

ELECTRIC COLLECTIVE: EUROPE'S CLEAN ENERGY FUTURE WITHOUT RUSSIA

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SUMMARY

- Following Russia's all-out invasion of Ukraine, the EU and member states embarked on "energy diplomacy" in search of new international supplies of energy.
- Between 2021 and 2026, the EU successfully diversified its sources of energy and reduced its dependence on Russian fossil fuels. It began working more closely with partners around the world on clean electricity imports and critical raw materials.
- However, structural weaknesses remain for the EU, including a paucity of clean energy agreements and a preponderance of gas deals locking Europeans into fossil fuel reliance.
- ECFR's [Energy Deals Tracker](#) also reveals that most energy diplomacy was undertaken by individual member states. Europeans are therefore currently missing out on the energy security benefits of joint action led either by the EU or by collectives of member states.
- To strengthen their international energy cooperation, the EU and its member states should agree a high-level energy diplomacy framework, conclude more binding agreements that incorporate clean energy components and complete the phase-out of Russian fossil fuels.

Back from the brink—but still near the edge

Russia's all-out invasion of Ukraine in 2022 exposed a structural weakness in Europe's energy system: its deep dependence on fossil fuel imports. Over the past four years, the EU and member states have successfully secured alternative gas supplies and signed many new deals with countries around the world. This "energy diplomacy" has shown what the bloc can achieve in a geopolitical emergency situation that undermines governments' ability to keep the lights on for their citizens.

But the EU remains heavily reliant on fossil fuels, which meet nearly 60% of the bloc's energy demand. This creates import dependency: the EU's dependence on oil imports stands at 90%, and on gas imports at 85%. Europe's energy security—in its primary, conservative sense as security of supply—thus relies strongly on relations with external partners and the mercy of geopolitics. The fallout for European energy prices caused by the Iran war is only the latest iteration of this problem.

European energy diplomacy has also managed to develop a more progressive dimension. For example, the EU and member states have increased efforts to conclude agreements on the supply of critical raw materials (CRMs) and cooperation on hydrogen. However, they still need to not only diversify their supplies but also secure access to new value chains linked to the energy transition, including technologies and raw materials for renewables, hydrogen and synthetic fuels. They can do this by signing agreements with countries outside Europe that have strong potential for renewable energy production.

This policy brief examines the ways in which European energy diplomacy has reshaped the energy landscape within the EU. It draws on ECFR's Energy Deals Tracker, which records the most important energy agreements concluded by the EU and member states with third countries. The tracker maps the notable successes of the EU's and member states' energy diplomacy as they find alternative sources of fossil fuel supplies, particularly in the gas sector. It follows how many energy agreements EU countries concluded in individual sectors between 2022 and 2026. More particularly, it identifies how many of these were binding, how many were only indicative and how many contained elements of clean energy.

The paper finds that agreements concluded individually by member states are the most numerous by far, with many fewer deals concluded by the EU itself or via collective action undertaken by member states clubbing together. European energy diplomacy has proved itself to be creative and vigorous over the last four years. Nevertheless, the policy brief identifies ways the EU and member states can work more closely together, specialise and divide up tasks for mutual benefit and complete the final phasing out of Russian fossil fuels.

How Europe weaned itself off Russian energy

One of the EU's greatest energy security successes is its radical reduction in dependence on fossil fuel supplies from Russia. This has come about partly through measures initiated by the EU as part of sanctions packages—but also partly through Russia's own actions, which forced Europeans to seek new supplies.

The sizeable number of energy agreements collected in [ECFR's Energy Deals Tracker](#) testifies to the diplomatic efforts made by the member states and the EU to secure alternative energy supplies. The tracker shows which countries have replaced Russia as the main supplier, but also clearly illustrates the extent of the resulting dependencies on gas supplies from outside Russia. Gas remains the area of greatest activity—and an area of potential weakness.

Policy

The EU's response to the 2022 energy crisis was the [REPowerEU](#) programme, adopted in May of that year. The programme's primary aim was to address European dependence on Russian fossil fuels in response to the war in Ukraine, by simultaneously reducing energy consumption, diversifying supplies and accelerating the development of renewable energy sources. This plan formed part of the EU's broader energy transition, strengthening energy security and system resilience while driving progress towards climate targets. At the same time, the [EU's external energy policy strategy](#), also adopted in May 2022, focused on strengthening cooperation with international partners to diversify energy sources and supply routes, develop global clean energy markets such as hydrogen and increase the EU's resilience to geopolitical shocks. It also envisaged a more active role for the EU internationally in promoting the energy transition and developing stable, sustainable energy supply chains.

Over the last four years, the EU has translated REPowerEU objectives into legislation. In January 2026 the EU adopted a [regulation](#) to introduce a phased ban on imports of Russian gas (both pipeline gas and liquefied natural gas—LNG). The ban took effect in March 2026, with transition periods for existing contracts and a licensing system. A complete phase-out of Russian gas imports is scheduled for 2027. Meanwhile, the European Commission is preparing regulations regarding crude oil. These will require member states to draw up diversification plans to completely eliminate imports of Russian crude oil by the end of 2027 at the latest.

The result is that, between 2021 and 2025, the EU drastically reduced its imports of fossil fuels from Russia: the share of Russian gas in EU imports fell from around 45% to about 12%, the share of Russian oil from around 26% to about 2%, and imports of Russian coal have been eliminated due to sanctions. This has been one of the greatest successes of European energy policy in recent years, significantly strengthening the EU's energy security and reducing its dependence on Russian energy commodities.

Gas

As recently as 2021, the volume of gas imports from Russia (including both pipeline gas and LNG) stood at almost 160 bcm a year. That accounted for almost 40% of total EU gas demand in 2021. But by 2025, this had fallen to 37 bcm. Similarly, the share of Russian gas in EU imports fell from nearly 45% in 2021 to around 12% in 2025.

This change was driven mostly by measures taken by Russia itself early in the war. In March 2022, Vladimir Putin signed the "gas for roubles" decree, through which he cut off supplies to those countries and companies that refused to accept a settlement mechanism to pay for gas using roubles unilaterally imposed by the Kremlin. (Poland and Bulgaria were among the countries cut off.) Then, from June 2022, Gazprom began restricting supplies via the Nord Stream 1 pipeline, until Russia completely halted exports via this pipeline at the end of August 2022. Sabotage on two lines of Nord Stream 1 and one line of Nord Stream 2 in September 2022 completely ruled out the possibility of operating either pipeline.

