



CTCN
CLIMATE TECHNOLOGY
CENTRE & NETWORK

LCS-RNet 11th Annual Meeting

Technology framework under the UNFCCC: the CTCN experience

October 17, 2019

Years



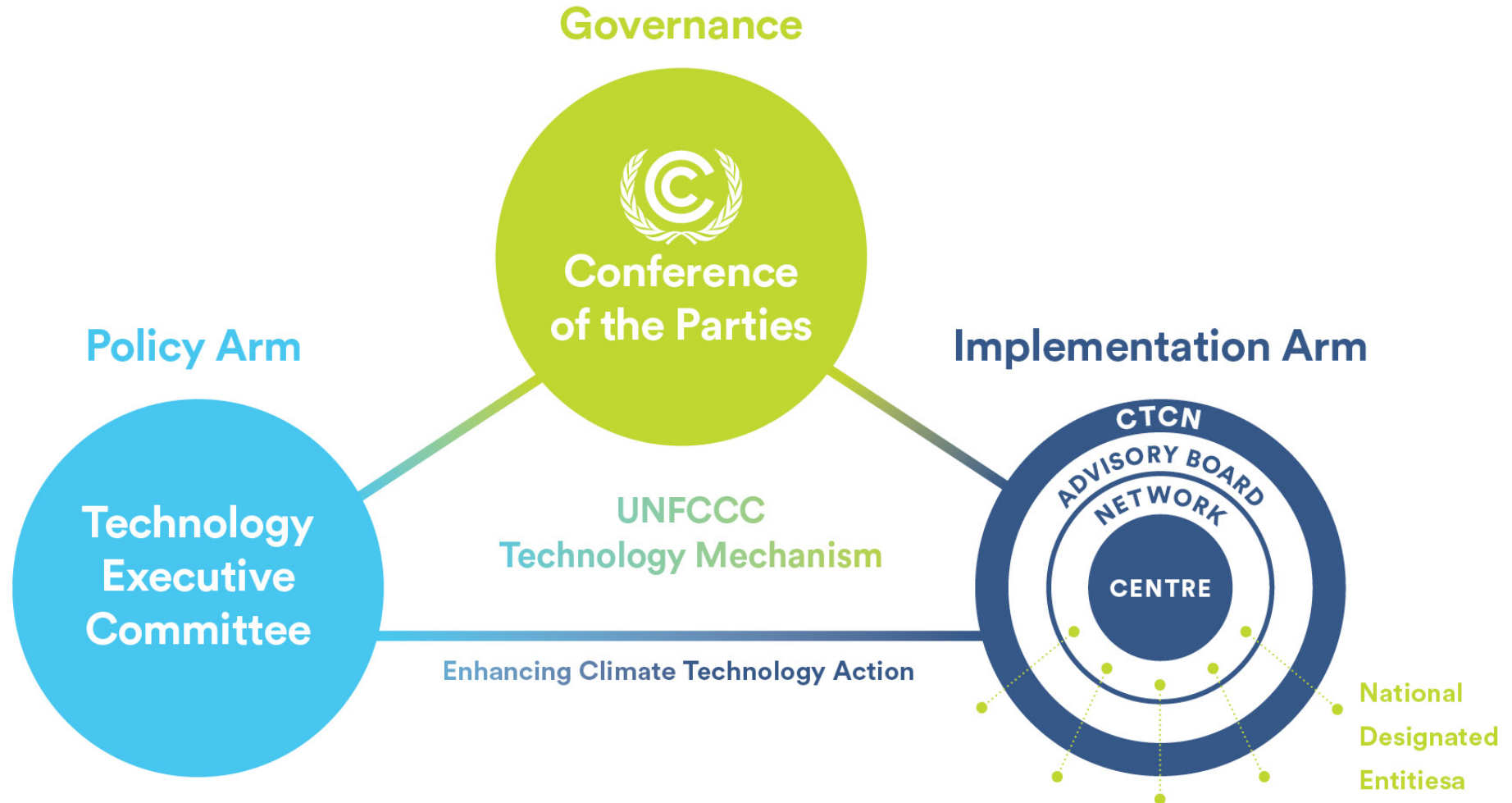
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To promote the accelerated development and transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate-resilient development



UNFCCC Technology Mechanism



CTCN service areas and core sectors



SERVICE 1
Technical Assistance

SERVICE 2
Knowledge Sharing

SERVICE 3
Collaboration & Networking

↓ MITIGATION

- Agriculture
- Energy Supply
- Forestry
- Industry
- Transport
- Waste Management

