



Ministry of
Ecology and Natural Resources
of the Republic of Azerbaijan

The First Biennial Transparency Report of the Republic of Azerbaijan to the UNFCCC

Facilitative Multilateral Consideration of Progress (FMCP3) – SB64

June 2026

Bonn, Germany



NATIONAL CIRCUMSTANCES



Azerbaijan – Strategic Geographic Location



GEOGRAPHIC PROFILE

86,600 km²

Total land area

825 km

Caspian coastline

60% / 40%

Mountain / Lowland

12%

National forest cover

Shared land borders with Russia, Georgia, Armenia, Türkiye, and Iran.

DEMOGRAPHIC PROFILE

~10.2M

Total population

+6%

Projected growth
(2030)

54.5%

Urban population

60%

Population < age 40

CLIMATE EXPOSURE PROFILE

Urban Climate Exposure

Rapid urbanization (54.5%) intensifies urban heat island effects in Baku, driving rising energy demand for cooling.

Rural / Agricultural Exposure

Agriculture employs ~45.5% of the rural workforce – highly exposed to heatwave stress and irrigation constraints



CLIMATE VULNERABILITY PROFILE

Azerbaijan experiences 8 of the 11 global climate types (Köppen classification), creating complex adaptation challenges across its diverse climatic landscape.

↑ TEMPERATURE RISE

+1.1°C rise over the last 23 years. In 2023, temperatures spiked to **1.9°C above the norm**, indicating accelerating warming trends.

🌊 CASPIAN SEA LEVEL

-2 metres drop observed over the last 30 years. Currently at **-29m MSL**, posing significant risks to coastal ecosystems and infrastructure.

⚡ EXTREME WEATHER EVENTS

Increased frequency and intensity of extreme events, including **4x increase in Baku heatwaves**.

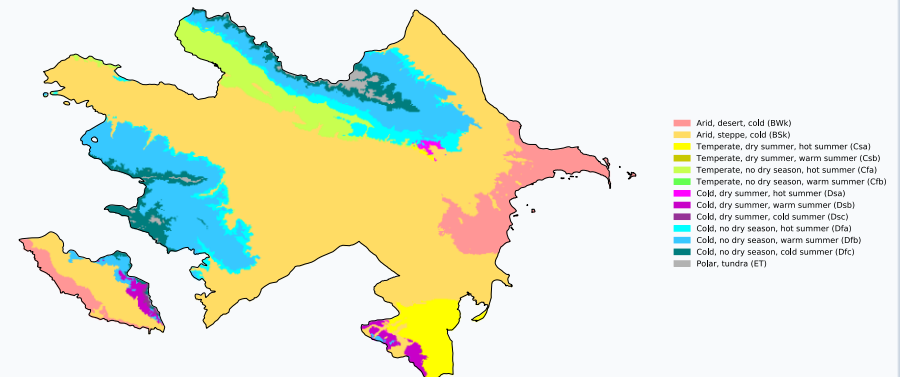
Key Hazards:

- Floods
- Landslides
- Droughts
- Strong winds

🌿 PRECIPITATION TREND

Azerbaijan has witnessed an approximate **15% decline** in overall precipitation in recent decades, leading to increased regional water scarcity.

Köppen-Geiger climate classification map for Azerbaijan (1980-2016)



Source: Beck et al.: Present and future Köppen-Geiger climate classification maps at 1-km resolution. Scientific Data 5:180214. doi:10.1038/sdata.2018.214 (2018)

Köppen-Geiger Climate Classification Map of Azerbaijan



ECONOMIC TRANSITION & STRATEGIC VISION

Azerbaijan is transitioning from a hydrocarbon-based economy toward a diversified and resilient growth model.

