



CTCN: Mandate, services offered, and operative lessons learned

**10th Meeting of the UNFCCC
Adaptation Committee
Bonn, 14 September 2016**

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Content

1. Mandate and structure
2. Operative services delivered to Parties
3. Challenges and opportunities

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Mandate and structure

- **Technology ‘Framework’ established:** 2001 (COP7)
- **Technology Mechanism established:** 2010 (COP16)
- **CTCN established as operational arm:** 2011 (COP17)
- **CTCN Operational:** 2014

Mandate:

“Stimulate technology cooperation and enhance the **development and transfer of technologies** to developing country Parties at their request”

Governed by:

COP and Advisory Board (24 members)

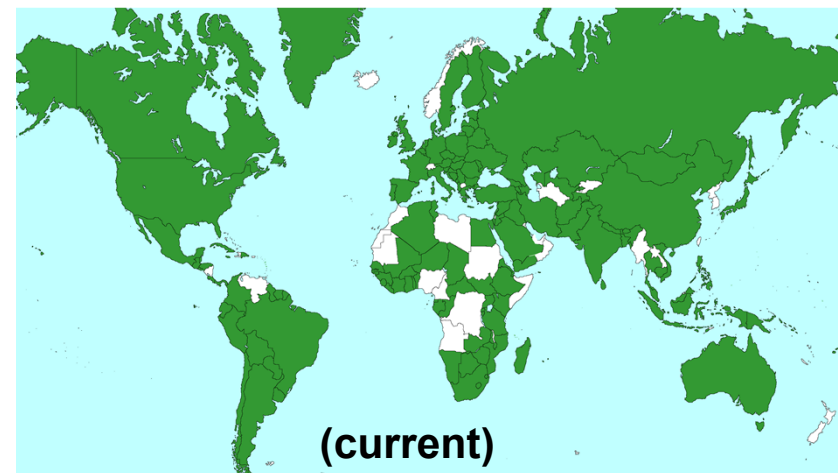
Bilateral financing from:

Canada, Democratic Republic of Korea, Denmark, European Union, Finland, Germany, Ireland, Japan, Norway, Switzerland, USA

Budget:

USD25/year approved; 10M/year actual

152 National Designated Entities



Mandate and Structure (continued)

3 Core Services:

(1) Technical assistance; (2) Knowledge; (3) Capacity building

Hosted by UNEP with UNIDO and a 12 member Consortium



Supported by a Network of 200+ climate technology leaders



Mandate and Structure (continued)

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Supported by a Network of 200+ climate technology leaders



- Paris Agreement
 - Engagement in Technical Expert Meeting process
 - Enhanced linkages with Financial Mechanism + financial bodies outside the Convention
- CTCN Advisory Board:
 - Quantification of Technical Assistance impacts
 - Urgency of Financial needs + outreach strategy



Content

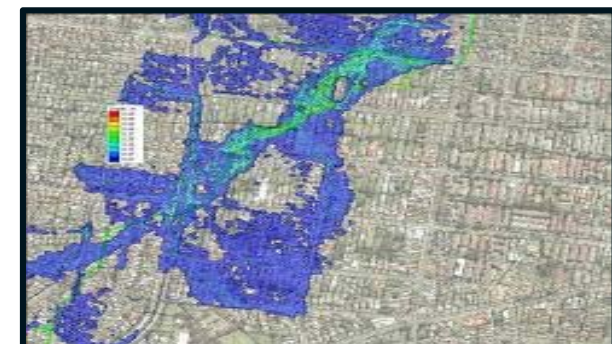
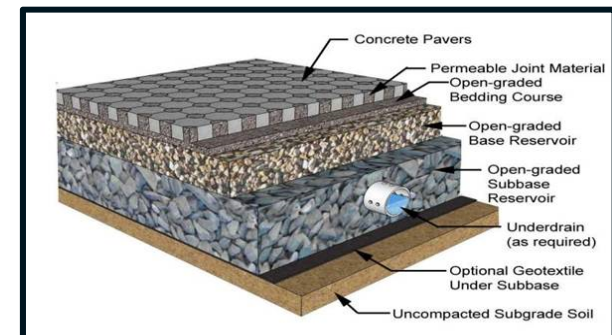
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But what is “Adaptation Technology”?

