Advisory Board to the CTCN **14-16 April 2015**

Fifth meeting AB/2015/5/8

Climate Technology Network in a snapshot

– As of 23 March 2015 (including list of Network members)

1 Network status

At its 4th meeting the Advisory Board requested the current status of the network to be reported to illustrate the recent development of the Network, its composition and its capacities to contribute to the three core functions of the CTCN.

1.1 Overview

- 52 applications received
- 45 accepted Network members (see Annex I)
- 6 applications under assessment
- 1 application declined (all numbers as of March 23rd 2015)
- Pipeline: 5 confirmed to be close to submitting applications

As shown in *Figure 1*, the number of applications grew steadily over the last 14 months. *Table 1* shows the geographic distribution of the Network members by UNFCCC commitment, further categorized by geographic regions based on the country of registration. International organizations refer to those established under multinational agreements or equivalent with or without official registration in a single country. Details of each member, including the country of registration, are listed in Annex I.

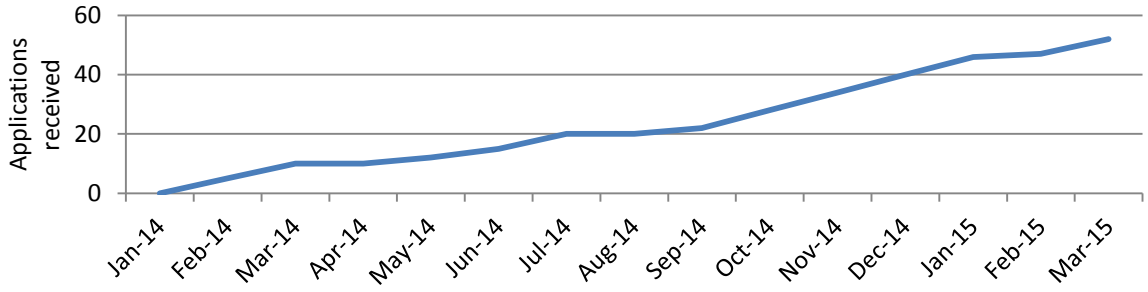

Figure 1 Accumulated number of applications received

Table 1 Network members by region

Annex I	**24**
North America	6
Asia	5
Europe	11
Oceania	2
non-Annex I	**13**
Africa	3
LAC	2
Asia	8
Oceania	0
International	**8**
Total	**45**

1.2 Members by type of institution

Figure 2 shows the network composition by type of institution. The chart shows that private sector organizations hold the largest share with research and academia, partnerships/ initiatives and non-governmental organizations each with 15-16 % of the Network. Details are provided in Annex I.

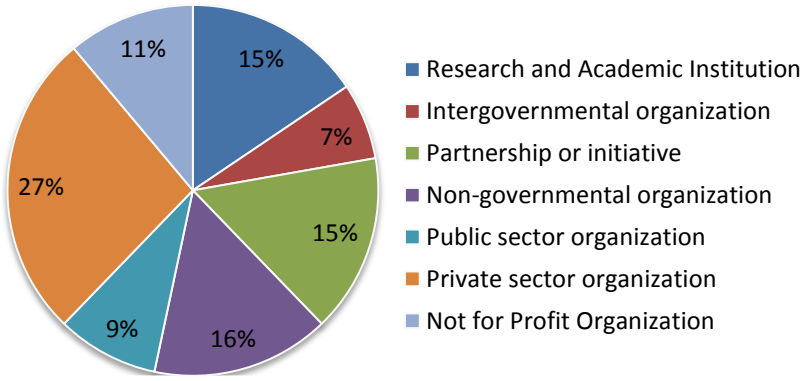

Figure 2 Network by type of institution

1.3 Members by expertise

This section outlines the capacity of the Network to perform its functions. The organizations' expertise has been assessed based on the information provided in the CTN application form. Most of the organizations are experienced in more than one mitigation and/or adaptation sectors, regions or service types and the figures represents the cumulative figure.

a. Mitigation vs adaptation

Table 2 shows the total counts of expertise in climate change mitigation, adaptation and cross-cutting activities. Currently, the Network has more coverage in climate change mitigation and less in climate change adaptation. "Cross-cutting" expertise refers to those which have both mitigation and adaptation elements (e.g. agriculture, forestry, resource efficiency) or expertise that can be applied in both mitigation and adaptation measures (e.g. project financing, knowledge management platforms, or policy and planning.

