

# ROMANIA ENERGY PRODUCTION AND STORAGE



Does Romania need a strategy for energy storage? Based on the EU context and planning a significant uptake of renewable energy sources in its electricity mix over the following decades, Romania must also develop a strategy for the deployment of energy storage technologies.



What is the energy sector like in Romania? Romania's energy sector is key to its evolving economy and security policy. It has a diverse energy mix, including coal, natural gas, nuclear, hydroelectric, and renewable sources. The largest share of electricity production historically came from coal and natural gas, followed by hydroelectric and nuclear power.



How much energy does Romania produce in 2022? According to the National Energy Regulatory Agency (ANRE), the energy output in Romania in 2022 was 53 TWh (terawatt-hour), while imports were 5.9 TWh. Electricity consumption by household end-users was 13.5 TWh, while non-household end-users were 36.7 TWh. Furthermore, energy exports were 4.6 TWh.



Can storage technologies improve energy security in Romania? Such enhanced legislation is needed for implementing the Romanian National Energy and Climate Plan (NECP), which lists developing storage capacities as an instrument to improve energy security but lacks detail on how storage technologies will be deployed until 2030.



Where does Romania import electricity? Romania exports and imports electricity to and from neighboring countries, including Hungary, Bulgaria, Serbia, Ukraine, and Moldova, and is also part of the European Union's internal energy market, which aims to create a single, competitive market for electricity and gas across EU member states.

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What are some examples of energy security issues in Romania? One example is Romania's NECP, which at first did not address storage technology. The updated version of 2020 was marginally improved in this respect, listing 'developing storage capacities' as an instrument to improve energy security, but lacking detail on the storage capacity to be developed until 2030.



Romania Energy Ministry shells out PNRR funds to support PV manufacturing and energy storage capacity. The Romanian Ministry of Energy has approved state aid of 32.92 million (\$35.4 million) under the National Recovery and Resilience Plan (PNRR) for a solar panel energy production capacity, the greater the need for storage. All these



The Minister of Energy signed, on October 17, two financing contracts through Investment 4.3 and a contract through Investment 4.2 from the National Recovery and Resilience Plan (PNRR), aimed at developing electricity storage capacities and promoting investments in the cell value chain and photovoltaic panels. Sebastian Burduja, Minister of Energy: "This summer, "



Romania can reach a completely decarbonised electricity production mix in 2040 with no security of supply risks by aiming to have no more than 3.5 GW<sup>1</sup> of total installed gas-fired capacities by 2030 and by focusing more on wind power and a



The price of electricity on the balancing market in Romania spiked at RON 16,000 (EUR 3200) per MWh in the morning of July 2, as the production of intermittent generators (wind farms most likely

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The Ministry of Energy of Romania will provide just over 103 million in financial support for battery energy storage system (BESS) deployments in the country. Minister of Energy Virgil Popescu signed an order approving the state aid scheme for investments in battery energy storage systems on Monday, 28 November, announced via his Facebook page.



Romania's energy ministry has re-launched a competitive tender for battery storage projects, seeking to have at least 240MW/480MWh of energy storage facilities up and running by mid-2026. Meanwhile, another tender for the construction of an industrial chain for battery storage and solar panels will



(C)2023 Deloitte Renewable Energy in Romania | Roadmap to 2030 2  
Information Sources Main data sources include market data, historical / statistical and forecasted data using the PRIMES model in relation to the key energy sector drivers. An overview of the evolution of energy production costs from conventional and renewable sources, with



In this regard, under INECP Romania set itself to implement the following measures: (i) clearly define the energy storage concept in primary legislation, (ii) outline the conditions for the procurement of energy storage licenses, as well as connection to the grid, (iii) define the standards for the installation and use of various storage technologies; (iv) develop a



Romania's Energy Storage: Assessment of Potential and Regulatory Framework 2. NECPs and the 2030 outlook for storage Increasing the use of renewable energy sources (RES) is among the pillars of the decarbonisation process embraced by the EU. However, an increased RES share translates into more variable

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Romania has allocated €80 million (\$87 million) under its national recovery and resilience plan (PNRR) for energy storage projects, which is expected to result in contracts for a total of 1.8 GW



Increasing domestic production and storage capacity forms the core of this effort. Boosting Domestic Energy Production. While Romania is investing heavily in domestic production, especially in natural gas and renewables, current levels are insufficient to fully meet national demand. The Neptune Deep gas field is expected to add up to 100



Finland and Greece are also using the funding pot to support energy storage projects. Romania is currently targetting 30.7% renewable generation in its electricity mix by 2030. The country hasn't had many utility



Based on its renewable energy potential and considering the national energy sector's current characteristics, generation assets, interconnections, market design, regulatory landscape, Romanian authorities should plan for increased



Răzvan Nicolescu, the EIT Governing Board member and former energy minister in Romania, declared: "I am very excited that such an important storage capacity is manufactured and installed in Europe by a Romanian

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As the Romanian Ministry of Energy takes steps to encourage investments in standalone battery energy storage systems (BESS) through support schemes and an improved tariff regime, one regulatory challenge ???