↻ ADAPTATION

- Agriculture & Forestry
- Coastal Zones
- Early Warning & Environmental Assessment
- Human Health
- Infrastructure, Transport & Urban Design
- Marine & Fisheries
- Water



SDGs and CTCN impact



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6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

3 GOOD HEALTH AND WELL-BEING

5 GENDER EQUALITY

14 LIFE BELOW WATER

4 QUALITY EDUCATION

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

17 PARTNERSHIPS FOR THE GOALS

15 LIFE ON LAND

2 ZERO HUNGER

8 DECENT WORK AND ECONOMIC GROWTH

11 SUSTAINABLE CITIES AND COMMUNITIES

13 CLIMATE ACTION

1 NO POVERTY



70

countries



137

technology projects

A man wearing a white long-sleeved shirt, dark cargo pants, and a grey cap with a neck flap is standing in a vineyard. He is giving two thumbs up. The vineyard has rows of grapevines supported by metal trellis structures. The ground is dry and sandy. The sky is blue with large white clouds.

40

**million USD
invested by CTCN**



2,500

people trained

85

million
anticipated
beneficiaries

10,400,000

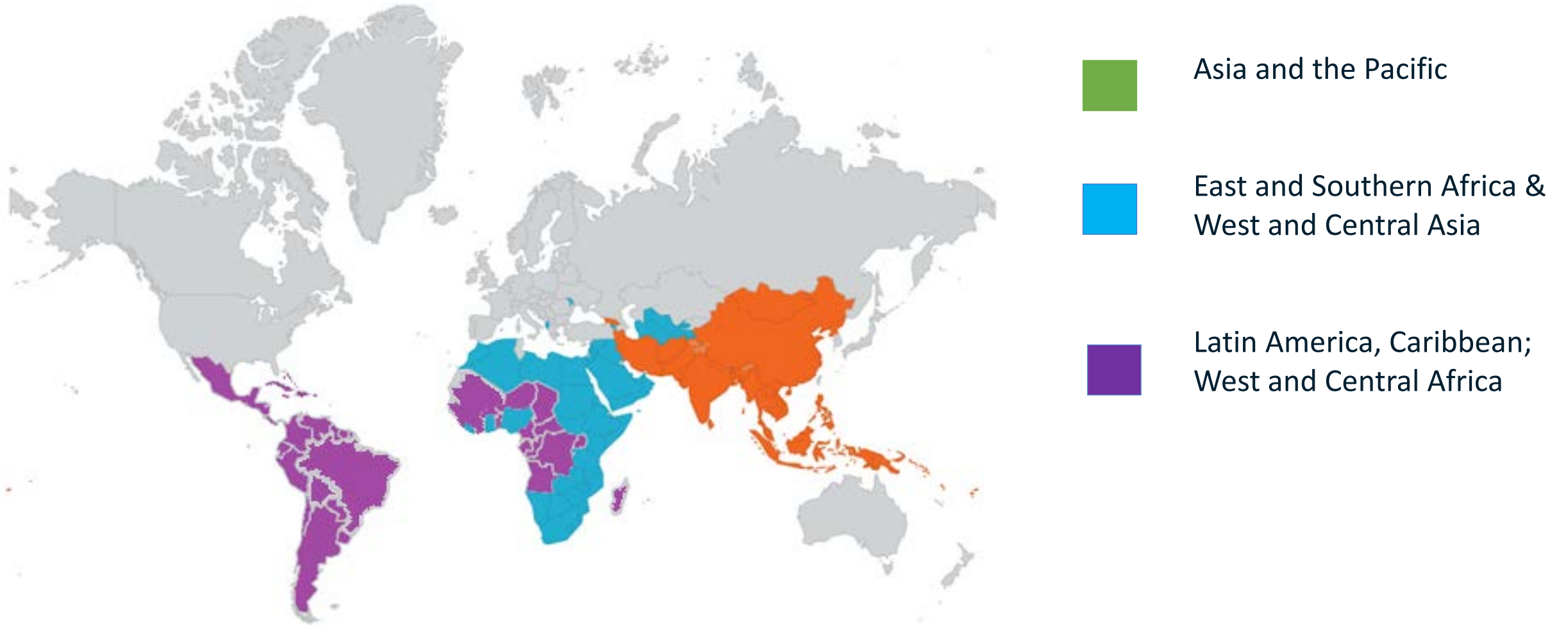
expected
tonnes
of CO₂eq
reduction
per year

670,000,000

USD anticipated
funding leveraged



CTCN geographical teams' distribution



Technical Assistance

Meeting technology demand



CTCN Technical Assistance: How it works



Interested parties contact their National Designated Entity to request climate technology assistance.

