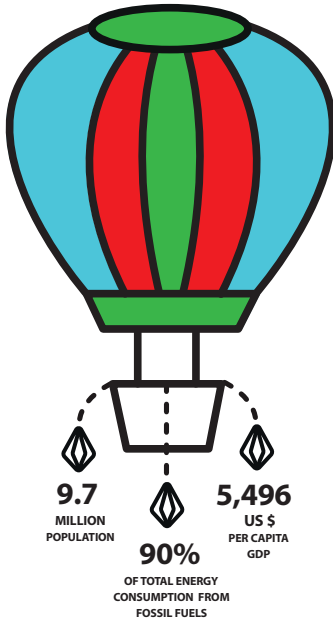


# AZERBAIJAN

## CLIMATE FACTS AND POLICY

### POLICIES AND PROCESSES

**51.8 MILLION tCO<sub>2</sub>e**  
**5.4 TONNES PER CAPITA**



Sources: Third national communication (2016); demographic, energy and economic data from the World Development Indicators of the World Bank: <http://data.worldbank.org/indicator/>

#### Policy framework

Azerbaijan 2020 development concept  
State programme on poverty reduction and sustainable development  
Green economy concept  
State programme for the development of industry for 2015-2020  
National programme on restoration and expansion of forests  
Transport sector development strategy

#### 2020 targets

Increase use of alternative energy sources:

- 20 per cent share of renewable energy in electricity
- 9.7 per cent share of renewable energy in total energy consumption

Decrease losses in the gas distribution system

#### 2030 targets and INDC

##### Mitigation

Base year: 1990  
35 per cent emission reduction by 2030 compared to the base year  
Covered sectors: Energy, oil and gas, agriculture, waste, transport and LULUCF

##### Adaptation priorities

Development of measures for agriculture, forest, water resources, coastal zones, human health and tourism

#### GHG inventory of all sectors and gases

Third national communication to UNFCCC  
First biennial update report to UNFCCC  
Application of revised 1996 IPCC Guidelines for national greenhouse gas inventories  
System of GHG emissions monitoring, reporting and verification (MRV) in preparation stages

### CLIMATE ACTIONS

#### Paris agreement on climate change

Azerbaijan ratified Paris agreement on climate change in January 2017

#### GHG emissions

29 per cent reduction of total GHG emissions in 2012 compared to 1990

#### Energy-related actions

Establishment of the State Agency for Alternative and Renewable Energy Sources  
Modernization of oil and gas processing technologies

#### Industrial sector development

Promotion of efficient and environmentally friendly energy technologies  
Expansion of alternative energy installations and equipment

### CLIMATE FINANCE

#### National energy sector investments by 2030

US \$57 million in modernization of energy production, distribution networks and transmission lines, increase of renewable energy sources

