

July 31, 2012

The Chair and Members of the Technology Executive Committee
c/o the UNFCCC Secretariat
P.O. Box 260124
D-53153 Bonn
Germany

Re: Call for inputs on ways to promote enabling environments and to address barriers to technology development and transfer, including on the role that the Technology Executive Committee could possibly play in this area of work

The Institute for Global Environmental Strategies (IGES) welcomes the Technology Executive Committee's call for public inputs on ways to promote enabling environments and to address barriers to technology development and transfer, including on the role that the Technology Executive Committee could possibly play in this area of work.

In responding to the call, we would like to submit our suggestions and inputs on the following two issues: 1) Which technologies to be transferred; 2) through which mechanisms. The proposal is based on IGES research and activities and it has been discussed in chapter 6 of IGES white paper IV, titled: Green Governance in Asia-Pacific, published on Jul.2012¹.

Followings are our suggestions and inputs. We are more than happy to further engage and involve in addressing the barriers to technology development and transfer.

1) Regarding which technology to be transferred?

The focus should be on:

- Promoting the transfer of proven and commercially available technologies which are at their deployment and diffusion stage of maturity. These technologies are associated with fewer barriers, especially those which continue to be controversial under the UNFCCC process (IPR, MRV, and finance). Deployment and diffusion are urgently required actions given the risk associated with current global environmental and economic crisis.
- R&D and demonstration of new technologies are likewise important.
- Low carbon technologies which match the needs of recipients and which have large local spillovers. This should be based on conducting a proactive comprehensive technology need assessment (at and by the recipient country) and a comprehensive technology availability assessment (at the supplying country). It should involve a process of *technology customization* and *application* not only a process of technology transfer.
- Transferring combined packages of hard technologies, technical knowledge and skills. Brokerage services need to be elaborated and promoted.
- Cobenefit technologies, which simultaneously enable GHG emission reduction as well as other benefits such as improvement of water quality, air quality, waste management, health, etc.

2) Regarding through which mechanism?

Promoting low carbon technology transfer could be through the following:

- Generating financial incentives by rewarding low carbon technology transfer with credits (TTC) and facilitative arrangements such as export/import insurance. Projects which result in low carbon technology transfer should receive such credits (which could be used for payment of IPR holders). This rewarding scheme can be conducted at national

¹ Link to Chapter 6in IGES white paper IV:

http://enviroscope.iges.or.jp/modules/envirolib/upload/4015/attach/Chapter_6_E.pdf

level (such as PAT program in India), or at bilateral level (such as BOCM in Japan). It can be also conducted at global level through a mechanism similar to the CDM process. The start should be with rewarding hard technologies which are at their deployment and diffusion stage rather than soft technologies or those which are at their early stage of development (to overcome MRV issue). The TTC value should vary according to the transferred low carbon technology, and according to recipient country. Doing this may help the transfer of a larger number of technologies, and to wider set of countries; hence overcoming some of the criticisms to CDM projects.

- Enhancing the proactive involvement of the private sector in bilateral and multilateral initiatives regarding technology transfer. To this end, a stable framework of incentives should be provided by governments, as well as from regional and international organizations, to leading companies willing to play a more proactive role in transferring low carbon technology. These incentives should include material incentives (financial, IPR protection, public procurement, etc.) as well as non-material incentives (honorariums, public awards, etc.).
- Accelerating the low carbon FDI (LCFDI). LCFDI is already soaring, and the potential for further acceleration is huge. The effectiveness of this decentralized mechanism largely depends on the willingness and commitment of various stakeholders to shift from current governance mechanisms toward green governance. Green governance should be streamlined at company level and at government level. Regional and international organizations should provide the necessary support and advice to private companies and governments in the region to make this transition.
- Promoting not only information sharing regarding technologies transfer, but also knowledge building and capacity development, through a bottom up approach as indicated in the diagram below. Further explanation are as follow:

-As for information sharing, first, there is a need to establish a National Technology Data Center in each country (if it is not established yet); to this center all stakeholders within a country have to provide their information and contribution relevant to technology transfer. For example, Governmental agencies disseminate their regulations and legislations regarding technology transfer. Businesses list up their available technologies (or their needs); Financial institutions provide their funding initiatives and programs, research institute provide their findings regarding technology need assessment (or availability assessment), etc. The information collected within each National Technology Data Center should be reported to a Regional Technology Data Center (which also has to be established if is not yet there), as well as to the Climate Technology Center under UNFCCC.

