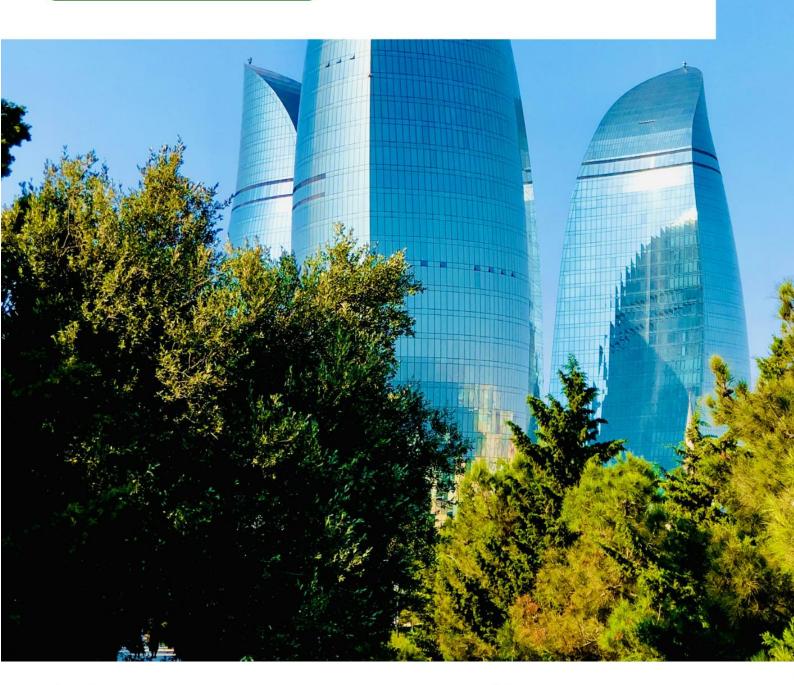
Prosperity Post Fossil Fuels

Policy Dialogue on Just Energy Transitions

Briefing: Azerbaijan



Lead partners:

SALZBURG GLOBAL SEMINAR



Other partners:

WINDWARD Fund



About this briefing

This briefing was commissioned by Climate Strategies to support the *Policy Dialogue on Just Energy Transitions: Identifying Pathways to Prosperity Post-Fossil Fuels*, co-hosted by Climate Strategies (CS) and the Salzburg Global Seminar (SGS) from September 8–12, 2024, and organised alongside our partners from the Stanley Centre for Peace and Security and the Windward Fund. It incorporates insights from the author's desk research and discussions held during the dialogue, conducted under strict Chatham House rules. The views expressed here do not necessarily represent those of CS, SGS, the funders, or the programme participants.

About the Policy Dialogue on Just Energy Transitions

The Policy Dialogue on Just Energy Transitions: Identifying Pathways to Prosperity Post Fossil Fuels aimed to increase capacity and confidence in strategies that acknowledge the challenges faced by oil and gas dependent countries, enable participants to envision and enact climate compatible development plans, and foreground viable economic diversification strategies with attention to protecting vulnerable communities. The first iteration of the dialogue took place from September 8 – 12, 2024 in Salzburg, Austria. For more information, follow this link.

About Climate Strategies (CS)

<u>Climate Strategies</u> is an international, not-for-profit research network with a Secretariat based in the UK and the Netherlands. Its international network includes some of the foremost thinkers and researchers on a range of multidisciplinary climate change topics. Climate Strategies enables its members and other researchers to place impact at the heart of their research, catalysing climate action by providing robust evidence for decision-making and facilitating meaningful interactions between decision-makers and researchers.

About Salzburg Global Seminar (SGS)

<u>Salzburg Global Seminar</u> is an independent non-profit organization with a mission to challenge current and future leaders to shape a better world. Founded in 1947 as a centre for post-war dialogue and reconciliation, for 75 years Salzburg Global Seminar has worked to catalyse new perspectives, ideas, and collaborations that shape more peaceful, equitable, and just societies.

