

Enhancing Prospects for Peace between Armenia and Azerbaijan through Joint Climate Change and Energy Security Action

A joint policy brief by experts from Armenia and Azerbaijan

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Introduction¹

This Policy Brief outlines practical ways in which environmental and energy cooperation between Armenia and Azerbaijan could foster regional stability and peace amid the looming impacts of climate change. Collaboration on shared resources could mitigate the negative impacts of cross-border environmental challenges while fostering mutual trust, thereby reducing the risk of future conflicts. Joint efforts to produce and transmit renewable and non-renewable energy resources could further promote regional stability by strengthening energy security and deepening economic interconnectivity.

Joint action on climate change is becoming increasingly urgent in the South Caucasus, especially between Azerbaijan and Armenia. Both countries face serious economic, social, and political risks from climate impacts, including rising temperatures, reduced precipitation, desertification, extreme weather, water scarcity, and the spread of diseases. Armenia and Azerbaijan are also likely to face challenges affecting energy dependence and security, although in different ways. These challenges are likely to strain resources, heighten tensions, and increase the potential for conflict within and between these two nations. To mitigate climate change impacts, enhance energy security, and reduce the risk of conflict, cooperation is crucial, particularly as Armenia and Azerbaijan navigate a fragile post-conflict environment.

The Policy Brief proposes five actionable policy options to promote environmental and energy cooperation. Their implementation would create platforms for government representatives, experts, and civil society members and organisations to jointly study, deliberate, and negotiate through technical and economic communication channels, fostering mutual understanding, confidence building, and reconciliation through shared problem solving.

After discussing these policy options, the Policy Brief concludes by summarising the key take-aways from this important discussion.

¹ Disclaimer: There are multiple references in this policy paper to the 'Aras' river, which flows through parts of the Caucasus and neighbouring countries. The river takes different names depending on its host country, but for the purpose of this paper we use the customary international name Aras.

Problem and context

As elsewhere around the world, the joint tackling of the challenges created by climate change is rapidly becoming a necessity in the South Caucasus in general and between Armenia and Azerbaijan in particular. Without concerted action, these countries will encounter significant risks that threaten their economic, social and political stability. These risks are caused by tangible signs of climate change, including significant rises in temperature, falls in precipitation, the desertification of land, extreme weather events, water scarcity, landslides and floods, and the spread of infectious and vector-borne diseases.² These trends, the tensions they produce, and the ensuing competition for scarce resources increase the likelihood of old conflicts being revived and new ones being triggered.³

Climate change

For Armenia and Azerbaijan, projections indicate potential warming of the region of up to 4.7°C by the 2090s, far above the global average.⁴ Average temperatures are rising rapidly, with annual mean surface air temperature in Armenia increasing from 7.3°C in 1991 to 8.6°C in 2022.⁵ Although Azerbaijan has a highly diverse climate, the rise in annual mean surface air temperatures from 12.27°C to 13.84°C in the same period is a major concern.⁶ Both countries are expected to face temperatures exceeding 40°C by 2090. Furthermore, between 1935 and 2022 average annual precipitation fell more than 10% in Armenia and more than 5% in Azerbaijan.⁷

Temperature increases and precipitation reductions of this scale could significantly reduce agricultural productivity, worsen desertification and soil salinity, and heighten the demand for irrigation, further straining these countries' water resources. Additionally, a warmer climate would present various public health challenges, including a rise in heat-related medical conditions in urban areas like Baku and Yerevan, as well as an extended season for malaria

² IPCC (Intergovernmental Panel on Climate Change), *AR6 Synthesis Report: Climate Change 2023*, 2023, <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>; I. Rucevska et al., *Climate Change and Security in the South Caucasus Republic of Armenia, Republic of Azerbaijan and Georgia: Regional Assessment*, 2017, <https://policycommons.net/artifacts/2390304/climate-change-and-security-in-the-south-caucasus-republic-of-armenia-republic-of-azerbaijan-and-georgia/3411543>; Zoi Environment Network, *Climate Change in the South Caucasus*, 2011, <https://zoinet.org/wp-content/uploads/2018/02/Climate-change-South-Caucasus.pdf>.