“Any equipment, techniques, practical knowledge and skills needed for adapting to climate change”

- Hardware, software and ‘orgware’
- Traditional, modern, high tech

(Special Report on Technology Transfer, IPCC, 2000)



Cross-cutting enablers:

- Governance and planning
- Financial decision making
- Awareness and education

Adaptation

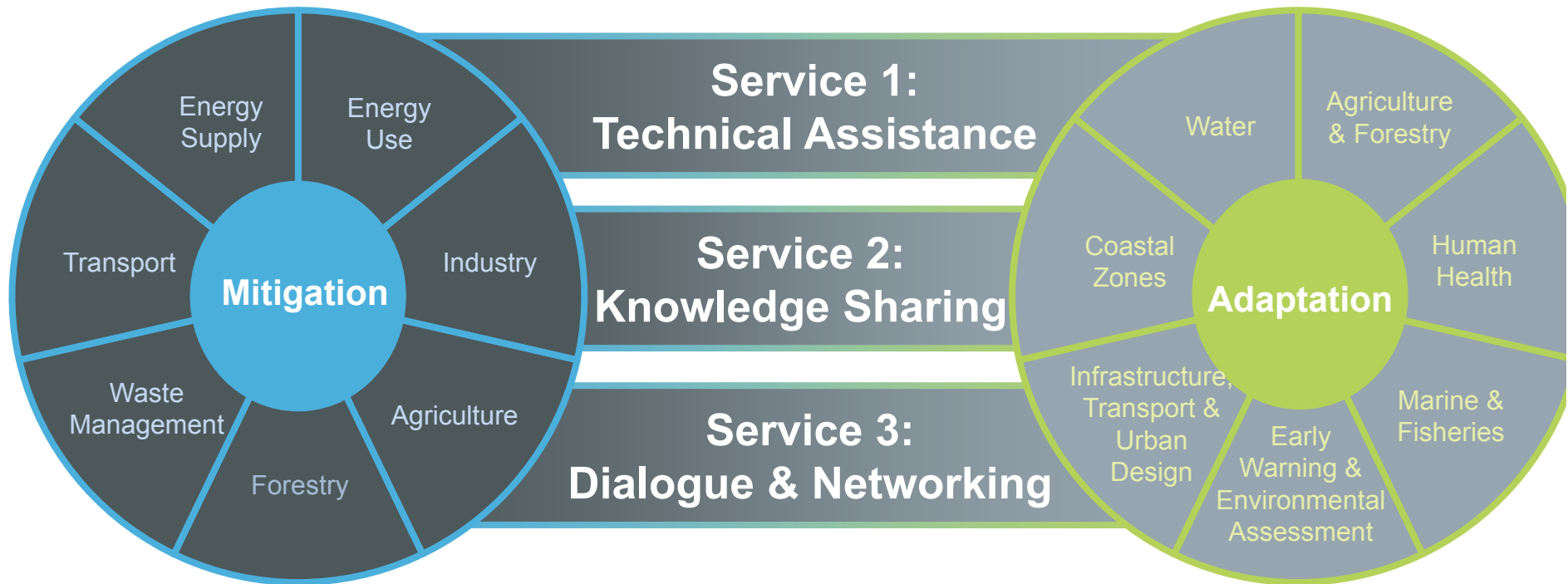
sectors:

- i. Water
- ii. Agriculture and Forestry
- iii. Marine and Fisheries
- iv. Coastal Zones
- v. Human Health
- vi. Early warning and assessment
- vii. Infrastructure, Transport & Urban Design

Cross-cutting Approaches:

