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# WWF Global Climate Policy DISCUSSION PAPER

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# Technology Action Programs as a way forward

WWF and E3G propose to organize the future technology efforts under the United Nations Framework Convention on Climate Change (UNFCCC) in a set of Technology Action Programs. These programs would run for periods of five years, and have clear targets and an adequate working budget.

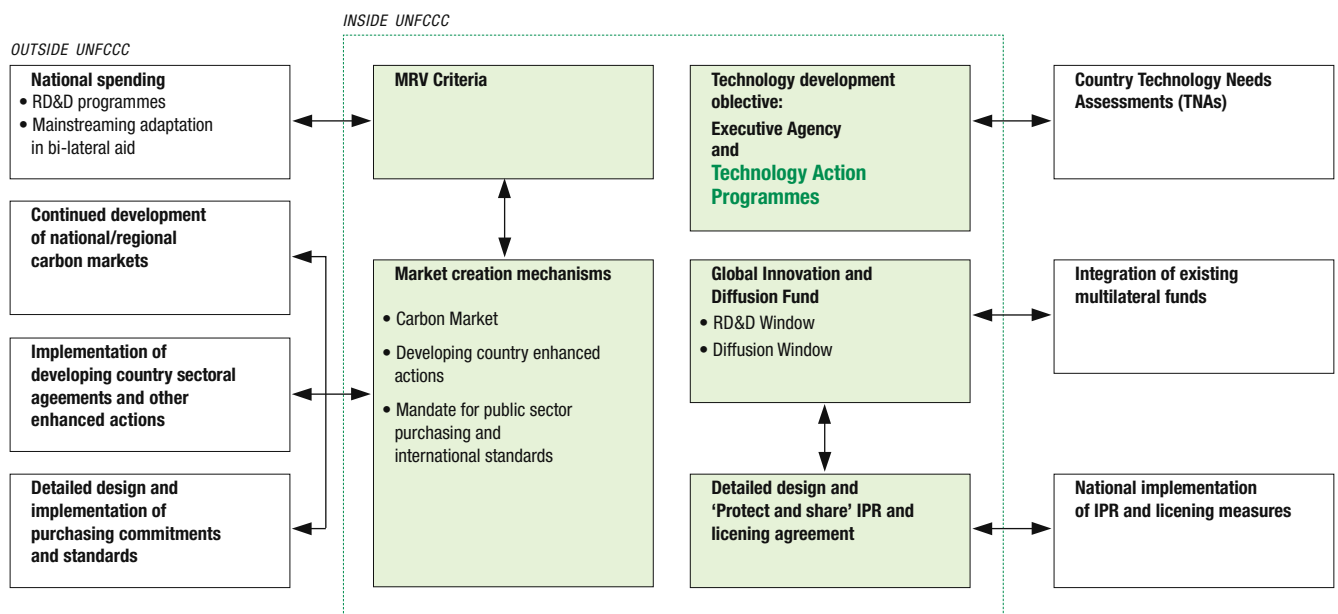
By creating Action Programs for a set of adaptation and mitigation technologies, the UNFCCC would send clear signals to the private and finance sector, governments, research institutions as well as citizens of the world looking for solutions to the climate problem.

## Technology Action Programs as part of the solution to the technology challenge

Solving the technology challenge will require action both inside and outside the UNFCCC. Within the Copenhagen Agreement it is essential that five key areas are addressed:

- Setting overall objectives for technology development and diffusion;
- A new multilateral funding mechanism for technology development and diffusion, including existing and near-market solutions;

FIGURE



- An agreement on Intellectual Property Rights (IPR) and licensing to ‘Protect and Share’ new innovations;
- Measurable, Reportable and Verifiable (MRV) criteria for assessing developed country technology, financing and capacity building support; and
- Market creation mechanisms to pull technologies down the innovation chain.

Within this framework we propose the use of Technology Action Programs to guide overall objectives for funding and action on technology cooperation and innovation.

### The basic idea

Using Action Programs as a way to scale-up and structure global technology cooperation makes it possible to divide the technology challenge into manageable pieces and to select tools that are appropriate for the various technologies. The tools needed to enhance the use of a certain technology are dependent on where that technology lies in the technology cycle.