³ V. Koubi, 'Climate Change and Conflict', *Annual Review of Political Science*, Vol.22, 2019, pp.343-360, <https://doi.org/10.1146/annurev-polisci-050317-070830>; Rucevska et al., 2017.

⁴ IPCC, 2023.

⁵ Climate Change Knowledge Portal, 'Armenia', World Bank, 2020a, <https://climateknowledgeportal.worldbank.org/country/armenia/vulnerability>.

⁶ Climate Change Knowledge Portal, 'Azerbaijan', World Bank, 2020b, <https://climateknowledgeportal.worldbank.org/country/azerbaijan/vulnerability>.

⁷ Ibid.; Climate Change Knowledge Portal, 2020a.

transmission, including in south-eastern and north-eastern regions of Armenia bordering Azerbaijan.⁸ These developments will likely put significant pressure not only on fragile agricultural systems, but also on overall labour productivity, livelihoods, internal migration and food security.

Climate-related disasters are already taking a heavy toll in Armenia, with around 40,000 people affected by flooding each year, causing an estimated US\$100 million loss in national gross domestic product (GDP). Based on conservative estimates from 1997 to 2024, over 430,000 people were impacted by various natural disasters, resulting in approximately US\$336 million in damage.⁹ In Azerbaijan too, official reports indicate that between 1995 and 2012 over two million people, or approximately 20% of the population, were adversely affected by 15 significant natural disasters, with the total damage estimated at over US\$370 million.¹⁰ On its own, flooding, which is becoming common in Azerbaijan, causes annual economic losses of US\$18-25 million and contributes to soil erosion.¹¹ The Global Facility for Disaster Reduction and Recovery Disaster Risk Profile for 2016 estimates that a 250-year return period earthquake could cost Azerbaijan US\$40 billion (or 71% of its 2022 GDP) and affect three million people (or 34% of the population).¹²

Energy security

Each in their own way, Armenia and Azerbaijan are also likely to experience issues affecting energy dependence and security. Both countries have ambitious renewable energy plans, but a lack of investment has hampered serious progress.¹³ Armenia's energy security is heavily reliant on imported natural gas, which accounted for 62% of its total energy supply in 2021, followed by oil (16%), making it vulnerable to external supply risks, particularly from its main supplier, Russia.¹⁴ While the country has a diversified energy mix that includes nuclear (14%), hydro (5%), and a small share of renewables (wind and solar, about 1%), dependency on imported fuels poses a major challenge.¹⁵

⁸ Rucevska et al., 2017; Zoï Environment Network, 2011.

⁹ CRED (Centre for Research on the Epidemiology of Disasters), 'EM-DAT - The International Disaster Database', 2024, <https://www.emdat.be>; Climate Change Knowledge Portal, 2020a.

¹⁰ CRED, 2024.

¹¹ Climate Change Knowledge Portal, 2020b.

¹² Ibid.

¹³ Rucevska et al., 2017.

¹⁴ IEA (International Energy Agency), *Armenia Energy Profile: Energy Security*, 2023, <https://www.iea.org/reports/armenia-energy-profile/energy-security-2>; World Bank Armenia, 'Armenia's Transition to Clean Energy and Power Transmission Grid Upgrades to Benefit from World Bank Support', Press Release, 3 June 2024, <https://www.worldbank.org/en/news/press-release/2024/06/03/armenia-s-transition-to-clean-energy-and-power-transmission-grid-upgrades-to-benefit-from-world-bank-support>.

¹⁵ Ibid.; A. Khachatryan, 'The Path to Independence: Can Armenia Ensure Its Energy Security?', *English JAMnews*, 6 March 2024, <https://jam-news.net/energy-security-of-armenia/>.