Ukraine also played its part in reducing the EU's gas dependence on Russia. In December 2024, the five-year Russian-Ukrainian agreements on the transit of Russian gas through Ukraine expired. Kyiv refused to extend them, with the result that, from January 1st, 2025, Russian gas ceased to flow to the EU via the Ukrainian pipeline.

Countries such as Germany, Italy and Poland have been particularly successful in this regard. Until 2021, they all imported large quantities of Russian gas. But in 2026 they are either obtaining gas through newly sourced supplies of LNG (Germany and Poland) or through alternative pipeline routes (Italy and Poland). Poland now imports no Russian gas at all while Germany and Italy import only very small volumes. In terms of what remains: Russian pipeline gas is still shipped to Hungary and Slovakia through the TurkStream pipeline, and some Russian LNG is directly exported to Belgium, France, Greece and Spain.

Deals

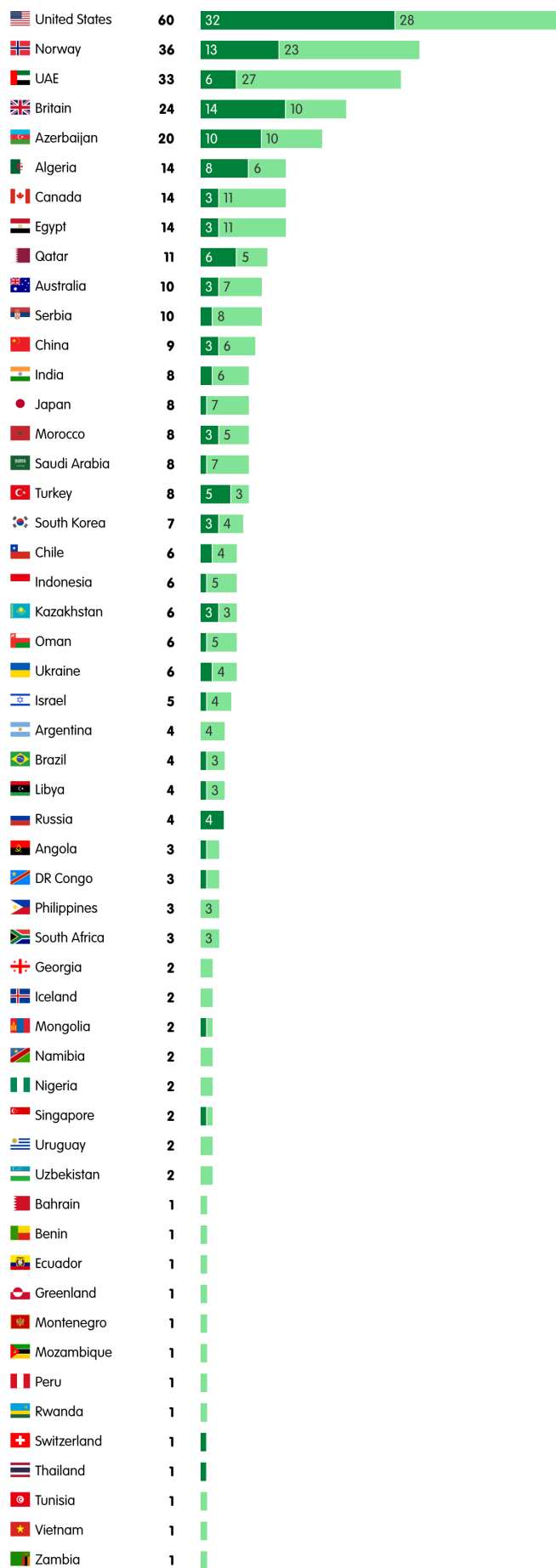
Both the EU and member states led energy diplomacy efforts in their own right. For example, in 2022 the European Commission concluded agreements with Algeria, America, Azerbaijan and

Norway to compensate for the drop in Russian fossil fuel imports. Germany rapidly replaced its heavy reliance on Russian pipeline gas (about 55% before the war) by expanding LNG infrastructure and shifting to suppliers such as Norway and America, while also signing agreements with Qatar and others. Italy similarly reduced its dependence on Russia and increased imports via pipelines from North Africa and LNG from multiple global suppliers. Thanks to the launch of the Baltic Pipe gas pipeline in September 2022, the expansion of the LNG terminal in Swinoujscie and contracts with America, Norway and other suppliers, Poland became completely independent of Russian supplies.

