A Executive Summary

Context

The issue of technology transfer has been a cornerstone of the United Nations Framework Convention on Climate Change (UNFCCC) since it was established, and each meeting of the Conference of the Parties (COP) has since taken decisions to promote the development and transfer of climate relevant technologies.

As a major step forward the Technology Mechanism was established by the 16th session of the COP in Cancun in December 2010. The Technology Mechanism consists of a Technology Executive Committee and a Climate Technology Centre and Network.

The stated mission of the Climate Technology Centre and Network (CTCN) is to stimulate technology cooperation and to enhance the development and transfer of technologies and to assist developing country Parties at their request, consistent with their respective capabilities and national circumstances and priorities, 'to build or strengthen their capacity to identify technology needs, to facilitate the preparation and implementation of technology projects and strategies taking into account gender considerations to support action on mitigation and adaptation and enhance low emissions and climate-resilient development.'

In line with the COP decision, the CTCN will be guided by an Advisory Board and implemented by a host institution selected through competitive tendering. This document responds to the Call for Proposals issued by the secretariat of the UNFCCC on 16 January 2012. It is submitted by a consortium of partners committed to making the CTCN a driving force for a sustainable low-carbon and climate resilient future through a pioneering approach to accelerating technology development and transfer. Our vision is of a CTCN based on local and national ownership and country driven needs, and focused on building and strengthening developing country capacity to address technology challenges and opportunities for adaptation and mitigation.

Our Consortium

Our Consortium would create and manage a CTC that meets the broad range of demands of developing countries, and does so in an efficient and effective manner. We bring together a carefully constituted group of leading institutions located in both developing and developed countries combining decades of complementary expertise. Our experience spans the entire technology life cycle and covers equally adaptation and mitigation. We have the sectoral and geographic knowledge needed to respond to developing country requests in a manner that meets *their* needs. Our 'distributed' CTC would be competent, responsive, and cost effective, with a lean Core Centre managed by UNEP and UNIDO responsible for overall coordination, Network development, and liaison with Nationally Designated Entities (NDEs). Supporting the Core Centre in preparing country response plans and providing a strong technical link to the Network are the other partners, who constitute a Technical Resource Pool that could be tapped quickly in response to country needs.

We are:

- United Nations Environment Programme (UNEP) – lead CTC host institution and co-manager of the Core Centre
- United Nations Industrial Development Organization (UNIDO) – co-manager of the Core Centre
- Asian Institute of Technology (AIT) – Thailand
- Bariloche Foundation – (BF) Argentina
- Council for Scientific and Industrial Research (CSIR) – South Africa
- The Energy and Research Institute (TERI) – India
- Environment and Development Action in the Third World (ENDA-TM) – Senegal
- Tropical Agricultural Research and Higher Education Center (CATIE) – Costa Rica
- World Agroforestry Centre (ICRAF) – Kenya
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) – Germany
- Energy Research Centre of the Netherlands (ECN) – The Netherlands
- National Renewable Energy Laboratory (NREL) – United States
- UNEP Risø Centre, including expertise from UNEP-DHI Centre (URC) – Denmark

The Core Centre would hosted in UNEP, an international intergovernmental organization located in a developing country.

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Our Approach to the CTC

A number of principles will guide our approach. We will not duplicate the work of other bodies, such as the Green Climate Fund or the GEF. We will develop working relationships with the donor community and UNFCCC partners to identify opportunities for complementary support. This will allow for deeper and more sustained operations of the CTCN. With equity in mind, we will aim to serve a large number of developing countries, rather than focusing efforts on a smaller number of countries. And we will be driven by country needs, recognizing as well that weak institutions are often a barrier to the transfer of technologies and that developing the capabilities of developing countries is critical.

Overall success of the CTCN will depend on creation of an efficient and effective structure for the CTC. Our consortium structure, with a broad-based knowledge pool and a lean and efficient UN-led Core Centre, is designed with the aim of providing a cost-effective and highly flexible CTC with the ability to respond quickly and competently even to a large number of national requests.

The **Core Centre** staff will be responsible for managing the overall CTCN process including logging and screening requests received from the Nationally Designated Entities (NDEs), engaging relevant parts of the Technical Resource Pool in further development of the proposals and contracting implementation of support activities to the wider Network established under the guidance of the Advisory Board. The Core Centre staff will be responsible for supporting the Advisory Board and for reporting on CTCN activities, including substantive achievements and financial performance. Similarly the core centre will manage awareness and capacity building programs while drawing on the technical expertise in the Technical Resource Pool.

