



EUROPE LITHUANIA

In 2023, the Lithuanian Government, regulators, and energy companies developed the legal framework for further expansion of renewables, preparing a new National Energy Independence Strategy and adopting legal acts that define and improve the conditions for renewables development. Two offshore wind farm tenders with a maximum permitted generation capacity of 700 MW each were organised.

These developments are regarded as the beginning of a new era for Lithuania's **energy security** as the country seeks to become a self-sufficient energy producer and exporter in the future. With the number of prosumers increasing remarkably in 2023, this change is also crucial to ensure the sustainable development of the sector. Other important amendments that facilitate the introduction of more renewable energy sources into the electricity network include setting a target of at least 55% of electricity produced from renewable energy sources by 2030, ensuring balanced development of power plants that use renewable energy sources, clarifying the conditions and procedures for connecting hybrid power plants and **storage** facilities to the electricity network, and amending rules for reserving network capacities and changing the type of activities in the electricity sector.

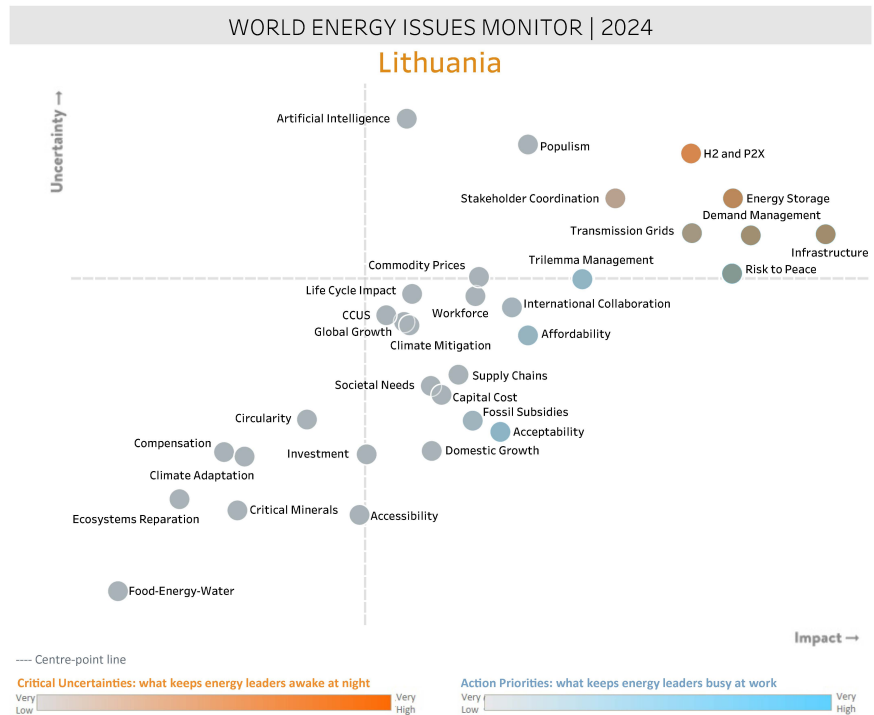
At the business level, companies continued to make final investment decisions regarding solar and onshore wind projects. Consequently, solar output during the daytime has inverted the typical daily price curve, making power usually more expensive at night than during the day. As a result, the Lithuanian hydro-pumped **storage** power plant had to adjust its operating mode, now generating power mainly in the mornings and evenings, while pumping water up during the daytime when solar output is high. On the electricity offtake side, there is significant emphasis on developing EV charging infrastructure. Additionally, the Lithuanian Government announced a draft **hydrogen** development roadmap for 2024–2050, which is the main strategic document for creating a regulatory environment for hydrogen and promoting synergies between hydrogen and electricity. Renewable hydrogen is expected to play a crucial role in decarbonising the transport and industrial sectors and serving as a long-term and large-scale storage solution for energy generated by offshore wind farms in the Baltic Sea.

Following the European Commission's recommendation, the national regulator approved a methodology specifying the implementation of a revenue cap on electricity generated using inframarginal technologies.

Another important issue in 2023 was the increasing concern about the country's ability to ensure the security and defense of critical energy **infrastructure**. First, the Lithuanian Transmission System Operator (TSO) successfully conducted an isolated operation test of the country's power system, curtailing power imports and switching on all the largest gas-fired generators. This test is an important step in preparing for the synchronisation of the Baltic states' electricity grid with the synchronous **grid** of Continental Europe. Second, in light of recurring incidents (e.g., the shutdown of a submarine gas interconnection pipeline between Estonia and Finland), the tense geopolitical situation, and lessons learned from Ukraine, the

Ministries of Energy, Finance, Interior, and Defense discussed the need to establish a unified threat response system and to invest more in the protection of critical energy infrastructure. For companies, this means that investments in specific security measures will have to be planned and implemented. Additionally, old gas-fired power generation units in Elektrėnai are being considered for an overhaul in light of concerns related to the security of electricity supply, with one 300 MW unit already undergoing an overhaul.

In 2023, the focus remained on mechanisms for determining fair electricity and natural gas prices, and partial tariff compensations were issued by the Government for private and business customers. These compensations reached close to EUR 1 billion in 2022–2023 and had a positive effect on consumers during the **energy price** crisis.



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Lithuania Member Committee