Romania's Ministry of Energy has reached two additional milestones under the National Recovery and Resilience Plan related to battery storage capacities and PV panel production. CEENERGYNEWS PRO. Search. Search. CEENERGYNEWS. Subscribe. Oil & Gas. OMV terminates Gazprom gas contract, no supply bottleneck. December 12, 2024



According to data from system operator Transgaz, Romania moved to net gas exports for the first time in almost a year and a half at the end of November, as sluggish demand allowed the country to balance on domestic production and storage alone.

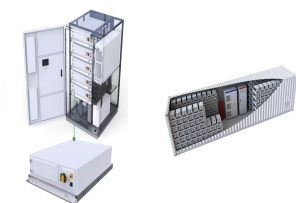


In a milestone for Romania's green energy push, the country's Energy Minister Sebastian Burduja has signed the nation's first financing contracts under the National Recovery and Resilience Plan (PNRR), dedicated to supporting domestic production of photovoltaic panels and expanding battery storage capacity.



The Society for the Administration of Energy Shares - SAPE SA obtained funding from the National Recovery and Resilience Plan (PNRR) for one of its most important projects, the one regarding energy storage using green hydrogen. Thus, according to a press release sent on Wednesday, AGERPRES, for the "Green hydrogen production unit by ???

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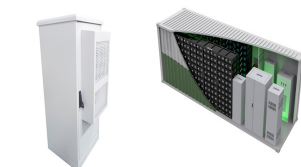
address these challenges by mandating energy storage requirements for prosumers with PV systems between 10.8 kW and 400 kW. This bill, however, has not yet come into force as it was returned to renewable energy production and consumption, Romania is not only advancing its national energy goals but also contributing to the broader European



Prime Batteries and Monsson put into operation the largest capacity of electric energy storage in batteries in Romania. This is part of the first hybrid photovoltaic-wind-battery project, within the Mireasa Wind Park, with a capacity of 50 MW, located in Constanța County.



The Ministry of Energy of Romania has reopened a competitive solicitation for battery storage for the grid integration of renewable energy, seeking "at least" 240MW and 480MWh of resources. The Ministry made its announcement yesterday (8 February), aiming to get the 2-hour duration battery energy storage system (BESS) facilities up and running by mid-2026.



EDPR's project represents the first energy storage activity in Romania, where the company has been present since 2008. The company currently has a total installed capacity of 521 MW in Romania, comprised mainly of wind energy and, to a lesser extent, solar power. EDPR's production facilities in the country are located in Dobrogea and



Investments in storage systems through which all of Romania's electricity consumption for four hours would be covered by energy stored in batteries would mean around 4 billion euros, i.e. the same amount that the state budget paid to suppliers to compensate for waste energy. says the Association of Prosumers (APCE). Romania is "repeater" in terms



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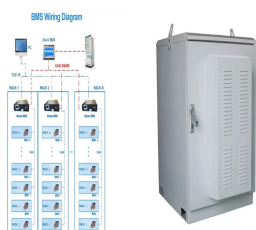
The Romanian government plans to fund up to 25% of storage capacity for investors in photovoltaic and wind projects through the Modernization Fund. The initiative aims to enhance energy storage



nia's aging energy infrastructure, improve interconnectivity, and expand electricity storage capacity - ties to support the anticipated growth in renewables. Romania's energy transition is closely tied to EU regulations, which necessitates a focus on sustainable energy production and efficiency. Key



Sebastian-Ioan Burduja: In the context of the current European decarbonization policies, which result in the increasingly reduced use of fossil fuels and especially the elimination of coal-fired power plants, in conjunction ???



So, reducing energy consumption can inevitably help to reduce emissions. However, some energy consumption is essential to human wellbeing and rising living standards. Energy intensity can therefore be a useful metric to monitor. ???



The government adopted the Energy Strategy of Romania 2025-2035, with projections up to 2050. The Energy Strategy of Romania 2025-2035, with projections up to 2050, is the first strategic document of its kind that the government in Bucharest adopted in 17 years, the Ministry of Energy pointed out. The document defines the directions for the development of the ???