The **Technical Resource Pool** is constituted of lead experts from the eleven partner institutions and will be responsible for the initial appraisal, refinement, and technical support for requests received through NDEs. Where necessary a small expert team will be established to lead the request appraisal and refinement, deliver immediate technical support (when requested), and prepare a response plan for more in-depth support provided through the Network. As a basic principle any team responding to a request will have a regional institutional lead complemented by one or two topical experts in the relevant field coming from other partner institutions.

The consortium structure will in this way provide a CTC with limited number of fixed cost staff in the Core Centre combined with a Technical Resource Pool, providing for **fast and flexible technical support and rapid implementation**. The number of experts in the pool can quickly be scaled up to respond to a potentially growing demand for services. In addition partner institutions can support the fast start of the CTC through secondments of expert staff to the core centre until recruited UN staff are in place and operational.

While our Consortium has national reach and expertise, we will **strengthen and emphasize the primary role of NDEs at the national level** and not duplicate their role by setting up parallel UN structures and offices.

Consistent with decision 1/CP.16, we will develop and operate the CTCN to serve three main functions:

1) Management of requests and responses in the technology cycle
2) Fostering collaboration to accelerate technology transfer
3) Strengthening networks, partnerships and capacity building for technology development and transfer, and fostering collaboration to accelerate technology transfer.

These core functions of the CTCN will be supported by broader **outreach and awareness activities** and a **knowledge management system** that enables learning and enhanced response quality over the life of the CTCN, reflecting the two other functions.

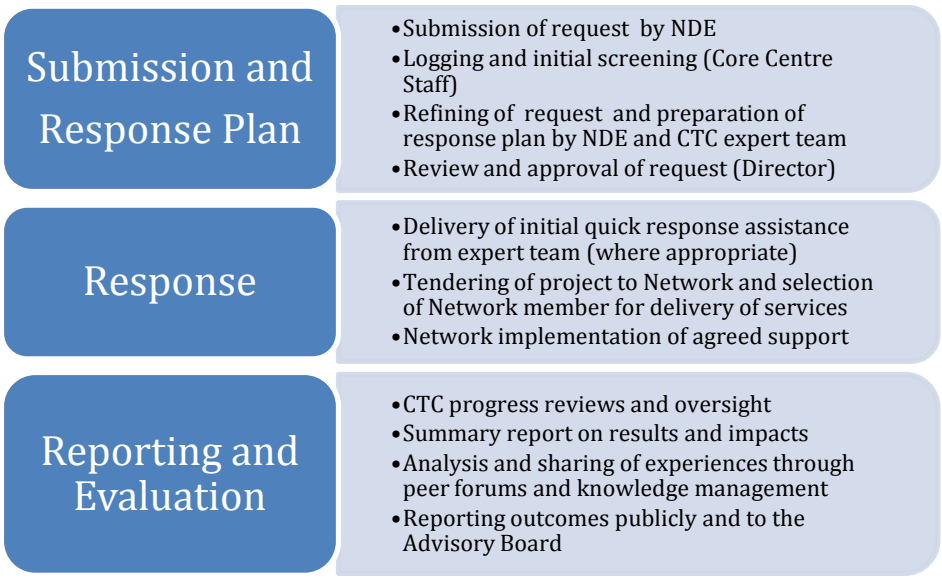
Managing requests from NDEs and providing highly qualified support to countries along all stages of the technology cycle, from identification of technology needs, through assessment, selection and piloting of technological solutions, to their customization and widespread deployment remains the core function of the CTCN and the principle approach proposed by the Consortium is illustrated in Figure ES1.

Our Consortium will emphasize meaningful and **sustained capacity building** for developing countries on technology development and transfer as a core part of the CTCN. This will include areas such as i) Building capacity of NDEs to identify priority technology needs and design collaborative programmes with the CTCN; ii) Capacity building as an integral part of CTCN support to countries; iii) Regional and global peer learning, exchange, and training programmes and finally iv) Strengthening the capacity of Network members.

Competence to Deliver

The UNEP led consortium has deep experience and expertise spanning the full range of issues in the development and transfer of technologies for adaptation and mitigation under the UNFCCC. Seven of the thirteen partners are technical institutes and development organisations located in developing countries and are leaders in their regions on climate technology issues, while the other partners have extensive experience working with developing countries on the development and transfer of technologies. The partners have rich expertise that extends across all relevant sectors, the technology life cycle, types of activities, and forms of regional, sub-regional, and global collaboration required to meet developing country needs for development and transfer of adaptation and mitigation technologies.