##### ADB

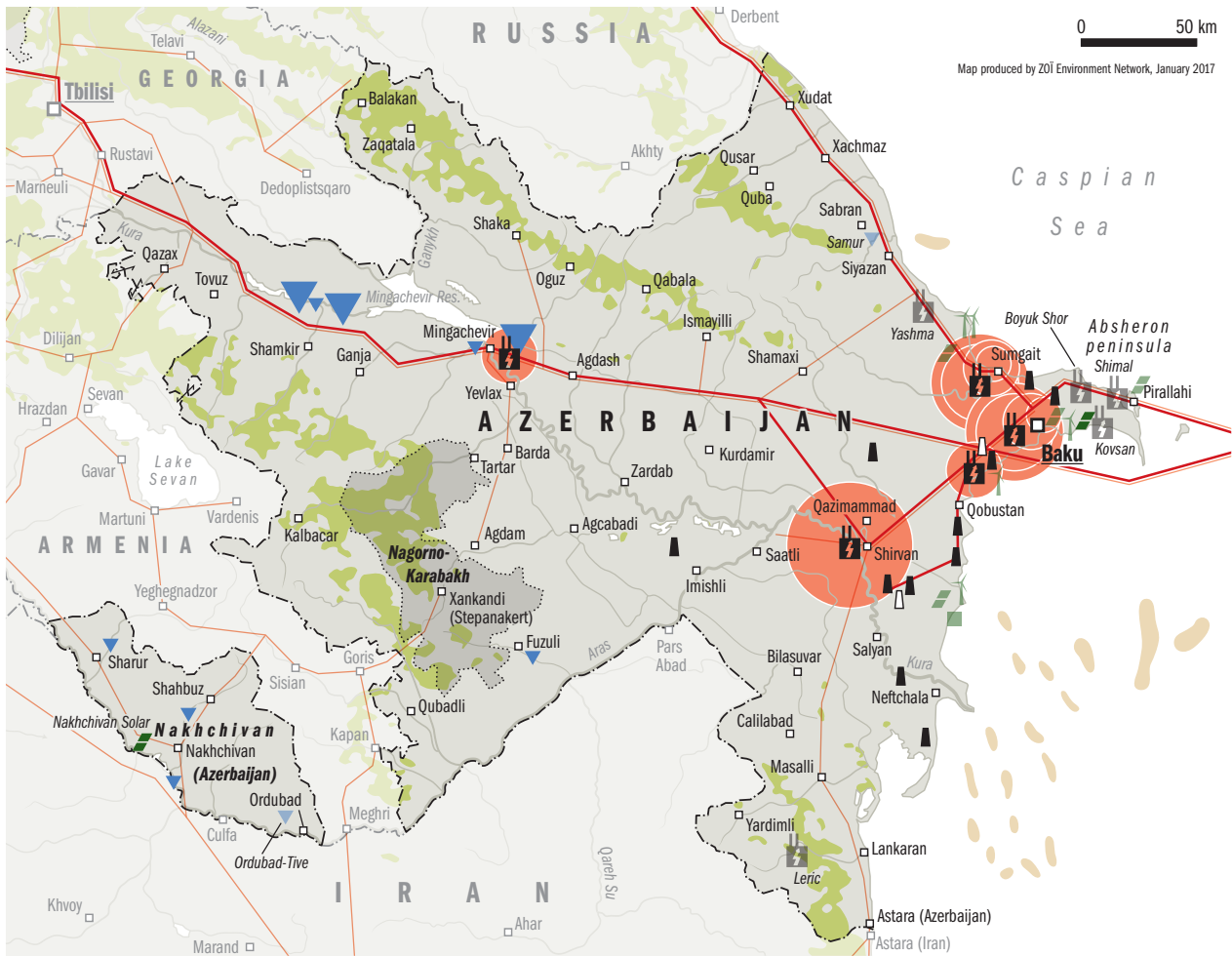
US \$165 million for establishment of the Samukh Agro-Energy Residential Complex as renewable (biomass and solar) energy producer (NAMA)

##### GEF

Climate policy development, GHG inventory and reporting under UNFCCC, energy efficiency in residential buildings, wind energy plant (NAMA)

#### International Climate Initiative (Germany)

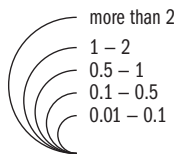
Phase-out of CFCs in refrigerators (NAMA)



## Energy and emissions

### Fossil fuel energy installations and carbon emissions

● CO<sub>2</sub> emissions from thermal power plants, million tonnes per year:



⚡ Thermal power plant (coal/oil/gas)

⚡ Thermal power plant (coal/oil/gas) under construction

### Pipelines

— Oil  
— Gas

### Oil and gas

▲ Oil spots

□ Natural gas spots

● Subsea oil field

### Renewable energy installations and plans

▨ Solar park / solar park under construction

▨ Hydropower plant / hydropower plant under construction

⚡ Wind park under construction

■ Biogas station under construction

Installed capacity:

▨ More than 100 MW

▨ 50 MW – 100 MW

▨ 1 – 50 MW

■ Forests (high CO<sub>2</sub> absorption potential)

