

January 2023

country report

Country office Romania



Romania is getting well through the winter. But what else is going on in the energy policy?

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Low dependence on Russian gas, full natural gas storage facilities, balanced energy mix in production. At first glance, Romania is a model pupil in terms of energy policy compared to the EU and can easily bridge this difficult winter in terms of energy. But there are also deficits. Above all, there is a strong need to expand the electricity supply. If new investments are not made or progress is too slow, the situation in Romania can quickly deteriorate.

The European Commission proposed at the end of July 2022 that each EU member should, firstly, reduce gas consumption by 15% between 1st of August 2022 and 31st of March 2023 and, secondly, have natural gas storage facilities at least 80% full by 1st of November 2022 to ensure winter supply. Romania met these requirements in time and without much effort. Romania started this winter, which has been exceptionally mild so far, with more than 3 billion cubic metres of gas in storage. Moreover, the country in the south of Eastern Europe has been one of the EU countries with the lowest gas consumption for years. Romania's total energy consumption of 25 million tons of crude oil units in 2020 is also only 2.5% of the consumption of the entire EU. Or put another way: Only 11 % of Germany's consumption. Per person, this is 2.7 Mwh per year.

So it is hardly surprising that Romania's imports of Russian energy sources are 17 % below the EU average overall: According to Eurostat, the EU's total dependence on Russian energy sources was around 24% in 2020. In Romania, the figure was 15.5% for gas, 37% for oil and 11.8% for coal. So, apart from oil - where Russian supplies can still be replaced relatively easily - Romania is not dependent on Russian energy sources to a threatening extent.

Romania is the second largest gas producer in the EU

But why is Romania dependent on Russian energy sources in the first place? Romania currently produces 25 to 26 million cubic metres of gas a day from the country's own gas reserves. This is enough for the country's entire summer consumption, but too little for the cold season: daily gas consumption in Romania reaches 13 million cubic metres per day during summertime, and in the current winter of 2023 a peak of about 55 million cubic metres is expected in gas consumption on frosty days. Until 2022, Romania relied on relatively cheap gas from Russia to cover this supply gap.

The Russian war of aggression against Ukraine, the subsequent turbulence on the European energy markets and the price explosion in the energy sector have now led Romania to cut its exports to Europe in order to secure its own needs. Romania has also increased production capacity from current deposits to 32 million cubic metres per day, according to the director of the Romanian gas company Transgaz, Ion Sterian. It has also helped that large Romanian industrial consumers (e.g. the fertiliser producer Azomureş or the aluminium producer Alro Slatina) have stopped or partly reduced their activities. However, it is not this winter that is problematic in Romania, but the long-term production outlook - that is the tenor among industry experts.

Romanian on-shore gas production will slowly decline in the coming years because the deposits are depleting. The on-shore deposits could be replaced by the huge Romanian off-shore gas deposit "Neptune Deep" in the Black Sea, estimated at more than 80 billion cubic metres of gas. Whether and when "Neptun Deep" can be exploited currently depends on a business agreement between the Romanian state gas company Romgaz and the Austrian oil and gas company OMV.

An investment decision is only expected in a few months; they say in Romania. In addition, reliable legislation for subsidies and taxation still has to be created and implemented. In an optimistic scenario, in which both Romgaz and OMV Petrom make the final investment decision in 2023, the preliminary work for the actual extraction of gas from the Black Sea would take about four years. 2027 would thus be the earliest year in which Romania could start extracting gas from the waters of the Black Sea. In view of the current tense relationship between Romania and Austria due to Romania's recent rejection of Schengen accession by Vienna, the agreement between Romgaz and OMV needed for the major investment is likely to be delayed. At the same time, Romanian energy demand is expected to grow significantly in the coming years due to the country's positive economic development.

Electricity is the weak point in the system

However, the medium and long-term challenges in the area of gas supply can be easily pushed aside in everyday life. This explains why neither the Romanian government nor county or city councils call on citizens to save energy as forcefully as happens in other EU countries. And yet Romania is vulnerable in terms of its energy

security. The most pressing problem, however, is not in the gas sector but in the electricity sector.

Romania's Ministry of Energy and also the Energy Market Regulatory Authority (ANRE) point to large Romanian electricity capacities: 22 GW are said to have been available in 2019 - more than double the capacity needed for a peak consumption of 9-10 GW in the country. However, experts and industry complain that much of this capacity exists only on paper. In fact, statistics on the operation of the electricity system show that Romania has become a net importer of electrical energy since 2019 and is expected to remain so in the medium term. In recent years, fossil-fuel power plants that did not comply with environmental and climate protection, were outdated or economically inefficient, had to be taken off the grid. At the same time, these lost production capacities were not replaced by new investments, e.g. in production facilities for renewable energy. Despite the official target of covering 30.7% of electricity consumption from renewable energy sources by 2030, practically no new production capacities have been installed in Romania since 2016. In addition, industry in particular complains that electricity capacities sometimes cannot be made available at the required location, which hinders growth.

