









Photo credit: UNDP in Armenia

# ARMENIA

# Climate policy development and advancing cooperation with the EU in Armenia



With a population of around 3 million (2020), Armenia contributes as little as 0.02% to the total global greenhouse gas (GHG) emissions and is in the lower range of per capita footprint with 3.45 t CO<sub>2</sub>e.

as 0.02% to the total global greenhouse gas (GHG) emissions and is in the lower range of per capita footprint with 3.45 t CO<sub>2</sub>e. Armenia's GHG emissions fell by about 70% between 1990 and 1995 and then fluctuated between 7 and 8,5 Mio t CO<sub>2</sub>eq until 2010. In the latest available year (2017)<sup>1</sup> GHG emissions are at the level of 10,6 Mio t, which is an increase of 25% from 2010. This increase was mainly driven by increased economic activity (+34%) and counterbalanced by a decrease in population (-2.4%). Comparisons of the latest year show that emission intensity per GDP is the lowest compared with the other Eastern Partnership countries. In the updated Nationally Determined Contribution (NDC) 2021-2030, Armenia sets the economy wide GHG emission reduction single year target of 40% by 2030 compared with the base year 1990.

enera

66.7%

temperature

increase

Energy and agriculture are the two sectors with the largest GHG emission shares, 66.7% and 18.5% respectively, and therefore this is where most of the mitigation potential lies.<sup>2</sup>

Climate change is already affecting Armenia, with an annual temperature increase higher than the global average and a significant decrease in precipitation.

Armenia's 4<sup>th</sup> National Communication on Climate Change (NC4) (2020) reports that it experienced an average temperature rise of 1.23°C between 1929–2016 while a 10% reduction in average annual precipitation volume was documented over the period 1935–2012. The Biennial Update Report 3 (BUR3) (2021) reports that from 1990 to 2019, the deviation of the average annual temperature from the baseline period (1961-1991) was averaging 0.9°C. In 2019, a deviation of 1.5°C from the annual average temperature for the period of 1961-1990 was recorded. Intergovernmental Panel on Climate Change (IPCC) projections suggest Armenia could experience warming at levels significantly above the global average, with potential warming of 4.7°C by 2090s, above the 1986–2005 baseline, under the highest emissions pathway (RCP8.5). Increased drought risks, floods and landslide hazards, a reduction of the total arable land and the yield of staple crops will be driving significant changes in the ecosystem composition, dryland expansion, water availability and food production.



Climate change is increasing the vulnerability of Armenia, with an increase in the frequency of extreme weather events, worsening desertification and land degradation. The most vulnerable sectors are agriculture, human health, water resources, forestry, transport and energy infrastructure.

agriculture

18.5%

precipitation

decrease

The Strategic Programme of Prospective Development 2014-2025 - the overarching development strategy of the country - mentions climate change as an issue that needs to be addressed in order to improve rates of economic growth. A strong focus is given to mitigation and emissions reduction. The country has a set of climate-relevant environmental laws with further amendments (e.g. Water Code, 2002, and Law on Energy Saving and Renewable Energy, 2004) and policies (e.g. National Forest Policy, 2004, and the Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector 2020-2030, 2019, the Strategic Programme for the Development of the Energy Sector of the Republic of Armenia (until 2040)). However, these existing laws and policies do not have a specific focus on climate change. To address this, the government decided to develop national action plans for all climate-sensitive sectors. The National Strategy on Disaster Risk Management (2017) integrates climate change and incorporates Sustainable Development Goals (SDGs). The Program on Energy Saving and Renewable Energy to 2022-2030 and its Action Plan for 2022-2024 were approved by the Government of Climate Change and the list of Measures for 2021-2025 were approved by the Government in May 2021. The water Sector Adaptation Plan and its Program of Measures for 2022-2026 were adopted in November 2022.

The EU relations with Armenia are based on the Comprehensive and Enhanced Partnership Agreement (CEPA), which entered into full force in March 2021. At the regional level, the Eastern Partnership policy guides the EU's multilateral engagement with the eastern neighbourood countries, including Armenia. Among other sectors, green connectivity, energy, environment and adaptation to climate change are supported through various actions such as: improving water resources management and transboundary cooperation; mainstreaming environmental goals; developing sounder environmental governance; enhancing environmental awareness; and improving the sustainable management of key natural resources. Support to sustainable energy, energy efficiency and climate resilience has also been strongly provided by the EU, including together with International Financial Institutions.



