MINISTRY OF ECONOMY
AND SUSTAINABLE DEVELOPMENT
OF GEORGIA

Technological Needs for Climate Action in Line with National Commitments

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Georgia's Climate Change policy Milestones

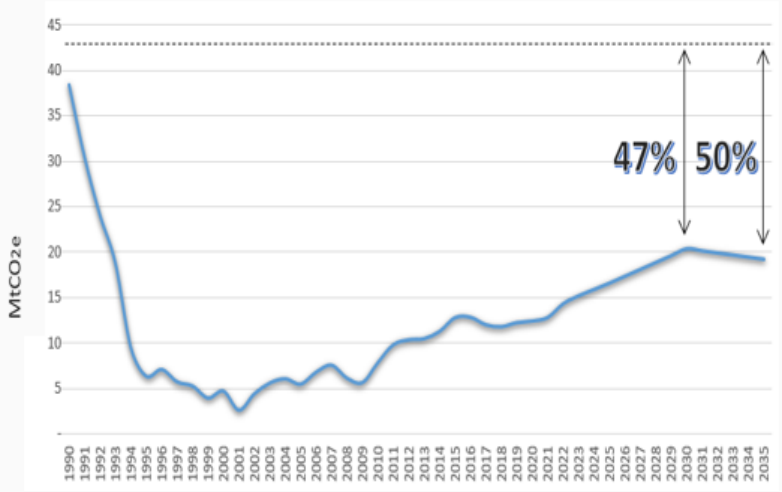
1994
- Georgia became a signatory to the United Nations Framework Convention on Climate Change (UNFCCC)

2015
- Georgia signed the Paris Agreement and submitted its Intended Nationally Determined Contribution (INDC).

2017
- By the ordinance N96 of February 21, 2017, the Government of Georgia approved the Paris Agreement

2021
- Georgia submitted its updated NDC;
- 2030 Climate Strategy, and 2021–2023 Action Plan (CSAP), including sectoral targets and measures.

2026
- Georgia's Nationally Determined Contribution 3.0 (NDC.3.0)



Georgia undertakes to reduce the total net emissions of greenhouse gases at the national level by 47% by 2030 compared to 1990 levels, and to set a target of a 50% reduction for 2035

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Climate Technology Needs Assessment for Georgia

- 2023 Georgia Technology Action Plan has been prepared;
- The document was developed by the Center for Sustainable Development - "Remisia" and funded by the Green Climate Fund.
- At the first stage four sectors were selected :

  I. Electricity generation and supply;
  II. Buildings;
  III. Transport;
  IV. Agriculture.

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Chapter – I
Energy Sector Technology

Combination of technologies:		
➢ Wind power plants (WPP) ➢ Pumped storage hydro power plants (PS-HPP)	➢ Photovoltaic power plants ➢ Battery energy storage system (BESS)	➢ Run of-river-power plants (RoR) ➢ Green hydrogen(GH_2)
Main Challenges (WPP)	**Main Challenges (PV)**	**Main Challenges(RoR)**
• Integration into the grid; • WPP generation is highly variable	• Integration into the grid; • Variability.	• Variability; • Local community opposition
Main Challenges (PS-HPP)	**Main Challenges (BESS)**	**Main Challenges(GH_2)**
• Investment costs; • long construction period ; • Local community opposition.	• Investment costs; • Low experience in the technology; • Lack of legislative framework	• Investment costs • Long Construction period • Lack of legislative framework

Chapter – II
Building sector technologies

- Saving potential in building sector - 40–50% reduction of GHG
- New building standards came into force - June 30, 2023

Technology 1: Improved building insulation (thermal envelope);

Technology 2: High-efficient heating & cooling system (water-electric heat pumps)

Chapter – III
Transport sector technologies

Technology 1. Public transport development;

Technology 2. Strengthening electric road transport and its infrastructure

Technology 3. Increasing biodiesel production

Chapter – IV
Agricultural sector technologies

Technology 1. Breeding of highly productive livestock;

Technology 2. Use of agricultural waste as fertilizer

Conclusions

In order to achieve better progress, there is a need for:

- Elaboration and effective implementation of legislation;
- Modern technology development to mitigate climate change;
- Addressing financial and capacity constraints;
- Technology transfer from developed countries;
- International cooperation and awareness raising.

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Thank You!

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