- Ecosystem-based
- Gender-oriented
- Community-based

CTCN 3 Core Services



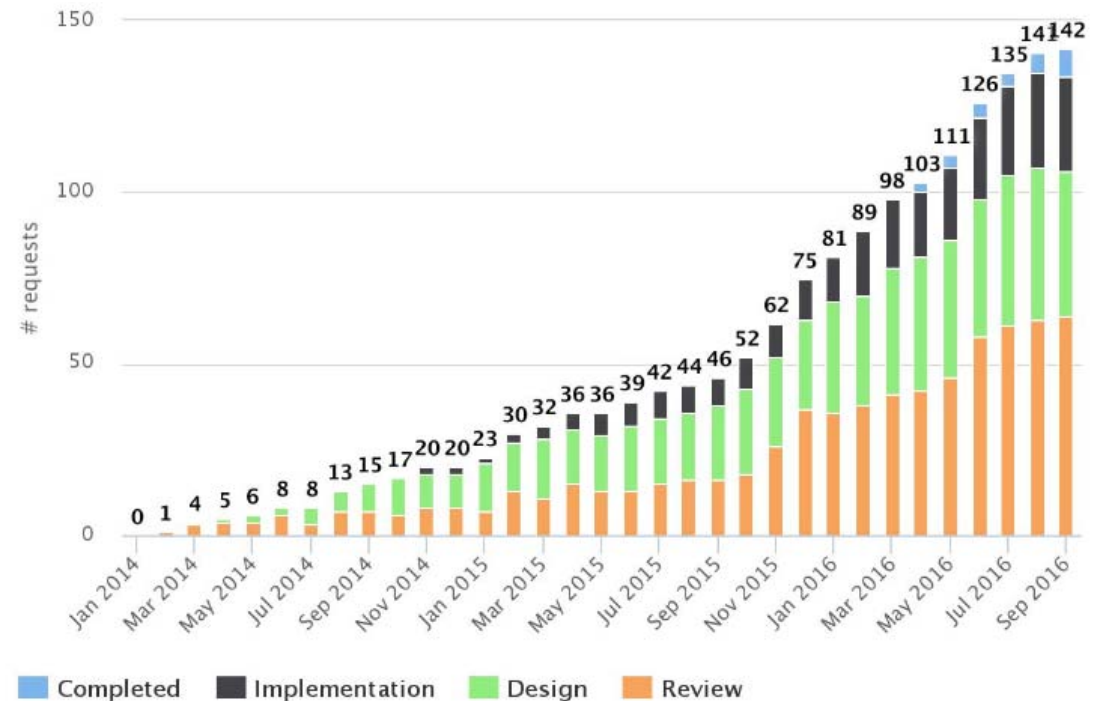
CTCN Service #1: Technical Assistance

Steadily increasing:

- 142 Requests from 70+ countries
- 67+ being designed or implemented; 8 completed
- Expect 200 by end 2016; 350 by end 2017
- Subject to funding considerations

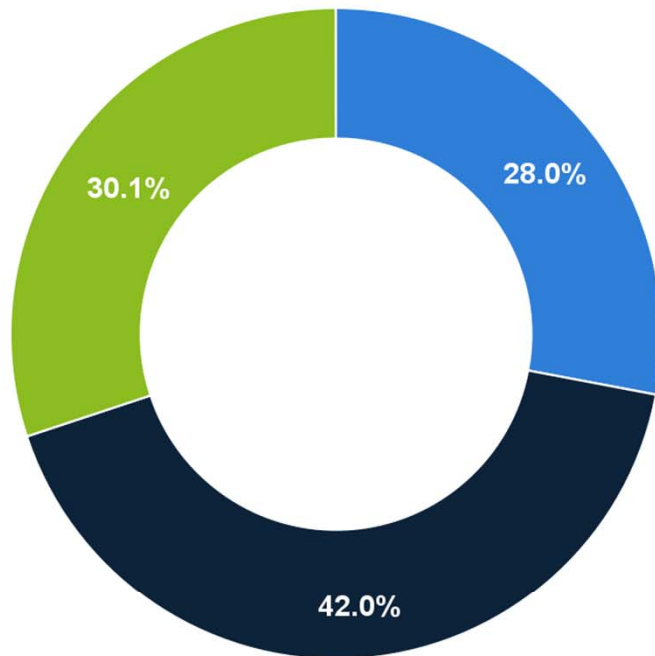
Quick and accessible:

- By request by NDE
- USD 25k to USD 250k
- 3-12 months
- Implemented by CTCN Consortium or Network partner

