

# USEA Supports Investment-Ready Transmission Expansion to Strengthen Moldova's Regional Grid Integration



The United States Energy Association is supporting investment-ready transmission expansion that strengthens Moldova's regional grid integration and accelerates its energy transition. By identifying the Strășeni–Gutinaș 400 kV interconnection as the most viable option, USEA has created a \$103 million opportunity that boosts cross-border capacity, enables renewable integration, and positions Moldova as a stronger, more reliable partner in the European power market.

Since 2018, the United States Energy Association (USEA) has supported Moldova's efforts to strengthen regional energy integration and modernize its power system. A major milestone was reached in 2022 when Moldova and Ukraine successfully synchronized with the continental European grid. This achievement was made possible by years of coordinated technical support from USEA, the transmission system operators of Moldova and Ukraine, and the European Network of Transmission System Operators for Electricity (ENTSO-E). Today, as Moldova continues to advance its energy transition, a new infrastructure priority has emerged: developing a third 400 kV interconnection with Romania.

From 2023 to 2024, USEA collaborated with transmission system operators from Moldova and Romania to evaluate three potential cross-border corridors connecting Moldova's Strășeni substation to Romanian nodes in Iași, Roman Nord, and Gutinaș to support this goal. Through advanced power system modeling and long-term regional planning scenarios, the study identified the Strășeni–Gutinaș corridor as the most technically and economically viable option. The proposed 400 kV line would provide up to 1,191 MW of transfer capacity, significantly enhancing Moldova's ability to exchange power with EU markets, integrate renewable energy, and stabilize the regional grid.

Supported by a comprehensive cost-benefit analysis and rigorous technical validation, the Strășeni–Gutinaș 400 kV interconnection stands out as a \$103 million investment-ready opportunity. The project presents a technically sound and strategically significant infrastructure solution that aligns with Moldova's national development priorities and the EU's energy integration objectives. Its design – anchored at Gutinaș, a central hub in Romania's 400 kV network – positions it as an attractive prospect for international energy companies, institutional investors, infrastructure funds, and international financial institutions (IFIs) seeking to advance sustainable, cross-border grid expansion in Southeast Europe.

USEA's power system modeling and analyses have leveraged more than a billion US dollars in transmission investment in Eastern Europe. This initiative underscores USEA's commitment to leveraging investment through evidence-based planning and stakeholder alignment. By laying the groundwork for financially sound and regionally significant transmission infrastructure, USEA is helping Moldova and its neighbors attract the capital needed to deliver resilient, interconnected power systems, accelerating clean energy integration and long-term regional cooperation.