Currently, there are a plenty of technology centers (national and regional); however, they are focusing more, or solely, on information sharing rather than on knowledge building and capacity development. Low carbon technology transfer can be better leveraged through the engagements of these regional technology centers, the climate technology center and the Technology Executive Committee in knowledge building as well. In this regards, organizations belonging to a regional technology center or to the climate technology center as well as the Technology Executive Committee should:

-Support each national technology data centers to develop a comprehensive technology need assessments and/or technology availability assessments. Contribution by private sectors would be useful.

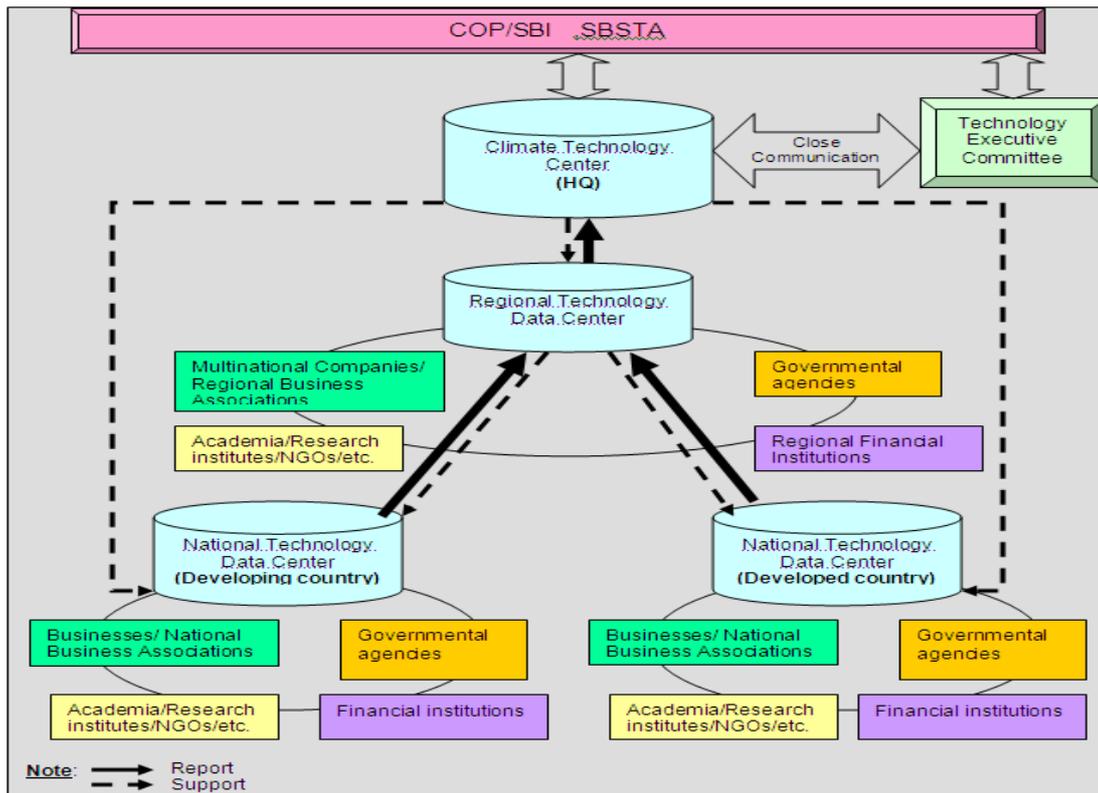
-Based on the information collected from national technology data centers, develop a matrix that shows best opportunities for cooperation between two or multiple countries (through matching seeds with needs). Sharing, and facilitating the access to this map will help

efficient allocation of low carbon foreign direct investment (LCFDI), which is a tools to promote technology transfer.

-Design, or support in designing, rewarding scheme for technology transfer (or for LCFDI) in unilateral level, bilateral level, or multilateral level.

-Implement, or support in implementing, pilot projects of technology transfer as show cases. These pilot projects should be implemented at clusters, for easy replication.

-Not only disseminate the collected information, but play a consultancy role on how to effectively use it, by whom, where, etc.



 Abdessalem RABHI, Ph.D (Mr.)
 Policy Researcher
 Institute for Global Environmental Strategies (IGES) Kansai Research Centre.
 Disaster Reduction and Human Renovation Institution, East Building 4F, 1-5-2, wakihamu Kaigan
 Dori, Chuo-ku, Kobe, Hyogo, JAPAN
 Tel: +81-78-262-6634/ Fax: +81-78-262-6635
 E-mail: abdessalem@iges.or.jp
 URL: <http://www.iges.or.jp>