Efforts to diversify through the Armenia-Iran gas pipeline have been limited due to Russian influence, restricting the pipeline's capacity to supply Armenia's full gas needs.¹⁶ To enhance energy security and modernise outdated infrastructure, attracting private investment is crucial, especially as energy demand continues to rise, with an improving economy and higher living standards.¹⁷

In its turn, Azerbaijan's economy remains considerably dependent on the oil and gas industry, which accounts for over 90% of exports and about one-third of GDP.¹⁸ Trade and transit corridors, such as the International North-South Transport Corridor and China's Belt and Road Initiative, can enhance Azerbaijan's position as a trade and transit hub. The current energy demands of the European Union (EU) amid tensions with Russia also provide opportunities for Azerbaijan to supply energy to Europe. However, although supply security is not endangered in the short term, the country's heavy economic dependence on the export of fossil fuels increases greenhouse gas emissions and makes it vulnerable to risks associated with fuel price fluctuations.¹⁹

In the long term, the contribution of Azerbaijan's oil and gas industry to the public budget will decline due to limited production capacity, global shifts towards green energy, and reduced demand for oil and gas.²⁰ Furthermore, global decarbonisation policies could indirectly increase the costs of diversifying and expanding Azerbaijan's non-hydrocarbon sectors, because the carbon footprint of traded goods will be increasingly taken into account and other hydrocarbon economies are already adapting, in the hope that early movers will gain the advantages of technological innovation and related investments.²¹

The imperative of cooperation

These environmental and energy sector trends are significantly reducing available resources in Armenia and Azerbaijan and putting increasing strain on government capacities. These trends have the potential to increase the propensity to conflict both within the two countries and between them.²² Cooperation is imperative for the triple purpose of mitigating climate change impacts, improving energy security, and reducing conflict risks, especially as Armenia and Azerbaijan are navigating a fragile post-conflict environment.

¹⁶ N. Martikian, 'Armenia Refuses Loan from Russia to Repair Nuclear Power Plant', *English JAMnews*, 12 June 2020, <https://jam-news.net/armenia-refuses-loan-from-russia-to-repair-nuclear-power-plant/>.

¹⁷ World Bank Armenia, 2024.

¹⁸ World Bank Group, *Azerbaijan Country Climate and Development Report, 2023*, <https://openknowledge.worldbank.org/server/api/core/bitstreams/915eb2e5-ee71-45b5-99ee-009337fca253/content>.

¹⁹ IEA, 2023.

²⁰ EIU (Economist Intelligence Unit), *Azerbaijan Country Analysis, 2024*, <https://www.eiu.com/n/store/products/viewpoint/country-analysis/azerbaijan/>.

²¹ World Bank Group, 2023.

²² Rucevska et al., 2017.

While societal awareness of the risks from the climate crisis is low across the Caucasus region, governments are becoming increasingly alert to the issue. Amid the difficult geopolitical and economic environments, which constitute major constraints, these governments are nonetheless aiming to take tangible steps towards countering these challenges internally. However, the imperative and potential benefits of cooperating externally to jointly tackle climate change effects have not yet been fully recognised.

Environmental cooperation could mitigate the negative impacts of climate change within and between these states, enhance the chances of post-conflict reconciliation, and tackle indirect and potential contributors to future conflict.²³ While we do not expect such cooperation to lead to substantial integration between Armenia and Azerbaijan, environmental issues could serve as effective entry points for confidence- and peace-building measures.²⁴ Symbolic rapprochement could pave the way for fostering understanding, mutual trust, and the development of institutions, thereby reducing the risk of future conflicts.²⁵ Joint efforts in the production and transmission of renewable and non-renewable energy resources can further promote regional stability by strengthening energy security and deepening economic interconnectivity.

Proposed policy options

Many policy alternatives may be considered in light of the challenges outlined above. This Policy Brief offers several options that may be deemed politically and economically feasible in the current settings. The aim is to initiate practical Armenian-Azerbaijani discussions and encourage joint deliberation on this topic.