Partner countries in European energy deals: Ranked

Show details by: Deal type Energy type

■ Binding ■ Indicative

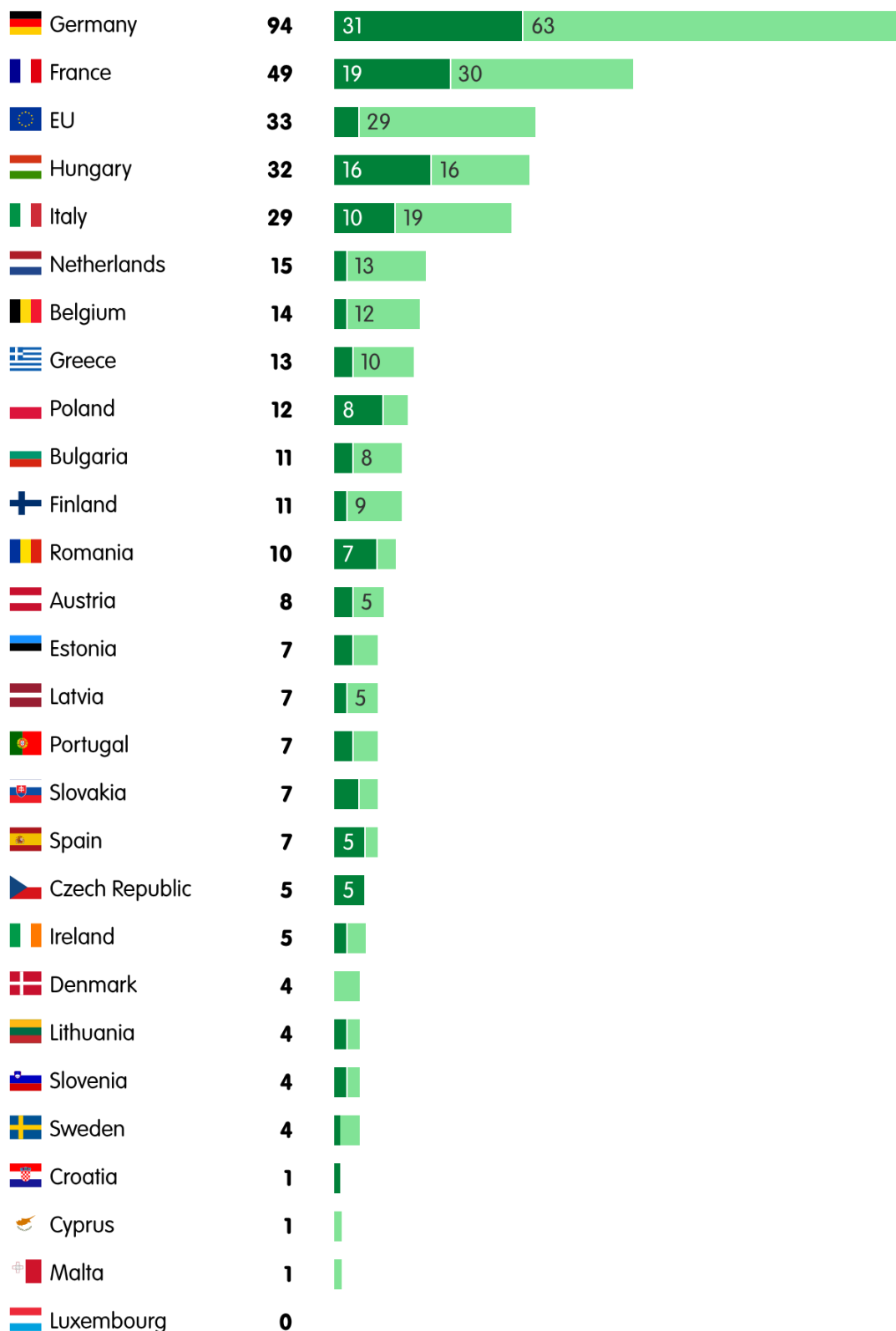


Source: ECFR Energy Deals Tracker
ECFR · ecf.eu

European countries in European energy deals: Ranked

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Source: ECFR Energy Deals Tracker
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The biggest change for European gas imports between 2021 and 2025 was the large rise in supplies coming from America. This followed the conclusion of numerous new long-term contracts between European and American companies. Imports from the US to the EU thus rose from almost 21 bcm in 2021 to almost 83 bcm in 2025—a volume equivalent to Germany’s total gas consumption in 2025. America is now the second-most important supplier of gas to the EU after Norway. Elsewhere, companies from EU countries concluded long-term contracts with QatarEnergy. Gas imports from Azerbaijan have also risen (ten EU countries receive gas under long-term and short-term contracts from Azerbaijan).

The EU now has a much more diverse supply of gas across the bloc, and individual member states have similarly diversified.

Infrastructure

Some EU member states are now much better placed to receive gas imports. For example, at the start of 2022, LNG import capacity in Italy was low and Germany did not have a single terminal for importing LNG. Yet now, in Italy, regasification capacity has increased from 17 bcm at the end of 2022 to almost 27 bcm as of April 2026. (It has also commissioned new regasification capacity.) The most notable infrastructure investment to enable LNG imports was in Germany, which invested in the construction of regasification terminals. Poland has expanded the regasification capacity of the Swinoujscie LNG terminal. Poland also plans to launch a second—this time floating—regasification terminal in Gdansk.

In addition to increasing the capacity of LNG terminals to enable gas imports from outside Russia, initiatives to deepen the integration of the gas market within the EU are of great importance to Europe’s energy security. This includes a successful expansion of interconnectors—cross-border connections between countries that enable them to move gas around more easily, making better use of gas imported from third countries and helping landlocked European countries unable to build their own LNG terminals. This has strengthened energy security by allowing diversification of supplies and a faster response to crises. Examples of such investments include the commencement in 2022 of two important interconnectors: Poland–Lithuania (GIPL) and Greece–Bulgaria (IGB).

Projects such as the Vertical Gas Corridor (VGC) are also of key importance. This is a strategic infrastructure initiative in central and south-eastern Europe designed to enhance energy security and diversify gas supplies by linking transmission systems along a north-south axis, from the Baltic Sea region to the Aegean Sea. It is based on expanding interconnectors and market integration, enabling flexible gas transmission from various sources (such as the Caspian region) between countries in the region. Plans for the VGC began to take shape around

2014-2015, partly in response to Russia's annexation of Crimea. But in 2022 European countries accelerated efforts to reduce their dependence on Russian gas and increase the resilience of their energy systems.

Oil

The EU has also drastically reduced its dependence on Russian crude oil and petroleum products. As recently as 2021, the EU imported around 115m tonnes of crude oil from Russia—over 20% of the EU's total oil demand in 2021. By 2025, imports had fallen to around 10m tonnes, and Russia's share of oil imports to the EU dropped from over 25% to just 2% between 2021 and 2025. In 2026, Slovakia and Hungary are the only EU countries still directly importing crude oil from Russia.

The EU's sixth sanctions package was decisive: it banned the import of Russian crude oil by sea and banned the import of most petroleum products. The restrictions came into force for crude oil in December 2022 and for most petroleum products in February 2023. In turn, the 11th sanctions package, adopted by the EU in June 2023, introduced a ban on crude oil imports via the northern branch of the Druzhba pipeline (used for oil supplies to Poland and Germany). This ban formalised a situation that had effectively existed since early 2023—Germany had already halted imports of Russian oil via the Druzhba pipeline early 2023, and Poland was cut off from Russian supplies in February 2023.

Europeans have replaced oil supplies with increased imports from other sources such as America, Kazakhstan and Norway. The change is not as comprehensive as for gas, however. By the end of 2025, EU member states Hungary and Slovakia were still importing Russian oil directly, as these supplies were exempt from the oil sanctions imposed on Russia in 2022-2023. Additionally, Russian crude or refined products (petroleum products) continued to reach Europe between 2022 and 2025. This includes, among other, an increase in exports of petroleum products from India derived from the processing of Russian crude oil. Nevertheless, this does not compare to the volumes that flowed from Russia to the EU up until 2021.

Coal and nuclear

EU sanctions banned imports of Russian coal, further reducing European energy dependence on Russia. At the same time, many countries that rely on Russian nuclear fuel have begun to diversify their sources. For example, the Czech Republic has signed agreements with Westinghouse and Framatome; Bulgaria has chosen Westinghouse fuel; and Finland and Slovakia have selected Framatome as a nuclear fuel supplier. These states intend these measures to enhance energy security and make the nuclear sector independent of Russian raw materials.