NDE confirms the alignment of the request with its national climate priorities and passes it to CTCN.

CTCN collaborates with NDE and applicants to develop a tailored technology transfer plan.

CTCN implements the technology solution with a selected Consortium or Network member.

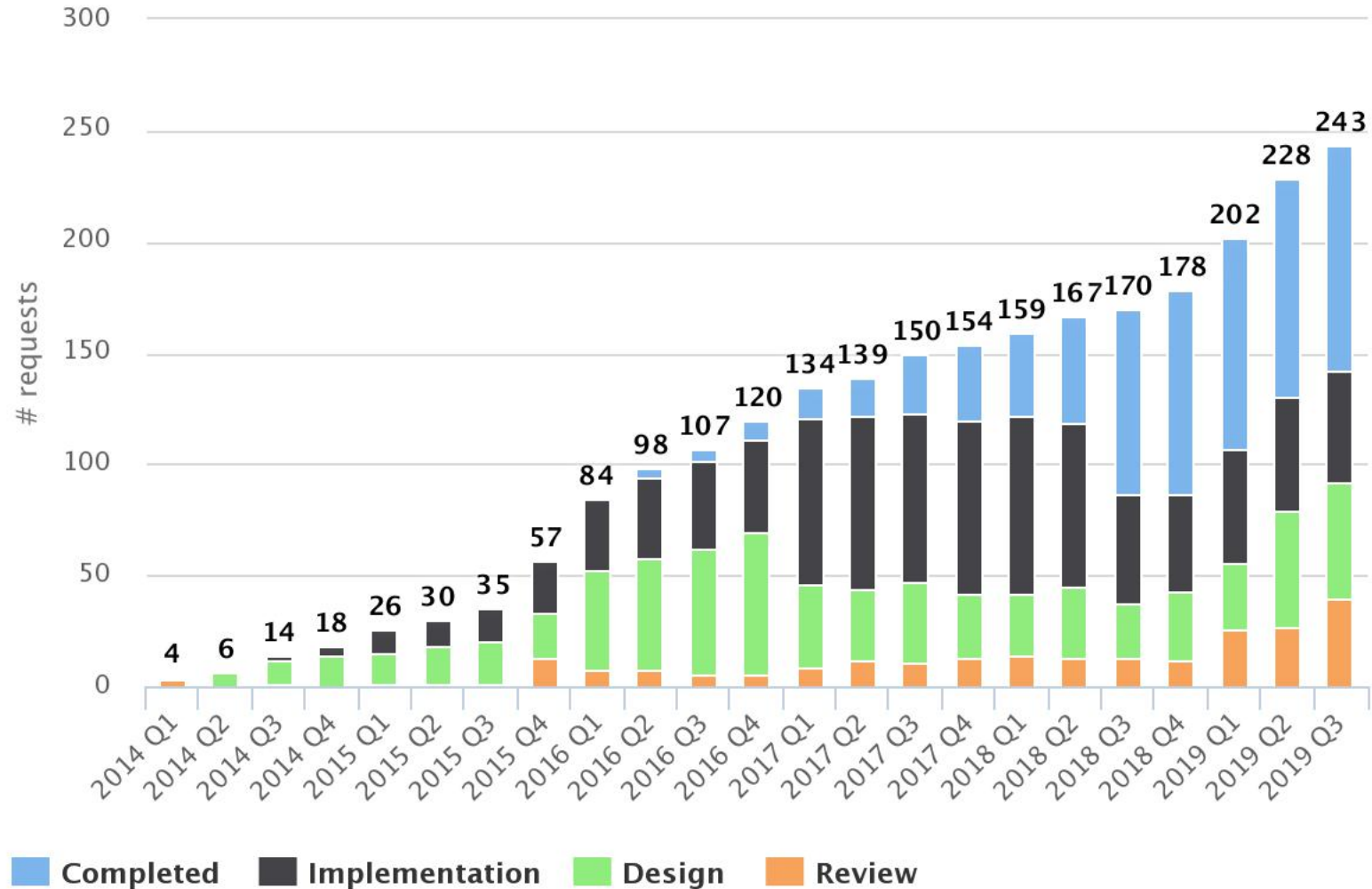
(t ≈ 12-18 months from request to completion)