These policy alternatives are conceived with two considerations in mind. Firstly, environmental and energy cooperation would be effective if it creates platforms for government representatives, experts, and civil society members and organisations to jointly study, deliberate, and negotiate through technical and economic communication channels, fostering mutual understanding, confidence building, and reconciliation through shared problem-solving activities.²⁶ Furthermore, the success of such cooperative efforts in promoting peace depends on several contextual factors, including strong environmental awareness, internal political stability for the countries involved, established

²³ T. Ide, 'Does Environmental Peacemaking between States Work? Insights on Cooperative Environmental Agreements and Reconciliation in International Rivalries', *Journal of Peace Research*, Vol.55(3), 1 May 2018, pp.351-365, <https://www.ijstor.org/stable/48595888>; T. Ide, 'The Impact of Environmental Cooperation on Peacemaking: Definitions, Mechanisms, and Empirical Evidence', *International Studies Review*, Vol.21(3), 1 September 2019, pp.327-346, <https://doi.org/10.1093/isr/vij014>; A. Maas et al., 'From Conflict to Cooperation? Environmental Cooperation as a Tool for Peace-Building', in R. Floyd and R. Matthew (eds), *Environmental Security: Approaches and Issues*, Routledge, 2012, pp.102-120.

²⁴ Ibid.

²⁵ Ide, 2019.

²⁶ Maas et al., 2012.

patterns of environmental collaboration, and existing reconciliation processes.²⁷ While many of these factors are beyond the authors' influence, the Policy Brief proposes policies that are designed to complement one another, working together to strengthen these conditions and improve the overall potential for peace and cooperation between the two countries.

Policy option 1: Joint efforts to clean the Aras River

Joint efforts to clean the Aras River between Armenia and Azerbaijan represent a critical step towards addressing the significant environmental challenges facing the Kura-Aras River Basin. According to a United Nations Environment Programme (UNEP) report, four priority transboundary problems are affecting the Kura-Aras River Basin: (a) the variation in and reduction of hydrological flow; (b) the deterioration of water quality; (c) ecosystem degradation in the river basin; and (d) increased flooding and river-bank erosion. Furthermore, the Kura and Aras significantly impact the quality and quantity of water flowing into the Caspian Sea. Flowing along the Turkish-Armenian, Iranian-Armenian, and Iranian-Azerbaijani borders before flowing into Azerbaijan, where it joins the Kura near the Caspian Sea, the Aras River may be providing the greater share of the Caspian's pollutants.

However, transboundary environmental management has been complicated for three reasons. Firstly, the Kura-Aras River Basin is shared by five countries that have experienced various strains in their relations. Secondly, the basin is characterised by diverse climatic and hydrological conditions. Thirdly, it provides about two-thirds of the much-needed water for agriculture in the South Caucasus, heightening demand for it in each country. Yet closely cooperating on transboundary environmental management is now becoming essential in the face of impending climate change.

To address environmental issues in the Aras River, Iran and Armenia signed a memorandum of understanding (MoU) in 2023. As part of this agreement, Armenia committed to implementing measures to prevent the flow of heavy metals from its factories into the river. Armenia and Azerbaijan should consider taking similar steps by signing an MoU during the 29th Conference of the Parties to the UN Framework Convention on Climate Change, which is generally known as COP29. Such an agreement could also be signed trilaterally to include Georgia and to cover similar efforts regarding the Kura River. This would enhance regional cooperation and address shared environmental challenges more comprehensively.

²⁷ *Ide*, 2018; 2019.

As a first practical step, this MoU could establish a bilateral technical committee composed of experts in hydrology, environmental science and engineering. This committee would be tasked with:

- convening a forum for brainstorming and initiating joint initiatives aimed at improving water quality, restoring ecosystems, managing hydrological flows, and controlling flooding and river-bank erosion; and
- facilitating regular joint environmental monitoring and developing measures to enforce pollution control.