AZERBAIJAN 2030: National Priorities for Socio-Economic Development

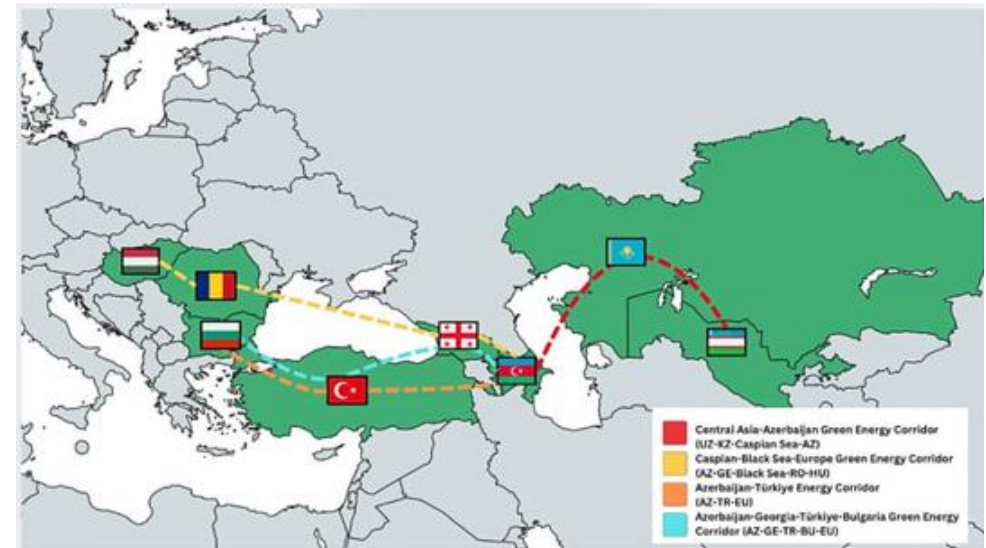
National Priority 5 mandates a transition to "Clean Environment and Green Growth," integrating climate action into all sectoral plans.

2022–2026 Socio-Economic Development Strategy

Scaling renewable energy (solar/wind), deploying circular waste management, and prioritizing resource efficiency in urban development.

GREEN ENERGY & CONNECTIVITY ZONES

Developing dedicated Green Energy Zones in Karabakh, East Zangezur, and Nakhchivan as regional hubs for low-carbon production.



Strategic Positioning: Well-positioned for East-West Logistics and Green energy Corridors.

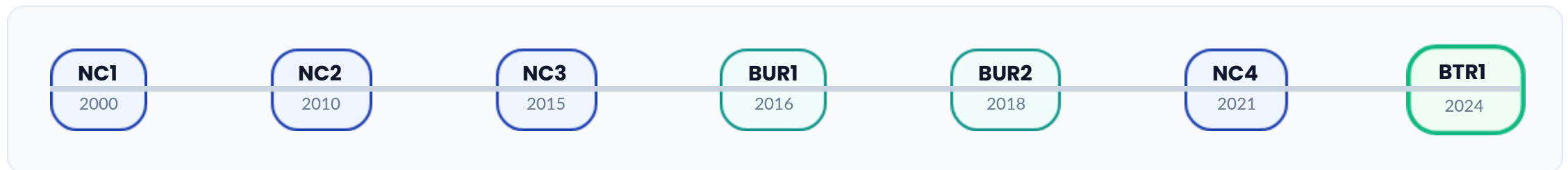


EVOLUTION OF CLIMATE GOVERNANCE & TRANSPARENCY

CLIMATE GOVERNANCE & INTERNATIONAL COMMITMENTS



CLIMATE REPORTING SUBMISSIONS



● National Communications (NC) ● Biennial Update Reports (BUR) ● Biennial Transparency Reports (BTR)



INSTITUTIONAL TRANSPARENCY ARCHITECTURE

INTERNATIONAL FRAMEWORK

UNFCCC Enhanced Transparency Framework (ETF) | BTR / TER Process

NATIONAL STRATEGIC GOVERNANCE

State Commission on Climate Change
Strategic Oversight | Chair: Deputy Prime Minister

CLIMATE TRANSPARENCY COORDINATION

Ministry of Ecology and Natural Resources
National Designated Authority for Climate Reporting