TA options:

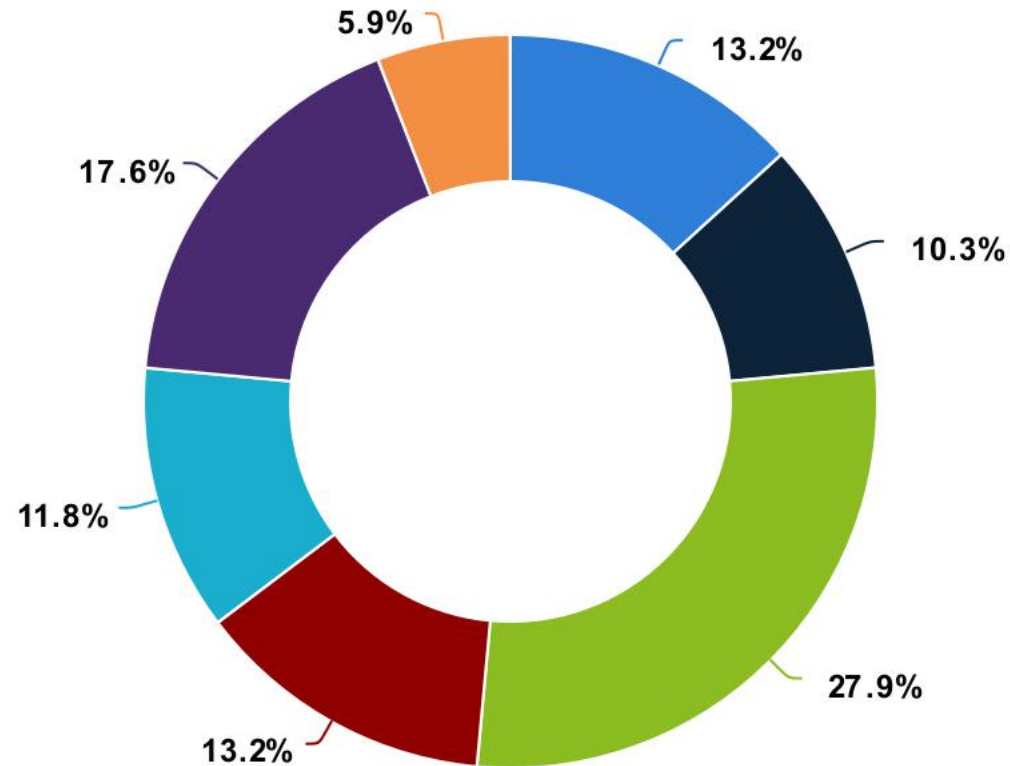
1. Up to 50K\$ (through Consortium Partners)
2. > 50k\$: bid to Network (up to 250k\$)
3. Fast TA: up to 15k\$ (~2 months intervention)
4. GCF Readiness: >200k\$



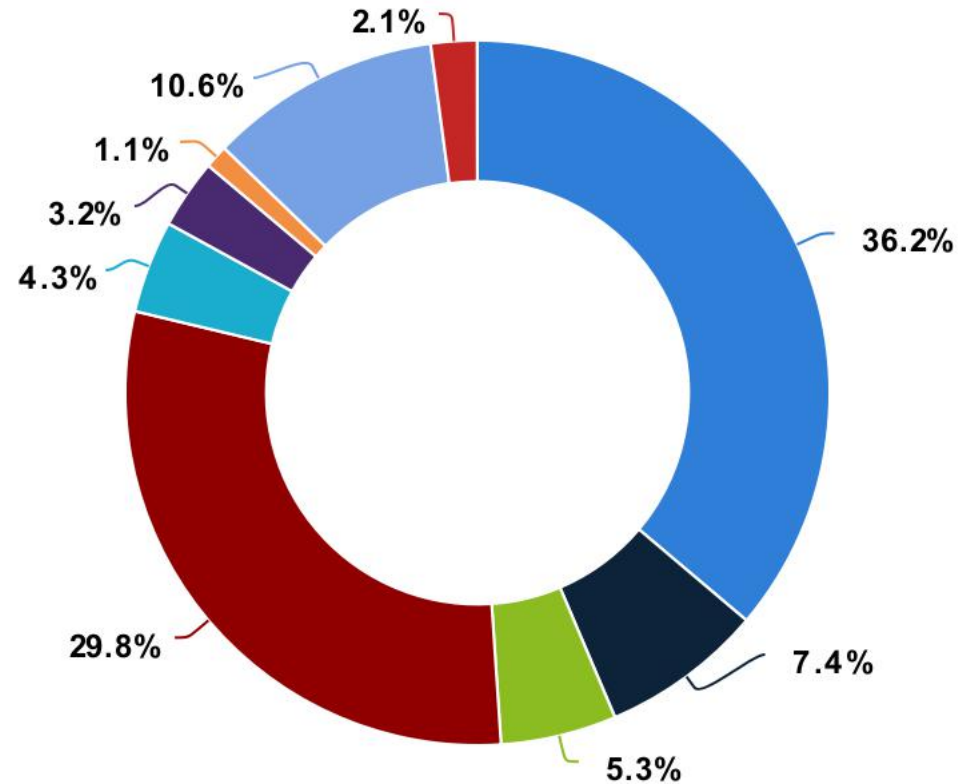
Distribution of technical assistance requests by stage



