CTCN
CLIMATE TECHNOLOGY CENTRE & NETWORK

UNEP

Overview of CTCN Assistance in the Region

CTCN Regional Forum,

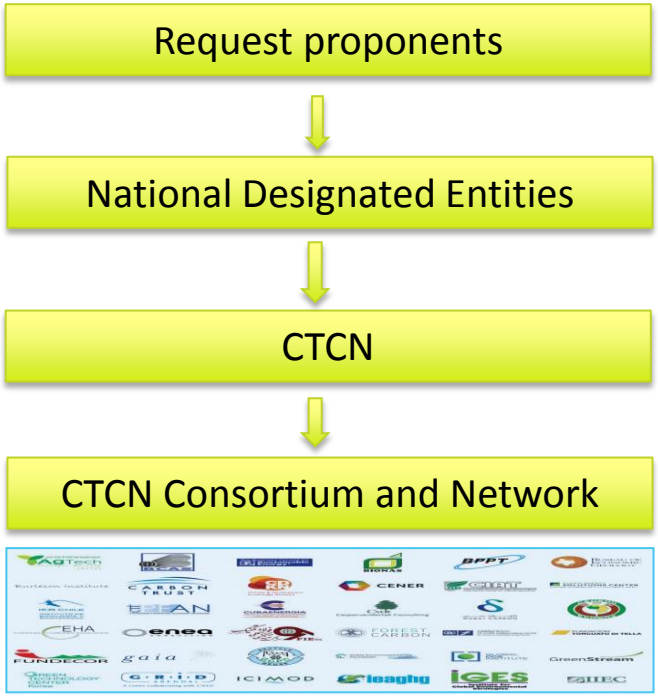
30 May - 1st June

Tbilisi, Georgia

The Assistance Process Step-by-Step

A country-driven mechanism

- Any organization can express need (ministry, city, company, research organization, etc.)
- Request must be in line with national priorities and signed the NDE
- Assistance is designed together with the request applicant, in collaboration with the NDE, and the NDA when relevant



1- Formulate needs in a form of a draft request

2- Prioritize, endorse and submit request

3- The CTCN:

- Assess eligibility and prioritization
- Design assistance (response plan) with experts and country
- Select the implementer

4- Delivery of technical assistance

Objective of Technical Assistance: Removing Barriers to Technology Transfer

Technological	Financial	Institutional
• Limited capacity to assess, adopt, adapt and absorb technological options • Lack of knowledge of technology operation and management • Lack of skilled personnel/training facilities • Lack of standard and codes and certification	• Lack of access to financing • Potential lack of commercial viability • Lack of financial institutions to support climate technologies • Lack of instruments (incentive, risk mitigation mechanisms)	• Uncertain governmental policies • Lack of infrastructure • Lack of information and awareness • Lack of consumer acceptance

Requests submitted by countries in the region for mitigation and adaptation to climate change

- Azerbaijan: Strengthening Capacities to Assess Climate Change Vulnerability and Impacts to Shape Investments in Adaptation Technology for Azerbaijan's Mountain Regions
- Georgia: Building Capacity in Ecosystem-based Adaptation in Mountain Regions
- Georgia: Assessment of Suitable Flood Mitigation Measures in Tbilisi
- Armenia: Identification of Technologies for Climate Change Mitigation and Adaptation
- Serbia: Modernization of the district heating system and improvements of energy efficiency of buildings in the City of Belgrade
- Serbia: Climate change, technology transfer and Energy efficiency
- Bosnia and Herzegovina: Rehabilitation and Modernization of the district heating (DH) system in the City of Banja Luka
- Albania: Regional Energy Efficiency Action Plan

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

Challenge / Request:

- Mountain regions cover 60% of Azerbaijan and highly vulnerable to climate change and disasters
- Understanding of climate impacts and mountain vulnerability is essential to plan adaptation actions
- Insufficient climate change monitoring system due to heterogeneity of methodology and data, making it difficult to use and compare results
- Azerbaijan requested CTCN assistance to develop a set of climate change indicators for vulnerability impact assessment study

CTCN Assistance / Expected results:

- CTCN will work with the Ministry of Ecology and natural Resources to develop the set and test it for use in mountain regions
- Indicators to be used to identify adaptation options and technologies, and to encourage investment decision in adaptation planning

Georgia: Building Capacity in Ecosystem-based Adaptation in Mountain Regions

Challenge / Request:

- Mountainous regions suffer form increased exposure to natural disasters such as landslides, mudflow, flooding, erosion, , etc.
- Climate change is expected to exacerbate frequency and severity of these types of events
- Ecosystem-based services (EbA) can be used as protection against these climate negative impacts