The dialogue was held at Schloss Leopoldskron, the home of Salzburg Global, in Salzburg, Austria. It provides a retreat-like environment, which is conducive to the sensitivity and complexity of this conversation. Together with an international network of 40,000 Fellows, Salzburg Global has been at the forefront of global movements for change for 76 years, generating significant impact on individuals, institutions, and systems. PPFF participants joined this network of Fellows, allowing for continuous high value exchanges beyond the scope of the programme.

Prosperity Post Fossil Fuels: policy briefing for a just energy transition in Azerbaijan

Ingilab Ahmadov, Director of the Eurasia Extractive Industries Knowledge Hub, Khazar University

Key Messages

These are unique times for the energy transition in Azerbaijan. The country is the host of the 2024 Conference of the Parties of the UNFCCC (COP29) and is implementing ambitious large-scale renewable energy projects. However, it also intends to increase its hydrocarbon supplies, primarily natural gas to Europe.

Renewable energy growth in Azerbaijan is necessary, but not sufficient for a successful energy transition. The key question is whether the development of domestic renewables capacity automatically supports the energy transition or simply supplements fossil fuels, as is currently the case.

For the energy transition to be successful, the government needs to strengthen its ability to overcome existing and future obstacles to support this it should:

- Develop a comprehensive and targeted energy transition strategy to demonstrate to the domestic and international community, and potential investors, the irreversibility and sustainability of the transition process.
- Identify vulnerable groups who are likely to lose out and will need support through socio-economic measures to ensure the transition is inclusive and sustainable.
- Increase the potential of the private sector and strengthen its competitive capabilities to overcome the omnipotence of the state in the energy sector, which causes serious risks for long-term sustainability and significantly reduces efficiency.
- In addition to creating the necessary institutional conditions, support new private initiatives with technical capacity building and the provision of preferential loans.

The COP29 Presidency is a unique chance to reconsider the status quo on climate change not only in the country and the region, but also in the world. Key issues that Azerbaijan, together with the COP Troika (which unites the COP29 Presidency with the previous and upcoming presidencies), can bring to the forefront at the Conference will be the existing disagreement between the Global North and the Global South, on shared responsibility for climate change, and the financing of decarbonization pathways.

Introduction

For resource-rich countries like Azerbaijan, the energy transition is not an inherent necessity, but a predominantly externally-driven phenomenon in response to international climate commitments. For this reason, and due to the prevailing economic structure of the country, high profit expectations, and consumer behaviour, it is met with considerable resistance by domestic stakeholders.

Nonetheless, Azerbaijan is committed to reducing its greenhouse gas emissions by 35% by 2030. In parallel, the government has created a "zero emission zone" in three regions, Karabakh, East Zangezur and Nakhchivan.¹ The COP29 Presidency has also been a strong stimulus for climate ambition and, although there is currently no overarching carbon neutrality target, there are high expectations that the government will announce ambitious emissions reduction goals ahead of the Conference.

Energy landscape

Fossil fuels remain the backbone of the Azerbaijani economy. According to official data, in 2023, the share of the oil and gas sector in GDP was 35.3%; the share of oil and gas revenues in the total budget income was 51.5%; and the share of oil, gas and oil products in total exports was 90.1%². Since 2008 the latter has never dropped below 90%. In 2016, the Parliament (Milli Meclis) ratified the Paris Agreement, committing to reduce greenhouse gas emissions by 35% by 2030, from 1990 levels, leaving the country with a huge challenge in terms of a just energy transition.

The peculiarity of the oil and gas sector in Azerbaijan is that the operations are conducted mainly in cooperation with global oil giants, such as BP, ExxonMobil, and Total. Since 1994, these oil majors have signed more than 35 Production Sharing Agreements (PSAs) with the government for activities in the Azerbaijani sector of the Caspian Sea, in conjunction with the nationally-owned State Oil Company of the Azerbaijan Republic (SOCAR). Another important feature are favourable transportation routes to Western markets, most notably the Baku–Tbilisi–Ceyhan (BTC) oil pipeline and the Southern Gas Corridor, including the Trans-Anatolian Pipeline (TANAP) and the Trans Adriatic Pipeline (TAP), which enable the supply of natural gas to Europe.