## Policies and institutions

The Ministry of Ecology and Natural Resources (MENR) is responsible for preparation and implementation of policy on climate change. The Climate Change and Ozone Centre of the National Hydrometeorological Department of MENR manages GHG inventories and national reporting to UNFCCC. The State Commission on Climate Change is established as a coordinating forum on climate issues. It is composed of representatives of 18 ministries and other governmental institutions, including MENR, the Ministry of Agriculture, the Ministry of Economic Development, the Ministry of Industry and Energy, the State Oil Company of Azerbaijan Republic (SOCAR), the Ministry of Emergency, Azer-su JSC, Azerbaijan Amelioration and Water Management JSC, and the National Scientific Academy of Azerbaijan.

Other relevant governmental institutions include the State Agency for Alternative and Renewable Energy Sources (SAARES), which is responsible for renewable energy and energy efficiency planning and regulation, tariff policy and enforcement. SAARES is also the lead agency for implementing Azerbaijan's 20 per cent renewable energy target by 2020.

"Azerbaijan 2020: Look into the future" development concept aims to reach the level of OECD countries for energy intensity and carbon dioxide emissions per unit of GDP; it also calls for green economy development and clean energy production.

The State programme on poverty reduction and sustainable development promotes GHG emission reductions, energy efficiency and renewable energy, and increases in forests and protected areas.



## Energy and emissions

- Sea and coastal areas: increase of sea level, salinization of coastal areas, deficit of safe drinking water, reduction of quality and diversity of fisheries
- Risk of floods
- Flash floods
- Landslides
- Mudflow
- Desertification and soil degradation
- Heatwaves
- Storms
- Potable water scarcity

## Azerbaijan scorecard

- Country's share of global emissions
- Country's emissions per capita
- General climate action ambition

### Mitigation commitment:

- Emissions reductions
- Decoupling from population growth
- Decoupling from economic growth
- Renewable energy prospects