In the short term, these actions would lead to immediate improvements in water quality and data availability, and would strengthen bilateral relations through shared efforts. Long-term benefits would include the sustainable management of the river's ecosystem, increased resilience to climate change and enhanced regional stability. Regular interactions and negotiations could establish essential technical and economic communication channels to enhance mutual understanding and improve prospects for peace.

Presenting this joint initiative at COP29 could enhance the project's effectiveness by dealing with two potential bottlenecks: financing and know-how. Firstly, by aligning with the priorities of major international organisations, such as the World Bank, UNEP, the UN Development Programme, the Global Environmental Facility, and the EU, higher visibility during COP29 could attract these entities' financial support. Secondly, it would increase opportunities to bring in the required international expertise. Joint efforts will necessitate training and capacity-building for local experts, which could be supported by international organisations present at COP29.

Policy option 2: Implementing small-scale green projects in border villages

In 2024, Armenia returned four border villages in Azerbaijan's north-western Qazax province that it had seized decades ago, marking a significant step toward normalising relations between the two countries. This peaceful exchange could lay the foundation for establishing mutual trust and facilitate the development of green projects as a natural progression towards deeper cooperation and transforming these areas into exemplary models of peace and sustainability.

Having increased its efforts and investment in green energy and environmental projects, Azerbaijan could showcase these villages as a model for sustainable development. The establishment of green energy projects in both countries' villages could foster peace by providing shared benefits and addressing common challenges. Sustainable energy initiatives can create economic opportunities for local firms, improve living standards, and enhance energy security. Additionally, the countries could receive joint investment in green energy from the EU, United States, World Bank, UN and other international organisations. In doing so, the green investment project could expand access to electricity and stimulate economic growth, create employment opportunities, and alleviate poverty.

Armenia and Azerbaijan could consider cooperating on small-scale projects to harness wind and solar energy in border regions. Jointly developing wind farms and solar photovoltaic (PV) power plants in these locations could enable the exploitation of their largely untapped potential as well as complementarities and economies of scale that may be involved.

In terms of wind energy, border regions provide high mean wind power density,²⁸ indicating the availability of considerable resources for wind farms. These regions include the north-western parts of mainland Azerbaijan's Kalbajar-Lachin region bordering the north-eastern parts of Armenia's Syunik region, and the south-western parts of mainland Azerbaijan's Ganja-Gazakh region bordering the eastern parts of Armenia's Gegharkunik region. Such potential may also apply to the border between the south-western parts of Armenia's Syunik region and the south-eastern parts of Azerbaijan's Nakhchivan exclave.²⁹

In terms of solar energy, PV power potential³⁰ is very high throughout Azerbaijan's Nakhchivan exclave (particularly in the Kangharli and Babek districts), and high in Azerbaijan's Kalbajar-Lachin region bordering Armenia's Syunik region, the Vayots Dzor and Gegharkunik regions, and Armenia's Ararat region bordering northern Nakhchivan.³¹ In the cases of both wind and solar energy, the two countries should consider areas with both the highest yield of solar power and the most feasible link to existing transmission networks. While the latter may not pose a significant problem for Armenia, given its dense transmission network grid in Syunik, it may require additional investment for Azerbaijan.

Population densities in most of these regions, except Nakhchivan, are relatively low. This reduces the negative implications of wind and solar energy projects for local populations. However, green energy projects should be preceded by sound social and environmental impact assessments. They should avoid utilising resources in fragile and conflict-affected areas. The parties should avoid increasing grievances and inequalities among local groups, displacing poor and marginalised communities from land essential to their livelihoods, and negatively impacting existing ecosystems.

