## **UN Climate Technology Center & Network:**

Driving the next decade of climate innovation & action in developing countries

SDG 17 – Strengthening Implementation through Finance, Technology, Capacity Building and Partnerships

15 Feb 2024





www.ctc-n.org

## **The UN Climate Technology Center & Network**



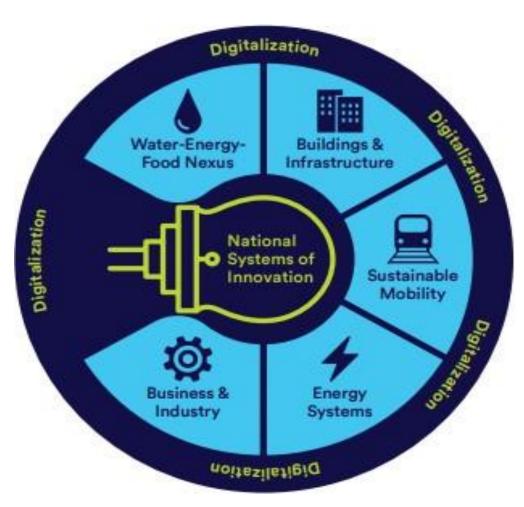


The implementation arm of the UN Climate Change Technology Mechanism Formally mandated under the Paris Agreement

CTCN supports, promotes, catalyzes and accelerates low carbon and climate resilient development in developing countries to:

- Achieve commitments via technology development and transfer
- Implement their NDCs (Nationally Determined Contributions)
- Mitigate and Improve resilience to climate change
- Address the requests of countries and creates sustainable real-world impacts

CTCN's demand driven support also includes the development of sectoral technology roadmaps and market assessments and feasibility studies that create enabling environments for climate technology development and transfer



## 10 years of Innovation and Climate Action





#### **Selected Highlights – Further details available on request**

- 300 technical assistance projects & 10 multi-country projects delivered in 110 developing countries
- 100 million USD deployed across 108 mitigation, 71 adaptation, 61 cross-cutting projects
- 16 Donor Countries <a href="https://www.ctc-n.org/about-ctcn/donors">https://www.ctc-n.org/about-ctcn/donors</a>
- 810+ Network Members and Partners from around the World
- Global Capacity Building Program and Technology Needs Assessments
- Adaptation Fund Climate Innovation Accelerator (AFCIA) program management
- EU supported program of community-based projects focused on conflict risks linked to climate impact
- Collaborative R&D: Thematic knowledge development exchange with research institutes, business and industry
- Youth Climate Innovation Lab and Academy
- Enhancing Public Awareness on Climate Technology Development and Transfer and engagement with Stakeholders to drive implementation Enhancing Collaboration with the Financial Mechanism (incl. the GCF and GEF) Facilitating access to financing through technical assistance
- Developing and Enhancing a System for Monitoring and Evaluation and Tracking Actions







## **Active engagement with network members**



The CTCN has actively engaged over 800 public and the private sector network members from ideation, through to design and implementation of projects, facilitating knowledge transfer, networking and matchmaking





## **Adaptation Fund Climate Innovation Accelerator**





#### **AFCIA I, 5 million USD, 2020 –2025**

CTCN is currently managing a USD 5 million programme within the "Adaptation Fund Climate Innovation Accelerator (AFCIA)".

**CTCN** received 500+ requests from 105+ countries on the 1st call for AFCIA I.

25 Technical assistance were selected, at different stages of implementation, 4 of which have been completed.

#### **Objective:**

Support countries to test, evaluate, roll out and scale up innovative adaptation practices, products and technologies.

#### **Lessons Identified:**

- \* Large appetite for adaptation-related technical assistance in developing countries.
- \* LCDs and SIDs need support to articulate their adaptation technology demands
- \* The percentage of eligible and pre-selected requests could be increased

#### **AFCIA II**, 10 million USD, 2023-2028

AF invited CTCN to submit a proposal for the coordination services of the global AFCIA II programme.

#### **Objective:**

Support countries to test, scale up and leverage innovative, transformative, and locally-led adaptation technologies across the technology cycle and anchor these into the National Systems of Innovation

## ADAPTATION FUND Climate

Innovation Accelerator

MALL GRANTS. BIG IMPACT.









### Collaborative RD&D: Webinar Series



CTCN is leading a series of thematic knowledge development & exchange across the 5 system transformation areas, partnering with research institutes, business and industry.