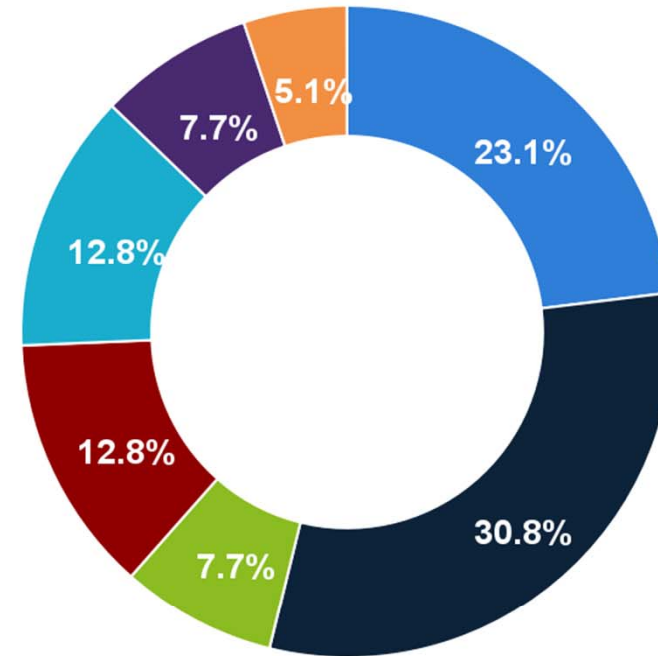


Breakdown of Requests for Technical Assistance

By UNFCCC Objective:



By Sector:



■ Adaption
 ■ Mitigation
 ■ Adaption and mitigation

■ Cross-sectoral
 ■ Agriculture and forestry
 ■ Water
■ Infrastructure, Transport and Urban design
■ Coastal zones
■ Early Warning and Environmental Assessment
■ Human Health



Examples of CTCN Technical Assistance

Country	Focus
Dominican Republic	Disaster risk management communications protocol using mobile phone technology
Indonesia	Flood modelling for infrastructure investment planning in Jakarta
Kenya	Technology design and private-public partnership for investing rural water service provision
Mauritius	Inclusion of climate change aspects in the 2020 development plan for the Port of Port Louis
Mali	Prioritising technologies and catalysing private finance crop drying and storage to strength climate resilient food security
Peru	Design of the national fisheries strategy
Colombia	Monitoring impact of adaptation investments at nationally and locally

Impacts of CTCN Technical Assistance

CLIMATE CHANGE ADAPTATION Agriculture and forestry




Benin

Applicant: Ministry of Agriculture
National Designated Entity:
Mr. Aminou Raphiou,
Ministry of Environment
Duration: 12 months
Status: Under implementation

CLIMATE CHANGE MITIGATION Cross sectoral



Agro-meteorological information for resilience of

CONNECTING COUNTRIES TO CLIMATE TECHNOLOGY SOLUTIONS

The Climate Technology Centre and Network promotes the transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate resilient development.

By connecting stakeholders with technology experts from around the world, the CTCN delivers customized capacity building and technical assistance aligned with national climate objectives.

CHALLENGE
The agricultural livelihoods are being harmed due to drought, leading to a basic need to adapt to climate change.

CTCN SOLUTIONS

- Adaptation technologies
- Capacity building
- Technical assistance

IMPACT
By establishing a network of stakeholders for climate resilience, the CTCN helps to build a more resilient agricultural sector.




Senegal

Applicant: Bureau de Mise a Niveau des Entreprises du Senegal
National Designated Entity:
Mr. Issakha Youm
Centre d'Etudes et de Recherches sur les Energies Renouvelables
Duration: 7 months
Status: Under implementation
Budget: 50,000 USD
Technical Assistance Planned by: UNIDO
Implemented by: Sofies SA

Green technology deployment in Senegal's industrial sector

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CHALLENGE

Senegal has a growing industrial sector. However, modern options for energy efficiency and industrial symbiosis remain untapped.

CTCN ASSISTANCE

- Conduct resource-efficient and cleaner production assessments of 5 priority sectors to identify high potential technology and process improvements
- Develop a set of recommendations (policy, regulatory, financial, technical, etc.) for each sector and an implementation plan for a pilot enterprise in each sector
- Identify and disseminate best practices for development of an eco-industrial park with a focus on industrial symbiosis (including energy and material resources treatment and recovery; waste valorisation; use of renewable energy and sustainable material substitutes; and by-product reuse and recycling)

INTENDED IMPACT: Carbon emission abatement

- Design of technology solutions that can result in a reduction of up to 10 % in energy consumption and green house gas emissions in each pilot enterprise
- Recommendations that can be replicated and scaled-up nationally in other industrial enterprises to multiply impact



CLIMATE CHANGE ADAPTATION Infrastructure, Transport, Urban Design




Indonesia

Applicant: Jakarta Research Council
National Designated Entity:
Ms. Nur Masripatin, Ministry of Environment and Forestry
Duration: 12 months
Status: Under implementation

Hydrodynamic modeling for resilient infrastructure

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THIS PROJECT ADVANCES

Thailand's Nationally Determined Contribution to:

- Promote and strengthen Integrated Water Resources Management (IWRM) practices
- Strengthen disaster risk reduction and reduce the population's vulnerability to climate risk and extreme weather events
- Strengthen climate modelling capacity while promoting collaboration among relevant agencies
- Establish effective early warning system and enhance the adaptive capacity of national agencies



What is climate technology?