Clean electricity imports

Agreements concluded since 2022 providing for the import of clean electricity from third countries represent a potentially promising contribution to the EU's energy security in the long term. Such deals are primarily driven by EU efforts to support the energy transition and the increasing need for cross-border renewable energy infrastructure. Even before Russia invaded Ukraine in 2022, the EU was exploring plans for new Africa-Europe interconnectors. At the same time, geopolitical disruptions—including the 2026 war on Iran, which disrupted fossil fuel supplies and energy markets—have made these projects more attractive as a means to reduce dependence on imported fossil fuels.

Some of the deals related to clean electricity imports were concluded after 2022 and are therefore included in the Energy Deals Tracker. Others were concluded before 2022. Deals agreed in the last four years include agreements on the [Black Sea Green Energy Corridor](#), and they envisage the import of electricity from Azerbaijan via Georgia and the Black Sea to the EU. The project may also include the import of electricity from [Kazakhstan or Uzbekistan via the Caspian Sea](#) to Azerbaijan and thence to the EU. Another important deal is the January 2025 [trilateral agreement between Albania, Italy and the United Arab Emirates](#) to develop a subsea electricity interconnector linking Albania and Italy for the transmission of renewable energy across the Adriatic. This €1bn project is intended to strengthen regional energy security and support the broader integration of renewable energy across the Mediterranean region.

Plans for cross-border interconnectors linking North Africa with southern EU countries are of real importance and reflect the EU's aim not only to diversify its sources of fossil fuel supply but also to import electricity. The most advanced example of existing infrastructure is the [Spain-Morocco interconnector](#), operational since the 1990s, which—via subsea cables with a total capacity of around 1,400 MW—enables two-way power transmission between Europe and Africa. Plans are currently under way to expand this interconnector with a third cable, which would add around 700 MW of new capacity. Although its impact would be mainly at the regional rather than EU-wide level, it will increase total exchange potential and enable more frequent and larger cross-border electricity flows.

Projects in the Eastern Mediterranean are also significant, including the [EuroAfrica Interconnector](#), which is set to link Egypt with Greece and Cyprus via a 2,000 MW cable. This would create an “energy bridge” between the continents enabling the export of solar energy from Africa to Europe. An EU-backed Greece-Egypt direct interconnection project, which aims to supply Europe with cheap renewable energy ([GREGY](#)), also has a similar objective. These projects are part of the EU's policy to support cross-border infrastructure investments (eg,

through the “[Connecting Europe](#)” facility), which are crucial for decarbonisation and the creation of an integrated energy market.

That being said, although projects involving the import of clean electricity can help strengthen the EU’s energy security, the volume of imported electricity will remain small compared to EU demand. This will be the case even under the optimistic assumption that all planned interconnectors with non-EU countries are completed. Projects such as connections with North Africa or the Green Energy Corridor from Azerbaijan via Georgia to the EU could supply a total of between a dozen and several dozen TWh per year by the 2030s. For comparison, total electricity consumption in the EU already exceeds 2700 TWh per year and is expected to rise significantly with the electrification of transport, heating and industry and potentially reaching 3500-4000 TWh by 2030-2040. This means that even in the maximum scenario, imports would account for only around 1-3% of demand.

Electricity imports may be a useful supplement, but they will not become the cornerstone of the EU’s electrification. The bloc will, for the most part, have to rely on domestic production and the expansion of internal infrastructure. In future, member states will need to develop renewable energy capacity and nuclear energy potential (which is also a source of clean energy) and invest in the modernisation and expansion of electricity grids. Progress in this area is crucial for reducing dependence on fossil fuel imports.

Critical raw materials and rare earth elements

Between 2022 and 2026, the EU and member states ramped up their energy diplomacy in search of cooperation on CRMs and rare earth elements. These are crucial for producing batteries, solar panels, wind turbines and power grids that support the development of clean energy. The energy crisis triggered by Russia’s aggression against Ukraine highlighted the EU’s vulnerability to the risks associated with the concentration of strategic raw material supplies in the hands of a few countries (especially [China](#)).

EU energy diplomacy and technological cooperation on hydrogen and CRMs were not initiated by Russia’s invasion of Ukraine, but they were significantly accelerated and reframed by it. Earlier frameworks such as the European Green Deal, the EU Hydrogen Strategy and the Critical Raw Materials Action Plan had already been developed, primarily to support decarbonisation and industrial policy goals. However, after 2022, these initiatives became central instruments of energy security under REPowerEU, which prioritised rapid diversification away from Russian fossil fuels and strengthened external partnerships. As a result, hydrogen and raw materials policies shifted from long-term transition tools to core pillars of EU energy resilience and geopolitical strategy, culminating in measures such as the Critical Raw Materials Act.

In terms of activity, member states and the European Commission stepped up negotiations on bilateral agreements and strategic partnerships with non-EU countries. For example, France has actively developed cooperation not only with North African countries, but also with Australia, Canada and Japan. This covers the security of supply of lithium, cobalt and rare earth elements, joint research and development projects, and investments in processing and environmental standards. Meanwhile, Germany has cooperated with Australia, Canada and African countries on securing supplies of lithium and cobalt, while also investing in battery recycling and energy storage.

Poland has increasingly engaged in EU and bilateral cooperation initiatives concerning CRMs with partners such as Canada, Chile and Norway, while also supporting the development of domestic processing capacity and logistics infrastructure linked to CRMs supply chains. Projects such as the rare earth separation facility in Pulawy and logistics expansion around the Port of Police illustrate efforts to strengthen Poland's role in European critical mineral value chains. Finland, meanwhile, has intensified its contacts with Brazil and Chile, focusing on the extraction of rare earth elements and the development of efficient processing technologies. Cooperation on CRMs imports increases the resilience of EU industry to global fluctuations in the prices and availability of raw materials and accelerates the achievement of climate targets.

The EU's energy diplomacy also encompasses scientific and technological cooperation. Examples include joint research and development programmes between EU countries like France or Germany and African countries (including Morocco and Namibia, among others) on green hydrogen. These integrate renewable energy and energy storage, which require stable access to CRMs. (Green hydrogen can help sectors that are hard to electrify directly to make progress on decarbonisation.)