Green energy projects represent a promising avenue for Armenia and Azerbaijan to cooperate in ways that benefit both countries environmentally, economically,

²⁸ Wind power density is a metric used to quantify the wind energy available at a specific location. It represents the average annual power generated per square metre of a turbine's swept area and is calculated at various heights above the ground. See INSPIRE Registry, 'Average Mean Wind Power Density', European Commission, 2015, <https://inspire.ec.europa.eu/codelist/WindPotentialValue/averageMeanWindPowerDensity>.

²⁹ N.N. Davis et al., 'The Global Wind Atlas: A High-Resolution Dataset of Climatologies and Associated Web-Based Application', *Bulletin of the American Meteorological Society*, Vol.104(8), 21 August 2023, pp.E1507-E1525, <https://doi.org/10.1175/BAMS-D-21-0075.1>.

³⁰ Photovoltaic power refers to the conversion of sunlight into electrical energy using semiconducting materials that produce a voltage when exposed to radiant energy, especially light. See EIA (US Energy Information Administration), 'Solar Explained: Photovoltaics and Electricity', 2024, <https://www.eia.gov/energyexplained/solar/photovoltaics-and-electricity.php>.

³¹ M. Suri et al., 'Global Photovoltaic Power Potential by Country', 2020, <http://documents.worldbank.org/curated/en/466331592817725242/Global-Photovoltaic-Power-Potential-by-Country>.

and socially. By focusing on shared goals and mutual benefits, both countries can work together to create a more sustainable and peaceful future. International support and engagement could further facilitate this cooperation, ensuring that it contributes to long-term peace and stability in the region. To advance this initiative, it is recommended that a joint task force be established and pilot projects be initiated to explore and implement green initiatives. Given the above-mentioned circumstances, small green projects in border villages may offer the most viable entry point for cooperation in this domain.

Policy option 3: Cooperating on the Black Sea Submarine Cable Project

Another policy option is to include Armenia in the Black Sea Submarine Cable Project (BSSCP).³² This project's potential significance for transitioning to clean energy, reducing dependence on Russian fossil fuels, facilitating renewable energy development in the South Caucasus, and strengthening EU-South Caucasus relations has been highlighted by European Commission president Ursula van der Leyen.³³ Currently, the project includes only Azerbaijan and Georgia from the South Caucasus, but Armenia has expressed its willingness to join.

The inclusion of Armenia would allow all three regional countries to share both the opportunities for and challenges of delivering renewable energy to the EU. This would increase the project's scope and impact, and would incentivise and harness the development of renewable energy potential in the three South Caucasus countries, contributing to building a robust and wide-ranging regional energy network. The World Bank's May 2024 approval of US\$35 million for Georgia's preparatory BSSCP activities indicates international financial institutions' serious commitment to the project.

The inclusion of Armenia would create a common technical and economic grouping among the three countries that would foster collaboration to address potential technical and environmental issues. The project would not only provide a platform for the three countries to work together, but would also facilitate closer technical, energy, and economic ties between the EU and the South Caucasus as a region. While Azerbaijan and Georgia, on the one hand, and Armenia and Georgia, on the other hand, have experience of bilateral cooperation, this project would facilitate trilateral cooperation for the first time since these countries' independence from the Soviet Union. This trilateral approach could enhance regional stability by reducing Armenia's regional isolation and integrating it into larger energy and infrastructure networks. The

³² The Black Sea Submarine Cable Project is a major initiative designed to create a high-voltage underwater electricity transmission link between the South Caucasus and the EU.

³³ European Commission, 'Statement by President von der Leyen at the Signing Ceremony of the Memorandum of Understanding for the Development of the Black Sea Energy Submarine Cable', Press Release, 17 December 2022, https://neighbourhood-enlargement.ec.europa.eu/news/statement-president-von-der-leyen-signing-ceremony-memorandum-understanding-development-black-sea-2022-12-17_en.

BSSCP's expected economic benefits, including job creation, increased foreign investment, and enhanced energy security (for both the region and the EU), would contribute to reducing the likelihood of conflict in the region.