Regarding the development of renewable energy, Azerbaijan, much like other fossil fuel-dependent countries, has not been as active as resource-poor nations. Renewable energy sources accounted for only 7.2% of electricity generation in 2023³, but the potential is high. According to the Ministry of Energy, renewables could deliver 26,040 MW, of which 23,040 MW from solar and 3,000 MW from wind⁴. However, even when compared with other fossil-fuel dependent and oil-rich countries, such as neighbouring Kazakhstan, Azerbaijan has been relatively late in initiating renewable energy projects and is now trying to make up for the lost time by accelerating their implementation.

The government of Azerbaijan began to consider alternative energy sources after 2014, when prices for hydrocarbons in the global market collapsed and the world entered a period of low commodity prices. Prior to this, in 2004, the state programme *On the use of alternative and renewable energy sources in Azerbaijan* ⁵ was adopted and, in 2011, the President issued the decree *On the preparation of the State Strategy for the use of alternative and renewable energy sources in Azerbaijan for 2012-2020*⁶. However, no tangible steps have followed.

More action has been observed since the COVID-19 pandemic. In 2021, the agenda *Azerbaijan-2030: national priorities for socio-economic development* was adopted, which mentions, among four other priorities, a clean environment and green growth. It was the first time these topics appeared in such a high-level statement. Two important legal documents were also adopted in the same year: *On the use of renewable energy sources in the production of electricity* and *On efficient use of energy resources and energy efficiency*, which significantly improved renewable energy governance and created a legislative basis for energy efficiency.

In 2022, the government signed an investment agreement with Masdar Azerbaijan Energy, associated with the UAE state-owned renewable energy company, marking a significant step in the identification of the key players and approach to renewable energy development. This agreement not only laid the foundation for future ambitious investment projects with Masdar, but also provided a model for working with foreign investors in the renewable energy sector. The role of Masdar in the development of renewable energy in Azerbaijan is compared with the role of BP in the early stages of hydrocarbon development, following the signature of the "Contract of the Century" in 1994.

In addition, the decision at the end of 2023 to select Azerbaijan as COP29 host has motivated the country to set more ambitious renewable energy development goals and to make the decarbonisation of the economy a domestic priority.

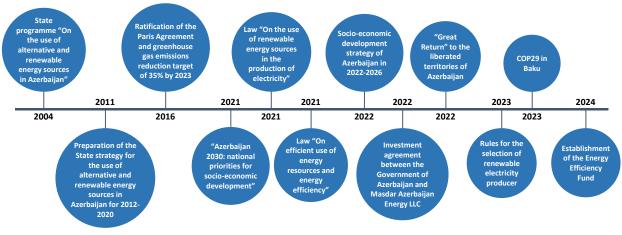


Figure 1: Key milestones towards the energy transition in Azerbaijan

Policy context: actors, interests, and policies

Governance

The key actors in the energy governance of Azerbaijan are the Ministry of Energy, state-owned energy company Azerenerji, state-owned energy trading company Azerishiq, and the Tariff (Price) Council. The Ministry of Energy is the central executive authority with the responsibility for policy implementation. Azerenerji is a vertically integrated company responsible for electricity generation and transmission throughout the country. Azerishiq is responsible for the provision of electricity to consumers by purchasing electricity from producers (Azerenerji and others). The Tariff (Price) Council is a collegial executive body with the mandate to determine retail and wholesale tariffs for electricity, gas, district heat and refined petroleum products, as well as purchase tariffs for renewable electricity. Meanwhile, the Ministry of Ecology and Natural Resources is responsible for ensuring environmental safety, and for the implementation of measures designed to avert any potential damage to natural ecological systems from economic or other human activities.¹¹

