UN environment programme | CTCN UN Climate Technology Centre & Network

Overview of Technical Assistance Support

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NDE Forum for Eastern Europe
8 September 2026

1 Technical Assistances

Technical Assistances

- ✓ Available for developing countries at the request of their NDEs
- ✓ Free of charge (with a value up to 300,000 USD)
- ✓ At local, national or regional levels
- ✓ To academic, public, NGO, or private sector entities
- ✓ For a broad range of adaptation and mitigation technologies
- ✓ At all stages of the technology cycle: from identification of climate technology needs; policy assessment; selection and piloting of technological solutions; to assistance that supports technology customization and widespread deployment.

Types of Technical Assistances

Technical Assessments

Research and development of technologies, piloting and deployment in local conditions, feasibility studies

Governance and Planning

Sectoral roadmaps, strategies and recommendations for law, policy and regulations

Capacity Building

Stakeholder engagement, trainings and workshops, communications and awareness raising

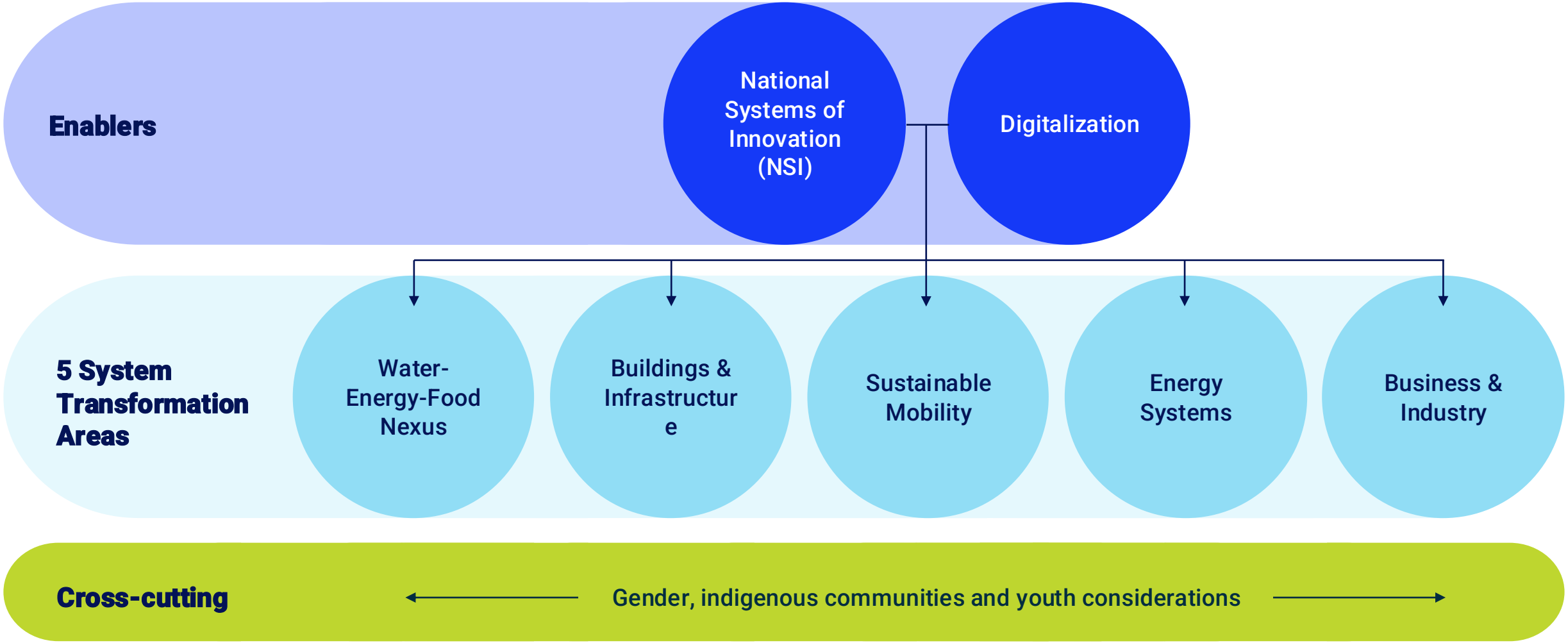
Tools and Methodologies

Decision-making tools, information provision, technology identification and prioritization

Implementation

Collaboration with Financial Mechnism, private sector engagement and market creation