Any equipment, technique, practical knowledge or skills needed to reduce greenhouse gas emissions and/or adapt to climate change. This includes traditional, modern and high tech technologies.

THE STORY

When a World Bank report on Climate Risks and Adaptation in Asian Coastal Megacities indicated that Bangkok must undertake proactive measures to address increased flooding risks as an integral part of urban planning, the Bangkok Metropolitan Administration sought technical assistance through the CTCN.

The CTCN drew on technical expertise of the UNEP-DHI Centre on Water and the Environment and the guidance of Thailand's National Designated Entity to design an urban flood early warning system for a high-risk catchment within the Bangkok Metro area. This assistance includes technology transfer, a demonstration programme and capacity building.

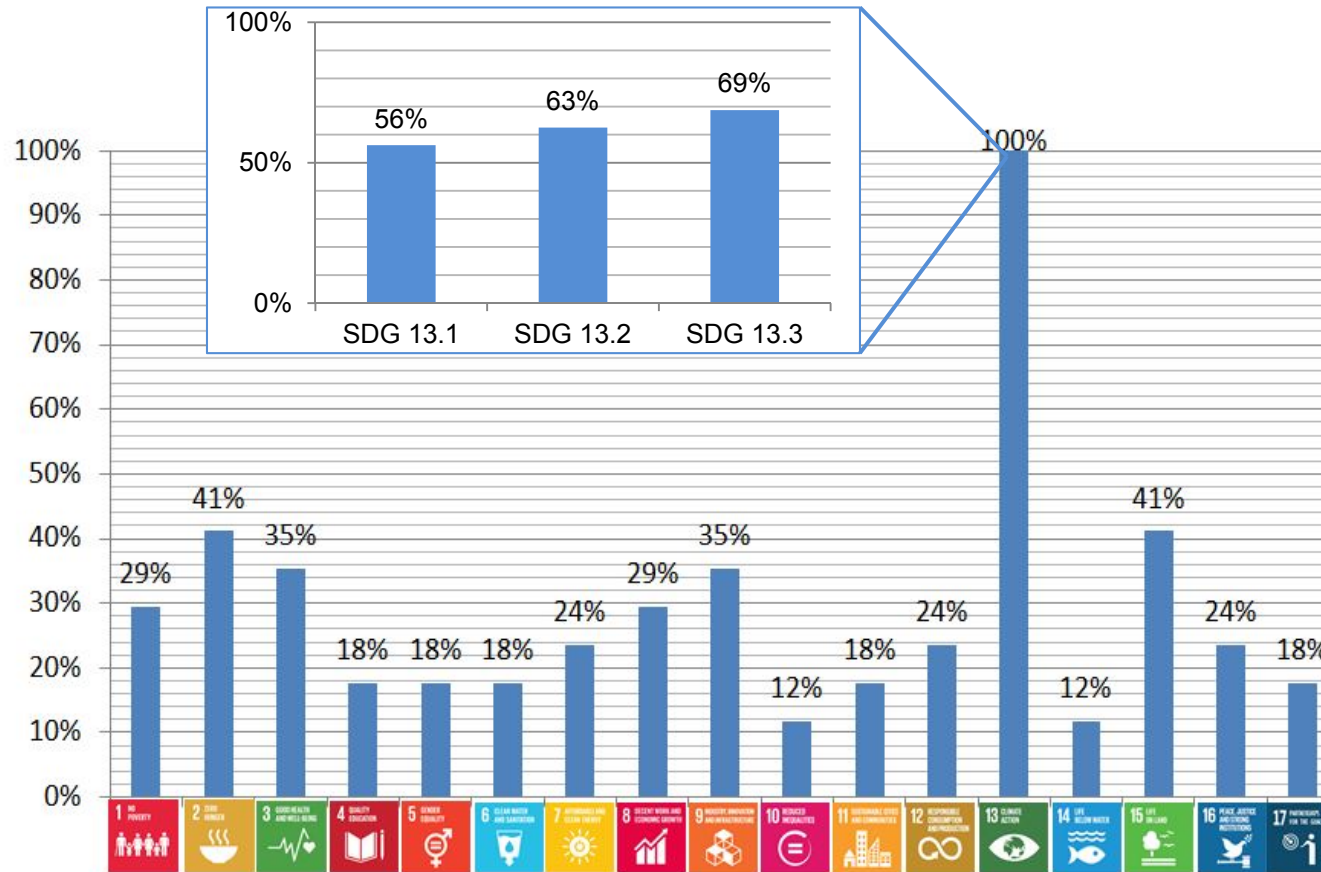
The flood warning system will provide:

- Information on flood risk zones to residents and commuters through an automated web and mobile platform
- Empowerment of Bangkok city staff with warning management skills
- Proposed methods to expand the system through a citywide warning platform
- Dissemination of findings to other cities and organizations in the region.

The CTCN gratefully acknowledges the support of:



Contribution technical assistance projects towards SDGs



SGD 13: Take urgent action to combat climate change and its impacts

13.1 - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.2 - Integrate climate change measures into national policies, strategies and planning

13.3 - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Aligning technical assistance to remove technology barriers with Parties' priorities to finance large scale technology deployment

Technical assistance to remove barriers for technology deployment:

- What: Feasibility studies; policy reform, cost benefit analysis, technology options, etc.
- Who: Development Banks, GCF, Adaptation Fund, private investment

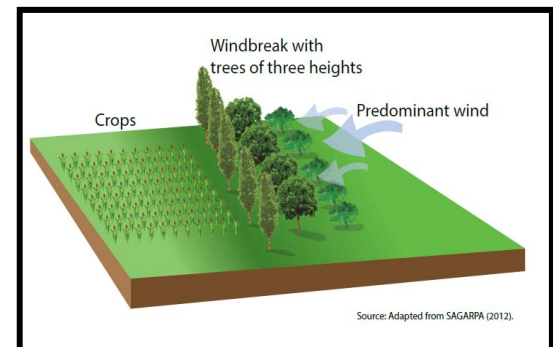


Relevance of CTCN technical assistance to Adaptation Fund Readiness

Compliment to Adaptation Fund Readiness support, especially “Project Preparation Assistance” grants (15k)

Type of technical assistance CTCN can provide:

- Vulnerability assessment of key productive sectors
- Identification of locally relevant climate technology solutions
- Cost-benefit and multi-criteria analysis to prioritise climate technology solutions
- Feasibility studies of scaling-up climate technology solutions
- Business planning and facilitating private investment
- Policy and regulatory reform design
- Able to support both South-South and North-South modalities

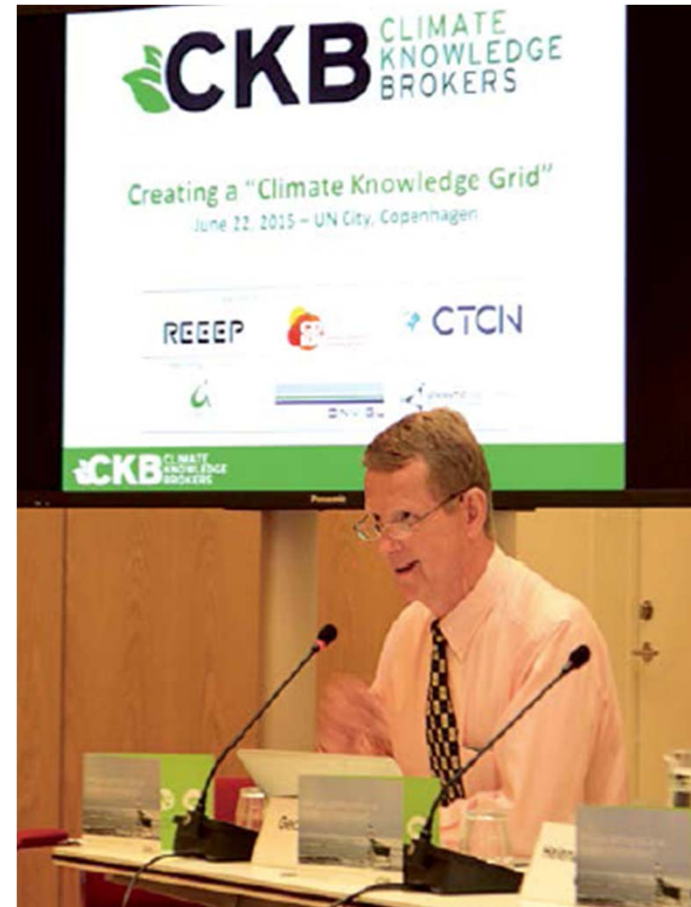


CTCN Service 2: Knowledge Sharing & Capacity Building

- ❑ Climate Tech Portal: (www.ctc-n.org)
 - 35,000+ visits/month
 - Users globally (200 countries)