Romania's energy security could therefore be achieved relatively easily through massive investments in the expansion of the electricity grid and the creation of further production capacities. From Romania's point of view, coordinated EU-wide energy policy initiatives, e.g. to accelerate interconnectivity of infrastructure, joint gas purchasing under the leadership of the European Commission or solidarity mechanisms for mutual support between EU members in case of energy shortages would also help to ensure energy security in the long term.



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Distribution of installed production capacity for electricity in October 2022 (Source: ANRE)

Source	Capacity
Hydropower plants	6.641 MWh (36,3 % of the total output)
Coal-fired power stations	3.092 MWh (16,9 %)
Wind farms	3.014 MWh (16,5 %)
Hydrocarbon power stations (gas, oil)	2.615 MWh (14,3 %)
Nuclear reactors	1.413 MWh (7,7 %)
Photovoltaic plants	1.393 MWh (7,6 %)

Capital is available

In principle, Romania is open to technology when it comes to expanding production capacities in the electricity sector. This includes nuclear energy. In 2022, Romania signed a contract with the USA for the development of small modular reactors (SMRs). NuScale Power wants to build the first small modular nuclear reactor complex in the USA by 2030 at the latest and has already entered into a first memorandum with the local government for the construction of a first SMR power plant in Doicești (Dâmbovița County).

The sector of energy from renewable sources is clearly expandable with great growth potential. Unfortunately, Romania has lost a lot of its attractiveness for investments in this sustainable sector in recent years: partly due to a lack of regulations, guidelines and rules, and partly due to a lack of state support, promotion and subsidies.

The investment backlog in the expansion of renewable power generation capacities is all the more unfortunate as access to financial instruments is better than ever. The EU instruments "Just Transition Fund", "Modernisation Fund" and the "PNRR" (Romanian development plan based on the "Recovery and Resilience Mechanism") alone are fully or at least partially dedicated to clean energy production. The PNRR, for example, foresees EUR 460 million of direct investment for an additional 950 MW by

2026, plus EUR 440 million for electricity storage and recycling of renewable equipment. In addition, banks and other commercial financial institutions are now even reluctant to finance the construction of conventional power generation capacity themselves. Likewise, investors are increasingly willing to invest their own capital to support the expansion of renewable energy capacities.

The ball is now in the Romanian government's court. It must prioritise setting the necessary state legal and administrative framework to open the dam for these investments. However, the government must do this with a steady hand and reliable planning horizons. Hardly any other sector of the Romanian economy has undergone as many changes in laws and norms in the last 10-15 years as the energy sector. Investor confidence has been permanently damaged, leading to the current investment backlog.

Not only the Romanian energy market but also the general population is waiting for corresponding confidence-building political initiatives. They would directly benefit from stronger competition on the Romanian energy market and then presumably lower prices. Currently, the Romanian state itself is the biggest beneficiary of increased energy prices in the country: nuclear energy producer Nuclearelectrica and natural gas producer Romgaz are state-owned companies. The energy

ministry also holds 20% of the shares in OMV Petrom and manages the country's largest hard coal and lignite mines. However, most of the profits - which have also increased due to inflation - were used to finance Romania's budget deficit in the last twelve months and not for new investments.

Words are to be followed by deeds

Romania could be a stable energy anchor for South-Eastern Europe, Eastern Europe and even East-Central Europe and secure solid growth for itself with its energy production and gas exports. The financial resources are available for all sectors of natural gas production, electricity generation, grid and infrastructure strengthening. What is needed now, however, is political will.

Independent energy experts criticise a lack of professionalism in the administrative and supervisory boards, which they attribute to the

politically motivated appointment of lateral hires and party friends. In addition, the state's administrative capacities would have to be improved quickly and massively in all key positions: In the Ministry of Energy, in the regulator ANRE, in the state-owned energy companies and in the grid operators Romgaz, Transelectrica and Transgaz.

What is needed is a strong political commitment to development, investment and innovation in direct coordination with the EU Commission and the other EU member states. What is needed are honest figures and a transparent inventory of the country's energy infrastructure. Also a medium- and long-term energy security plan. In line with "Fit for 55" and the "Green Deal" priorities, a stable and reliable investment environment must be created for the development of energy capacities in Romania. This concerns both gas and renewable energy capacities. Many words must now be followed by deeds in Romania.

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