Climate and Meteorological Research Centre
(Under National Hydrometeorological Service)
Data Collection & Technical GHG Inventory Coordination

SECTORAL IMPLEMENTATION (CRT SECTORS)

ENERGY

Ministry of Energy / State Statistical Committee

IPPU

Ministry of Economy / SSC

AGRICULTURE

Ministry of Agriculture / SSC

WASTE

MENR / Tamiz Shahr / SSC

LULUCF

Ministry of Ecology and Natural Resources / SSC

CROSS-CUTTING EXPERTISE

Ministries | Academia | Private Sector | NGOs

FTC SUPPORT

Ministry of Finance | Ministry of Economy | Central Bank | Donors



NATIONAL CLIMATE TRANSPARENCY PLATFORM

Ensuring Data Integrity & Reporting Readiness under the Enhanced Transparency Framework



GHG DATABASE

Centralized national inventory for systematic storage, organization, and validation.



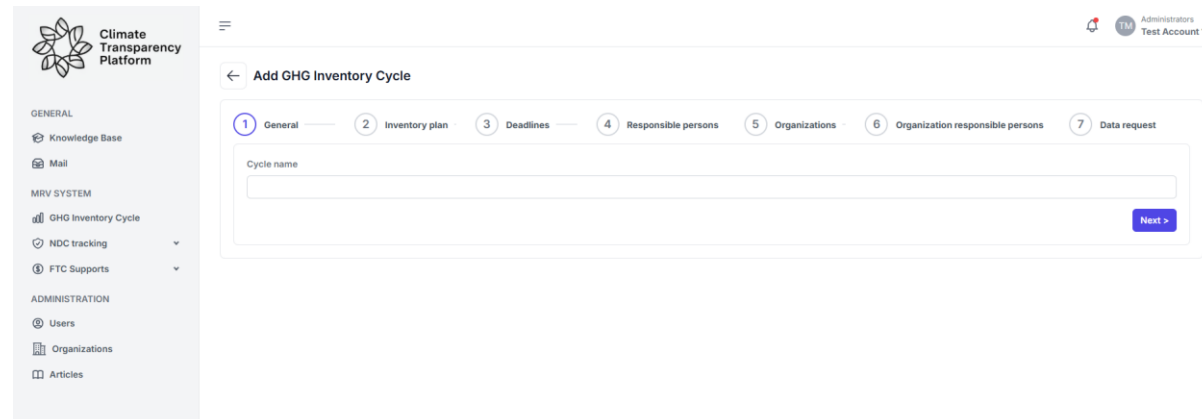
NDC TRACKING

Continuous monitoring of mitigation progress toward national 2030 and 2035 targets.



FTC SUPPORT

Structured mapping of financial, technology, and capacity-building support flows.



System interface

INSTITUTIONAL MANDATE

Developed under **National CBIT**; officially transferred to the Ministry of Ecology and Natural Resources (MENR).

OPERATIONAL STATUS

Line Ministry training **successfully conducted**; technical operationalization currently in progress.

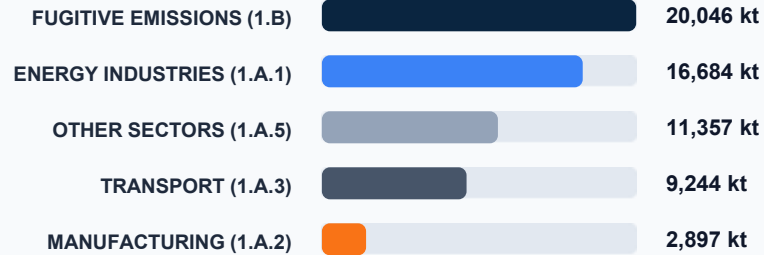
STRATEGIC ROLE

Primary **interim QA/QC system** ensuring data integrity prior to the formal adoption of the Climate Law.