Oil and gas sector

SOCAR is the national oil and gas company (NOC). It was established in 1992 and is the most powerful structure in Azerbaijan. SOCAR is an integral part of the country's oil industry and has partnerships with international oil companies, led by BP, under PSAs. SOCAR thus has a dual role: on the one hand, it is a business partner in all PSA contracts with international companies, on the other, it is a conductor of oil and gas policy on behalf of the government. The company also plays a significant role in the transportation of hydrocarbons through the BTC and the Southern Gas Corridor, including TANAP and TAP

Renewable energy sector

Masdar, a leading renewable energy company with Abu Dhabi National Oil Company (ADNOC), Mubadala Investment Company and Abu Dhabi National Energy PJSC (TAQA) as shareholders, was invited to invest in Azerbaijan in 2020. In 2024, Masdar signed an agreement to build three solar and wind power plants with a total capacity of 1 GW. The company plans to build up to 10 GW of renewable energy capacity in the country by 2030¹.

ACWA Power from Saudi Arabia was also invited to Azerbaijan in 2020. ACWA's existing project, the 240 MW Khizi-Absheron wind farm, is due to start generating power in 2025. The project is based on the principle build-own-operate. The government is also considering two new potential ACWA projects: the construction of onshore wind energy facilities with a total capacity of 1 GW, and a 1.5 GW off-shore wind farm with battery storage.

¹ https://masdar.ae/en/news/newsroom/masdar-opens-office-in-azerbaijan

Azerbaijan's traditional partner in hydrocarbon projects, BP, is also involved in clean energy development. A solar power plant is being built in the Jabrayil region, and plans are underway to harness solar energy for the operations of the Sangachal Terminal, one of the world's largest oil and gas terminals, transporting crude oil and natural gas produced in the Caspian Sea for pipeline shipments to Europe.

At the end of 2023, SOCAR established SOCAR Green LLC with the aim to oversee the company's strategic ventures within the realm of renewable energy. In the initial phase, SOCAR Green LLC is collaborating with Masdar on the construction of onshore wind and solar power plants with a total capacity of 1 GW.

State of the just transition

Strengths	Weakness
 Political will COP29 as a trigger Clean energy as a priority of public expenditure (indirectly, within the "Great Return" program)² Historical cooperation with international oil companies 	 Lack of an energy transition strategy Phase-out instead of net-zero approach Over-regulation instead of liberalisation within the energy sector Bloated public ownership in the energy sector Fragile private sector Low tariffs and hydrocarbon subsidies Energy efficiency problems Unsustainable consumer behaviour
Opportunities	Threats
 High renewable energy potential Geopolitical and transit opportunities Partnerships with Eastern Europe Strategic Partnership on energy supply with the EU Strategic partnership with China and Central Asian post-soviet countries 	 Oil dependency and rent factor Global tensions between hydrocarbon suppliers and consumers Geopolitical tensions in the region EU plan to reduce gas demand

Figure 2. SWOT analysis of the Energy Transition

BRIEFING: AZERBAIJAN
PROSPERITY POST FOSSIL FUELS

² https://idp.gov.az/en/news/1749

Key dilemmas

Economic dependency on oil rents

As an oil-rich country, the backbone of Azerbaijan's economy continues to be the rent factor. A decrease in oil production and exports as part of the transition to renewable energy sources will deprive the government of its oil rent and require a reform of the socio-economic architecture, a challenging process for the executive.

The State Oil Fund of Azerbaijan (SOFAZ), the sovereign wealth fund, also derives its main source of income from the sale of oil and gas within the framework of PSA contracts. The decarbonisation of the Azerbaijani economy will reduce this source of revenues. To prevent the loss of accumulated assets (to date, USD 58 billion, 77% of GDP¹²), the Fund's authority should therefore strengthen the management of asset placement and increase profitability.

The energy transition will also pose a significant challenge for SOCAR which, despite having established a green subsidiary, relies on oil and gas as main source of income and this could reduce its profitability in the future.