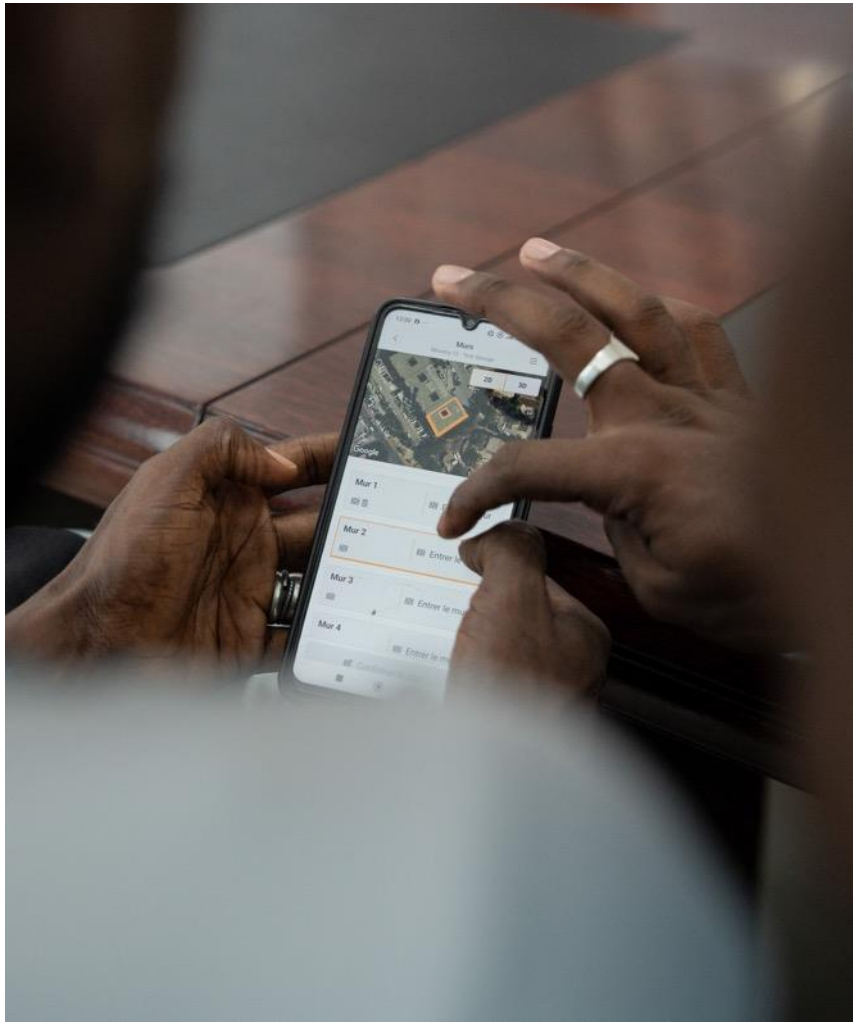
CTCN's 3rd Programme of Work 2023-2027



I. Digitalization

Digitalization in developing countries offers transformative climate action opportunities, enabling efficiency, innovation, and economic growth. Its rapid adoption also contributes to climate challenges, including rising e-waste and energy-intensive data centers.

Country	Example
Mali	Empowering ESCOs through Digital Energy Audits and Smart Building Management
Vietnam	Strengthening Hai Phong City's climate adaptation and disaster prevention: a pilot for localized early warning system
Chile	Artificial Intelligence Pilot for Non-Revenue Water Reduction in Tocopilla



II. National Systems of Innovation

National systems of innovation are crucial for developing countries, fostering endogenous capacities for climate innovation. They enable technological development, collaboration, and adaptation to climate challenges by promoting research, enhancing skills, and supporting the creation of locally tailored sustainable solutions.

Country	Example
Mozambique	Framework and roadmap for a National Innovation System to foster low-carbon and climate resilient economic development
DRC	Incubation programme for innovative companies based on climate technologies in the Democratic Republic of Congo
Tanzania	Tanzania: Establishing a National Climate Innovation Centre for Entrepreneurs and Small Businesses

a. Water-Energy-Food Nexus

Water, energy, and food are linked in a complex web of relationships in the hydrological, biological, social, and technological spheres. Demand for all these resources is rising rapidly, driven by an increasing global which is quickly urbanizing, alongside changing diets, economic growth, and rising living standards.

Country	Example
Saint Kitts & Nevis	Piloting GIS-based Tools to Model Drought Risk for Water Planners
Guatemala	Promoting Solar-powered Irrigation Systems and Satellite Observations for Smallholder Farmers
Pakistan	Scaling Rainwater Harvesting Solutions for Water-scarce Communities

b. Buildings and Infrastructure

The building and construction sector is responsible for about 37% of GHG emissions, considering energy consumption and embedded carbon. Continuous growth comes from urbanization and rising energy needs for appliances and equipment.

Country	Example
Ghana	Development of Green Building Guidelines and Standards
Timor-Leste	Formulating a National Electricity Grid Code and the Definition of a Net Metering Policy
SADC Region	Leapfrogging to energy-efficient refrigerators and distribution transformers

c. Sustainable Mobility

Motorized transport on land, sea and air remains dependent on internal combustion engines that generally run on fossil fuels. Transport accounts for more than a third of GHG emissions from end-use sectors.