Table 2 Expertise by theme

Mitigation	43
Adaptation	20
Cross-cutting	7

b. Sector coverage

Figure 3 shows the Network coverage for mitigation sectors. While expertise in energy dominates, it is observed that the technologies and applications in the energy sector are diverse.

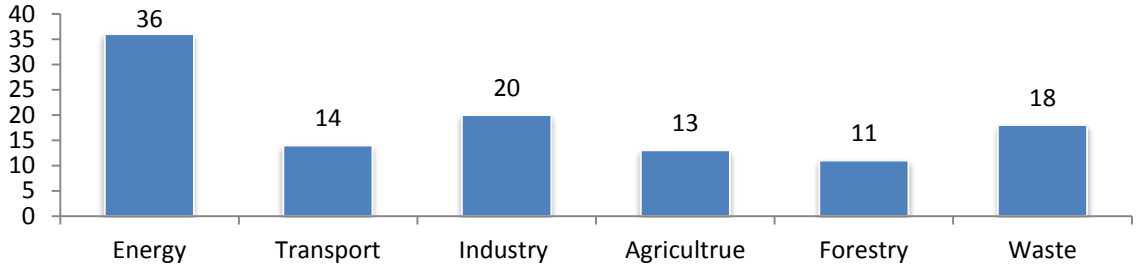

Figure 3 Expertise in climate change mitigation

Figure 4 shows the total counts of expertise for each sector in adaptation. As the overall coverage is relatively small, increase in capacity in all sectors is needed.

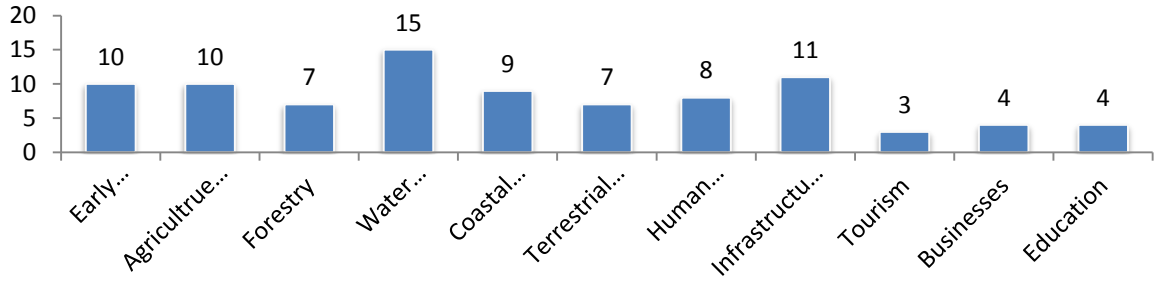

Figure 4 Expertise in climate change adaptation

c. Service capacities

Figure 5 shows the service capacities of the Network. While the Network has a relatively good coverage of capacity building, knowledge sharing and policy and planning, it was observed that the expertise in specific technologies development or deployment of technologies is scarce.

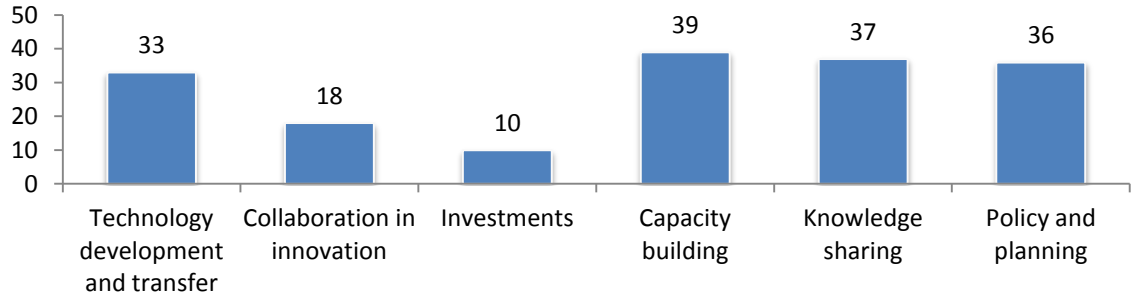

Figure 5 Expertise by type of service

2 Gap analysis of Network capacities

One of the key roles of the Network is to enable the CTCN to deliver on its three core functions on a global scale in timely manner. This ability is not solely provided by mere size of the Network and a large variety of capacities, but also by its capabilities to deliver the expertise that is demanded by those seeking assistance from the CTCN. While it is essential to equip the Network with necessary technical and regional expertise, due to the nature of the mission of the CTCN, the demand is not clearly defined. The results of the Technical Need Assessment (TNA) were used to forecast the areas where the technical expertise is expected to be in demand. This was compared to the requests for technical assistance received to date.

