



ASIA CLEAN ENERGY FORUM 2026

Beyond Transition: Building Secure, Resilient, Inclusive, and Intelligent Energy Systems

8–11 June | ADB Headquarters, Metro Manila, Philippines



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Next Generation Energy Systems in Central, West and East Asia: Technology, Markets and Regional Integration

Scaling Renewable Energy in Azerbaijan: Challenges and Solutions for Future-ready Grids.

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(GMT+8)**



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5th National Priority

A clean environment and country of "green growth."

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July 2022, Action Plan

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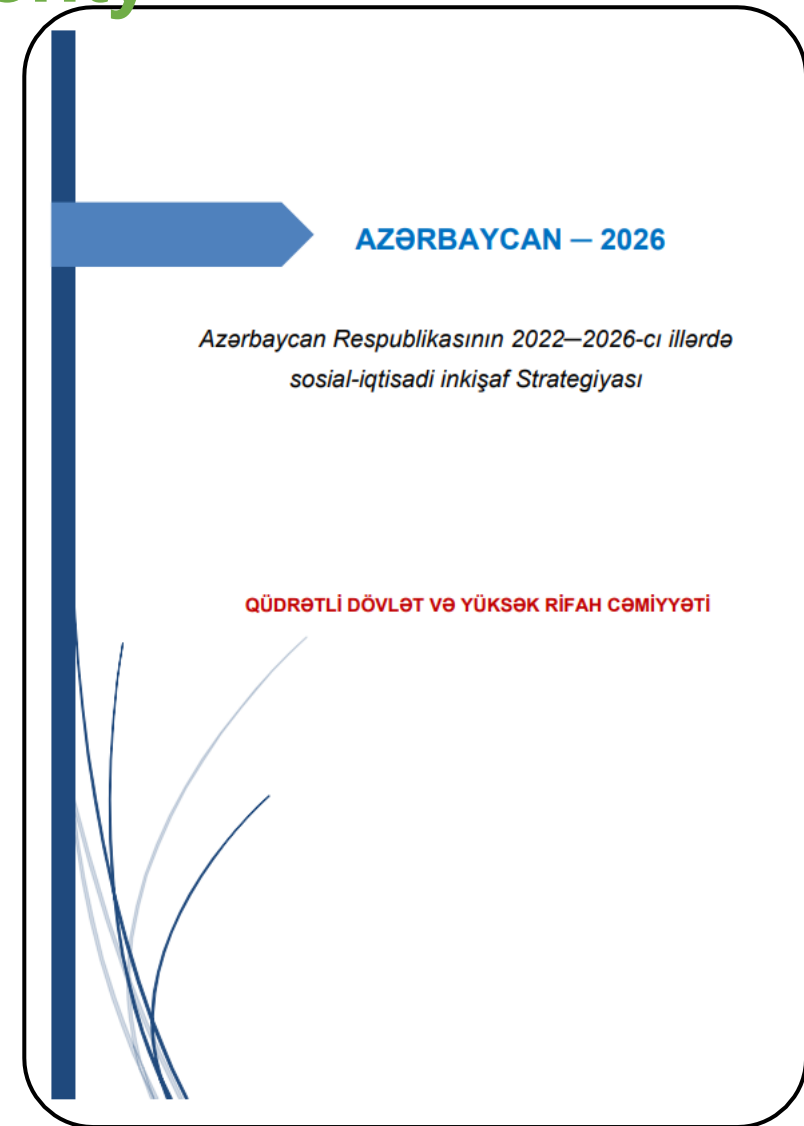
Regional Green Energy Corridors

4 corridors

Socio-economic development strategy for 2022-2026 -5th National Priority

Direction 5.2.3 - Increasing the use of renewable energy sources

- ✓ Public-private partnership to expand renewable energy source (RES) infrastructure
- ✓ Development of offshore wind energy potential
- ✓ Utilization of bioenergy and geothermal energy potential
- ✓ Establishment of an information system for renewable energy sources and implementation of instrumental measurement campaigns in high-potential areas
- ✓ Construction of new infrastructure to ensure the reliable integration of additional generation capacities into the energy system



Socio-economic development strategy for 2022-2026

5th National Priority

Direction 5.2.5 - Expanding the use of environmentally friendly vehicles and other green technologies

- ✓ Preparation of the "National Plan on Electromobility"
- ✓ Study potential of hydrogen production and use
- ✓ Study potential for energy storage systems
- ✓ Investigating and proposing of the application of CCUS technology systems in the energy sector