Country	Example
Bangladesh	Development of Framework for Real-Time Transport Information Systems for Public Transport in Greater Dhaka
Tanzania	Developing a national framework for deploying and scaling up E-Mobility

d. Energy Systems

Energy demand in developing countries is projected to expand by two-thirds by 2050. Annual capital spending on clean energy in developing economies will need to multiply by over seven times, to more than USD 1 trillion, in order to remain on track to meet goals.

Country	Example
Mauritius	Feasibility study of anaerobic digestion of the organic fraction of solid wastes
Maldives	Feasibility study on green hydrogen potential in Maldives and development of a national roadmap for sustainable energy transition
Kenya	Development of a SF6 Phase-out Roadmap and Pilot Projects

e. Business and Industry

Business and industry in developing countries face significant challenges, including carbon-intensive processes, limited access to green technologies, and inadequate infrastructure. Addressing these challenges requires investment in sustainable infrastructure and practices to allow low-carbon and resilient economic growth.

Category	Example
Senegal	Decarbonization Roadmap in the Cement Sector
Algeria	Feasibility study for a waste-to-energy pilot project at a GICA cement plant
Nigeria	Developing an Institutional Framework for the Energy Efficiency Act and Regulations targeting energy intensive sectors

Cross-cutting

Gender Mainstreaming

Mali: **Enhance the safety, health, and economic well-being of rural and urban women and their families by increasing access to affordable solar cookers**, which will reduce demand for wood and charcoal, protecting and restoring local ecosystems

Youth Engagement

Central African Republic: Involvement of youth networks for the production of affordable solar cookers in the deforestation-threatened Bangui region.

Indigenous Communities

Burkina Faso: Reinforcing the implementation of actions to mitigate and adapt to climate change by developing solar energy systems for off-grid agro-industrial facilities through the establishment of a "**Community Solar Platform**"

Partners for Climate Technologies

WIPO | GREEN
The Marketplace for Sustainable Technology

- Platform linking seekers and providers of green tech; ~130,000 solutions, prototype to market
- Source concrete technology options to ground and inspire technical-assistance requests
- Post national technology needs and showcase local solutions to a global audience of providers and investors

Digital Public Goods Alliance

- **DPGs for Climate Action Collection**: A curated set of trusted, open digital public goods (open-source software, open data, open AI) with a proven track record in climate mitigation and adaptation
- Draw on vetted tools to ground TA asks with proven solutions.
- Tools are built for reuse across different settings

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CTCN Technical Assistance Portfolio in Eastern Europe

Technical Assistances in the Region

To date, the CTCN has implemented **11 technical assistance projects in the region**.

Country	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Albania	1										1
Armenia		1									1
Azerbaijan			1								1
Bosnia & Herzegovina	1										1
Georgia		2	1				1		1		5
Montenegro											0
North Macedonia										1	1
Moldova											0
Serbia			1								1

Technical Assistance Examples

Georgia

Building up an integrated monitoring and early warning forest fires detection system in the Borjomi - Kharagauli National Park by innovative remote sensing tools

Serbia

Modernization of the district heating system and improvements of energy efficiency of buildings in the City of Belgrade

Azerbaijan

Strengthening Capacities to Assess Climate Change Vulnerability and Impacts to Shape Investments in Adaptation Technology for Azerbaijan's Mountain Regions

Technical Assistance in Georgia

3

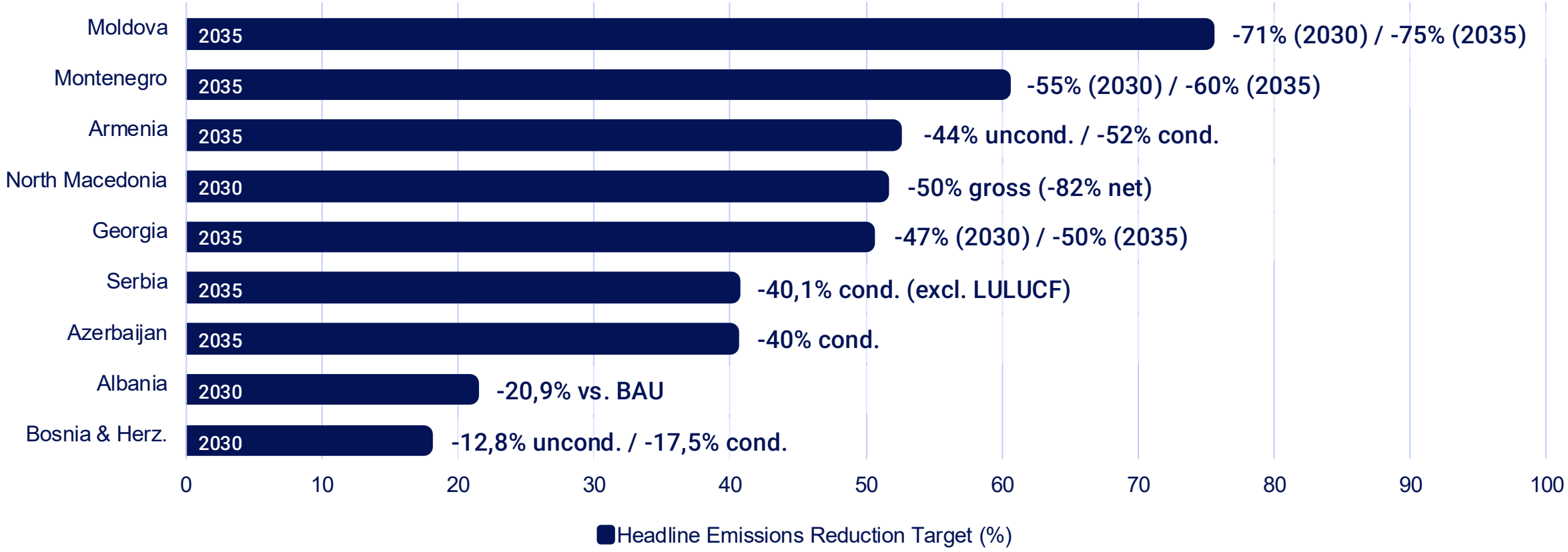
Climate Technology Priorities in Eastern Europe