Renewable energy growth within the transition

Renewable energy growth in Azerbaijan is necessary, but not sufficient for a successful energy transition. The key question is whether the development of domestic renewable energy capacity automatically supports an energy transition or simply supplements existing fossil fuels. The key issues are the stated economic structure dependent on the redistribution of rent, the fragility of the non-oil economy, energy sector subsidies and the weight of the state in the economy. Between 2016 and 2021, average annual subsidies – explicit and implicit – for natural gas, electricity and oil amounted to USD 2.3 billion, accounting for just over 5% of GDP.¹³

As a traditional oil country, however, crude oil production has been steadily declining since its peak in 2010, while natural gas production and exports have been growing. This trend benefits the energy transition in two ways. First, declining oil production means the problem of sunk costs is not as acute as, for example, in neighbouring Kazakhstan, where peak oil production is yet to be achieved. Second, natural gas is frequently presented as a "transition fuel" due to lower carbon dioxide emissions compared to oil or coal. This, however, cannot compensate for the fact that the rents associated with gas exports are significantly lower than oil, and the country no longer receives the same level of income from the export of hydrocarbons as in the past. Even high oil prices cannot offset the decline in its production and exports.

In such context, the EU's objective to reduce natural gas demand in the near term may significantly impact Azerbaijan's plans to increase gas exports to Europe. By 2030, EU oil

and gas demand is expected to fall by 25% and 50%, respectively, compared to 2019. By 2050, demand for both fuels will be cut by at least 80%.³ Azerbaijan's plan to build up additional gas supplies to Europe is thus risky and the government should develop an alternative agenda to accelerate the reduction of oil and gas dependence.

In 2023, 92.8% of the country's electricity generation derived from fossil fuels, 6% from hydropower and only 1.2% from other sources¹⁴. Almost half of the electricity used is sourced from natural gas. In this regard, the government sees the increase in renewable energy production as an opportunity to free up some natural gas that can be exported to Europe. This could bring a double benefit to the economy as the export price is significantly higher than the domestic price and the level of subsidies needed for the local energy market would be reduced (the phasing out of fossil fuel subsidies remains a priority for the government¹⁵). This would partially compensate the possible initial losses of renewable energy production and therefore support integration of clean energy. The government is adopting a similar approach with renewable energy projects in collaboration with Masdar, whereby part of the production is exported to Europe, compensating the initial unprofitability.

Energy efficiency and the protection of vulnerable groups

The share of people employed in extractive sectors is only 0.8% of the total workforce. Therefore, the energy transition and decarbonisation efforts will not have direct negative social consequences for people working in the oil and gas sector. Many more people are expected to be affected by climate change impacts and disruptions in the agriculture sector, which accounts for 36% of the total workforce¹⁶. Nonetheless, the potential indirect consequences of the phasing out of subsidies – the gradual increase of energy prices to improve efficiency and encourage investment in the transition – present a challenge for the government, especially with regard to the protection of the poorer groups of the population¹⁷.

The main factor in the persistence of poverty in the country are the obstacles to the growth of the private sector and related job creation. The rent economy does not contribute to the diversification and expansion of private initiatives. In this context, a just energy transition should promote the involvement of vulnerable groups in new business projects, both in the renewable energy and related sectors. The state should not only create the necessary institutional conditions, but also support such private initiatives, including through the provision of preferential loans. The lack of knowledge and skills to cope with the new

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³ https://www.e3g.org/publications/powering-up-the-cop29-presidency/

socio-economic conditions is another difficulty and it is up to the government to shoulder this burden with an effective effort to retrain and re-skill workers.

Improving energy efficiency is also challenging in Azerbaijan because of the required changes to consumer behaviour, which, due to government subsidies, has become accustomed to a relatively cheap energy source. It is not well understood by consumers that cheap energy is compensated for by the budget, which could be spent on other forms of social support. Breaking this vicious cycle in a short period will be extremely difficult.

Provincial consumers must also be considered in the energy transition as they represent one of the most vulnerable groups. Traditional energy supply in the provinces is less stable than in the capital and it is possible that the renewable energy infrastructure may be less reliable and durable in such territories.