2.1 Demand illustrated by TNAs

To project the expected demand for specific technologies, the outcome of the National Technical Needs Assessments (TNAs) were considered. A total of 257[1] technologies listed in the TNAs were categorized into 29 technology categories and then assigned to 6 mitigation and 11 adaptation sectors. *Table 3* lists the top five technology categories (on the left) and respective CTCN sectors (on the right) in the order of frequency they were referred to in the TNAs.

Table 3 CTCN sectors with high demand from TNAs

Rank	CTCN Sectors	
	Adaptation (140)	**Mitigation (117)**
1	Agriculture/ fisheries (52)	Energy (60)
2	Water resources (35)	Transport (20)
3	Early warning/ Disaster reduction (20)	*Buildings (energy efficiency) (17)*
4	*Climate Monitoring[2] (14)*	Waste (12)
5	Terrestrial Ecosystems (3)	Forestry (11)

[1] Information as of November 2014
[2] "Climate monitoring" and "Buildings" are in italics as they are subsectors of the sectors defined by CTN sectors

2.2 Demand illustrated by technical assistance requests

In *Table 4* of this section, the demand from technical assistance requests by sector is shown.

Table 4 Comparison of technical assistance demand and Network capacity in adaptation

Adaptation	%	Mitigation	%
Water resources	20	Energy	50 %
Early warning/ Disaster reduction	20	Waste	13 %
Agriculture/ fisheries	20	Cross-sectoral	13 %
Terrestrial ecosystems	20	Industry	12 %
Cross-sectoral (adaptation)	20	Transport and forestry (each)	6 %

3 Way forward

As mentioned previously, the size of the Network is relatively small. Thus expansion in the short term should be focused on increasing the overall size of the Network in all sectors and regions. Particular attention may be paid based on the current Network Status and the forecasted demand, following issues that are considered relevant for the expansion of the Network in order to respond to requests for technical assistance in the future:

- Adaptation expertise needs to be strengthened in all areas, with a focus on the following sectors:
  - Water resource management
  - Early warning and disaster reduction (including climate monitoring)
- Mitigation expertise to be strengthened in general with a particular focus on the following sectors:
  - Energy
  - Demand side energy efficiency, including Energy Efficiency in Buildings
  - Transport

Furthermore, as mentioned in section 1, while the Network has relatively large coverage of knowledge-based expertise (capacity building, knowledge sharing, policy and planning), it needs to strengthen its coverage in development and deployment of technologies.

Annex I – List of members

Basic Data			Institutional				
Ref #	Abbreviated name	Official name	Institutional type	Country of registration	Region	Sub-region	Annex 1/ non-Annex 1
N0001	REN21	21Renewable Energy Policy Network for the 21st Century	Non-governmental organization	International	International	International	International
N0002	REEEP	Renewable Energy and Energy Efficiency Partnership	Non-governmental organization	International	International	International	International
N0003	CDKN	Climate and Development Knowledge Network	Partnership	International	International	International	International
N0004	WIPO	World Intellectual Property Organizatiton	Intergovernmental organization	International	International	International	International
N0005	CTI PFAN	Climate Technology Initiative - Private Financing Advisory Network	Partnership	Japan	Asia	Eastern Asia	Annex I
N0011	BATC	BATC Development Bhd.	Private sector organization	Malaysia	Asia	South-Eastern Asia	Non-Annex I
N0012	TPSA-BPPT	Deputy of Natural Resources Development Technology, Agency for the Assessment and Application of Technology	Research and Academic Institution	Indonesia	Asia	South-Eastern Asia	Non-Annex I
N0013	IEB	Corporation Institute of Ecology and Biodiversity	Research and Academic Institution	Chile	Americas	South America	Non-Annex I
N0014	EHA	European Hydrogen Association	Not for Profit Organization	Belgium	Europe	Western Europe	Annex I
N0015	Global CCS	Global Carbon Capture and Storage	Not for Profit Organization	Australia	Oceania	Australia and New Zealand	Annex I
N0016	KCIC	Climate Innovation Centre Kenya	Partnership	Kenya	Africa	Eastern Africa	Non-Annex I
N0017	BCSE	Business Council for Sustainble Energy	Not for Profit Organization	United States of America	Americas	Northern America	Annex I
N0019	GEC	Global Environemt Centre Foundation	Not for Profit Organization	Japan	Asia	Eastern Asia	Annex I
N0020	JESC	Japan Environmental and Sanitation Centre	Public sector organization	Japan	Asia	Eastern Asia	Annex I
N0021	CIAT	Centro Internacional de Agricultura Tropical	Not for Profit Organization	International	International	International	International
N0022	ISWA	International Solid Waste Association	Non-governmental organization	International	International	International	International
N0023	CVDT Consulting	CVDT Consulting (Beijing) Ltd	Private sector organization	China	Asia	Eastern Asia	Non-Annex I
N0024	Carbon Trust	Carbon Trust	Private sector organization	United Kingdom of Great Britain and Northern Ireland	Europe	Northern Europe	Annex I
N0025	GCPC	Gujarat Cleaner Production Centre	Public sector organization	India	Asia	Southern Asia	Non-Annex I
N0026	OECC	Overseas Environmental Cooperation Center, Japan	Non-Governmental Organization	Japan	Asia	Eastern Asia	Annex I
N0027	INER	Instituto Nacional de Eficiencia Energetica y Energias Renovables	Research and Academic Institution	Ecuador	Americas	South America	Non-Annex I
N0028	ARPEDAC	Association pour la Recherche et la Promotion de l'Energie Durable en Afrique Centrale	Private sector organization	Cameroon	Africa	Middle Africa	Non-Annex I
N0029	RITE	Research Institute of Innovative Technology for the Earth	Research and Academic Institution	Japan	Asia	Eastern Asia	Annex I
N0030	MIT CEE	Department of Civil and Environmental Engineering, Massachusetts Institute of Technology	Research and Academic Institution	United States of America	Americas	Northern America	Annex I
N0031	IRD	Institut de recherche pour le développement	Research and Academic Institution	France	Europe	Western Europe	Annex I
N0032	Gaia Consulting Ltd	Gaia Consulting Ltd	Private sector organization	Finland	Europe	Northern Europe	Annex I