Potential examples of focus of Action Programs (this list is illustrative and does not attempt to provide an exhaustive list of Action Programs):

- early warning systems
- pro-poor technologies to avoid salinity intrusion and expansion of salinity-tolerant crops
- wind energy
- solar energy
- renewable energy grid systems and grid loss reduction
- sustainable energy production from biomass, including combination with carbon, capture and storage for negative emission technologies
- electric vehicles
- energy efficient appliances and lighting
- energy savings in buildings and passive-energy houses
- phase-out of hydrofluorocarbons (HFCs) and other industrial greenhouse gases (GHGs)
- carbon savings in industrial sectors like cement, steel and chemicals, including through material substitution

This list is not exhaustive and, considering the size of the technology challenge, WWF and E3G expect that at least 20 Action Programs should be established. There should be a balance between the different Action Programs to ensure technologies are developed both to deliver rapid mitigation and to enable the poorest and most vulnerable countries to adapt and increase their resilience to climate change.

A main feature of the Technology Action Programs should be that the inputs and resources available should be predictable. The conditions for participating in the programs would also need to be precisely defined. Clarity on these features as well as information on how developed the technology is and barriers to the transfer and use of the technology, would make it possible to set clear targets for each action program.

WWF and E3G believe that Technology Action Programs would create a completely new kind of global technology cooperation for climate-friendly technologies. It is, however, worth remembering that a similar global cooperative effort was established under the Montreal Protocol some 20 years ago and that this effort was highly successful in phasing out ozone-depleting substances. The technology challenge in the climate field is much larger and, therefore, a whole set of Action Programs is urgently needed.

### Participation and finance

The Technology Action Programs should be developed in relation to developing countries National Adaptation Plans of Action (NAPAs) and Technology Needs Assessments. This should include:

- Capacity building in developing countries for research, development, demonstration and diffusion; and
- Transfer of skills and know-how; technology information, technological goods and equipment.

However, it would probably not be relevant for all developing countries to participate in all Action Programs and would in part depend on the individual enhanced actions to which they commit. Developed countries should ensure that all Action Programs are

adequately financed. A Global Climate Innovation and Diffusion Fund should be established under the UNFCCC and the majority of finance for the Action Programs should come from this fund. In addition, provided that the activities meet certain MRV criteria, developed countries could meet a part of their commitments through bilateral or regional activities.

To succeed, the Action Programs will need to deliver greater capacity-building, network and infrastructure support rather than rely solely on the narrow project-based transfer of specific technologies. To achieve this, Action Programs must include a clear strategy for delivering wide-scale diffusion, preferably based on sector-wide or economy-wide initiatives.

The Action Programs should also serve as a coordination mechanism for activities related to the various technologies in the developed countries, including cooperation on research and development (R&D), standards and government regulations, but they should only finance activities in developing countries.

## The process

Development of the Action Programs will take time. WWF and E3G suggest that the idea is discussed at COP-14 in Poznan.

At COP-15 in Copenhagen, decisions should be made on which Action Programs to develop and agreement should be reached on the rules for implementation.

The most mature of the technology Action Programs should be developed through 2010 and approved at COP-16, while the remaining majority of programs should be approved at COP-17 in 2011.

While implementation of the Action Programs should not begin until the finan-

cial mechanism is established, developed countries should make financing commitments for pilot activities at COP-15.

## Institutional arrangements

Technology Action Programs for the first five-year period could be developed by provisional technical expert panels created at COP-15.

The Action Programs should be approved at the COP level.

An Executive Board of Technology with balanced representation of developing and developed countries should be in charge of the funding decisions and hold responsibility for the coordination of the effort through the Action Programs.

For each Action Program one or more existing institutions should be appointed as implementing agency.

The executive board and the implementing agencies should receive advice from one or more Technical Expert Panels, consisting of experts from governmental as well as non-governmental institutions, the research community and the private sector.

An independent assessment body should evaluate the efficiency of implementation of the Action Programs.

## Your feedback and cooperation is appreciated

In the coming months, WWF and E3G will continue our work to make the Technology Action Program idea more concrete, including descriptions of how specific Action Programs could look, what level of funding would be needed etc. We invite governments, non-governmental organizations and business groups to work with us on this. We are interested in any comments on this proposal.

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