One important development is the new EU mechanism for the joint purchase of CRMs. In July 2025, the commission introduced the EU Energy and Raw Materials Platform to help European companies source energy-related products (including hydrogen, natural gas and biomethane) more efficiently and in a coordinated way. The platform gathers demand and supply proposals from companies, providing aggregation and matchmaking services to connect suppliers with potential buyers. This enables joint procurement of various energy-related products and critical strategic raw materials. The Hydrogen Mechanism is the first initiative launched under the platform. It is a matching system to connect the demand and supply of renewable hydrogen and its derivatives across Europe and partner countries, helping to coordinate purchases and investments to build a functioning hydrogen market. As an element of EU energy diplomacy, it translates the EU's hydrogen strategy into practical cooperation on supply, investment and partnerships.

After 2022, the EU and member states pursued a vigorous energy diplomacy that was not limited solely to fossil fuels and energy supply security, but increasingly focused on CRMs and rare earth elements. The active partnerships with Australia, Canada, Chile, Japan and North African countries helped the EU create legal frameworks for the future diversification of raw materials supplies, increase industrial resilience, develop local processing capacities and strengthen Europe's position in the global market for low-carbon technologies. This constituted a significant step in the bloc's energy transition and towards strategic security. These measures stand the EU in good stead to reduce its dependence on dominant suppliers, such as China, and support the development of European technological capabilities.

Weaknesses in the EU's energy diplomacy

The imbalance between gas agreements and other agreements

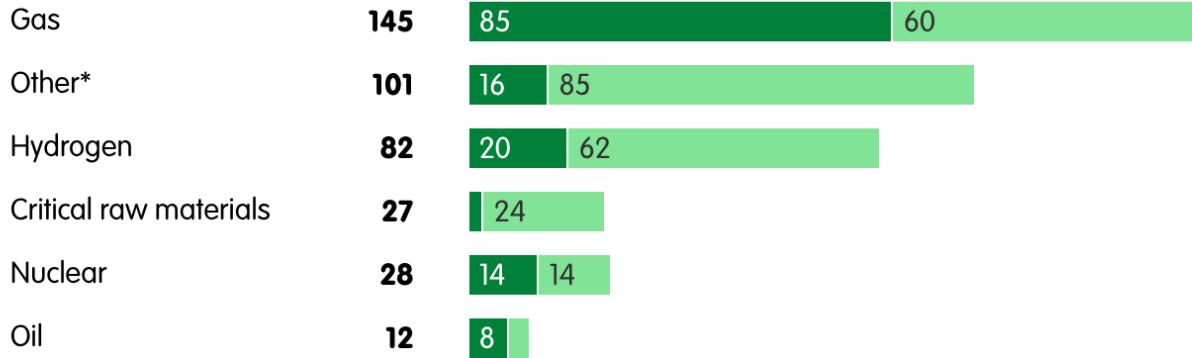
Over the last four years, Europeans have diversified their supplies but [Energy Deals Tracker](#) data confirm that imports remain heavily skewed towards agreements on fossil fuel supplies, particularly gas. This leaves Europe exposed to the risk of supply disruptions due to geopolitical shocks, as seen in 2026 with the US-Israeli attacks on Iran. Moreover, this high dependence on fossil fuels makes it more difficult to achieve the EU's climate targets.

Many of the new long-term contracts [extend beyond the 2050 horizon](#)—the date by which the EU has pledged to achieve its [climate neutrality target](#). Gas import commitments made on such timescales may hamper efforts to achieve long-term EU energy transition goals, especially given that the bloc's fossil fuel agreements are, in the vast majority of cases, legally binding commitments.

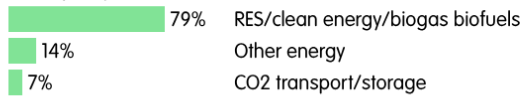
Breakdown of energy contracts by fuel type

By deal type By type of party

■ Binding ■ Indicative

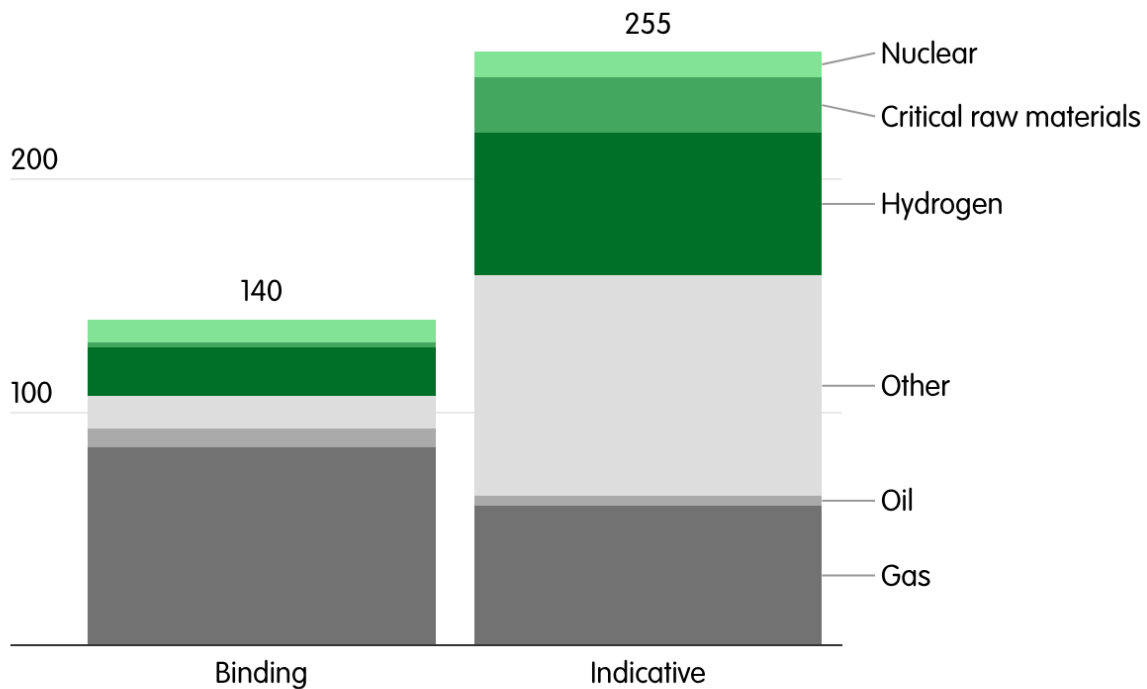


* Majority of the other deals are linked to Renewable Energy Standards (RES) and clean energy:



