



CONVENTION ON BIOLOGICAL DIVERSITY

Distr.
GENERAL

UNEP/CBD/AHTEG-TTSTC/INF/2
27 July 2007
ORIGINAL: ENGLISH

AD HOC TECHNICAL EXPERT GROUP ON
TECHNOLOGY TRANSFER AND SCIENTIFIC
AND TECHNOLOGICAL COOPERATION
Geneva, 10 - 12 September 2007

EXPLORING POSSIBILITIES OF DEVELOPING A BIODIVERSITY TECHNOLOGY INITIATIVE, TAKING INTO ACCOUNT THE CLIMATE TECHNOLOGY INITIATIVE (CTI)

Note by the Executive Secretary

I. INTRODUCTION

1. In decision VIII/12 on technology transfer and cooperation, the Conference of the Parties requested the Executive Secretary to “explore possibilities of developing a ‘Biodiversity Technology Initiative’, taking into account the Climate Technology Initiative (CTI).” The request came further to the consideration by the Conference of the Parties of proposals, prepared by the Executive Secretary with the assistance of the expert group on technology transfer and scientific and technological cooperation established pursuant to decision VII/29, of options to apply measures and mechanisms to facilitate access to technologies of relevance under the Convention by developing countries and countries with economies in transition. In these proposals, reference had already been made to the Climate Technology Initiative (CTI), as an example for the useful role of such an international network for the effective implementation of provisions on technology transfer. ¹

2. The present document has been prepared pursuant to this request. It will be submitted as an information document to the upcoming meeting of the *Ad hoc* Technical Expert Group on Technology Transfer and Scientific and Technological Cooperation, which will take place in Geneva on 10-12 September 2007, as a basis for further consideration. The mandate of the Expert Group, as per decision VIII/12, paragraph 4, is to collect, analyse and identify ongoing tools, mechanisms, systems and initiatives to promote technology transfer and scientific and technological cooperation under the Convention, and to propose strategies for practical implementation of the CBD programme of work on this issue. The meeting will base its work *inter alia* on the existing proposals of options to apply measures and mechanisms to facilitate access to technologies of relevance under the Convention, referenced in paragraph 1 above.

The information in this document was extracted from the CTI, UNFCCC, and IEA websites ², as well as the publication *The History of the IEA*. ³ A review of the document by the chair of the CTI Executive Committee, Mr. Elmer Holt, and the CTI secretariat is gratefully acknowledged. Section II of the document provides an overview of the Climate Technology Initiative (CTI). Section III identifies issues

^{1/} See document UNEP/CBD/COP/8/19/Add.2

^{2/} CTI: <http://www.climatetech.net/>; UNFCCC: <http://unfccc.int/>; IEA: <http://www.iea.org/>

^{3/} Scott, Richard (1994): *The History of the International Energy Agency*. Two volumes. OECD/IEA, Paris.

/...

and associated options to consider in the development of a Biodiversity Technology Initiative. Section IV concludes by suggesting a number of elements for further consideration by the Expert Group.

I. THE CLIMATE TECHNOLOGY INITIATIVE

1. Background

3. Launched in 1995, the Climate Technology Initiative (CTI) is an initiative of nine OECD countries. ⁴ Its mission is to bring countries together with a view to foster international cooperation on the development and diffusion of climate-friendly and environmentally-sound technologies and practices, consistent with the objectives of the United Nations Framework Convention on Climate Change (UNFCCC) and in particular the framework for technology transfer adopted at the Seventh Conference of the Parties to the UNFCCC. ⁵

4. While independent from the UNFCCC, the CTI works closely with the UNFCCC process, including its Secretariat and the Expert Group on Technology Transfer (EGTT), as well as with relevant IEA Implementing Agreements of the International Energy Agency (IEA) and other international organizations or initiatives. In particular, the promotion of technology transfer under the Framework Convention, as incorporated in the Marrakech Accords, is at the core of the CTI's work.

2. Evolution of the institutional structure and host institution arrangements

5. In June 1994, the International Energy Agency (IEA) prepared a "scoping study" on a climate technology initiative as a technological option in response to climate change and as a method for accelerating technology development. ⁶ Based on this work, the CTI was launched at the first Conference of Parties to the UNFCCC, held in March 1995. Starting in 1996, the IEA hosted the CTI on a temporary basis, with CTI activities being part of the IEA's Programme of Work, funded largely by voluntary contributions.

