

SEE ENERGY BRIEF

Monthly Analysis

Energy Supply Uncertainty in SE Europe
Amidst Continuing Ukraine War



Introduction

The war in Ukraine has brought renewed instability to energy systems across SE Europe. Countries in the region have long depended on imported fossil fuels, particularly natural gas and oil, much of which traditionally flowed through or from Russia. The conflict has disrupted these supply chains, creating uncertainty about both availability and affordability of energy. Governments and operators now face the difficult task of maintaining secure supplies while adapting to rapidly changing conditions.

Beyond supply concerns, electricity grids in SE Europe are under growing strain. The volatility of fuel deliveries increases the risk of shortages, price spikes, and forced reliance on emergency reserves. Grid operators must balance fluctuating imports, uneven renewable generation, and growing demand, all while preparing for possible further disruptions. The war has therefore made grid stability a pressing issue, not only for technical management but also for broader economic resilience.

The situation also highlights the region's dependence on external suppliers and limited infrastructure for diversification. Some countries, such as Greece and Türkiye, have begun investing in new interconnections, LNG terminals, FSRUs and renewable energy projects, but these measures take time to deliver results. Until then, the uncertainty remains high, with governments forced into short-term solutions that can conflict with long-term sustainability goals.

In this context, SE Europe finds itself at a crossroads. The war in Ukraine has underscored the urgency of reducing dependence on vulnerable supply routes and strengthening grid reliability. At the same time, it has accelerated the debate about energy transition, resilience, and regional cooperation. How policymakers and operators respond to these challenges will shape not only the immediate security of supply but also the region's long-term energy future.

Oil, Gas and Electricity Disruption in SE Europe

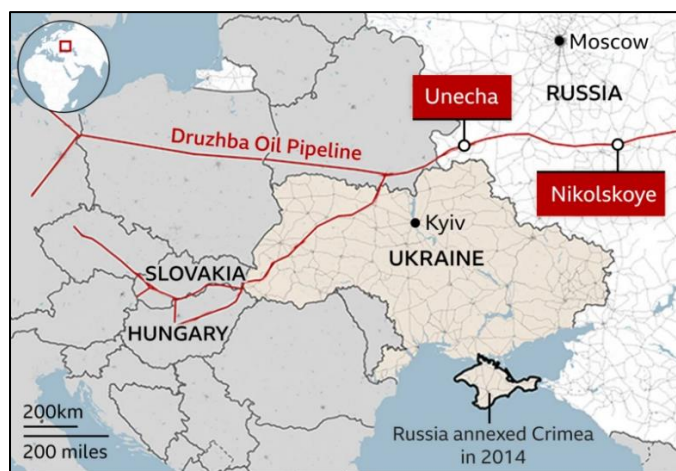
The war in Ukraine has caused major uncertainty for energy security across SE Europe. The region has traditionally relied heavily on Russian oil and gas, both through direct imports and transit routes that pass close to the conflict zone. As the war continues, these supply chains face disruption, forcing governments, companies, and households to adapt to shortages, high prices, and a shifting geopolitical landscape.

Oil imports remain a central concern. Several SE European countries, including Bulgaria, Serbia and Greece, depend on imported crude and refined petroleum products. With sanctions limiting access to Russian oil and global markets tightening, these countries face challenges in sourcing affordable supplies. Refinery operations have become vulnerable, and transport networks that move oil across the Balkans face added

strain.

it is worth noting that Russia and Ukraine have stepped up attacks on each other's energy infrastructure, hitting Ukrainian domestic heating supplies, Russia's Druzhba oil pipeline¹ and other facilities, over the past few weeks, as US President Donald Trump has pushed for a deal to end the conflict. EU members Slovakia and Hungary have maintained relations with Russian President Vladimir Putin and opposed sanctions against Russia that Ukraine says are vital to make Moscow drop unacceptable territorial demands. They also oppose the phase-out of Russian energy supplies via the Druzhba oil pipeline. The recent Ukrainian strike marked the second time that week that Russian oil supplies have been cut to Hungary and Slovakia. Ukraine's military said it had again struck the Unecha oil pumping station, a critical part of Russia's Europe-bound Druzhba oil pipeline, as shown in Map 1. (1)

Map 1: Ukraine's Strikes on Oil Pumping Stations and Druzhba Oil Pipeline, August 2025