- ❑ Tech Library of proven and emerging low carbon and climate-resilient technologies and publications, showcased by target sector

- ❑ Weekly webinar series:
 - Proven and emerging technologies by CTCN partners
 - 1500+ participants total
 - 100+ per event
 - NRCan/RETScreen; Econoler



Active engagement with CKB, REEEP & CDKN

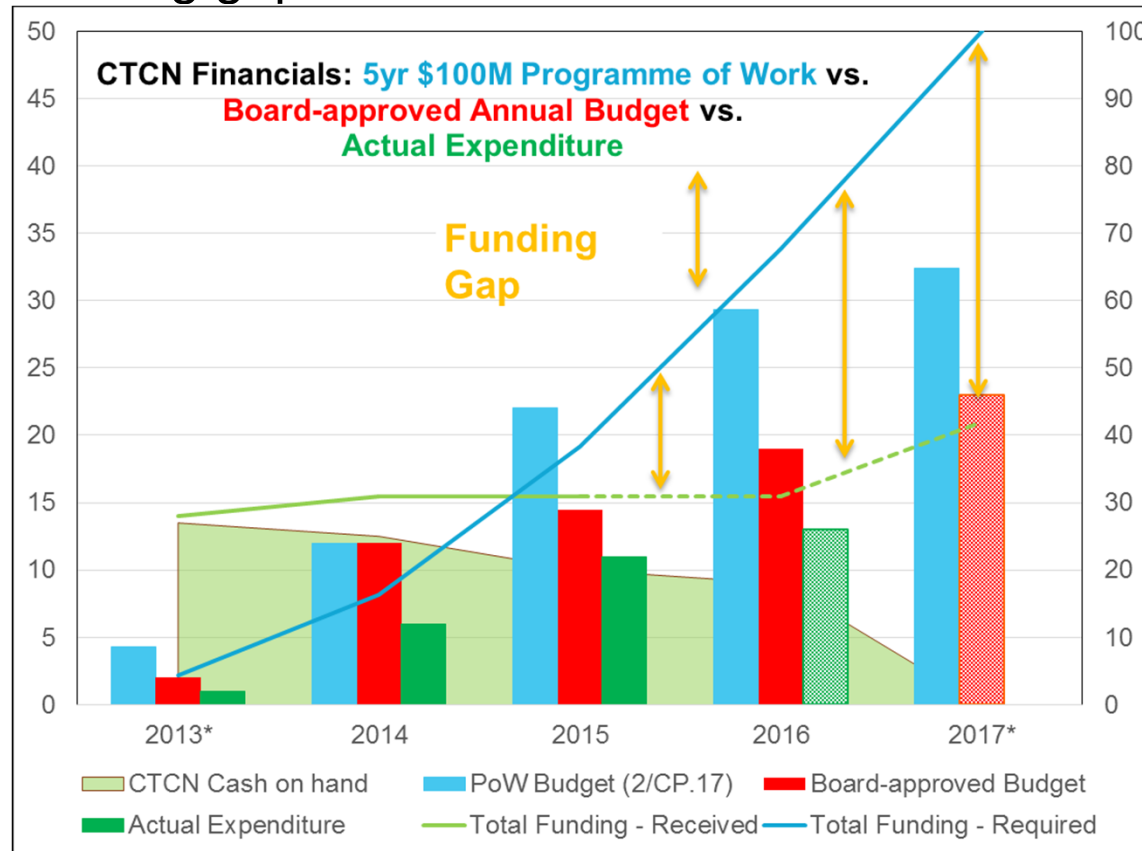
CTCN Service 3: Capacity Building

- Annual Regional Forums:
 - 5+ Forums/year
 - 236 individuals from 120+ countries
 - NDEs, GCF, Development Bank, and private sector representatives.
- Increasing thematic workshops and launch of stakeholder/private sector platform (subject to funding)