Distribution of adaptation TAs requests by sector



Distribution of mitigation TAs requests by sector



Distribution of Network Members by Type of Institution



201

Private Sector Organisations



99

Research & Academic Institutions



89

Non-Government Organisations & Not for Profit Organisations



36

Public Sector Organisations



12

Intergovernment & Regional Organisations



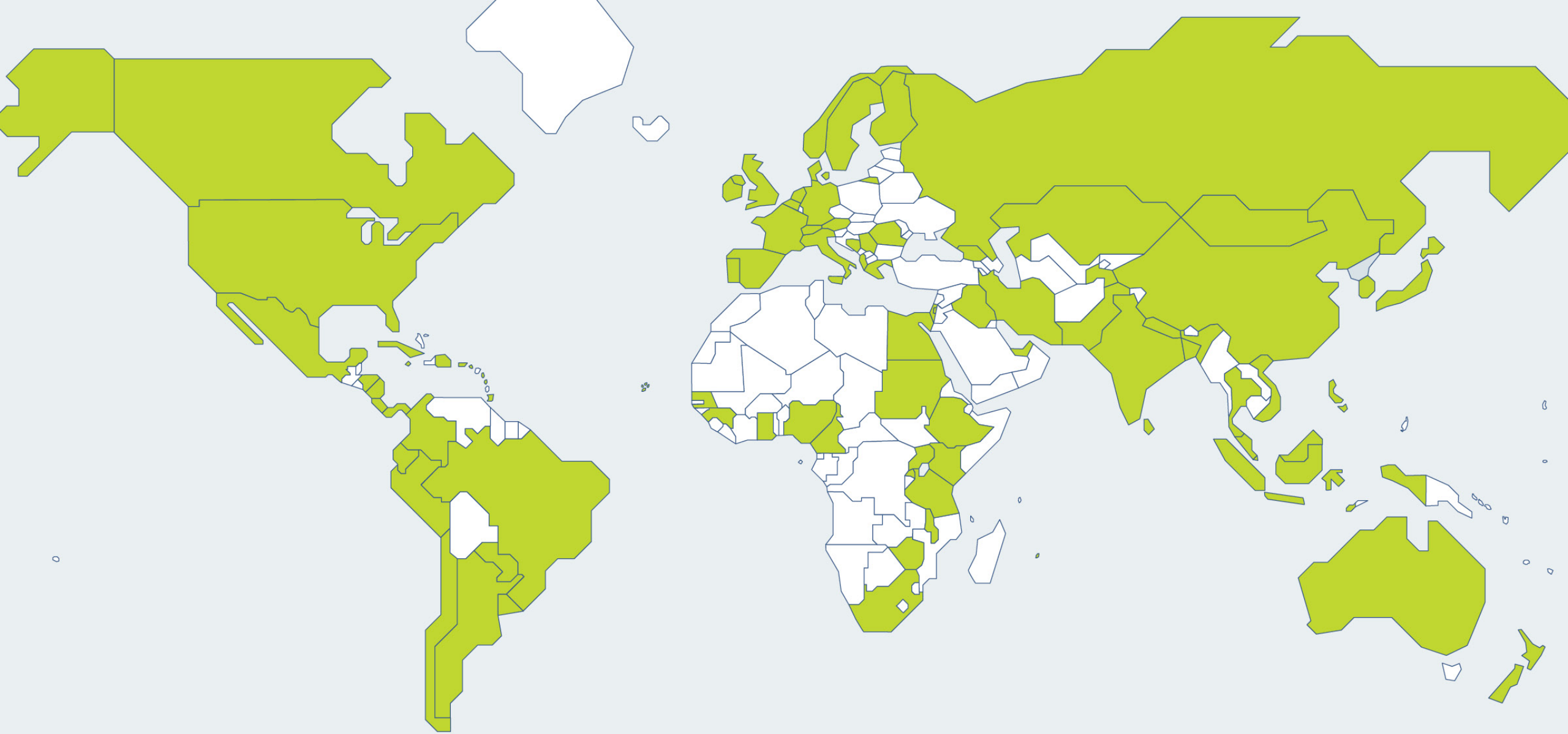
9

Partnerships & Initiatives



2

Financial Institutions



Countries with Network members

New Technology Framework after COP24

COP24 produced 5 principal decisions for CTCN

1. Independent review (2017)
2. Strengthening the Technology Mechanism (TEC-CTCN, GCF-RD&D, TNA)
3. Linkages with the Financial Mechanism
4. Terms of reference for the Periodic Assessment of the Technology Mechanism
5. **Technology Framework of the Paris Agreement**

Technology Framework of the Paris Agreement

The Paris Agreement called for the creation of a technology framework to guide the activities of the Technology Mechanism. The framework was decided along five principles and key themes at COP24; these themes guide the CTCN Programme of Work for 2019-2022 approved in late March 2019.

- The 5 themes of the technology framework:
 1. **Innovation;**
 2. **Implementation;**
 3. **Enabling environment and Capacity building;**
 4. **Collaboration and Stakeholder Engagement;** and
 5. **Support**

- CTCN Programme of Work aligns activities against each theme
- CTCN services are capable of producing impact in all TF themes

1. Innovation

