



**Climate Action Network - International
Submission to UNFCCC Ad Hoc Working Group
on Long-Term Cooperative Action
Regarding Technology Cooperation and Sharing**

24 April 2009

The Climate Action Network International (CAN) welcomes the opportunity to provide input on discussions under the Ad Hoc Working Group on Long-Term Cooperative Action under the UNFCCC. CAN is a coalition of more than 450 environmental and development non-governmental organizations worldwide, committed to limiting human-induced climate change to ecologically sustainable levels.

CAN Position on Technology Cooperation and Sharing

I. Introduction

In Copenhagen 2009, Parties will need to come to an agreement that avoids dangerous climate change and significantly increases action on mitigation and adaptation pursuant to the Bali Action Plan. This requires first and foremost, that all developed countries take on ambitious, binding commitments to reduce their own emissions. However, developed countries must also deliver the technical and financial means to help developing countries decarbonize their development and adapt to climate change. This technological cooperation and financial support is a crucial means through which developed countries will fulfill their obligations resulting from historical and ongoing responsibility for climate change and imposing the additional burden of adaptation on developing countries.

To keep the global average temperature increases as far below 2°C as possible compared with pre-industrial levels, we truly need a worldwide revolution in the development and rapid diffusion of climate-friendly technologies, particularly renewable energy and energy efficiency. It is clear that business as usual is not an option. We need drastic action and global cooperation all along the technology chain targeted at: the direction and financing of national and cross-border research and development; the speed of technology demonstration and deployment; the scope and extent of technology diffusion; and the directness and ease of accessibility to technology products, skills and know-how.

This will require a transfer of resources, (information, skills, know-how, financing, goods, and equipment, etc.) in particular from developed to developing countries, all along the technology chain, while supporting the creation of conditions in all countries that enable clean and environmentally sustainable technologies to flourish.

CAN stresses the importance of the principles on technology transfer established in Chapter 34 of Agenda 21 of the 1992 Rio Declaration that "environmentally sound technologies are not just individual technologies, but total systems which include know-how, procedures, goods and services, and equipment as well as organizational and managerial procedures" and emphasizes that transfer of environmentally sound technologies must enable the recipient to use, adapt and reproduce technologies for both the domestic and export markets.

Technology cooperation must focus on delivering sustainable development and enabling poverty reduction and ensuring access to sustainable energy services for all. This will require significant amounts of public funds, channeled directly to support technology projects and programmes as well the use of public funds to leverage private sector investment and participation in technology projects and programmes.

Technology cooperation is not about new obligations, but is about the proper implementation and operationalizing of existing commitments under the UNFCCC, in particular Article 4.5 in conjunction with Article 4.1, 4.3 and 4.7. The task now is to ensure measurable, reportable and verifiable delivery on these commitments.

Technology Cooperation under the UNFCCC must also support and enable technology projects and programmes that are focused on South-South technology sharing, capacity building, and exchange of technology-related information, skills, know-how, financing, goods, and equipment.

We urge all Parties to put forward substantive proposals that address exactly how to operationalize and ramp up technology cooperation, including institutional arrangements (participation, decision-making, project and programme approval criteria, MRV standards and processes), financing (sources, structures, suggestions for operational entities), and managing intellectual property issues. We welcome, and support in principle, the G77 plus China proposal and urge all governments to respond to the substance of the proposal especially to highlight areas of agreement and areas that require further discussion. To ensure a shift to a low-carbon future, with a particular emphasis on renewable energy and energy efficiency, and to spur the necessary innovation for the next generation of technologies, a new technology mechanism governed by an Executive Board and supported by a Technology Fund are needed.

We would emphasize that technologies for adaptation and mitigation technologies do differ. Research, Development & Demonstration for adaptation technologies is beyond the scope of the Adaptation Fund and therefore will have to be addressed within a technology mechanism for technology cooperation (as proposed below). Support to technologies for adaptation is only one aspect of an effective approach to adaptation and crucially, different criteria, standards and safeguards apply to technology cooperation as compared to adaptation. Nevertheless, we emphasize that all components of projects and programmes for adaptation should be fully and appropriately funded.

II. CAN Principles and Mechanisms for Technology Cooperation

CAN believes that effective technology cooperation to achieve the goals of staying as far below 2° C as possible and adapting to climate change impacts - while ensuring sustainable development, poverty reduction and access to modern energy services in developing countries - will require a radical step change in technology research, development, demonstration, and diffusion; a world wide wholesale shift to the best existing low-carbon technologies and energy efficiency; and strategies to spur technological advances through effective technology cooperation. Business as usual, either in structures or policies, is not an option. Success will require dedicated mechanisms and institutions, accountable to the UNFCCC COP or COP/MOP and UNFCCC principles as well as cooperating with and building on the strength of existing mechanisms and institutions. Such mechanisms and institutions must embody the strengths of all UNFCCC stakeholders, including civil society, taking into account fair and balanced representation among all groups, and be governed in accordance with the principles of the UNFCCC and established bodies.

To this end, CAN supports:

- The establishment of a dedicated **Technology Cooperation Mechanism** under the authority of the UNFCCC COP or COP/MOP, responsible for, at a minimum;
 1. The implementation of the technology cooperation obligations (Article 4.1c, Article 4.3, Article 4.5) of the UNFCCC.
 2. The establishment of a **Global Technology Objective** to guide technology cooperation. This would include:
 - i. A global commitment to scale up public funding for RD&D, diffusion and capacity building for both mitigation and adaptation; and
 - ii. Scaling up global levels for renewable energy market penetration.
 3. The development and implementation of **Technology Action Programmes** to prioritize areas of RD&D cooperation, and targets for uptake and diffusion and to ensure that the Global Technology Objective is met. Technology Action Programmes should *inter alia* be informed by the following sources, if available:¹
 - i. Global Technology Roadmaps that outline a strategy for technology Research Development, Demonstration and Diffusion for a key set of technologies.
 - ii. National Technology Needs Assessments, which describe the technological, human, and institutional capacities needed to implement the Low Carbon Development Plans and national approaches to adaptation (such as National Adaptation Programmes of Action and more comprehensive National

¹ The following list is in no way intended to prejudge what may be necessary to be done at the national level, as this is something that should be negotiated. The list is intended only to emphasize that Technology Action Programmes should be needs-driven.