GHG INVENTORY & METHODOLOGICAL ANALYSIS

TOP EMISSION SOURCES IN ENERGY SECTOR (IPCC 2006)



IPCC Key Categories in BTR1

1.B.2.b Natural Gas	1.A.1 Energy (Gaseous)
1.A.2 Manufacturing and Construction	1.A..3.b Road Transport
1.A.4 Other Sectors	1.B.2.a Oil Extraction
3.A Enteric Fermentation	4.A.1 Forest land
5.A Solid Waste	5.D Wastewater

Emissions in energy sector reduced by

24.86%

2022 vs 1990

- Fuel oil to Gas transition
- Infrastructure modernization
- Generation efficiency gains



IPCC Inventory Software Expansion (BTR1 Advancement)

- Transition of all sectors to IPCC software estimation: First time application across **all 5 CRT sectors** (Energy, IPPU, Agriculture, LULUCF, Waste). Represents a major methodological upgrade for BTR1 transparency, consistency, and QA/QC harmonization.
- For the first time, the Land Representation Matrix was applied in the LULUCF sector, and the First Order Decay (FOD) model was applied in the Waste sector.

1.A.1 ENERGY INDUSTRIES

Fuel Switching: Shift from fuel oil to natural gas in Energy Industries.

1.A.2 MANUFACTURING

Demand: Production growth & industrial recovery driving demand.

1.A.4 OTHER SECTORS

Gasification: Residential transition from fuel-oil to natural gas in households.

1.B FUGITIVE EMISSIONS

Export Dynamic: Fugitive emissions are linked to increased natural gas production and export-oriented transmission activities within the hydrocarbon value chain.

Infrastructure Modernization: Upstream leakage management.

1990

Structural Collapse

Post-Soviet industrial decline; sharp emission drop.

2000

Economic Resurgence

Oil and Gas expansion; rising energy demand from growth.

2022

Structural Transition

Fuel switching & efficiency modernization phase.



AZERBAIJAN'S NDC 3.0 (2025 UPDATE): NATIONAL MITIGATION TARGET

Pathway to an economy-wide absolute emission reduction by 2035

Target Level **40% Net Reduction**

Target Year **2035**

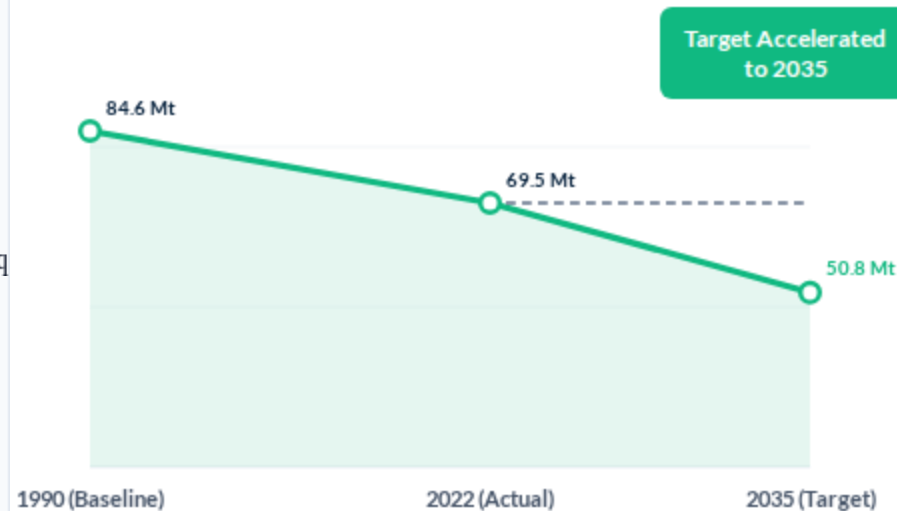
Reference Year Baseline **1990: 84,600.35 ktCO₂ eq**

Tracking Point **2022: 69,498.88 kt CO₂ eq**

Sector Coverage **Energy, IPPU, Agriculture, LULUCF, Waste**

Gases Covered
CO₂ , CH₄ , N₂O , HFCs , PFCs , SF₆

EMISSION REDUCTION TRAJECTORY (MT CO₂ eq)



Transitioning from a 2050 timeline to an accelerated 2035 target reflects a significant increase in national ambition and alignment with the 1.5°C goal.