- Establishing and/or strengthening national systems of innovation;
- Facilitating technology RD&D partnership and initiatives
 - TA in Brazil: “Internationalization of the Brazilian hydrogen energy research and development network” via the European Hydrogen Association (EHA)



- Promoting the engagement of private sector (PS) in the development of innovative climate technologies through:
 - raising awareness of future market opportunities;
 - Identifying ways to incentivise their participation.
 - PS match making workshops (Africa, Asia), SME clinics

2. Implementation

- Implementation of collaborative technology development and transfer
 - CTCN TA service modus operandi through network implementation

- Facilitating the undertaking and updating of Technology Needs Assessment (TNAs) and enhancing the implementation of their results
 - 8 TNAs proposals submitted to GCF Readiness in 2019 (Botswana, Cameroon, DRC, Equatorial Guinea, Gabon, Nigeria, South Sudan, Syria); 1 TNA for 2020: Congo

3. Enabling environment and capacity building

- Strengthen countries' capabilities to take effective climate action:
 - Multi-country TAs (several examples currently running in LAC, Africa, Asia): i.e. coastal management, circular economy

- Creation and enhancement of an enabling environment, including policy and regulatory environments for technology development and transfer
 - TA in Uganda on geothermal energy policy

Multi-country TA: coastal classification, hazard management and standardized communication scheme with the Coastal Hazard Wheel