Source: ECFR Energy Deals Tracker
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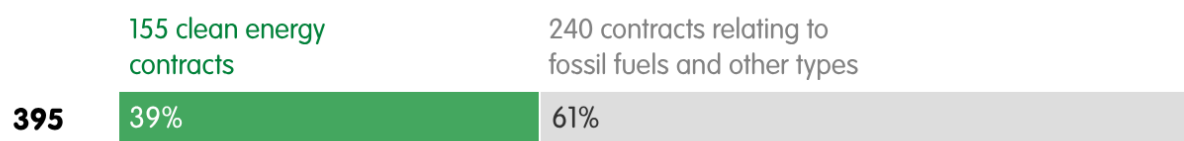
Breakdown of energy contracts: Legally binding and non-binding, by sector



Source: ECFR Energy Deals Tracker
ECFR · ecf.eu

In contrast, the EU's clean energy agreements of the last four years have been concluded predominantly in the form of memoranda. The same is true for the agreements on CRMs and on hydrogen, which the tracker shows are also largely declarations of intent. Many of these deals provide for the construction of infrastructure for the production or transmission of clean energy. But their non-binding nature calls into question the prospects of their implementation. This applies even to promising projects like the energy bridge. What is more, the implementation of such projects requires not only significant financial investment but also entails political risks, linked, for example, to the wars between Russia and Ukraine, or between America and Israel and Iran. Ongoing conflicts threaten both the construction and the protection of offshore infrastructure once it is built.

Share of energy contracts with clean energy/renewable element



Source: ECFR Energy Deals Tracker
ECFR · ecf.eu

The tension revealed by the data—between the need to ensure secure (long-term) supplies of fossil fuels, and the acceleration of decarbonisation measures and other actions related to the energy transition—is particularly significant for the EU and member states because of their high dependence on imported energy. Consequently, the EU will continue to face rising energy costs, industrial competitiveness pressures and political sensitivity around energy prices, all of which can slow the pace of decarbonisation.

The limited effectiveness of EU mechanisms

Although the EU’s efforts to create new mechanisms for collective action on the security of fossil fuel supplies should be commended, they have not yet proved as effective as anticipated.

One example is the AggregateEU initiative, launched by the European Commission in 2023 as part of the EU Energy Platform. AggregateEU is an EU mechanism for the joint purchase of natural gas by member states and companies. The platform enables the aggregation of gas demand and the organisation of joint tenders. It strengthens the EU’s negotiating position with suppliers and helps secure more favourable prices. The initiative aims to enhance energy security, reduce competition between EU countries and stabilise the gas market.

However, the mechanism’s impact has been limited due to the voluntary nature of participation and the fact that companies prefer to agree their own bilateral contracts. As gas prices have fallen and supply has stabilised, the platform’s role has diminished, serving as a supplementary rather than a key market instrument. According to European Commission data, from April 2023 to March 2025 the commission conducted a total of seven matching rounds, during which more than 119 bcm of gas demand from European companies was aggregated and 191 bcm was offered by international suppliers. After seeking the most competitive offers, AggregateEU matched close to 100 bcm to cover European demand. However, it remains unclear how much of these matched volumes has resulted in actual contracts concluded between companies.

Meanwhile, between 2023 and 2026, the European Hydrogen Bank—another EU mechanism—proved partially effective, but remains in the early stages of development. On the positive side, there has been significant interest in the auctions aimed at developing mainly hydrogen production projects in the EU (for example, 132 projects in the first round and 61 in the second) along with tangible financial support. By 2025, 15 projects worth around €1bn had been selected, which could potentially contribute to the production of around 2.2m tonnes of green hydrogen in the EU over the next decade. The mechanism has also helped to kickstart the first investments and narrow the cost gap between renewable hydrogen and fossil fuels.

At the same time, its effectiveness is limited by numerous problems: the small number of projects actually moving forward (for example, only six contracts were signed in one of the rounds), the withdrawal of some investors, and uncertainty regarding demand and regulation. As a result, the European Hydrogen Bank acts more as a market catalyst than its main driver—it is an important but insufficient tool for scaling up production. It also plays a minor role in stimulating projects involving the import of green hydrogen into the bloc since it focuses mainly on domestic (EU) hydrogen production projects. However, there are some positive examples of import-orientated projects. One is the Canada-Germany Hydrogen Alliance, signed in 2022. The alliance aims to establish a supply corridor for clean hydrogen exports from Canada to Germany. The Hydrogen Bank helps reduce financial risks for hydrogen import projects by providing investment support and market certainty for producers and buyers. This support encourages private investment and helps develop a reliable international hydrogen market.

Too many individual actions, too little a collective approach

As noted, the ECFR Energy Deals Tracker confirms that energy diplomacy is largely driven by individual state actions. Few agreements have resulted from collective action by EU member states or the EU itself. The most active countries—such as France, Germany and Italy—have concluded numerous bilateral agreements with energy suppliers. For example, Germany has developed close cooperation with the US on LNG and signed agreements with Qatar, while investing in regasification infrastructure. Italy has strengthened its energy ties with Algeria and North African states to become one of the main gas hubs in the Mediterranean region. While some joint initiatives are emerging in EU energy diplomacy, their scope remains very limited (including the green energy bridge from Azerbaijan through Georgia and the Black Sea to the EU). Another example is the cooperation between EU member states regarding gas supplies to those states which, due to their location, are unable to import gas directly as LNG. This applies, for example, to Austria, which cooperates with other EU member states to import gas under supply contracts concluded with Norway or America.

Excessive self-interest and a lack of broader coordination led to several specific problems.

Firstly, too individual an approach leads to growing competition among countries over access to resources. In periods of energy crisis, limited coordination among EU member states intensifies short-term competition for scarce supplies and weakens collective bargaining leverage at the margin, although these effects are ultimately constrained by global LNG market dynamics. This was evident during the energy crisis following Russia's full-scale invasion of Ukraine, when European buyers all entered the spot LNG market at the same time in search of replacements for Russian pipeline gas. The result was not only higher prices but also instances where EU buyers effectively competed against one another for cargoes, reinforcing sellers' pricing power in a tight global market where Asian demand was also recovering. Instead of acting as a single large buyer via the EU, which would give Europeans greater bargaining power, they have often operated as a collection of smaller, competing entities.