Sources: Global Energy Monitor, BBC

Natural gas disruption is even more critical. Much of the region's gas was supplied by pipelines running through Ukraine have been suspended, or directly from Russia via the TurkStream corridor, which is still running. The war has undermined the reliability of these flows, and sudden reductions in gas deliveries have forced some countries to draw on storage or look for emergency alternatives. The lack of sufficient LNG infrastructure across SE Europe makes rapid diversification difficult. It is worth mentioning that on January 1, 2025, Ukraine ended all Russian gas transit across its territory after the relevant agreement with Gazprom expired, forcing the Western Balkan countries, among others, to seek alternative routes of gas supply. (2)

Electricity systems are also under stress. Power grids depend on steady gas and coal supplies, as well as cross-border trade to balance demand. With fuel shortages and price volatility, power generation has become more expensive and unpredictable. Grid operators face new challenges in keeping systems stable,

¹ The Soviet-era Druzhba pipeline, which runs through Belarus and Ukraine, ships oil from Kazakhstan to Germany as well as from Russia to Hungary and Slovakia.

especially during winter peaks or in times of drought that reduce hydropower output.

Households and industries alike have been hit by energy price shocks. Rising costs for electricity, heating, and transport have placed a heavy burden on consumers, many of whom already face economic hardship. Industrial production, particularly in energy-intensive sectors like steel, aluminum, cement, and chemicals, has slowed or become less competitive due to higher input costs. Governments have responded with a mix of emergency subsidies, new contracts for alternative suppliers, and accelerated investment in renewable energy. While these steps have softened the immediate impact, they often come at a high fiscal cost and cannot fully offset the vulnerability of the region's energy system. In many cases, short-term fixes have delayed rather than solved the underlying structural issues.

Regional cooperation has become more important, but it remains uneven. Cross border interconnections between national grids and gas systems exist but are often limited. Some countries have moved faster than others in developing LNG terminals, FSRUs or building new cross-border pipelines. The lack of coordinated planning across SE Europe has hindered the region's ability to present a united front in dealing with the crisis.

At the same time, the crisis has opened opportunities for renewable energy expansion. Wind, solar, and hydropower projects are gaining new urgency as governments seek to reduce reliance on imported fossil fuels. However, integrating renewables at scale requires stronger grids, more storage, and better regional coordination. A major structural shift towards electrification must take precedence. Without fully electrified energy systems, it does not make sense to talk about renewables and how they can help improve energy security. However, such structural upgrades take years, meaning the immediate crisis cannot be solved through green transition alone.

The war has also reshaped the geopolitical energy map. In this context, oil and gas still remain the major fuels on which economies and social well being depend. SE Europe now looks increasingly toward partners such as Azerbaijan, Türkiye, and the Eastern Mediterranean for new supplies of oil and gas. The European Union has pushed for diversification and efficiency measures, but political and financial constraints often slow progress. Countries outside the EU, such as Serbia, face added difficulties aligning with regional policies.

In the long term, SE Europe's energy security will depend on a careful balance of diversification, infrastructure investment, and transition to cleaner sources. The war in Ukraine has exposed the dangers of overdependence on a single supplier and underscored the importance of resilient grids and flexible systems. Whether the region can turn this crisis into an opportunity for lasting reform remains an open question.

Current EU Legal Sanctions Framework on Russian Energy

Following Russia's invasion of Ukraine in February 2022, the European Union adopted a wide package of sanctions targeting Russia's economy, including its energy sector. The measures primarily focused on oil, coal, and technology exports. While oil imports have been directly sanctioned, the situation with natural gas remains more complex due to Europe's historic dependence on Russian supplies.

The EU banned imports of Russian coal in August 2022 (3) and introduced a ban on seaborne crude oil from December 2022 (4), followed by a ban on refined petroleum products in February 2023 (5). These measures were supported by the G7 oil price cap mechanism and are now firmly in place. The restrictions have significantly reduced Russia's oil export revenues and shifted its trade patterns toward Asia.

Unlike oil, there is no EU-wide sanction directly banning Russian natural gas. Instead, pipeline gas supplies to the EU dropped after Russia cut deliveries to several states and after Ukraine ended all Russian gas transit through its territory on January 1, 2025. The EU has also prohibited new investments by EU companies in Russia's energy sector and restricted exports of gas-related technology and equipment, which indirectly affects the sector.

Russian LNG imports still remain legal under EU law, though they are politically contested. Countries, such as France, Belgium and Spain, have called for restrictions, while others still rely on Russian LNG cargoes. Meanwhile, the EU has made rapid progress in diversification, expanding LNG import capacity, strengthening pipeline interconnections, and increasing supplies from Norway, the US, Azerbaijan and North Africa.

A stumbling block in the overall effort to minimise or even stop completely Russian gas exports to Europe, is the operation of the TurkStream gas pipeline which ships gas from Russia to Türkiye and through a trunk line over the European part of Türkiye, to Bulgaria, Greece, Serbia and other countries including Hungary Slovakia and Tsechia. SE Europe. Ending exports of Russian gas through this route poses is a serious challenge.