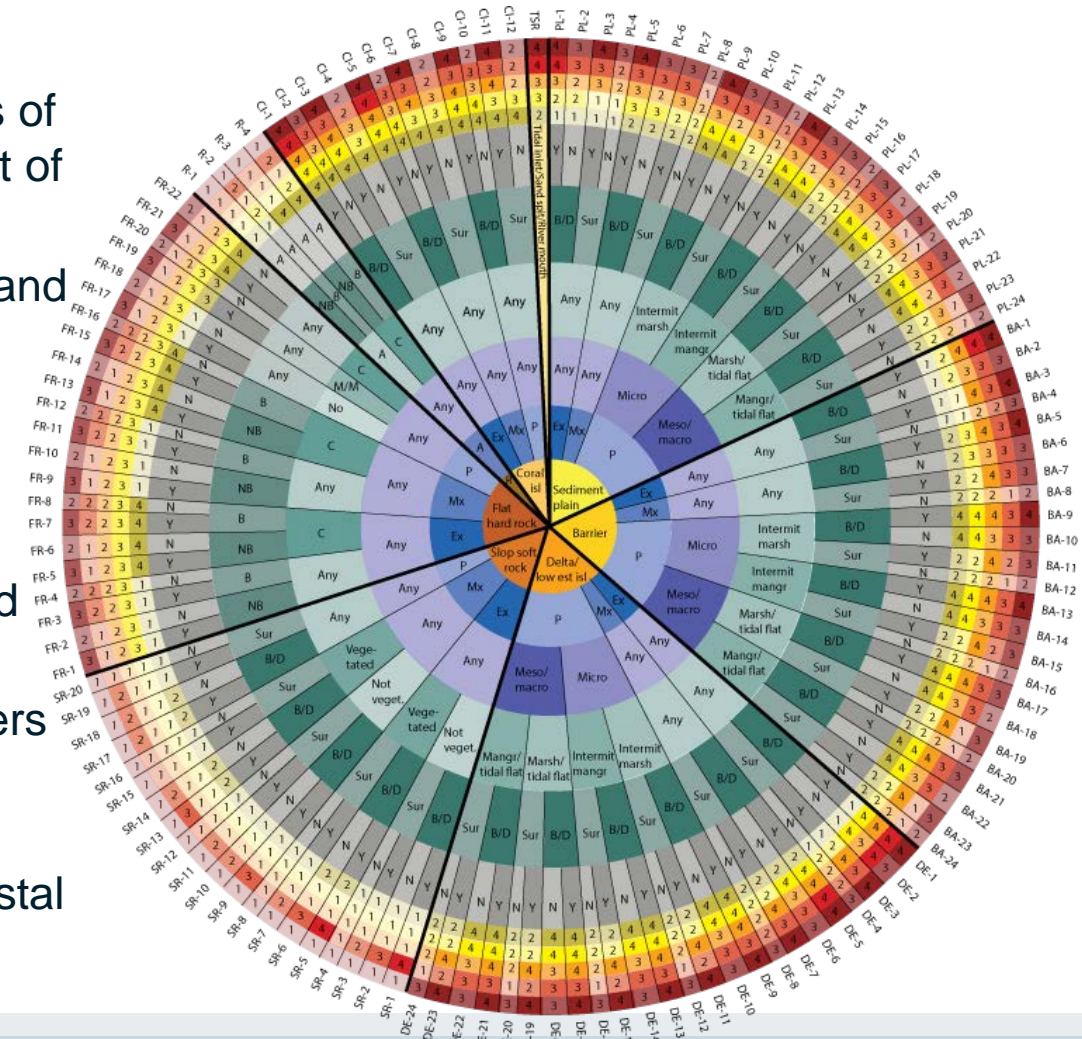


Challenge/Request:

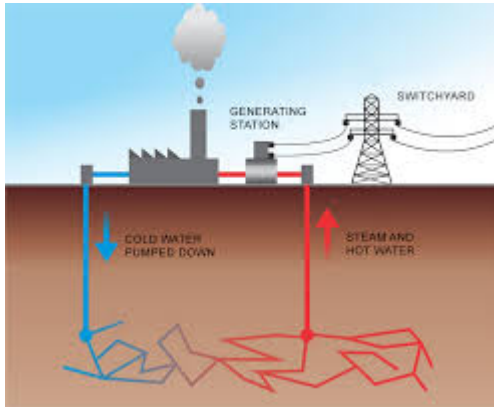
- West Africa's and Cameroon's littorals impacted by the effects of climate change, coastal erosion and sea level rise in a context of growing coastal urban concentrations
- Need to establish a robust diagnosis of multiple coastal risks and to identify technological adaptation options
- Coastal Hazard Wheel (CHW) identified as the most relevant tool

CTCN Response:

- Comprehensive assessment and analysis of data available and of their integration into the CHW system;
- Training of experts from WACOM and other relevant researchers on the data management available in the CHW system;
- Recommendations for appropriate technological options to be implemented for the sustainable management of the main coastal risks.

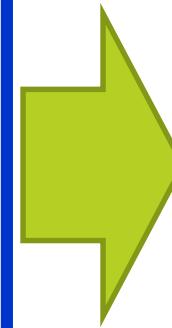


UGANDA TA: Formulating Geothermal Energy Policy, Legal and Regulatory Framework



Request:

- Huge estimated potential of untapped geothermal energy
- Geothermal market still at infancy
- Important legal and regulatory barriers for investors
- No geothermal-specific law



CTCN Response:

- Review of existing energy and mining legislation
- Development of draft geothermal law
- Formulation of recommendation for associated regulations

Expected result: Set up legal framework to enable development of geothermal industry

4. Collaboration and stakeholder engagement

- Enhance engagement of stakeholders at the local, national and global level.
 - CTCN regional fora in LAC, Africa, Asia Pacific within Climate weeks of UNFCCC
 - Workshop to strengthen linkages between climate focal points under the UNFCCC (NDE-NDAs), March 2019 Equatorial Guinea.

