# ARMENIA CLIMATE FACTS AND POLICY

### **9.8** MILLION tCO<sub>2</sub>e **3.2** TONNES PER CAPITA



Sources: 2012 national GHG inventory report (2015); First biennial update report (2016); demographic, energy and economic data from the World Development Indicators of the World Bank:

http://data.worldbank.org/indicator

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### **POLICIES AND PROCESSES**

#### **Policy framework**

Development strategy for 2014-2025 Second national environmental action programme

### **Energy sector developments**

Concept for ensuring energy security Renewable energy roadmap National programme for energy savings and renewable energy and action plan Law on energy savings and renewable energy

#### 2030 targets and INDC

Mitigation

Base year: 1990 633 million tCO<sub>2</sub>e emissions during 2015-2050 (5.4 tonnes per capita per year) Interim review of the mitigation progress and reduction targets in 2030 Forest cover increase up to 20 per cent of the territory

#### Adaptation priorities

Natural ecosystems, health, water, agriculture, energy, human settlements and infrastructure, and tourism

#### GHG inventory of all sectors and gases

First biennial update report to UNFCCC National GHG inventory report to UNFCCC Third national communication to UNFCCC

### **CLIMATE ACTIONS**

#### **GHG** emissions

70 per cent GHG emissions reduction in 2010 compared to 1990 26 per cent GHG emissions increase in 2010 compared to 2000

#### 2013 Concept for ensuring energy security

50 per cent reduction in energy intensity of GDP since 2000

#### Small hydropower plant development programme since 2010

Favourable tariffs, financing schemes Small hydro plants currently account for 13 per cent of total power generation

## **CLIMATE FINANCE**

#### National incentives for renewables and energy efficiency

Favourable tariff policy for renewables, and lending for renewable energy and energy efficiency

#### EBRD

Private sector investment facility for renewable energy and energy efficiency

#### WB

Renewable Energy and Energy Saving Fund Exploration of potential geothermal sites

# Netherlands Development Finance Company (FMO), International Finance Corporation (IFC), KfW Development Bank

Small hydropower and wind plants

#### **OeEB Development Bank of Austria**

Renewable energy and energy efficiency



## **Policies and institutions**

The Ministry of Nature Protection is the executive authority for environmental protection and climate change. It chairs the Inter-agency Coordinating Council on Implementation of Requirements and Provisions of the UNFCCC established in 2012. The Climate Change Information Center established in 1997 supports the Ministry on climate change information.

Armenia has identified the following priority areas of action for limiting GHG emissions: increased renewable energy production, modernization of thermal power plants, improved energy efficiency, expansion of electrical transport, decreased methane emissions from solid municipal waste and wastewater, and forest restoration and afforestation.

The Second national environmental action programme covers climate change as both a separate issue and as a cross-cutting issue. The Armenia development strategy 2014-2025 aims to introduce energy-efficient and resource-saving technologies and measures, and seeks to reduce transport emissions in the capital city Yerevan by developing electric public transport and other low-emission transportation alternatives. The Law on energy savings and renewable energy (2004) promotes strengthening of Armenia's energy independence. These goals are operationalized in the subsequent Renewable energy programme (2007) and Action plan (2010). Small hydropower production – advantageous in the mountainous setting of Armenia – has increased since the establishment of an SHP development programme in 2010.

The Concept for ensuring energy security assesses the export potential of Armenia's energy system, and aims to create an attractive investment environment for renewable, alternative and nuclear energy.

## **Climate actions**

Similar to many other countries with economies in transition, Armenia saw its GHG emissions decline after the collapse of the Soviet Union in the 1990s. Emissions in 2010 were 70 per cent lower than in 1990. The Armenia INDC sets an emission limit of 633 million tonnes of  $CO_2$ -equivalent during 2015-2050 or an average of 5.4 tonnes per capita, and aims for a 20 per cent forest cover for the country by 2050.



### Armenia scorecard

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

#### Mitigation commitment:

- Emissions reduction
- Decoupling from population growth
- Decoupling from economic growth
- Contraction Renewable energy prospects

# National climate policy actors

**Policy leadership:** Inter-agency Coordinating Council on Implementation of Requirements and Provisions of UNFCCC

UNFCCC focal point: Ministry of Nature Protection

**GHG inventory:** Project based, UNDP Climate Change Programme unit

**Adaptation action** 



Although Armenia's energy intensity is still high due to its high rate of energy losses and obsolete energy infrastructure, the energy intensity of GDP has declined by 50 per cent since 2000, partly due to Armenia's improved energy sector policies. Imported natural gas has a strong role in energy supply. Armenia is the only country in South Caucasus to produce nuclear energy (31 per cent of energy supply in 2014). The share of renewable energy in electricity production is on the increase and it provides approximately one third of the country's needs in electricity.

The National programme for energy savings and renewable energy and Action plan identify specific activities in residential buildings, services, manufacturing, transport, and water sectors. The Renewable energy roadmap (2011) aims for a 16 per cent share of renewables in total energy generation in the long term.

Armenia is planning to apply an ecosystem approach for adapting to climate change. The country has identified natural ecosystems, health, water, agriculture, energy, human settlements and infrastructure, and tourism as priority sectors for adaptation. These form the basis for Armenia's adaptation strategy and national adaptation plan, which are still to be developed.

## **Climate finance**

Armenia has established a revolving investment fund for climate change mitigation and adaptation. Environmental fees from companies using natural resources and having an impact on the environment maintain the fund. The country also applies a tariff policy to promote and attract investment to renewable energy. Preferential tariffs are set for power generated by small hydropower plants, wind turbines and biogas units as well as small-scale cogeneration units.

The Renewable Energy and Energy Savings Fund – financed by the World Bank and GEF – implements loan and grant programmes. It promotes market development and the use of clean, efficient and affordable heating technologies, and supports energy efficiency upgrades in public buildings. The fund has renovated central-heating systems in schools and has provided loans to small hydropower plants. An important milestone for Armenia was joining the Eastern Europe Energy Efficiency and Environment Partnership (E5P) agreement, which enables the country to access grant funds of €20 million. The funds are targeted for priority municipal energy efficiency and environmental projects, such as the rehabilitation of water and wastewater systems, solid waste management, street lighting and the insulation of public buildings. The first grant for energy efficient street lightning was signed in 2015.

International financial institutions – including EBRD, FMO, IFC, KfW, the World Bank and the Development Bank of Austria – have financed the establishment of lending organizations that provide credits for sustainable energy development to private businesses and entrepreneurs in Armenia.

Within the EU ClimaEast project Armenia implemented a project on sustainable forest and pasture management for climate change mitigation and adaptation.

### Sources of information for the scorecard

National strategies and information materials: Renewable Resources and Energy Efficiency Fund, Eastern Europe Energy Efficiency and Environment Partnership, Climate Change Information Center; Third national communication (2015); First biennial update report under the UNFCCC (2016); INDC (2015)

#### EU ClimaEast project

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



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