Submission by Asian Development Bank on Actions undertaken by accredited observer organizations relevant to the Technology Executive Committee in performing its functions

30 July 2012

Technology Executive Committee (TEC) at it third Session made a decision to call for accredited Observer Organizations to provide their inputs on their actions relevant to the TEC in performing its functions, Asian Development Bank (ADB) welcomes this opportunity and is pleased to submit its inputs as attached annex.

Annex Template for the call for input

Key element 1: Analysis and synthesis

Technology Executive Committee Key element 1: Analysis and synthesis

Key modalities:

- a) Producing periodic technology outlooks; collating, <u>collecting</u> and <u>synthesizing</u> a range of information on technology research and development and other technology-related activities from various sources, including, but not limited to, national communications, nationally determined technology needs and technology needs assessments, <u>national adaptation programmes of action</u>, <u>nationally appropriate mitigation actions</u>, <u>national adaptation plans</u>, and technology road maps and action plans; and <u>examining the policy implications</u> and opportunities for advancing technology development and transfer;
- b) Producing a series of technical papers on specific policies and technical issues, including those arising from technology needs assessments;
- c) Conducting a regular overview of existing technology development, transfer initiatives, activities and programmes with a view to identifying key achievements and gaps, good practices and lessons learned.

Key element 2: Policy recommendations

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Key element 2: Policy recommendations

Key modalities:

- a) Recommending to the COP, or other relevant bodies under the Convention, actions to promote technology development and transfer and to address barriers;
- b) Recommending guidance on policies and programme priorities related to technology development and transfer, with special consideration given to the least developed country Parties.

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	Key element 2: Policy recommendations											
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Key element 3: Facilitation and catalysing

Key modalities:

- a) Promoting and collaborating with relevant organizations, resources permitting, in organizing workshops and forums to increase the opportunities for sharing experience with experts in developing and implementing technology road maps and action plans as well as other technology-related activities;
- b) Establishing an inventory of existing collaboration activities and a regular review process, with a view to identifying key achievements and gaps, good practices and lessons learned;
- c) Making recommendations on actions to promote collaboration;
- d) Making recommendations on best practices and relevant tools to develop technology road maps and action plans;
- e) Establishing an inventory of technology road maps and action plans;
- f) Making recommendations on concrete actions, such as an international process for the development of technology road maps and action plans as well as support required to enhance the development of these items, and in particular capacity-building programmes that may be appropriate.

Organization name: Asian Development Bank

Key element 3: Facilitation and catalysing

Actions undertaken by the organization relevant to the TEC in performing its functions:

ADB has launched a number of regional initiatives in which sharing of technology-related best practices and experience through organizing forums and workshops, is a key activity. These initiatives are supported by the ADB's Climate Change Fund (CCF) or its Clean Energy Finance Partnership Facility (CEFPF). One of the objectives of the CCF is facilitating knowledge management activities, including regional conferences and workshops. With regard to clean energy development, the CCF prioritizes interventions that help developing member countries (DMCs) achieve energy security and transition to low carbon economies through cost effective investments, especially in pre-commercial clean energy (CE) technologies, that result in greenhouse gas (GHG) mitigation, and financial, policy and institutional reforms, as well as regulatory frameworks that encourage CE development and energy access. Under the CEFPF the deployment of new technologies with strong demonstration effect is facilitated, excluding technologies that are still in the research and development or pilot testing stage.

Through regional cooperation activities, ADB is addressing trans-boundary issues, and sharing experience in tackling common challenges in adopting climate technologies. ADB also supported a number of activities involving the formulation of roadmaps.

Specific ADB actions relevant for this TEC function are:

1 The Asia Solar Energy Forum (ASEF), a component of the Asia Solar Energy Initiative, is an international knowledge-sharing arena that brings together private sector companies, government representatives, and other stakeholders to share knowledge, develop partnerships, discuss new solar power proposals and incentive mechanisms, and organize major conferences on solar energy. ASEF also provides a regional platform to synthesize and analyze the various technology trends, market breakthroughs, measurement and modelling techniques, and smart grid and storage solutions piloted and scaled up in the region, thereby promoting a more effective and efficient solar development program.