Regional training workshop in Senegal, June 2015

- Budget approved by Advisory Board: USD 100 for 5 yrs (25M/yr)
- CTCN has received USD 31M over 3 years (10.3M/year)
 - Extensive strategy discussion at AB8; TA collaboration with GCF
 - Large funding gap remains



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Challenge:

1. Definition of technology and breadth of solutions



2. Need for finance to implement at a scale that matters



3. Resource limitations and uncertainty



4. Engagement/sharing across diverse and adaptation community



Solutions/Opportunities:

Taxonomy of adaptation technologies (7 sectors; 3 x-cutting enablers; 3 design approaches)

Align technical assistance with project design

Active donor engagement with Parties and beyond the Convention; TA collaboration with GCF

Engaging with global and regional Forums, TEMs, etc

Thank you



CLIMATE TECHNOLOGY CENTRE & NETWORK



Norwegian Ministry of Foreign Affairs



European Commission

UDENRIGSMINISTERIET
DANIDA

Canada



Ministry of the Environment



MINISTRY FOR FOREIGN AFFAIRS OF FINLAND



Comhshaol, Pobal agus Rialtas Áitiúil
Environment, Community and Local Government



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

Government of Germany

Summary/Looking forward

- Carrying strong Paris mandate into COP22
 - Focus on implementation + value proposition
- Matching DC needs with private sector solutions
 - Stakeholder Forums in priority sub-regions
 - Engagement with Business Dialogues
 - Leveraging Developed Country NDE Engagement
- Enhancing Linkages with the Financial Mechanism
 - GEF Pilot Programmes
 - GCF collaboration under Readiness & PPF
- Expand resource mobilisation
 - Approved (\$100M/5yrs) vs Actual (\$31M/3yrs)
 - Broader donor base to support ongoing operations

How and when to request CTCN technical assistance

How to request CTCN assistance:

1. 'Proponent' gains endorsement of NDE
2. Submit request (3 pages)
3. Criteria
 - Eligibility: relevance to (i) CC priorities; (ii) national plans; (iii) sustainability
 - Prioritisation criteria: balancing of (i) geography balancing; (ii) adaptation/mitigation; (iii) stage of technology cycle
4. CTCN design technical assistance work plan
5. CTCN selects implementer from 180+ Network
6. Implementation and evaluation overseen by CTCN and NDE

When to request:

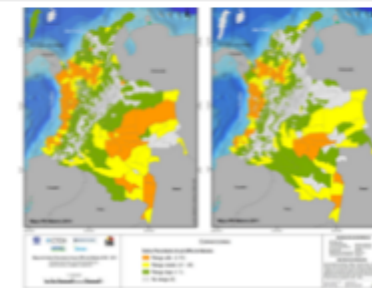
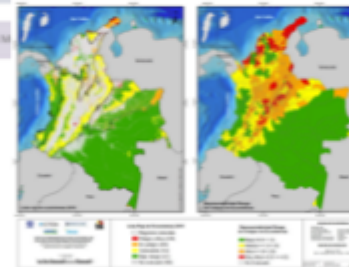
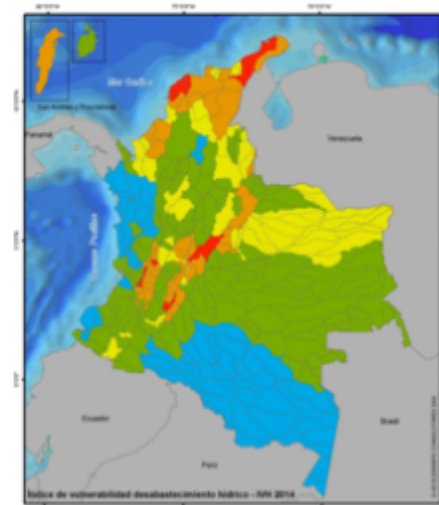
- Request accepted by CTCN at any time during the year
- For AF project developing: During design of concept notes of full proposals

**[www.ctcn-n.org/
technical-assistance](http://www.ctcn-n.org/technical-assistance)**

... and proponents presented on their success to AB8 in Colombia...

3. DEVELOPMENT OF A NATIONAL SYSTEM OF INDICATORS FOR ADAPTATION TO CLIMATE CHANGE

- Conceptual framework of indicators
- Analysis of existing territorial and sectoral information
- Development of a baseline of indicators
- Catalyze effort around M&E needs
- Inclusion of indicators in analyses and web tools



<http://accionclimatica.minambiente.gov.co>