Renewable Energy Potential of Azerbaijan

Technical potential

135 GW



Onshore

157 GW

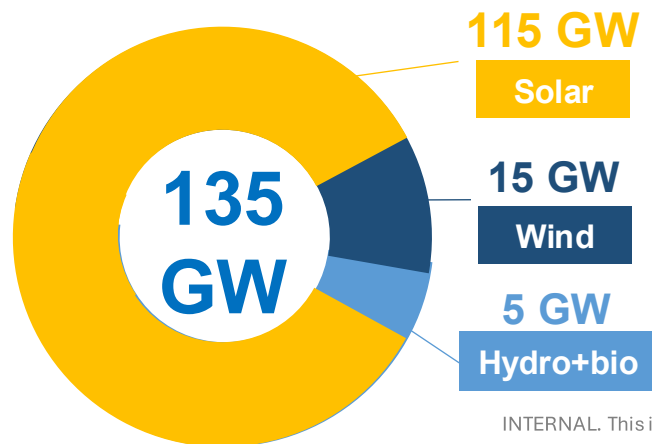


Offshore

including:

Garabagh and East Zangazur – 10 GW

Nakhchivan – 5 GW



Economic Potential

27 GW



Onshore

Being evaluated

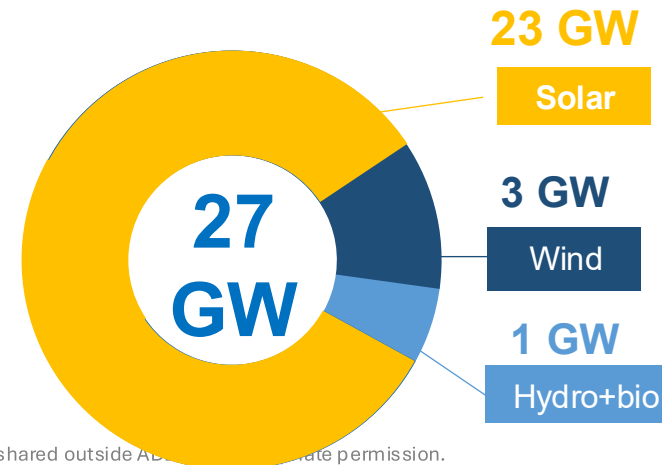


Offshore

including:

Garabagh and East Zangazur – 2.5 GW

Nakhchivan – 1.5 GW



Grid expansion and integration of renewable energy

Project to Strengthen the Integration of Renewable Energy into the Transmission Grid – AZURE

- ✓ Approved by the World Bank on March 27, 2025;
- ✓ The project consists of three components:
 - connecting the 200 MW Absheron Wind Power Plant to the transmission grid,
 - strengthening and expanding the 330/500 kV high-voltage grid to safely and reliably transmit up to 1 gigawatt of renewable electricity generated by the private sector, and
 - strengthening the grid's stability to better integrate 1.8 gigawatts of renewable electricity into the system through private investments.

330 kV “Jabrayil” junction substation

- A Digital Control Center has been built at the "Jabrayil" energy hub for automatic switching on and off, intelligent management, operational monitoring, and other processes.



Energy Storage

BESS

"Absheron" Battery Energy Storage System (BESS) " by Azerenerji OJSC
Opened on March 25, 2026

Part of a dual-site project at the 500 kV "Absheron" and 220 kV "Agdash" substations

Key Specifications

- Total Power Capacity: 250 MW
- Total Energy Capacity: 500 MWh



Regional significance: the largest facility of its kind in the CIS (Commonwealth of Independent States) region.



Grid development study

Strategic Framework: Comprehensive Strategic Partnership Agreement on Energy signed between the Ministry of Energy and China Energy Engineering Corporation in June 2025; Grid Analysis Study Agreement signed with the China Electric Power Planning and Engineering Institute (EPPEI) on 6 April 2026.

Technical Approach: Study conducted by EPPEI using two integrated modelling environments:

- PLEXOS — production simulation and economic dispatch
- DigSILENT PowerFactory — static and dynamic grid stability analysis

Scenario Approach: 22 simulation scenarios analysing different RES penetration levels, BESS integration options, Nakhchivan isolated operating mode and Small Modular Reactor (SMR) scenarios.

Expected Outcomes: Grid reinforcement recommendations and optimal connection points for large-scale RES, long-term electricity demand forecasting, and a strategic system development roadmap for 2028 and beyond.