CTCN Assistance / Expected results:

- Identify EbA measures and technologies adapted to mountain regions
- Identify mountains zones to implement these approaches and support to trigger financing for specific projects (i.e. GCF)
- Development of an EbA guidance tool for local stakeholders
- Objective to enhance understanding of EbA for adapting to climate change and incorporation into development and climate change agenda

Georgia: Assessment of Suitable Flood Mitigation Measures in Tbilisi

Challenge / Request:

- Flash floods and mudflows occurring in river sin Tbilisi cause heaving damages in the cities, with many victims
- This problem is accelerated by climate change and improper land development not taking into account flood hazard
- There is a lack of precise data and information on floods to inform planning
- National Environmental Agency of Georgia has limited access and experience to flood modelling and mapping technology

CTCN Assistance / Expected results:

- Create an inventory of available data and select suitable methodology and technology for use in next activities
- Modelling of flood scenarios including influence of climate change
- Propose suitable measures for flood mitigation and adaptation in the pilot catchment
- Technology transfer, training, dissemination and propagation of results.

Armenia: Identification of Technologies for Climate Change Mitigation and Adaptation

Request:

- The Government of Armenia seeks to create a favourable environment for technology development, national/international outreach and transfer: ArmCTCN

- TNA under finalisation (May 2017):
- Relating technology priorities:
  - adaptation: agriculture and water;
  - mitigation: energy.

Expected results:

- ArmCTCN to be established within Technology Transfer Association featuring two main functions in light of TNA results:
  i. acting as a bridge for promotion of local climate technologies;
  ii. internationalisation of private companies

Serbia: Modernization of the district heating (DH) system and improvements of energy efficiency of buildings in the City of Belgrade

Request:

- Identification of renewable and waste heat sources;
- capacity building;
- feasibility study of a demonstration project incorporating innovative low-carbon technologies into the DH network;
- Deployment plan development and national assessment.

Expected results:

- The City of Belgrade and local DH utility acquire technical and institutional capacity and knowledge to develop and scale-up low-carbon DH solutions that:
  - can attract funding and
  - are aligned with a long-term Action Plan in the City.

Serbia: Climate change, technology transfer and Energy efficiency

Request:

- Energy efficiency assessment of the Zrenjanin Hospital.

Expected results:

- Full energy audit of the hospital carried out in line with national/EU standards;
- Scale-up the hospital energy analysis to a municipality/regional level

Albania: Regional Energy Efficiency Action Plan

Request:

- Development of a Regional Energy Efficiency Action Plan (REEAP) for Elbasan;
- Multi-stakeholder engagement process at a regional level to build capacity and increase awareness about risks from climate change;
- Organisation of a Stakeholder Workshop to communicate REEAP findings and applicability to other Albanian cities.

Expected results:

- To present the REEAP to local authorities and stakeholders of the two regions of Tirana and Elbasan aiming at inclusion of the REEAP into their actions/policies;
- To incentivise the preparation of a wider regional REEAP outreach;

Bosnia and Herzegovina: Rehabilitation and Modernization of the district heating (DH) system in the City of Banja Luka

Request:

- An operational and investment strategy for the district heating system's improved sustainability, including:
  - Construction of new biomass boilers to reduce heavy fuel oil consumption and generate heat with sustainable biomass;
  - Rehabilitation and replacement of key components in the distribution network to reduce heat and water losses and reduce electricity consumption;

Expected CTCN assistance/ results:

- Investments to be attracted: provision of new biomass boilers, network upgrades and other efficiency measures.

Thank you

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Environment, Community and Local Government

Governments of Switzerland
and Germany

Experience sharing from country technology priorities

Common priorities identified in TNA and NDCs:

- Mitigation: energy efficiency, especially in buildings and transport, industry, reforestation and grassland
- Adaptation: agriculture (irrigation, soil conservation and crop diversification), water treatment, natural hazard management/extreme events, floods and droughts)

What technologies were prioritised for countries that conducted Technology Needs Assessments? What happened since in terms of deployment?

How can CTCN support the technology aspects of the Nationally Determined Contributions to the UNFCCC Paris Agreement?

What are the main needs for technical assistance to implement these priorities, in collaboration with ongoing efforts and initiaves?

Discussion on priorities and opportunities between CTCN and GCF

What collaboration and communication mechanisms exist already at national level, between NDEs, NDAs and other focal points. How could they be strengthened?

How could technical assistance requests can be identified from country programmes to serve as technical inputs to GCF proposal?

How can CTCN request for technical assistance can be linked and contribute to GCF project pipeline development of countries?

How can GCF and CTCN help you to strengthen these collaborations?