Figure ES1 Management of requests and responses in the Technology Cycle – delivery approach



All of the thirteen consortium partners have at least 20 years of experience implementing collaborative projects in developing countries, experience that is directly relevant for the key roles and functions of the CTCN. This includes assisting countries with technology needs assessments; managing responses to these needs; providing capacity building and support for deployment of technologies; stimulating collaborative technology development and transfer projects; facilitating cooperation networks, partnerships, training, and twinning arrangements; developing tools and policies; codifying and sharing best practices; and managing other supporting activities. Our experience extends as well to the areas of facilitating access to finance, entrepreneur development, technology licensing and IP management, monitoring, and evaluation**. The consortium partners are currently engaged in approximately 1500 activities related to climate technologies in over 150 countries** with a strong sub-regional coverage.

As one example, UNEP has as an Implementing Agency of the Montreal Protocol Multilateral Fund implemented more than 1500 projects in developing countries that directly or indirectly support the transfer of technology under that MEA. These cover issues such as integrated technology and policy national plans, technical assistance, capacity building and institutional strengthening. Jointly UNEP and UNIDO manage a global network of 42 National Cleaner Production Centres (NCPCs), which use a multi-stakeholder approach and involve different levels of industry, government, academia and the financial sector to bring about Resource Efficient and Cleaner Production approaches by businesses and other organizations. Again, a collaborative approach is used to accelerate technology transfer, one that draws on networks, develops partnerships, and stresses capacity building for technology development and transfer. Other partners have similar experience that is described in our proposal.

The UNEP led CTCN will operate in accordance with UN governance structures and management procedures. Core UN principles, made operational through UN rules and administrative procedures, include integrity, transparency, and ethical behavior. Tendering processes follow guidelines that ensure openness and transparency, fairness, cost-efficiency, and effectiveness. The UNEP management structure includes rigorous administrative and financial procedures that are reviewed by external auditors and made public.

Our proposed budget is based on a low administrative cost structure so that most of the funds can be used in responding to country requests for assistance. A proportion of the proposed budget will be used for knowledge management, capacity building, and network building. The consortium approach allows for a cost efficient and quick-start through short term secondments of staff to the CTC, providing 'in-house' access to a range of technical experts and enhancing

its ability to operate in a cost efficient manner. The broad reach of our Consortium makes possible regional expansion as resources permit, which will allow activities such as knowledge transfer and capacity building to be performed on a regional basis. A further advantage of our consortium approach is that it will allow for flexibility in supplementary staffing arrangements to match growth.

Finally, our Consortium can bring a variety of direct financial and in-kind contributions to support the CTCN. As a group we commit to seeking financial and in-kind co-funding for CTCN activities by engaging with other donor organizations and climate technology transfer initiatives.

Building and Managing the Network

Considering the wide range of adaptation and mitigation expertise required across sectors, regions and sub-regions and technologies, a wide and diverse Network of regional and national institutions will be required as a delivery mechanism that can respond effectively and efficiently to requests from developing countries. Potential members of the Network could include a wide variety of different types of institutions ranging from regional climate technology centres and networks to intergovernmental, international, regional and sectoral organisations, partnerships and initiatives that could contribute to technology deployment and transfer. Also included could be research, academic, financial, non-governmental, private-sector and public-sector organisations, and partnerships.

The Advisory Board of the CTCN will establish criteria for the structure of the Network and designate organizations as members Network. We suggest an approach of gradual expansion and increasingly sophisticated structuring of the Network, reflecting the expected build up of demand and underlying financing for activities. We suggest establishing – or where these exist strengthening – sub-networks for each of the key climate change adaptation and mitigation sectors, as well as sub-networks focused on private sector partnership and financing support.

Criteria for Network membership drawn from UNFCCC practices in other areas could include:

- Regional and sub-regional coverage
- Adaptation and mitigation expertise
- Sector expertise
- Balance among relevant types of stakeholders – government, industry, science, NGOs, research, finance
- Capacity building and knowledge management capabilities
- Experience with relevant phases of technology development and transfer in developing countries
- Ability to provide objective and neutral support to developing countries and to be responsive to country needs
- Proven record of cost-effective and high quality delivery of technical assistance and capacity building services.

These criteria will be elaborated further in consultation with the Advisory Board when the CTC is operational. While preparing this proposal the consortium partners have solicited views of a number of potential Network members. Based on this assessment we believe it is prudent to create a Network with different categories that reflect Network members' mandates, structure, governance, areas of expertise, and other criteria. To rapidly mobilize expertise through the Network we propose that members undergo a pre-qualification process that safeguards legal and fiduciary interests while avoiding the delays of an *ad hoc* procurement process initiated in response to each NDE request.