The designated authority for climate change in Armenia is the Ministry of Environment and the Inter-Agency Coordination Council for the Implementation of the Requirements and Provisions of the UNFCCC established in 2012 and revised in 2021.

<sup>1</sup> https://unfccc.int/documents/274257 <sup>2</sup> Armenia's Third Biennial Update Report

# EU4Climate Armenia: key results achieved in 2022



Armenia is a country with an ambitious climate change agenda, which makes significant efforts towards low carbon development through increasing the share of renewable energy, promoting energy efficiency, preserving and enhancing forest-covered areas and reporting regularly to the UNFCCC.

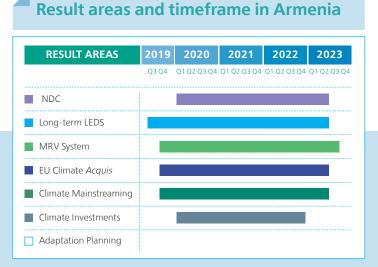
However, the main constraints for Armenia include dependence on external financing, availability of national funds to finance the process of Monitoring Reporting and Verifications system of emissions, limited human resources, technological and capacity building, shortage of arrangements for data collection for the GHG inventory or nation-wide forest inventory, poor local climate adaptation plans.

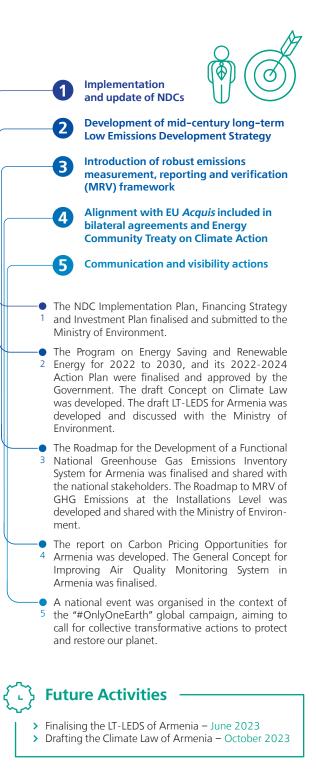
EU4Climate 🜔 EaP 🚺 Armenia

The EU4Climate Programme, funded by the European Union, aims to support the development and implementation of climate-related policies by the Eastern Partnership countries.

EU4Climate supported Armenia's commitment to update and enhance the country's NDC, with the ultimate goal to identify a realistic implementation strategy for the limitation of GHG emissions and prioritization of adaptation measures for coping with risks to the country's sustainable development. The main tool for the successful implementation of the Armenian NDC, as well as the Climate Action SDG, is a long-term Low Emission Development Strategy (LEDS), including the development of energy and agriculture sectoral strategies.

A robust domestic emissions measurement, reporting and verification (MRV) system will be established, to inform the government and the international community of the progress of its NDC implementation. Throughout the programme, the best international and EU practices will be applied, including alignment with EU *Acquis* in accordance with the CEPA.







Implementation of EU4Climate activities started in Armenia in the second half of 2019 laying the foundation for assisting the country in the implementation of Armenia's commitments under the Paris Agreement.



# **Energy Efficiency and Renewable Energy frameworks for Armenia**

With EU4Climate support, a new Program on Energy Saving and Renewable Energy for 2022-2030 for Armenia has been developed and adopted by the Government in March 2022, in line with Armenia's Energy Sector Development Strategic Program to 2040. The new Program aims to improve energy efficiency in the economic sector in the next ten years, promote energy saving, and increase the use of renewable energy sources to enhance energy security and reduce the negative environmental impacts.

Armenia considers the further development of renewable energy (solar, wind, geothermal) as a vital direction of its energy policy and an essential guarantee for its energy independence and security. The aim is to increase the share of solar energy production to at least 15% by 2030. To achieve this goal, the utilisation of the battery energy storage systems will be essential.