N0033	DCCE	Dubai Carbon Centre of Excellence PJSC	Private sector organization	United Arab Emirates	Asia	Western Asia	Non-Annex I
N0034	CENER	Centro Nacional de Energias Renovables	Research and Academic Institution	Spain	Europe	Southern Europe	Annex I
N0035	ATTS	Agricultural Technology Transfer Society	Non-governmental organization	Sudan	Africa	Northern Africa	Non-Annex I
N0036	FS-UNEP	Frankfurt School UNEP Collaborating Centre for Climate & Sustainable Energy Finance	Partnership	International	International	International	International
N0037	Meister Consultants	Meister Consultants Group	Private sector organization	United States of America	Americas	Northern America	Annex I
N0038	FIECO	Foolad Technic International Engineering Company	Private sector organization	Iran (Islamic Republic of)	Asia	Southern Asia	Non-Annex I
N0039	GRID-Arendal	GRID-Arendal	Initiative	Norway	Europe	Northern Europe	Annex I
N0040	SPREP	Secretariat of the Pacific Regional Environment Programme	Intergovernmental organization	International	International	International	International
N0041	ENEA Consulting	ENEA Consulting	Private sector organization	France	Europe	Western Europe	Annex I
N0042	LEDS GP	Low Emission Development Strategies Global Partnership	Partnership	United States of America	Americas	Northern America	Annex I
N0043	ISL	International Synergies Limited	Private sector organization	United Kingdom of Great Britain and Northern Ireland	Europe	Northern Europe	Annex I
N0044	Burleson Institute I	Burleson Institute Inc.	Non-governmental organization	United States of America	Americas	Northern America	Annex I
N0045	PRI	The Permaculture Research Institute	Non-governmental organization	Australia	Oceania	Australia and New Zealand	Annex I
N0046	KEMCO	Korea Energy Management Corporation	Public sector organization	Republic of Korea	Asia	Eastern Asia	Non-Annex I
N0048	IEAGHG	International Energy Agency Greenhouse Gas R&D Programme	Intergovernmental organization	United Kingdom of Great Britain and Northern Ireland	Europe	Northern Europe	Annex I
N0049	KNCPC	Korea National Cleaner Production Center	Public sector organization	Republic of Korea	Asia	Eastern Asia	Non-Annex I
N0050	GreenStream	GreenStream Network Plc	Private sector organization	Finland	Europe	Northern Europe	Annex I
N0051	Sofies SA	Sofies SA	Private sector organization	switzerland	Europe	Western Europe	Annex I
N0052	CESC	Clean Energy Solutions Center	Initiative	United States of America	Americas	Northern America	Annex I