NDC Analysis

Country	NDC Version	Year
Albania	Revised NDC	2021
Armenia	NDC 3.0	2025
Azerbaijan	NDC 3.0	2025
Bosnia & Herzegovina	Updated NDC	2020
Georgia	NDC 3.0	2026
Montenegro	Updated NDC	2026
North Macedonia	Enhanced NDC	2021
Moldova	NDC 3.0	2025
Serbia	NDC 3.0	2025

NDC Analysis

Headline reduction targets are **not directly comparable** as base years, reference scenarios and sectors differ.



Mitigation Sectors in NDCs

Country	Energy / Power	Oil & Gas	Buildings	Transport	Industry	Agri-culture	LULUCF	Waste
Albania	✓	-	✓	✓	~	✓	✓	✓
Armenia	✓	-	✓	✓	✓	✓	✓	✓
Azerbaijan	✓	✓	✓	✓	✓	✓	✓	✓
Bosnia & Herz.	✓	-	✓	~	~	~	✓	~
Georgia	✓	-	✓	✓	✓	✓	✓	✓
Montenegro	✓	-	✓	✓	✓	~	✓	✓
N. Macedonia	✓	-	✓	~	✓	~	✓	✓
Moldova	✓	-	✓	✓	✓	✓	✓	~
Serbia	*Energy plan*	-	✗	✗	~	~	✗	~

✓ Specific measures ~ within scope, no detail ✗ not addressed - reported under Energy

Adaptation Sectors in NDCs

Country	Water	Agri-culture	Health	Tourism	Forest / Biodivers.	Infra. / Settle.	Coastal	Cross-cut / DRR
Albania	✓	✓	~	~	✓	✓	✓	✓
Armenia	✓	✓	✓	✓	✓	✓	n/a	✓
Azerbaijan	✓	✓	~	~	~	✓	✓	✓
Bosnia & Herz.	~	~	~	~	~	✗	n/a	~
Georgia	✓	✓	✓	✓	✓	✓	✓	✓
Montenegro	NAP/CCAP	NAP/CCAP	NAP/CCAP	NAP/CCAP	✗	✗	✗	NAP/CCAP
N. Macedonia	✗	✗	✗	✗	✗	✗	n/a	✗
Moldova	✓	✓	✓	✗	✓	✓	n/a	✓
Serbia	~	~	~	✗	~	~	n/a	~

✓ Specific measures ~ flagged vulnerable, no measures ✗ not addressed **n/a** landlocked **D** NAP/CCAP

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UN Climate Technology Centre & Network

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Supported by:

Funded by the European Union
環境省 Ministry of the Environment
METI Ministry of Economy, Trade and Industry
外務省 Ministry of Foreign Affairs of Japan
Ministry of Foreign Affairs of Denmark
Norwegian Ministry of Foreign Affairs
GREEN CLIMATE FUND
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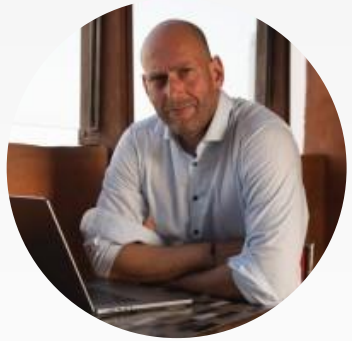
Environment, Community and Local Government

Climate Technology Presentations

Energy Systems

Energy Efficiency Building Retrofitting



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