Preparation of the National Hydrogen Strategy Implementation Plan

- DNV Consulting performs study on development of Implementation Plan for National Hydrogen Strategic Outlook.
- Based on the TOR, the Implementation Plan consists of 9 sub-tasks:
 - Stakeholder engagement plan,
 - Regulatory and commercial conditions
 - Market governance
 - Public infrastructure requirements
 - Value creation and knowledge development
 - Hydrogen clusters development and derivatives production
 - Financing mechanisms
 - Strategy Implementation Action Plan



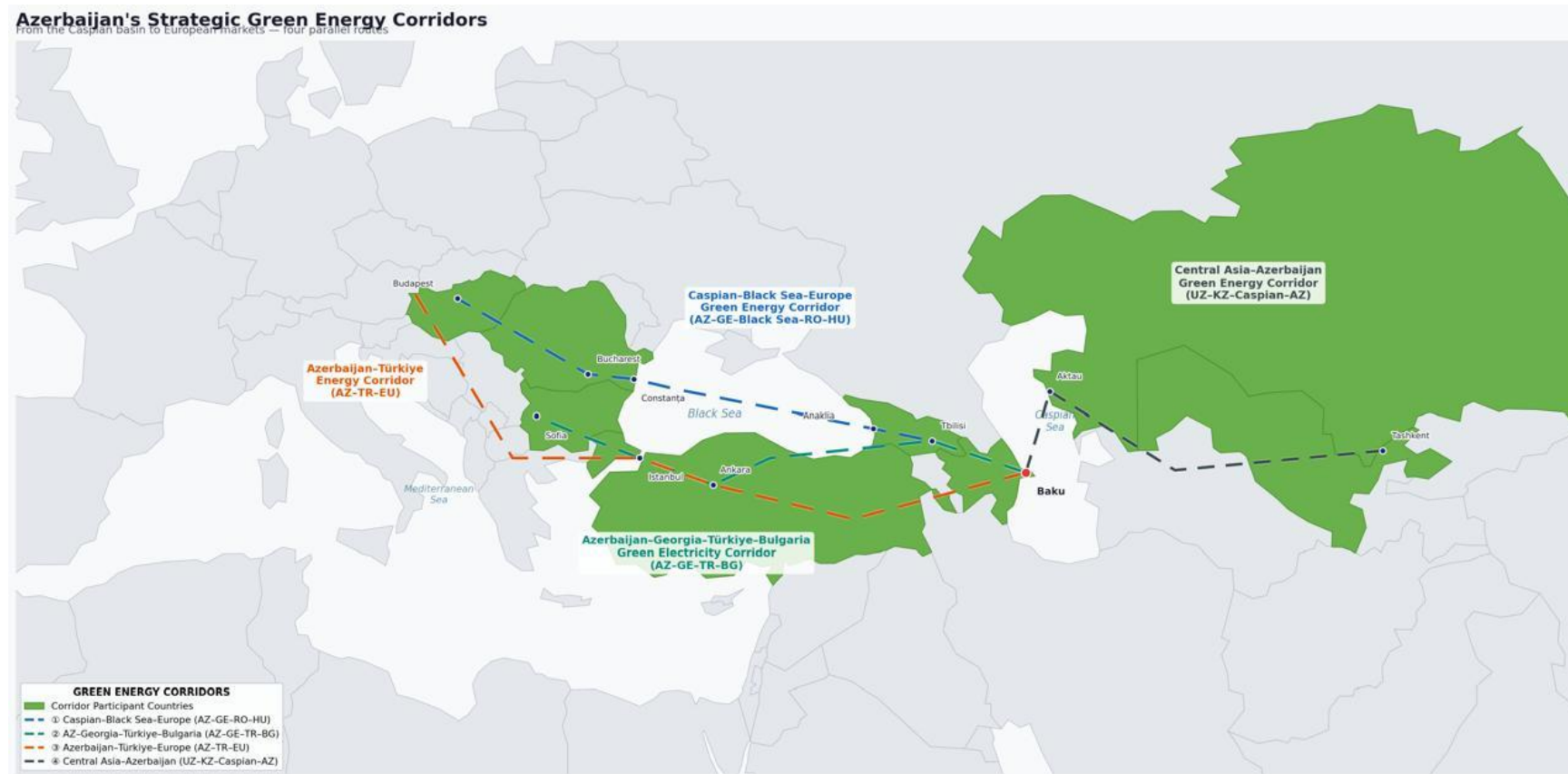
European Bank
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Regional Green Energy Corridors Projects

Azerbaijan aims to export energy to Europe via four strategic corridors:

- ❖ Caspian-Black Sea-Europe
- ❖ Central Asia-Azerbaijan
- ❖ Azerbaijan-Georgia-Türkiye-Europe
- ❖ Azerbaijan-Georgia-Türkiye-Bulgaria





Thank you for the attention!



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