The EU's formal sanctions regime continues to focus on oil and coal, while Russian natural gas is being reduced through a combination of market, contractual, and geopolitical changes rather than outright prohibition. Russia's share of EU imports of pipeline gas dropped from over 40% in 2021 to about 11% in 2024 (6). Debate continues within the EU over whether to extend sanctions to LNG, but political divisions and energy security concerns have so far prevented a full ban.

Volatility on Oil, Gas and Electricity Prices in SE Europe

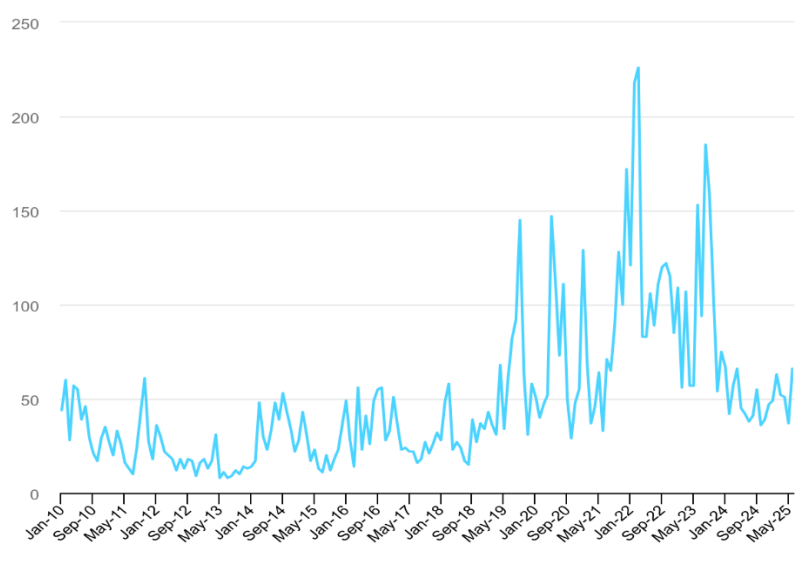
Oil prices

Oil prices in SE Europe have been hit by disruptive infractions to critical supply routes. A recent Ukrainian strike on the Druzhba pipeline's Unecha pumping station significantly disrupted Russian oil flows to Hungary and Slovakia—among the region's few remaining importers of Russian crude—prompting both countries to lodge formal complaints with the European Commission. Such interruptions exacerbate price volatility, introducing sudden supply shortages and uncertainty.

Gas prices

Natural gas prices continue to display high volatility, even after easing somewhat from their 2022 peak levels. In 2024, volatility in European gas markets was still about 50% above the 2010–2019 average, and in Asia, spot LNG volatility remained approximately 90% above that benchmark (7). These fluctuations directly ripple into energy prices across SE Europe, where gas is a key power generation fuel.

Figure: Historical Monthly Volatility on the Benchmark TTF Month-Ahead Contract, 2010-2025