- Adaptation action**

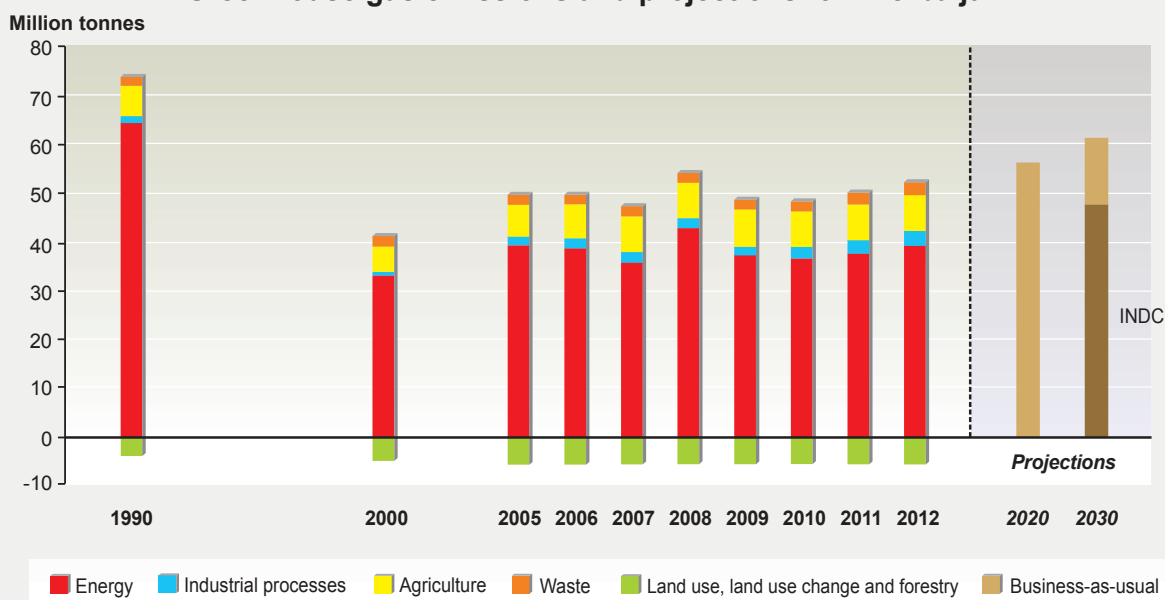
### National climate policy actors

**Policy leadership and UNFCCC focal point:** Ministry of Ecology and Natural Resources

**Coordinating advisory body:** State Commission on Climate Change

**GHG Inventory:** Climate Change and Ozone Centre of the National Hydrometeorological Department

## Greenhouse gas emissions and projections for Azerbaijan



Projections are based on and Azerbaijan's 3rd National Communication and INDC

© Zoï Environment Network (2017)

The State programme for the development of industry for 2015-2020 promotes efficient and environmentally friendly energy technologies and the expansion of alternative energy.

## Climate actions

The economy of Azerbaijan is one of the most energy-intensive in the region, largely as a consequence of the oil and gas production that is also the main source of the country's GHG emissions. By 2012 Azerbaijan had nevertheless achieved a 29 per cent reduction of GHG emissions compared to 1990 due to modernization of the industry and deployment of more efficient technologies.

In January 2017 Azerbaijan ratified the Paris agreement on climate change. The INDC of Azerbaijan prioritizes the use of alternative energy and development of low-carbon measures in the commercial and residential sectors, and sets a target to reduce CO<sub>2</sub> emissions by up to 35 per cent by 2030 compared to the base year 1990.

Azerbaijan has allocated a national investment programme for the energy sector until 2030.

Azerbaijan has adopted several strategies to promote renewable energy, including the establishment of the State Agency for Alternative and Renewable Energy Sources. The country has set renewable energy targets for 20 per cent of electricity consumption and 9.7 per cent of total energy consumption to come from renewable energy sources by 2020. Part of the strategy entails the installation of 2 000 MW of renewable energy capacity. According to its strategic plan 2015-2018, SAARES aims to construct by 2018 wind, solar, bioenergy and hydropower facilities that generate a total of 735 MW of new alternative and renewable energy supply. SAARES is studying a new tariff methodology for renewable and alternative energy, and will set a new tariff for solar power.

In cooperation with international donors, such as UNDP, ADB, and GIZ, Azerbaijan is developing a national climate adaptation and mitigation strategy. Azerbaijan has identified adaptation priority sectors as agriculture, forests, water resources and coastal zones, tourism and public health. Their integration into a national adaptation strategy, sectoral strategies and practical adaptation action is still to be implemented.

## Climate finance

International agencies such as GEF, International Climate Initiative, ADB and UNDP support the preparation of Azerbaijan's climate reports, and the application of MRV. UNDP/GEF provide support to a low-carbon development programme, and Germany supports the phase-out of CFCs. Improved energy efficiency of buildings, the waste sector and district heating are important areas of development for the future.

Azerbaijan expects to allocate US \$57 million for investment in the energy sector by 2030. The funds will support the development of a low-carbon concept, modernization of technologies in electricity and thermal energy production, reconstruction of distribution networks and transmission lines, and an increase in renewable energy sources.

ADB has provided US \$165 million for the establishment of Samukh Agro-Energy Residential Complex. This agriculture and food-processing centre will be powered by renewable sources for electricity and heat generation, including solar, geothermal, and locally produced biomass waste. The Complex is expected to reduce cumulative GHG emissions by 346 000 tCO<sub>2</sub>e by 2020. If the Samukh Complex is successful, Azerbaijan plans to replicate the experience at five other sites of similar size.

## Sources of information for the scorecard

Laws and regulations, Third national communication, Technology needs assessment for climate change mitigation and adaptation, INDC

Reports of State Statistic Committee, Hydrometeorological Department of the Ministry of Ecology and Natural Resources, Climate Change and Ozone Centre of the National Hydrometeorological Department

Analytical materials and expertise of Zoï Environment Network, as well as organizations and experts of Azerbaijan



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