The workshop was co-organized by the Climate Technology Centre and Network (CTCN) and the Central African Forest Commission (COMIFAC), with financial and technical support from the Japan International Cooperation Agency (JICA), the German International Cooperation Agency (GIZ)

5. Support

- Identify and promote innovative finance and investment at different stages of the technology cycle;
 - TA featuring scale-up funding by other financial mechanisms at the end of the project cycle

- Enhancing the mobilization of various types of support, including pro bono and in-kind support.
 - Pro bono TAs: Japan and Korea most active countries

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



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Challenge/Request:

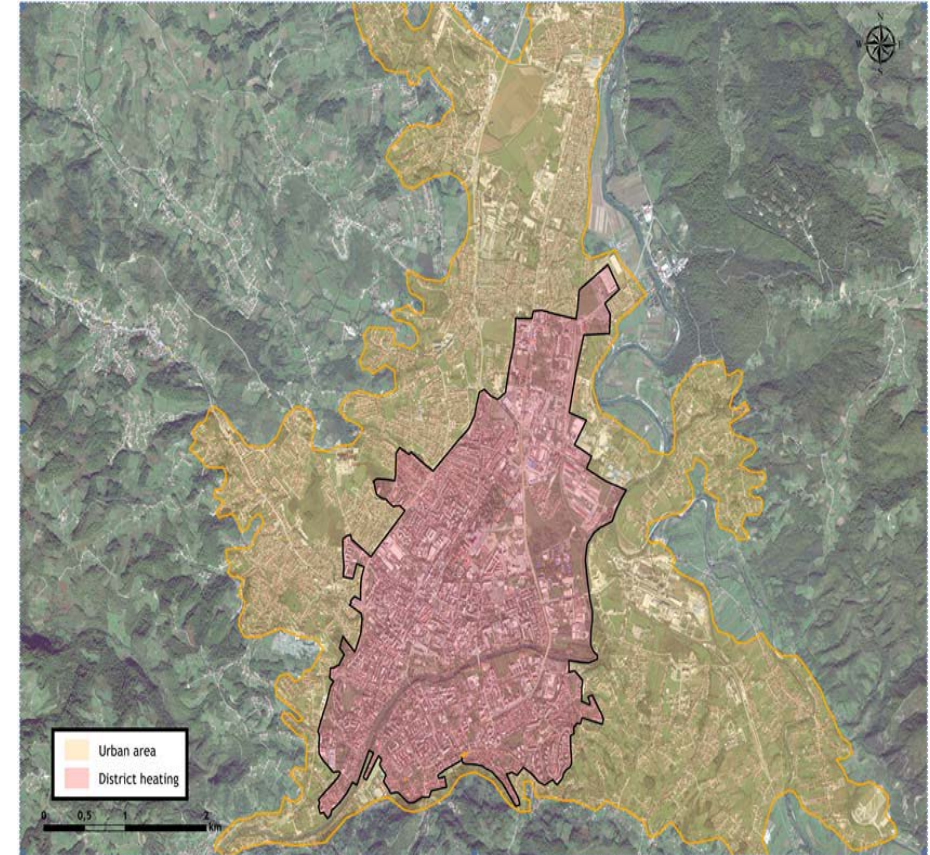
- Significant air pollution & energy losses from individual heating
- Financial pressure on city and District Heating company

CTCN Response:

- Construction of new biomass boilers to reduce heavy fuel oil consumption and generate heat with sustainable biomass (cheaper, renewable and locally available)
- Rehabilitation and replacement of key components in the distribution network to cut heat and water losses and reduce electricity consumption; and
- Switching to consumption based metering and billing for improved quality of services and customer confidence.

Impact

15M\$ scale-up funding by EBRD



Opportunities for engaging with CTCN on tech transfer towards LCS



- TA level: running, under design, to be planned TAs
 - Country level, climate technology level (adaptation/mitigation);
- Capacity Building Workshops/trainings: joint organisation of workshops in regions;
- Sharing of experts for TA and trainings;
- CTCN can contribute to strengthen bilateral programs between countries;
- Pro-bono TA;
- Innovation: match-making with local partners in developing countries (private sector)



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CTCN Secretariat
UN City, Marmorvej 51
DK-2100 Copenhagen,
Denmark
www.ctc-n.org
ctcn@un.org



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Thank you!

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f.villatico@unido.org

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