Secondly, the dominance of a national approach to infrastructure investments—such as LNG terminals, gas pipelines and storage facilities— has created coordination challenges at the EU level and resulted in overcapacity in some parts of Europe (stranded assets) and shortages in others. For example, parallel investment in LNG terminals in different northern European countries has not been optimally coordinated with the needs of the entire internal market and long-term projections. Following the 2022 energy crisis, several countries rapidly expanded LNG import capacity in parallel. For example, Germany commissioned multiple floating terminals in Wilhelmshaven and Lubmin between late 2022 and 2023, while the Netherlands and Finland also deployed new floating terminals within months. At the same time, Poland expanded the Swinoujscie terminal and pipeline connections to Norway. These investments significantly improved short-term energy security and helped replace Russian pipeline gas. But in the long run some investments could be better coordinated across different EU regions.

Coordination challenges remained evident in 2025 and early 2026, despite improvements in the resilience and integration of the EU gas system. Although some LNG terminals continued to operate below capacity, concerns about supply security, lower storage levels after the winter of 2025-2026 and uncertainty in global LNG markets reinforced political support for maintaining substantial import redundancy. Meanwhile, the Agency for the Cooperation of Energy Regulators (ACER) and other EU institutions continued to highlight the risk that declining long-term gas demand could lead to: inefficient infrastructure utilisation; and rising system costs if investment decisions are not sufficiently coordinated at the European level. The gradual phase-out of remaining Russian gas imports and continued reliance on globally traded LNG have further strengthened the strategic importance of cross-border coordination and joint infrastructure planning within the EU. Consequently, the tension between national energy security objectives and the efficient development of an integrated European energy market is likely to persist in the coming years.

Numerous hydrogen agreements, little practical effect

In recent years, the EU and its member states have shown increasing interest in developing hydrogen projects and strengthening cooperation with third countries in this area. The Energy Deals Tracker shows around quarter of deals are related to hydrogen cooperation.

Produced from renewable energy sources via water electrolysis, green hydrogen can replace fossil fuels in heavy industry (such as steel and chemicals) and long-distance transport. It can also serve as an energy storage solution, helping to stabilise an energy system based on intermittent sources such as wind and solar power by storing surplus energy for use during periods of shortage. This is particularly important for the EU, helping it reduce its dependence on fossil fuel imports, enhance the bloc's energy security and achieve its climate targets.

Despite this, EU and member state attempts at hydrogen diplomacy have proved particularly ineffective. Between 2022 and 2026, both the EU and its member states concluded numerous agreements on cooperation in the hydrogen sector. However, the practical significance of most of the agreements concluded is, for the time being, limited in terms energy security. This is because most hydrogen agreements take the form of memoranda of understanding or letters of intent.

Some more concrete agreements which set out specific commitments for the implementation of hydrogen projects have been signed, in particular by Germany. Noteworthy are German agreements that provide for the implementation of a significant large-scale hydrogen project in Kazakhstan.

Furthermore, the hydrogen market in the EU is at a very early stage of development: projects are costly, often delayed and transport infrastructure (for example, ammonia terminals or hydrogen networks) is only just being established. Even the European Commission reports that the vast majority of green hydrogen projects are currently at an early, pre-investment stage within EU matchmaking and support mechanisms designed to link supply and demand. Thus, there remains uncertainty about how many will ultimately reach final investment decisions or be implemented.

It is unlikely that the EU will succeed in achieving the targets for the import of green hydrogen into the EU, which were adopted back in 2022. The REPowerEU programme envisaged imports of 10m tonnes by 2030. Meanwhile, the quantity of green hydrogen actually imported is very small. On the current course, there is little to suggest this situation will change dramatically by 2030.

How to fire up European energy diplomacy

Agree an energy diplomacy framework

By acting more jointly, member states can overcome the fragmented and competing approaches towards energy agreements that characterised their energy diplomacy after 2022. To boost their collective leverage they should pool demand, coordinate negotiations and align their long-term energy strategies. This will strengthen their bargaining power, help them secure more stable and affordable supplies, and more effectively shape global energy markets.

More joint actions by EU member states could gradually enable the development of a coherent EU-level energy diplomacy framework—adopted on the level of the European Council—to support negotiations with non-EU countries. Rather than aiming for full uniformity, this approach could build on existing mechanisms like AggregateEU, but the European Commission should encourage member states to use them more often, especially where their interests align. The newly agreed energy diplomacy framework should address not only the security of fossil fuel supplies, including encouraging joint purchasing contracts, but also the joint approach in concluding agreements on clean energy partnerships, such as hydrogen projects, renewable energy investments and cooperation on CRMs.

To support diplomatic efforts, the EU must strengthen the bloc's internal energy market. This includes investing in infrastructure, integrating grids and promoting regulatory alignment. Strengthening the EU's energy market, including closer cooperation between member states, can facilitate joint action on the international stage. More joint actions in energy diplomacy would enhance collective bargaining power and reduce counterproductive competition between member states.

This is particularly significant in the context of geopolitical conflicts involving regions rich in energy resources. One example is the war involving America and Israel against Iran in the Middle East, which led Qatar—one of the world's largest LNG producers—to suspend gas production and exports. If this situation continues throughout 2026, it could increase global competition for access to the resource and may also result in competition among EU member states for LNG supplies from third countries. Greater collective action could remedy the risk of internal competition in times of crisis.

For energy diplomacy efforts to be effective, support from the financial institutions is required, along with appropriate support from the European Commission in the regulatory sphere. The European Investment Bank and other public and private financial institutions should expand their role in mobilising financing for strategic projects, particularly by de-risking investments.

They should also support early-stage development, particularly in less mature sectors such as hydrogen and strategic raw materials.

The European Commission has recently made efforts to streamline permitting procedures; but it should go further on this, providing regulatory certainty and strengthening cross-border coordination to accelerate project implementation. Greater progress in implementing internal investment projects, particularly in energy connectivity, will bring tangible benefits to all EU member states. Larger-scale action will enable better contract terms, price stabilisation and diversification of supply sources, while also strengthening cooperation on cross-border clean energy projects. Expanding these mechanisms increases the resilience of the EU's energy system to disruptions, facilitates the redistribution of raw materials between member states, and introduces common technical and regulatory standards that support the integration of renewable energy and hydrogen technologies.

Divide the tasks and specialise

To make the EU's energy diplomacy more effective and strategic, member states should agree to a specialisation and division of tasks in their dealings with partners outside the EU. Countries with a technological edge in hydrogen, such as Germany, could focus on developing partnerships and investments in green hydrogen with countries in North Africa, the Middle East and North America, creating stable supply chains and joint renewable energy projects. Those with more experience and developed legal framework in CRMs, such as France, could establish specialised partnerships in the extraction, processing and supply of raw materials essential for renewable energy technologies. In turn, countries with plans for, and the capacity to build, energy hubs—for example, Poland in the context of LNG and gas pipelines—should develop transport and storage infrastructure, enabling the redistribution of fossil fuels across the EU and to close partners such as Ukraine and Moldova.

