: changing behaviours to reduce energy consumption**

Category: Energy

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Households react to prices as well as habits, expectations and biases. Energy saving measures should factor in these behavioural aspects.

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# Energy expenditures have surged, posing challenges for policymakers

Category: Energy

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Energy expenditures in OECD economies increased rapidly in 2022, raising the risk of widespread recessions among advanced economies.

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# What role for carbon pricing in reducing emissions and generating revenues?

Category: Energy

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Higher and broader-based carbon prices will result in significant emission cuts and revenue but will not by themselves deliver the transition to net zero.