IMPLEMENTATION ENABLERS



Climate Finance

Mobilizing international FDI and green bonds for renewable expansion.



Tech Transfer

Adoption of grid-scale storage and industrial efficiency tech.



Capacity Building

Strengthening National Climate Transparency platform for BTR reporting.

Conditionality Clause

Implementation of enhanced ambition is supported through international cooperation, finance, and technology transfer mechanisms.

*1990 Baseline updated using latest IPCC inventory methodologies. Emissions tracking reflects net GHG levels including LULUCF sinks.

FTC SUPPORT & INTERNATIONAL COOPERATION

Support and cooperation

Finance	GCF SAP046: Example of international climate finance support for strengthening multi-hazard early warning systems and localized climate resilience.
Technology	Technology Needs Assessment (TNA): UNFCCC-supported national technology prioritization project is being implemented.
Capacity	National CBIT project: GEF-supported institutional capacity building for comprehensive ETF/BTR implementation.
Article 6	Azerbaijan signed a Memorandum of Understanding for bilateral cooperation through the Azerbaijan–Japan JCM, supporting deployment of decarbonization technologies.
Roadmap	Sustainable Finance Roadmap (2023–2026): Central Bank-led framework establishing robust ESG alignment and climate-resilient financial risk assessment.

DOMESTIC ALLOCATION

**USD
374M**

Of national Budget was allocated for public climate mitigation & adaptation projects in 2023.
Source: Ministry of Finance (Citizen’s Budget Guide 2023)

- **Fiscal Mainstreaming:** Consideration of climate allocations into national planning and budgetary mechanisms.

INTERNATIONAL COOPERATION



COP29

- COP29 in Baku advanced global climate negotiations, including progress on the **New Collective Quantified Goal (NCQG), Article 6 operationalization**, and enhanced transparency frameworks under the Paris Agreement.



WUF13

- WUF13 in Baku highlights Azerbaijan’s engagement in urban resilience, sustainable housing, and climate-adaptive urban development, linking climate action with sustainable urban development.



BTP

- Azerbaijan supported regional cooperation and capacity building for Enhanced Transparency Framework (ETF) and BTR implementation.

Representing approximately 0.1% of global GHG emissions, Azerbaijan actively contributes to international climate action through COP29 outcomes, transparency cooperation, and climate-resilient development initiatives.



TER FINDINGS & IMPROVEMENT ROADMAP

KEY CHALLENGES IDENTIFIED



DATA LIMITATION

Limited disaggregated activity data across key inventory sectors.



QA/QC GAP

Formal QA/QC procedures still actively under system development.



INSTITUTIONAL GAP

Institutional roles not yet fully formalized under the ETF framework.

PRIORITY IMPROVEMENT ACTIONS

1

METHODOLOGY UPGRADE

Further alignment with IPCC 2006 Guidelines; develop country-specific emission factors.



2

TIER ADVANCEMENT

Capacity building for Tier 2/3 systems, targeting Energy, LULUCF, and Waste.



3

LAND REPRESENTATION MATRIX

Strengthen land representation systems to support improved LULUCF estimation and consistency.



4

DATA QUALITY ENHANCEMENT

Strengthen QA/QC systems in IPPU (ODS), LULUCF, and Energy balance alignment.



5

DATA DISAGGREGATION

Improve plant/facility-level data collection protocols across Energy, IPPU, and Waste.

FORWARD COMMITMENT



All TER technical recommendations fully integrated into the BTR2 preparation roadmap.



Targeted capacity-building programme for national experts on MPGs requirements.



Active engagement in regional transparency initiatives and specialized UNFCCC workshops.



Iterative institutional approach driving continuous system strengthening over one-off cycles.

The Enhanced Transparency Framework (ETF) is an iterative process of continuous improvement, not a one-time reporting exercise.





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THANK YOU | **TƏŞƏKKÜR EDİRİK**

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