#### **Objectives:**

To raise awareness and explore ongoing efforts on collaborative RD&D

To develop twinning arrangements by matchmaking North-South, South-South collaboration demands

#### **Webinar Series:**

- 24th July WEF Nexus (AP and Africa)
- 28th August Nature-based Solutions (Buildings and Resilient Infrastructure) (LAC)
- IIth September Energy Systems (Africa)
- 16th October Business and Industry (MENA)
- 2 Ist November Sustainable Mobility (AP)







### CTCN towards SDGs



The CTCN delivers on all 17 SDGs, most notably, we implement technical assistance requests on

- SDG6 Water 48
- SDG7 Energy 73
- SDG9 Industry 37
- SDG11 Cities 34

#### **Holistic Sustainable Impacts**

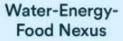
#### Digitalization & Sustainability



















#### Industry & Wellbeing









#### Climate & **Biodiversity**















Adapted from Mondejar et al. 2021

# **Accreditation of Energy Efficiency Lighting Laboratory : Jordan**



#### **Context of Technical Assistance**:

- ➤ The Jordan Standards and Metrology Organization (JSMO) Energy Efficiency Laboratory is national governmental lighting lab in Jordan.
- International accreditation for the JSMO Lighting Lab was necessary to ensure that the test results are reliable and trusted

#### **CTCN Support:**

- Assistance in the participation of Proficiency Tests and/or interlaboratory comparisons tests
- Professional Guidance and training on measurement uncertainty, verification of test methods and any important subjects to get accreditation
- Training on technical topics related to testing, and in the relevant lighting standards and regulations

# Technical guidance and support for conducting a Technology Needs Assessment (TNA) in Iraq



### **Sectors Addressed:**

Energy (Electricity), Industry, Oil and gas, Water and Agriculture

## **Technologies supported/Project Ideas:**

- > Energy: Off-/on-grid solar PV
- Oil and gas: Vapor Recovery Unites for oil storage tanks;
  - > Use of dry gas for power generation
- > Industry: Heat recycling and co-generation in cement industry
- > Agriculture: Agricultural water management; Conservation-friendly agriculture Drip Feed Irrigation
- > Water: Probabilistic water management Flood risk management
- ➤ Climate finance strategies strengthened, private sector mobilized, and project pipeline enhanced : Reviving the SME atmosphere and enabling environment through innovative new business identification training programme

# Development and implementation of an efficient appliance strategy: Lebanon



- Development of a strategy for standards and labels
- Development of a strategy to implement and enforce minimum energy performance standards (MEPS) for four priority appliances (Motors, DT, TVs, WM)
- Assist in developing a financing mechanism/incentive for the deployment of energy efficient equipment
- Propose an awareness plan to reach the end-user properly and effectively
- Assist the Lebanese Center for Energy Conservation in applying for international funds in order to implement the strategies

## **Investing in the Next-Gen Climate Action**

#### **Areas & Opportunities for partners involvement**



Exploring the climate potential of emerging technologies such as artificial intelligence, blockchain, Internet of Things, cloud computing and open data

**Small and Medium Scale Industries:** To enhance endogenous capacities of innovation and adopting as well as adapting climate technologies to local needs, paying special attention to women and youth and their role in shaping and leading the green business and industry. Focus could be on agro based SMEs specifically in LDCs and SIDs.

Decarbonizing or greening the grid and hard-to-abate sectors

Non-conventional renewable energy systems, such as ocean thermal energy, offshore wind, geothermal energy, energy islands, etc.

**Greening of Supply Chain to large producers,** Development of strategies and visons for new sources of energy, like green hydrogen etc. for fossil fuel replacement, and specific climate gases such SF6, HFCs, methane etc

Providing opportunities to lower emissions growth, create social and environmental co-benefits, and achieve other SDGs.

Net zero emission buildings and green infrastructure, green building materials

Focus on Hard to abate Sectors (cement, steel, ammonia etc.)

- Cement Sector roadmap implementation, steel sector process efficiency, waste heat recovery.

Use of digitalization and Al for energy system management

Use of digitalization and Al for smart monitoring systems for traffic management (ex. Bus Rapid Transit system)

Strengthening capacity for R&D and endogenous innovation around digital technologies for climate action

Enhanced platforms and tools for collaboration and learning on agri-food technology development and transfer

Integrated Coastal zone management through nature-based solutions.

Electrification of medium to heavyduty vehicles using low-emission fuels Real time systems for monitoring and management of floods.

Using digital technologies, such as radio internet, for the water-energy-food nexus

Providing opportunities for integrated planning and management, such as flood early warning systems that help advice farmers to plan accordingly and avoid losses related caused by flooding incidents

Switch to fuel substitution through alternative energy carriers such as green hydrogen, bioenergy, and ammonia as substitutes

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Developing and piloting locally adapted digital solutions to drive climate adaptation, increase resilience in communities, resulting in significant reductions in GHG emissions

Facilitate the development and transition to a circular economy, whereby NIS ca stimulate economic growth and create new job opportunities and contribute to a more resilient environment.

Sensor deployment to aid food and crop resilience





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