Governance changes to support decarbonisation and climate resilience

The World Bank estimates that decarbonising and building a climate-resilient economy could cost approximately 3.2% of national GDP cumulatively in the next four decades¹⁸. It will be difficult to reach these goals within the existing economic structure and institutional framework. To achieve a successful energy transition, a fundamental change in the governance system is required, as understood by the government. First of all, this entails improving energy efficiency in the building and transport sectors. In addition, future energy policies need to stimulate more competition, by facilitating a more active role of the private sector in electricity generation and distribution.

Key opportunities

The energy transition presents a variety of opportunities for Azerbaijan, including the sustainability of economic development as a whole. A successful and sustainable energy transition can increase competitiveness, end dependence on fossil fuel rents, and support the economic diversification that has been a long-standing target for the country.

Furthermore, the transition will support the creation of new jobs, which is of vital importance for a country with a surplus of labour force and high unemployment. In addition, the promotion of renewable energy initiatives, such as the installation of rooftop solar for homes and businesses, can provide new socio-economic opportunities, including for vulnerable groups, as it enables relatively independent access to sustainable energy sources.

The alternative to the current oil-dependent economy is not only a more diversified one, but also one with a new structure that brings more added value supported by institutional reforms, motivating local entrepreneurs to compete with each other and with foreign

investors. A more attractive environment for entrepreneurs will also create new jobs. All this is possible because, unlike the oil and gas business, renewable energy has a large spillover effect in the form of knowledge-based capacity building and increased demand for relevant services, and the state only needs to create the conditions for this to materialise.

COP29 Presidency as a trigger for greater climate ambition

Hosting the COP29 Presidency has significantly accelerated the decarbonisation efforts of the Azerbaijani government, as shown by large-scale renewable energy projects, and the highest growth rates of solar and wind production in the country's history in the first half of 2024. Active policy dialogues with international partners are also bringing best practices for the improvement of energy efficiency and decarbonisation processes. COP29 is expected to promote more ambitious commitments within countries' nationally determined contributions (NDCs), and a new set of targets is expected to be announced ahead of, and during, COP29. The COP Presidencies Troika mandated by the UAE Consensus, a key achievement of the COP28 Presidency unites the COP28 Presidency with the following two– Azerbaijan and Brazil – to drive ambitious collective climate action. The three countries will work together on the 'Roadmap to Mission 1.5°C'.

Conclusion

The energy transition and the related decarbonisation processes in Azerbaijan, as in the majority of other oil and gas-producing countries, start from an unfavourable environment. For an economy based on rent and whose energy balance is achieved through the use of traditional energy sources, often subsidised, the transition is more challenging than in countries less dependent on fossil fuels. Under these circumstances, a just transition becomes particularly pertinent.

The significant renewable energy projects initiated and completed in recent years are largely the consequence of a prevailing political will. While this is a crucial factor, alone it is not sufficient to enable a successful energy transition. To ensure the irreversibility of the process, it is essential to enhance the country's institutional framework, foster a competitive and diversified economic space, and achieve the desired inclusiveness. In this regard, a long-term strategy developed by the government for the energy transition could prove invaluable in terms of benchmarking and monitoring the process.

Policy recommendations

- 1. **Develop a comprehensive and targeted energy transition strategy** this would demonstrate to the domestic and international community, and potential investors, the irreversibility and sustainability of the transition process.
- 2. **Disseminate the strategic long-term vision for the just energy transition amongst vulnerable groups** this would provide such groups with the necessary information and support to facilitate their participation in the establishment of a more sustainable energy system.
- 3. Proactively advocate for decarbonisation targets and collaborate with communities to improve consumer behaviour this would guarantee inclusion and bolster energy efficiency.
- 4. Align the national economic development pathway with green energy plans this would reconcile the energy transition with socio-economic reforms.
- 5. As COP29 Presidency, incorporate global green finance perspectives into the COP29 agenda this would support the establishment of a dedicated financing mechanism during the COP29 summit.

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