6. Beginning in 2000, alternative institutional options were considered since not all IEA Member countries participated in the CTI. The CTI Board of Management proposed to establish the CTI as a "special activity" within the IEA, under in the sense of Article 65.1 of the International Energy Program (IEP) Agreement. However, in 2002, the IEA Governing Board determined that the levels of firm Member country commitment and dedicated financial resources were not sufficient to warrant establishment of the CTI as an IEA "special activity". Subsequently, in 2003, the CTI was reorganized as an IEA Implementing Agreement, the difference being that as a "special activity", the CTI would depend on the IEA Secretariat as the "operating agent", rather than an outside party.

7. The International Center for Environmental Technology Transfer (ICETT) in Japan was named to serve as the CTI's secretariat, responsible *inter alia* for supporting all activities of the CTI, including meetings of the CTI Executive Committee ⁷, seminars, publications, workshops, and side events at UNFCCC meetings.

8. In 2006, the CTI was reviewed by the Committee on Energy Research and Technology (CERT) of the IEA, and the term of the CTI Implementing Agreement was extended for a period of five years, to 2011.

^{4/} Current Member countries are: Austria, Canada, Finland, Germany, Japan, Norway, Republic of Korea, United Kingdom, and the United States.

^{5/} See Article 4.5 of the UNFCCC and, as regards the framework, document FCCC/CP/2001/13/Add.1

^{6/} [Ministry of the Environment Quality of the Environment in Japan 1995 \[MOE\]](#)

^{7/} The CTI's decision-making body made up of representatives from each of the CTI's Member countries; formerly, that is, before the CTI reorganization as an IEA Implementing Agreement in 2003, the CTI Board of Management.

3. Funding

9. According to the CTI Annual Reports, the CTI derives all of its funding from contributions of participating countries. Table one below provides an overview of the CTI total budget from 2003 to 2006. A common fund has been established, to which every CTI member makes a minimum core contribution of Euro 10,000 in order to carry out programme-wide support activities to facilitate the efficient functioning of the CTI programme of work. For instance, the common fund covers the costs of communicating and publishing CTI activities through pamphlets, documents and a well-maintained website. Upon consent of the Executive Committee, funds are sometimes redirected from the common fund to provide financial assistance to certain CTI projects, like the Private Financing Advising Network (PFAN) pilot program in 2006.

10. CTI members also provide in-kind contributions to CTI activities, for instance, by sending their government officials to meetings, by finding appropriate private sector experts, and by bridging with relevant organisations such as UN bodies.

Year	2003	2004	2005	2006
CTI Funds (in Euros)	677,900	810,000	805,000	572,500

Table 1: CTI budget – total contributions from participating countries

4. Main outputs

11. CTI participating countries undertake a broad range of co-operative activities in partnership with developing countries and countries with economies in transition, as well as other international bodies. Instead of developing an autonomous body of expertise, the CTI has used the expert capabilities of several technical institutions of its Member countries, notably the *National Renewable Energy Laboratory* of the US Department of Energy, the Japanese *New Energy and Industrial Technology Development Organization*, UK's Department of Trade and Industry, Canada's *Natural Resources*, and the *Greenhouse Response Branch* of the Australian Ministry of Industry, Tourism and Resources, as well as some bilateral programmes and UN agencies such as the United Nations Industrial Development Organization (UNIDO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP). ⁸

12. CTI activities are roughly divided into five overlapping categories, ⁹ described below.

Seminars and Symposia

13. The CTI has an ongoing programme of seminars and workshops designed to support the UNFCCC process and facilitate the diffusion of climate friendly and environmentally sound technologies and practices, with the active participation of the private sector, international organizations and financial institutions. Notably, the CTI has organized a series of regional joint industry seminars, as well as seminars on energy efficiency and project formation and financing through a variety of alternative approaches. The CTI has held 23 seminars and symposia to date, reaching more than 2,300 estimated participants through these events.

Technology Needs Assessments (TNAs)

14. The CTI provides technical assistance to selected countries in carrying out technology needs assessments. It collaborates with UNDP and UNEP on technology needs assessment methods training, including workshops, and develops and disseminates relevant materials and information on lessons learned. Specific activities include:

^{8/} See document COM/ENV/EPOC/IEA/SLT(2004)1

^{9/} Structure and content of output descriptions obtained from the CTI website: <http://www.climatetech.net/>

- Capacity building for technology needs assessments;
- Technical assistance to countries carrying out needs assessments;
- Development of methodological approaches to technology needs assessments in partnership with relevant international organizations;
- Exchange of experiences about successful approaches to conducting technology needs assessments;
- Facilitating interaction between governments, agencies and relevant international organizations on technology needs assessment.