Such a division of labour could maximise negotiation efficiency, reduce the risk of duplication of effort and excessive competition between member states, and strengthen the energy security of the entire EU. It would help accelerate the development of clean energy and facilitate the achievement of ambitious climate targets by 2030. Ideally, the introduction of a specialisation in energy diplomacy should be part of the aforementioned new EU energy diplomacy framework.

Ramp up the number of binding deals with a clean energy component

As many contracts with non-EU partners still focus on fossil fuels, the EU and member states must move rapidly to conclude more binding agreements on clean energy (rather than relying solely on non-binding memoranda). Such agreements should cover the supply of green hydrogen, participation in renewable energy projects and the transfer of technology and know-how for low-carbon energy production. Each contract should contain measurable commitments, such as specific volumes of imported hydrogen, the percentage share of renewable energy in the investments being carried out and a timetable for the implementation of technologies.

The benefit of ramping up this approach would be to construct an effective mechanism for supporting decarbonisation and accelerating the EU's energy transition. At the same time, binding commitments enhance Europe's credibility and its attractiveness to investment and technology partners, fostering long-term cooperation.

Coordinate on internal energy infrastructure investment

There can be no effective collective EU energy diplomacy without greater coordination on energy matters within the EU—that is, between member states but also with the participation of EU institutions. Although EU-level coordination mechanisms and joint purchasing initiatives have been expanded, infrastructure planning and contracting decision remain largely national. This is regularly evident in the official statements accompanying contracts for the supply of raw materials concluded by companies from member states.

As the Energy Deals Tracker records, officials are present at the signing of many important agreements—which suggests their significance for strengthening energy security and building new infrastructure. As a result, differences in member states' risk perception, energy mixes and strategic priorities continue to produce uneven infrastructure utilisation and limit the overall efficiency of the EU internal gas market.

As gas demand declined after 2023, utilisation rates of LNG terminals in the EU fell from 58% in 2023 to 42% on average in 2024, with some newer terminals operating at very low levels, such as Mukran in Germany (8% in 2024) and Alexandroupolis in Greece (9% in 2024). This highlights the emerging risk of overcapacity and underutilised assets, particularly as additional LNG import projects continue to be developed despite structurally lower EU gas demand and the growing role of renewables. However, a certain degree of redundancy reflects deliberate efforts

encouraged at both EU and national levels since the 2022 energy crisis to reduce dependence on Russian gas, diversify supply routes and strengthen resilience against future disruption.

Therefore, a more coordinated approach at the EU level is needed, meaning more joint actions by member states but also a strengthened role for some EU institutions. Coordination could involve enhanced EU-level infrastructure planning, where national network development plans, LNG terminal investments and cross-border interconnector projects are jointly assessed against common demand scenarios aligned with the EU's climate and energy targets. If ACER, the European Commission and ENTSO had played a greater role in screening projects, member states could have avoided the risks linked to utilisation rates or long-term cost efficiency before regulatory approval or public support is granted. At the same time, coordinated regional planning mechanisms developed by member states and shared capacity allocation frameworks could help prevent overinvestment while maintaining security of supply during the energy transition.

Finish phasing out Russian fossil fuels

Member states should implement the EU regulation mandating the phasing out of Russian gas imports by autumn 2027 consistently and without delay. Although the regulation (adopted in January 2026) sets a strict timetable for member states to stop importing gas from Russia, in the context of the latest energy crisis not all will have the resolve to comply.

The EU should also adopt and ensure the implementation of a similar mechanism for Russian oil as soon as possible. This is to safeguard the achievements of the intensive energy diplomacy conducted since 2022, which has enabled the diversification of supplies, the development of LNG infrastructure and closer cooperation with reliable partners. Returning to contracts with Russia—even if they appear attractively priced in the short term—would mean renewed dependence on a supplier that has demonstrated unreliability and a propensity to use energy as a political weapon. Maintaining the current course is therefore not only a matter of energy security, but also of the EU's credibility as an international actor.

Monitor and report on the impact of agreements on the energy transition

Many European energy agreements of recent years lack specific indicators or mechanisms for reporting progress. This often makes it difficult to assess their impact on energy security and the transition. The EU should therefore introduce a monitoring and reporting system covering fossil fuel supplies, green energy, hydrogen and CRMs. Regular assessments will enable the

identification of effective strategies, the vetting of partners and the adjustment of energy diplomacy in a timely manner. Transparency and consistent reporting also enhance the EU's credibility on the international stage, helping to attract new technological and investment partners who are key to accelerating the energy transition and reducing dependence on fossil fuels.

Get ahead of the next energy crisis

The last four years showed the EU and its member states to be unexpectedly talented energy diplomats. The swift, individual actions of member states proved highly effective during the crisis in 2022. Contracts concluded for the supply of fossil fuels, particularly gas, helped avert serious energy shortages and stabilise the situation in the short term. A combination of individual measures—new long-term contracts for the supply of non-Russian fossil fuels, the expansion of import infrastructure capacity (primarily LNG terminals), and the opening of further interconnectors—places the EU in a better position in the event of another energy crisis.

However, in practice many countries focused primarily on securing oil and gas supplies from alternative sources, rather than systematically reducing dependence on these commodities. The EU and member states still too rarely use their energy diplomacy to promote renewable energy sources and build sustainable energy autonomy, and they have too often worked separately rather than together. At times this pushed up the prices that they (and their citizens) were paying for gas. They have missed out on the opportunity to learn how to work together on energy diplomacy.

As a result, the EU's continued high dependence on gas imports leaves the bloc exposed when serious disruptions in the global LNG market occur. The US-Israeli war against Iran illustrates this, with financial consequences set to be felt throughout the EU for years. The EU is confronted—again—with a sharp rise in energy commodity prices (of crude oil in particular) and disruptions to supply. The Middle East remains crucial to the global oil and gas market: any restrictions on transport via strategic sea routes significantly affect the availability of these resources.

Every subsequent geopolitical crisis only serves to reveal the structural weaknesses of the European energy system. Without deeper integration, joint investment and a consistent shift away from fossil fuels, the EU will remain vulnerable to similar shocks in the future. The challenge is therefore to ensure that European energy diplomacy much more skilfully converts existing non-binding agreements into binding contracts for clean energy projects and ultimately reduces the EU's dependence on fossil fuels.

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