To manage this large-scale project effectively, a governance structure involving trilateral working groups or commissions would be necessary. These bodies would coordinate technical, financial, and operational aspects of the project, ensuring smooth implementation and collaboration among the three countries.

Policy option 4: Utilising Azerbaijan as an energy transmission facilitator for Armenia

Armenia's energy imports are dominated by supplies from Iran and Russia, and Yerevan is seeking to decrease its energy dependence on Russia and diversify its suppliers. Currently, Russia is the only uranium supplier for Armenia's nuclear energy sector, although Armenia aims to diversify its uranium sources by importing it from other countries. Azerbaijan has the potential to play a critical role in facilitating the most efficient movement of oil and uranium from Kazakhstan to Armenia. Azerbaijan would gain from playing this role by enhancing its energy transmission network and the volume of energy that is transported across its territory.

Azerbaijan has been transporting Kazakh oil via the Baku-Tbilisi-Ceyhan pipeline, although small amounts of oil can be transported by rail. This flexibility means that Armenia and Azerbaijan may not need to build new infrastructure and could terminate the agreement if disagreements arise.

Armenia's only nuclear power plant (NPP) in Metsamor contributes an average of 31% to the country's annual electricity output. The operation and maintenance of Metsamor NPP rely heavily on Rosatom, Russia's state-controlled corporation. All of Armenia's nuclear fuel is imported from Rosatom's TVEL division. Armenia plans to build a new NPP by 2036, but the choice of which country will be the energy partner for this project remains undecided.³⁴

Rich as it is in uranium resources, Kazakhstan could also supply Armenia with uranium via Azerbaijan. In mid-April 2024, the president of Kazakhstan visited Armenia to discuss potential regional cooperation. Following this visit, in May the Armenian and Azerbaijani foreign ministers held talks in Almaty. Kazakhstan clearly maintains good relations with both countries, and is interested in furthering regional stability and exploring potential trade opportunities. This process would benefit both Armenia and Azerbaijan economically, but it would be essential that this transit route complies with the transport safety regulations of the International Atomic Energy Agency (IAEA).³⁵

³⁴ *JAMnews*, 'Construction of a New Nuclear Power Plant: Who Will Be Armenia's Energy Partner?', 5 June 2023, <https://jam-news.net/construction-of-a-new-nuclear-plant-in-armenia/>.

³⁵ Armenia and Azerbaijan are both members of the IAEA.

However, a potential political challenge could arise from Russia, which might pressure Azerbaijan and Kazakhstan to prevent this cooperative enterprise. Russia's increasing assertiveness in building the global nuclear power infrastructure indicates its strategic interest in maintaining control over nuclear fuel supplies. Rosatom's low key yet increasingly assertive long-term binding investments across the world to build NPPs indicates that Russia sees such activities as a long-term economic and political priority.

To mitigate this risk, Armenia could import small amounts of uranium from Kazakhstan instead of fully halting its imports from Russia. In this regard, however, it is worth noting that there are limits to Russia's leverage. For instance, although Armenia initially secured a Russian loan to extend the operation of its current NPP until 2026, complications with Russia led Armenia to reject the loan meant for repairs to the Metsamor power plant – a decision that Moscow ultimately accepted.³⁶

Policy option 5: Integrating Armenia into Azerbaijan's petroleum export market

This option could be achieved if policy option 4 is successfully implemented and the parties decide to further develop their energy relations. Armenia is not rich in oil and gas, but is surrounded by countries with an abundance of these resources. In this regard, its energy diversification intentions could be achieved through close cooperation with its neighbours.

In addition to Kazakhstan, Azerbaijan could also supply Armenia with a small amount of petroleum. Armenia would not need to fully sever its energy relations with Russia, but could decrease its energy dependency and enhance its energy security.

Russia could challenge this option and put pressure on Azerbaijan. However, Azerbaijan has been exporting energy to several markets where Russia is a dominant actor, such as the EU, and has not faced significant pressure in this regard. By keeping the level of its oil exports to Armenia fairly low, it could avoid significantly irritating Moscow.