15. Between 2001 and 2004, countries that have received direct technical assistance from the CTI include Bolivia, the Dominican Republic, Georgia, Ghana, Malawi, and Nigeria.

Implementation Activities

16. The CTI facilitates the implementation of technologies, identified during the technology needs assessment process, through a variety of actions, including:

- Based on outcomes from the technology needs assessment process, identifying priority clean energy technology sectors in partnership with developing countries;
- Implementing targeted activities in selected priority sectors to foster market development and clean energy technology transfer;
- Evaluating activities, and disseminating lessons learned, to inform market development and country activities in other regions and sectors;
- Developing a strategy for eliminating any barriers to establishing the necessary enabling environment for technology transfer.

17. An example of CTI work in this area is the Private Financing Advisory Network (PFAN) program. Undertaken in cooperation with the UNFCCC Expert Group on Technology Transfer (EGTT), the PFAN seeks to broaden access to financing for the transfer of climate friendly technology by identifying projects in developing countries and countries with economies in transition that may be suitable for private sector international finance at an early stage, and then acting as a "free" project financing consultancy service to guide these projects to bankability and financial closure. PFAN activities started in early 2006 and are currently being conducted as a pilot program projected to run into mid- to late 2007.

Training Courses

18. Training courses are organized in collaboration with relevant international organizations, with a focus on the special requirements and circumstances of target countries, typically on a regional basis. Since the CTI's inception, it has organized 35 training courses, reaching almost 1,800 participants. Specific activities include:

- Capacity building for technology needs assessment, project planning and assessment, and establishment of institutional settings;
- Information dissemination about environmentally sound technologies and best practices appropriate to the region and circumstances of the target country;
- Identification of financing needs and alternative means of project financing;
- Exchange of experiences in the use of successful environment energy policy instruments (e.g. law, taxes, subsidies etc.);
- Professional education and training;

- Initiation and strengthening of networking between agencies/centres for energy saving, energy efficiency and renewable energies;
- Facilitating interaction between governments, agencies, and relevant international and other organizations with particular emphasis on engaging both the foreign and domestic private business and finance communities.

Information Dissemination

19. One objective of the CTI is to facilitate information dissemination among governments, industry, academia and relevant international and other organizations, and to support the diffusion of climate-friendly and environmentally sound technologies and practices.

20. The CTI conducted an Awards Program from 1999 to 2002 in order to recognize individuals and organizations that have demonstrated outstanding achievements in furthering the goals of technology transfer under the UNFCCC.

21. The CTI provides technical assistance and contributes to the UNFCCC process, including support for the Secretariat and the UNFCCC EGTT. The CTI also provides support for UNFCCC-organized seminars and workshops, designed to better inform participants on key technology transfer issues, including enabling environments, technology needs assessment, technology information resources and capacity building.

22. The CTI organizes side events at UNFCCC events to share experiences and lessons learned from CTI-supported technology transfer activities in collaboration with developing and transition country partners. The CTI has organized 22 Information Dissemination events, most of which were side events to UNFCCC Conferences and Meetings, and has reached almost 1400 participants through these events.

II. POSSIBILITIES OF DEVELOPING A BIODIVERSITY TECHNOLOGY INITIATIVE (BTI), TAKING INTO ACCOUNT THE CLIMATE TECHNOLOGY INITIATIVE

1. Identifying a host institution

23. The specific institutional arrangement of the CTI – as an IEA implementing agreement – is consistent with its focus on climate and energy technologies, but can presumably not be *emulated directly* by a prospective “Biodiversity Technology Initiative” (BTI). The arrangement seems however to indicate that it is important to identify a strong “umbrella” organization that can act as institutional host. A potential host institution of the prospective BTI should, *inter alia*: (i) being a center of excellence regarding relevant technical capacity and expertise on the CBD, its three objectives, and in particular on Articles 16 to 19 (the access to, and transfer of, technologies, including biotechnologies, for the conservation and sustainable use of biodiversity or technology that make use of genetic resources and do not cause significant harm to the environment, as well as scientific and technological cooperation); (ii) provide access to a strong international network of relevant experts and partner institutions; (iii) guarantee impartiality, ideally through a global multilateral governance structure; (iv) provide sufficient institutional flexibility to enable the establishment of a Biodiversity Technology Initiative under its umbrella (such as under the IEA provisions on special activities and implementing agreements).

