

Briefing · March 2024

Azerbaijan's energy and climate policies dominated by gas export expansion plans

Key points:

- Azerbaijan is the world's 28th-largest oil and gas producer
- Between 2000 and 2021 natural gas supply grew by 128%
- Gas exports rose by 29,290% between 2006 and 2021
- Around half of gas exports go to Europe, with significant plans to increase sales
- National climate target to reduce greenhouse gas emissions by 40% by 2050
- Push for renewables is to free up supply to increase gas exports to Europe
- Plans to turn Nagorno-Karabakh region into a green energy zone

Azerbaijan's economy is dominated by oil and gas

Azerbaijan is the world's [28th-largest oil and gas producer](#), with production of around one million barrels of oil equivalent per day in 2023. The country holds around [0.4% of global oil reserves](#). In March 2024, Samir Nuriyev, Chairman of the COP29 Organizing Committee, called for a [fair approach](#) for countries with large oil and gas sectors.

The state oil company SOCAR has been expanding its operations alongside global majors. Deals in 2023 include:

- [Acquisition of Equinor's assets](#) in the country,
- Partnership [with BP](#) on gas works in its Azeri-Chirag-Gunashli oil field (ACG) in the Caspian Sea
- Production at the Absheron field with [TotalEnergies](#), and
- Borrowed \$1.5 billion from [Lukoil](#) to enable its refinery in Turkey to resume processing of Russian crude oil.

In March 2024, SOCAR signed a deal with Kazakhstan's national oil company [KazMunayGas](#) to increase shipments of oil across Azerbaijan towards Turkey and Europe, and to partner on [geological exploration](#) in Kazakhstan.

Gas production & economic impact

Between 2000 and 2021 natural gas supply [grew by 128%](#). Government statistics show total natural gas production in 2022 reached nearly [47 billion cubic metres](#) (bcm). During the next ten years the country is planning on expanding its gas production by around [12 bcm a year](#).

Oil and gas make up [98% of total energy supply, over 90% of exports and one-third of GDP](#). Gas exports increased by [29,290%](#) between 2006–2021.

The country's economic reliance on gas is not without risks. The [World Bank warned in a recent report](#) that "Azerbaijan's development trajectory remains exposed to global energy markets' volatility" and that the country will not be able to achieve strategic priorities outlined in Azerbaijan Vision 2030 if it remains reliant on oil and gas rents. The World Bank concludes: "Remaining prey to commodity cycles and facing a depleting oil asset base, Azerbaijan's economy will be tested by the headwinds brought by global decarbonization".

Europe is a key market for Azerbaijan's gas exports

Europe is a key export market. Energy ministry data shows exports of natural gas reached 22.3 bcm in 2022, of which around [11.4 bcm went to the EU](#). In 2023 exports to the EU reached [12 bcm](#) out of a total 23.9 bcm.

Russia's invasion of Ukraine increased the EU's goal of finding alternative sources of energy supply. In 2022 the EU and Azerbaijan signed an agreement to increase exports of natural gas to [20 bcm a year by 2027](#). Azerbaijan is currently [importing Russian gas](#) for domestic use to enable it to meet its export commitments, but this policy is likely to come under greater scrutiny from European policymakers in future.

In March 2024 the EU and Azerbaijan [reaffirmed their commitment](#) to work together to develop the infrastructure required to increase gas exports through what is known as the Southern Gas Corridor. [Analysts conclude](#) that significant investment will be needed to develop new gas fields and upgrade infrastructure to enable larger export volumes.

Current plans are for the 10-bcm capacity Trans Adriatic Pipeline running between Greece and Italy to [increase its flows by 1.2 bcm per year from 2026](#). There are also plans to build an [electricity cable under the Black Sea](#) to enable Azerbaijan to export electricity to Europe.

Climate targets and renewable energy in the shadow of gas exports

Azerbaijan's [updated Nationally Determined Contribution](#), submitted to the UNFCCC three years late in 2023, states the aim to reduce greenhouse gas emissions by 40% by 2050 (using 1990 as the baseline reference year).

Hydropower dominates the country's renewable energy generation, with a capacity of more than 1300 MW. However, its long-term role could be affected by increasing water scarcity due to climate change. [Government statistics](#) show wind capacity is 66 MW, solar energy 282 MW and bioenergy 38 MW. In 2021 hydro, solar, wind and biofuels made up [1.4%](#) of national energy supply.

New [capacity is being developed](#). In 2022 construction began on a 240-MW wind farm with Saudi Arabia's ACWA Power, and on a 230-MW solar power plant with the UAE's Masdar. In 2023 implementation agreements were signed with ACWA Power on a 1.5-GW wind power project, a 1-GW onshore solar power plant and on energy storage systems. [SOCAR](#) is a partner in these projects.

The government has plans to turn Nagorno-Karabakh, the area it took [full control over](#) in September 2023, into a [green energy zone](#) with solar, wind and hydro electric power projects in development.

One driver of the country's push for renewables is to free up supply to increase gas exports to Europe. In November 2023, Azerbaijan's [deputy energy minister Samir Valiyev](#) said: "By the end of 2027, wind and solar power plants with a capacity of 1,862 MW are planned to be put into operation, which frees up more than 1 bcm of gas".