Adaptation Action Strategies) and identify the gaps in domestic capacities which must be met through international technology cooperation.

- iii. Low Carbon Development Plans that outline the national strategy to implement a low carbon development pathway, with a specific view on endogenous technologies and capacity-building.
- iv. National Adaptation Programmes of Action and other more comprehensive national adaptation strategies.
- v. Nationally Appropriate Mitigation Action plans.

4. The establishment of a **Technology Executive Board** to:

- i. Oversee the Technology Action Programmes;
- ii. Oversee the Technology Fund (see below);
- iii. Establish expert technical panels, where needed, to advise and make recommendations on such technology issues as deemed necessary; and
- iv. Coordinate the work of regional centers of excellence, regional and international technology incubation centers, and other regional and sub-regional platforms for technology cooperation and ensuring synergies with all adaptation policy related bodies.

- The establishment of a dedicated **Technology Fund**² with an RD&D window and a Diffusion window. Financing should be predictable, reliable, secure, transparent and sustainable, MRV'd and additional to 0.7% ODA commitments for developed countries. Contributions to the fund may be derived from financial obligations and commitments, voluntary contributions, and revenues from financing mechanisms, such as auctioning and levies, as well as any other financial flows as decided by the Parties. For Mitigation technologies the fund would provide support for both RD&D, diffusion and capacity building activities. For technologies for adaptation the fund would support RD&D and capacity building activities, in particular where international or regional co-operation is required, with a dedicated Adaptation Fund being responsible for a portion of diffusion support for existing technologies. Technology diffusion needs for adaptation should be addressed in comprehensive national adaptation strategies which should be prepared and implemented with support from a dedicated Adaptation Fund. Applications for funding should be needs-driven but within the framework of Technology Action Programmes and the Global Technology Objective. Proposed projects and programs, both multilateral and bilateral, must meet MRV criteria established by COP or COP/MOP, to qualify as financial support under the Technology Cooperation Mechanism. In administering the Fund, the Executive Board should:

² This Fund should be related to the broader Article 11 financial mechanism but this paper does not take a position on the nature and scope of that relationship. This technology fund will operate in conjunction with, and should not detract from, financing mechanisms for other pillars of climate change actions.

1. Receive, approve and decide the appropriate level and type of funding, including full cost and incremental cost grants, loans and guarantees, for technology components of mitigation and adaptation projects or programmes;
 2. Make allocation decisions in accordance with Article 4.3 UNFCCC;
 3. Review and accredit approved programmes and projects as a developed country's MRV contribution to its technology cooperation obligations.
 4. Ensure the financial integrity of the funds, including ensuring proper use, auditing of projects and programs and notifying the technology cooperation mechanism of any issues needing to be addressed.
- The establishment of a mechanism or process, under the technology cooperation mechanism to address patents and related intellectual property issues to ensure both increased innovation and increased access both for mitigation and adaptation. Such a mechanism should actively engage enterprises and institutions in both developed and developing countries to adopt innovation and access policies that will:
 1. Shorten research and development cycles and move technologies into markets as quickly as possible;
 2. Ensure the quickest possible global dissemination, absorption, and uptake of climate technologies, especially in developing countries; and
 3. Encourage and enable speedy follow-up innovation, both incremental and significantly inventive, to ensure adaptation of technologies to local needs, speedy feedback into innovation systems and enable indigenous and local innovation.

Recognizing that climate change is a planetary emergency, the patents and related intellectual property mechanism should be guided by an **International Declaration on Climate Technologies and IPRs** from the UNFCCC COP or COP/MOP that all possible policy avenues to accelerate research, development, demonstration and diffusion of climate-friendly technology, should be explored, including the use of all flexibilities, exceptions and limitations in international and national patent and related intellectual property rules, as well as innovative uses of intellectual property mechanisms, licensing practices, and alternative modes of innovation such as open source approaches. The declaration should state that all countries will refrain from using unilateral measures, financial or political (such as trade sanctions or withdrawal of trade preferences), against countries that exercise patent and related intellectual property flexibilities, exceptions and limitations. The UNFCCC COP should communicate this Declaration to the General Council of the WTO and to the General Assembly of the World Intellectual Property Organization with a request that they act, as appropriate and within their mandates, to include the declaration in their norm-setting, dispute settlement, technical assistance, and policy and research programmes.

The mechanism should also establish a clear framework for evaluating and determining when intellectual property becomes a barrier to international technology research, development, deployment, diffusion and transfer and should provide options

for corrective action, that both ensure that appropriate protection is provided to maintain reasonable and fair incentives for innovation, while enabling access to critical technologies and enhanced sharing and follow-on innovation in keeping with national circumstances and capacities. Such measures could include for example:

- a. patent pools and related concepts such as patent libraries
- b. joint research initiatives
- c. compulsory or non-voluntary licensing
- d. patent buy-outs
- e. segmented/parallel markets
- f. parallel imports
- g. patent exclusions
- h. differential patentability requirements
- i. open-source licensing
- j. prize funds
- k. rules on open access to publicly funded technologies

The technology cooperation mechanism should also make recommendations back to the UNFCCC COP or COP/MOP on barriers that may require further actions including the use of alternatives that may require limited or temporary modifications of international intellectual property rules.