Two further considerations arise with the option of Azerbaijan supplying petroleum to Armenia. Firstly, Azerbaijan has already made significant international energy commitments and is currently facing supply constraints, raising doubts about its ability to supply Armenia without straining its own resources. Secondly, even if Azerbaijan could theoretically supply petroleum to Armenia, the issue of pricing could become a significant obstacle. If Armenia is only able to afford a price lower than the one Azerbaijan asks, the economic benefit for Azerbaijan may be insufficient, potentially discouraging it from committing to such a deal.

³⁶ Martikian, 2020.

However, the benefits of this policy option should be factored in before discarding it. For Azerbaijan, supplying a small amount of oil and gas to Armenia would not only diversify its export portfolio, but also solidify its role as a key regional energy player. By establishing a new export market, Azerbaijan would demonstrate its ability to support neighbouring countries while maintaining its existing commitments. For Armenia, diversifying its energy sources by importing Azerbaijani oil and gas could enhance its energy security, reduce its dependence on Russia, and improve its resilience against supply disruptions and geopolitical pressures.

Furthermore, establishing an Armenian-Azerbaijani energy partnership, however limited in scope, could serve as a confidence-building measure, fostering trust and demonstrating mutual economic benefits. By creating economic interdependence through energy trade, both countries would have stronger incentives to maintain peaceful relations. This interdependence could help avoid conflicts that might disrupt their economies and trade, and thus further promote stability and cooperation.

Conclusion: key take-aways

Beyond addressing urgent environmental sustainability and energy security challenges, the **proposed policy options create opportunities and platforms for regular institutionalised interaction** among government representatives, experts, and civil society members and organisations from Armenia and Azerbaijan to jointly study, deliberate, and negotiate through technical and economic communication channels, promoting mutual understanding and cooperation through shared problem-solving activities. By integrating the region into a **broader environmental management and renewable energy framework**, these projects could enhance regional cooperation, reduce reliance on traditional energy sources, and contribute to long-term peace. The resulting **environmental and economic interconnectivity** could foster peaceful relations, because both countries would have a shared interest in maintaining stable and mutually beneficial activities and interactions.

These policy options are also **likely to attract significant international support**.³⁷ Demonstrating a commitment to cooperation through energy trade and environmental collaboration could draw the **backing of major international organisations** like the EU, UNEP, UNDP, and the World Bank, as well as much-needed investments, particularly in renewable energy projects. The European Bank for Reconstruction and Development has already made **substantial investments in green technologies** in Armenia, establishing a strong foundation for further cooperation.³⁸ The EU-funded EU4Environment programme is another key initiative supporting green growth and environmental protection in the region, offering Armenia and Azerbaijan opportunities for cooperative projects and access to funding for sustainable development.

COP29 in Baku would offer a strategic opportunity for Armenia and Azerbaijan to issue joint declarations and sign MoUs based on these policy options that would showcase their commitment to addressing shared environmental and energy challenges. COP29 could also serve as a **platform to encourage broader regional cooperation** involving not only Armenia and Azerbaijan, but also neighbouring countries like Georgia, Türkiye, and Iran in joint environmental initiatives. Through joint sessions, workshops, and discussions, the platform **could promote peace and stability through environmental diplomacy**, helping the countries share experiences and develop coordinated strategies.

³⁷ OECD (Organisation for Economic Co-operation and Development), *Green Economy Transition in Eastern Europe, the Caucasus and Central Asia: Progress and Ways Forward*, OECD Green Growth Studies, 2022, <https://doi.org/10.1787/c410b82a-en>.

³⁸ L. Martikian, 'EBRD and GCF Support Green Investments in Armenia', European Bank for Reconstruction and Development, 2 October 2024, <https://www.ebrd.com/news/2024/ebrd-and-gcf-support-green-investments-in-armenia.html>.

Building Peace Together

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