### The low carbon development context

The new Program goals and targets are in line with Armenia's low emissions development vision, namely, 'the increased use of renewable energy will improve the share of low-carbon energy in electricity generation to meet the domestic demand' (75% in 2030 compared to 72% in 2019). The Program aims to positively impact the economic growth potential, in particular, to reduce the price pressure of fossil fuels on the economy and employment. The Program aims to positively impact the reduction of the relative import of fossil fuels, except natural gas imported for electricity exports.

The new Program emphasises the possibility of introducing and developing battery energy storage systems in order to improve the safety and reliability of





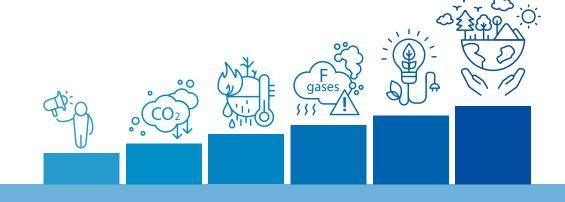


# the country's energy system. The program underlines the necessity of the assessment of wind energy's development perspectives and feasibility.

**Renewable energy sector** 

#### **Energy efficiency and energy saving**

The new Program emphasises three main areas/sectors regarding energy saving and energy efficiency, namely (1) households, (2) transport and (3) public schools. In addition, specific reference is made to industry and agriculture. The energy-saving and energy-efficiency improvement policy will be aimed at increasing the level of 'electrification' (replacing gas with electric energy) of the economy (in particular in the residential buildings sector). Such a policy can contribute to scaling up the use of low-carbon energy, thereby reducing the negative impact on the environment.







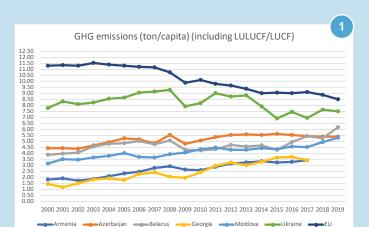
The EU4Climate Programme helps governments in the six EU Eastern Partner countries to take action against climate change. It supports countries in implementing the Paris Agreement and improving climate policies and legislation.

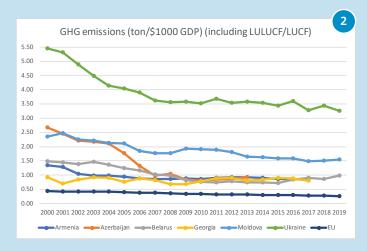
EU4Climate assists the EaP countries to integrate the low-emissions and climate resilience objectives into development policies and plans, to improve and consolidate climate policies and legislative alignment. Its ambition is to limit climate change impact on citizens' lives and make them more resilient to it. The Programme builds on important achievements of past cooperation programmes, such as the EU's ClimaEast Programme, which supported Climate Change Mitigation and Adaptation in Neighbourhood East and was completed in 2017. EU4Climate directly contributes to the targets of the Joint Staff Working Document "Recovery, resilience and reform: post 2020 Eastern Partnership priorities", adopted in July 2021.

The scope of the Programme was defined in cooperation with all partner countries. The Initiative is implemented by the United Nations Development Programme. The European Commission provides the overall policy direction.

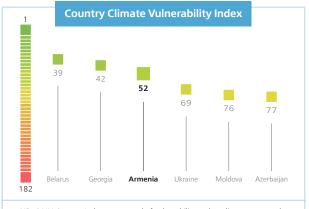


J4Climate





<sup>4</sup> Participation of Belarus in the EU4Climate was suspended as of 24.02.2022 until further notice



ND-GAIN Country Index, composed of vulnerability and readiness score, ranks the vulnerability of countries to the impacts of climate change; a higher number means a higher vulnerability. (As developed by the University of Notre Dame<sup>3</sup>).

**Partner Countries:** Armenia, Azerbaijan, Belarus<sup>4</sup>, Georgia, Republic of Moldova, Ukraine



2019-2023 Budget:

EUR 8.8 million (EU contribution: EUR 8 million)

Implementing Partner: United Nations Development

Programme (UNDP) Overall direction:

European Commission

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<sup>3</sup> https://gain.nd.edu/our-work/country-index/rankings/

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