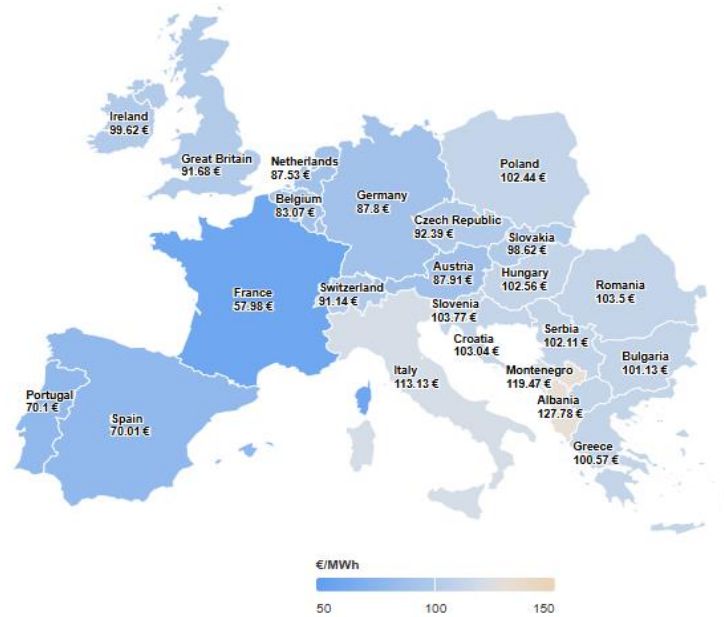


Source: IEA

Electricity prices

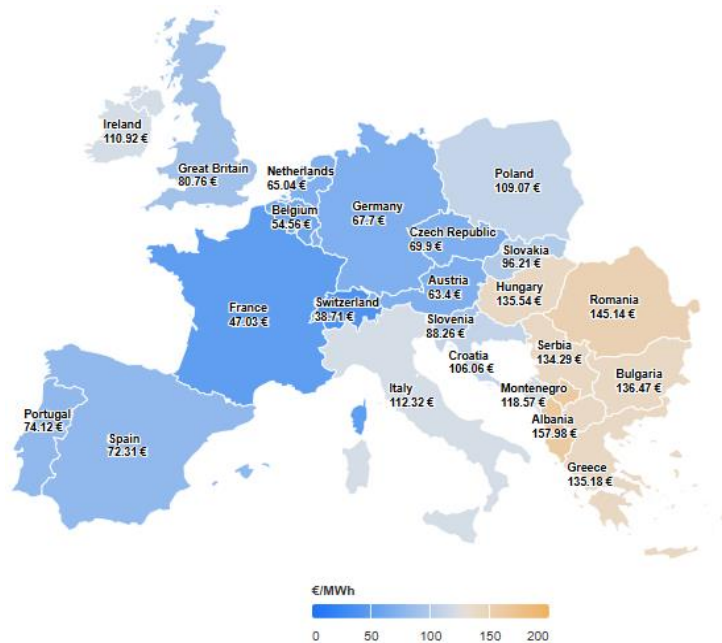
Wholesale electricity prices across SE Europe remain persistently high. Markets in Greece, Bulgaria, Romania, and neighbouring areas have seen prices ranging between €100 and €128 per MWh in July 2025, far exceeding levels in Western and Northern Europe, where prices often fall between €58 and €113 per MWh (8). This disparity underlines a structural imbalance that contributes to ongoing price instability.

Map 2: Wholesale Day-Ahead Electricity Prices in Europe, July 2025



Source: EnergyLive

Map 3: Wholesale Day-Ahead Electricity Prices in Europe, July 2024



Source: EnergyLive

Discussion

The ongoing war in Ukraine has reshaped the energy landscape of SE Europe, exposing vulnerabilities and deepening uncertainty in energy supply. The termination of Russian gas transit through Ukraine in January

2025 removed a critical supply corridor for Austria, Slovakia, Moldova, and the Balkans. Additionally, repeated disruptions to oil and gas pipelines, such as attacks on the Druzhba pipeline, highlight the fragility of existing infrastructure. With the TurkStream pipeline now the only direct Russian gas route into Europe, the region remains highly exposed to geopolitical risks that directly impact household energy costs, industrial competitiveness, and government budgets.

In the short term, SE Europe continues to experience high electricity and gas prices. Countries like Greece have been forced to allocate billions of euros in subsidies to shield consumers from soaring energy bills, straining fiscal capacity. The lack of adequate gas storage facilities and weak interconnections with Western Europe leave the region particularly vulnerable to supply shocks. While EU-wide gas storage has reached relatively comfortable levels thanks to LNG imports, SE Europe lags behind, making it more susceptible to volatility in global LNG markets.

To counter these risks, governments are accelerating diversification projects. The Trans-Adriatic Pipeline (TAP) is being expanded, while new interconnectors between Greece, Bulgaria, Albania, and Italy aim to create alternative supply routes. Floating LNG terminals, such as the Alexandroupolis FSRU, are coming online to provide flexibility and reduce dependence on pipeline gas. These infrastructure developments, supported by the EU's REPowerEU plan, are crucial steps toward regional energy security. At the same time, renewable energy projects and hydrogen-ready infrastructure are being prioritized to align with Europe's broader decarbonization agenda.

Looking ahead to the mid-term, SE Europe faces both risks and opportunities. Persistent geopolitical instability could delay infrastructure projects, prolong dependence on costly fossil fuels, and sustain elevated prices for consumers. Yet the region also has the chance to become a gateway for alternative energy flows. Ukraine, once the war subsides, could emerge as a significant partner, offering gas storage, renewable energy capacity, and hydrogen production that would strengthen the resilience of SE Europe's energy system.

In the long run, the trajectory of SE Europe's energy future depends on its ability to build resilience while accelerating electrification and eventually energy transition. If investment in renewables, hydrogen, and interconnections continues, the region could transform from a vulnerable periphery into a key node in Europe's decarbonized energy system. Conversely, failure to diversify and modernize may lock SE Europe into prolonged exposure to external shocks. The Ukraine war has underscored that energy security is inseparable from geopolitical security, making strategic investment and regional cooperation more urgent than ever.

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