24. The specific arrangements for hosting the BTI would need further exploration of the specific statutes and governance structure of the potential host, for instance:

- Whether it is possible to establish the BTI as an activity of a sub-set of members of the host institution;

- Whether suitable funding arrangement can be made, for instance, if a decision is made to operate the BTI with new and additional funds, whether it is administratively feasible to establish a special fund to operate the BTI under the umbrella of the host institution.

2. Involvement and participation of developing countries

25. The Climate Technology Initiative (CTI) is an initiative of nine OECD countries, all of them developed countries. The support of developed countries in funding the BTI will be crucial to its success. However, the Conference of the Parties also underlined that successful transfer of technology requires a country-driven process and that specific approaches must be developed that address the prioritized needs of countries based on their National Biodiversity Strategy and Action Plans (see decision VII/29 Annex, paragraph 2; decision VIII/12, second preambular paragraph). Hence, it will be important to ensure the full involvement and participation of developing countries in the programming and decision making process of the BTI, and the question by which mechanism this can be undertaken most effectively will need careful consideration. Such consideration is particularly important in light of the third objective of the Convention and the provisions of Articles 16 (3) as well as 19 (1) and (2).

3. Relationship with the Convention

26. Another issue to consider is the relationship between the prospective Biodiversity Technology Initiative, its host institution, and the Convention on Biological Diversity. As described above, the CTI is independent from the UNFCCC, but works closely with the UNFCCC Secretariat and the Expert Group on Technology Transfer (EGTT) established by UNFCCC SBSTA. The relevance and value of the CTI and, accordingly, of the prospective BTI, is derived from their ability to be responsive in a timely manner to the needs identified by and within the respective convention.

4. Cooperative arrangements with other organizations and conventions, and stakeholders

27. As has been discussed elsewhere, ¹⁰ substantial synergy can be realized by identifying, providing access to, and transferring technologies that are of joint interest and relevance to several conventions. For instance, there seems to be a substantial overlap between technologies of relevance under the Convention on Biological Diversity and technology for adaptation to climate change. Any limitations to synergy will also need to be addressed through well-established and smoothly working channels of cooperation, in particular in case of negative impacts on biodiversity where proactive cooperation is imperative in order to minimize the tradeoffs involved in the transfer and application of such technology. For these reasons, mechanisms would be needed to ensure the effective cooperation of the BTI with the UNFCCC and the CTI, as well as with any other conventions and initiatives with shared interests, in order to avoid duplication of work on similar technologies and practices.

28. A key lesson learned from CTI activities is the importance of partnerships, like those formed between the private sector and governments. In particular, the engagement of the private sector has been viewed as crucial to the success of much of the CTI's work, like the current pilot PFAN project. A proposed BTI might do well to consider placing the facilitation of such partnerships at the core of its work, in particular in light of the recent decision by the Conference of the Parties on private sector engagement in the implementation of the Convention (decision VIII/17).

III. CONCLUSIONS

29. The experience with the CTI, and the CTI portfolio as outlined above, seems to generally indicate that a similar initiative by committed CBD Parties may play a very useful role in promoting and fostering more effective technology transfer and cooperation under the Convention on Biological Diversity. However, for a number of reasons, including the specific focus of the CTI and the peculiarities associated

^{10/} See paragraphs 25-32 of document UNEP/CBD/COP/8/19/Add.2, reproduced as document UNEP/CBD/AHTEG-TTSTC/INF/1.

with the third objective of the Convention, a prospective Biodiversity Technology Initiative cannot be emulated directly from the 'template' of the CTI.

30. In further exploring possibilities for developing a Biodiversity Technology Initiative, the *Ad hoc* Technical Expert Group may wish to consider the following elements:

- Identification of candidates that could act as a host institution, bearing in mind the indicative list of criteria provided above;
- Funding mechanisms and arrangements;
- Involvement and participation of developing countries and corresponding institutional arrangements;
- Relationship with the Convention;
- Cooperative mechanisms with other organizations and initiatives.