ASEF's primary objectives center on knowledge sharing and consultations, policy and regulatory framework development, and capacity development for local stakeholders. ASEF's first meeting was held on 5–6 July 2010 in Manila, the Philippines, and brought together more than 200 policy makers and solar energy- related professionals from 34 countries resulting in intense engagement between project developers, equipment manufacturers, lenders, and government officials. More than 300 delegates from 38 countries attended the second meeting of the ASEF in Tokyo, Japan, on 1–2 December 2010. Both meetings paved the way for the establishment of ASEF as a nonprofit knowledge society. ASEI could serve as a model for other developing regions with high solar potential.

2 "Quantum Leap in Wind Power Development in Asia and the Pacific" is a regional initiative of the ADB launched in 2011, which, among other objectives, supports the drawing up of wind energy development road maps for better planning and facilitating public private partnership, and manages regional knowledge and builds capacity to facilitate the transfer of knowledge and regional cooperation.

Participating DMC governments are expected to achieve their targets for installed wind power capacity through the formulation of road maps, improved knowledge and capacity, better quantification of wind resource potential, and the identification of viable wind projects.

Several in-country, regional, and international workshops, including in the Pacific, to share lessons and examples of successful wind energy strategies and associated policies are planned. The third Quantum Leap workshop took place on 4-5 June 2012, and was co-organized with a number of international and bilateral agencies. The results are shared online and at future Asia Clean Energy Forums and other international events where private companies and government agencies in Asia and from around the world will be invited to disseminate best practices.

3 The annually held **Asia Clean Energy Forum (ACEF).** The first Asia Clean Energy Forum took place in 2006 and was envisaged as a knowledge- sharing event for policymakers and practitioners, to *inter alia* consult on ADB's Energy Efficiency Initiative and its Energy Policy Review, and share lessons learned on energy related technical assistance.

The issue of technology transfer was addressed at the fifth Asia Clean Energy Forum in 2010 themed "Meeting the Technology Transfer Challenge" and brought together policymakers, private sector firms, and non-governmental organizations to explore aspects of technology transfer relating to, amongst other issues, policy and regulation;

technology and program implementation; financing efficiency and renewables.

The Asia Clean Energy Forum (ACEF) 2012, themed "Accelerating Low-Carbon Energy For All," took place from 6-8 June 2011 in Manila, the Philippines, and was attended by approximately 850 participants, representing governments, financial institutions, civil society, academia, international organizations and the private sector. The Forum was framed around four tracks: energy access; technology; policy and regulation; and finance and investment. Key messages from the Forum include the need for better knowledge sharing and technology transfer to move clean energy from the exception to the norm, and with regard to technology innovation the need for concessional financing and a dedicated clean energy fund were highlighted.

4 Carbon Capture and Storage (CCS) Fund projects. In June 2009, ADB established a CCS Fund to accelerate the demonstration of CCS technologies, including the identification and lowering of barriers for CCS demonstration. One of the projects supported by the CCS Fund is a technical assistance project in the PRC, which aims to formulate a strategy for CCS deployment, including through the development of a road map for CCS and by recommending enabling policies and legal and regulatory framework.

Similarly, another regional CCS project in South East Asia is identifying potential for CCS in target countries, building capacity and disseminating knowledge on technical aspects of CCS and on enabling policies, and will culminate in the development of country-specific road maps for CCS demonstration in Indonesia, Philippines, Thailand and Vietnam.

- 5 The Asia Pacific Adaptation Forum (APAN). APAN, an event organized to share findings, opportunities, innovations and challenges in mainstreaming climate change adaptation into development, is facilitated by ADB together with the United Nations Environment Programme (UNEP), Institute for Global Environment Strategies (IGES), AIT/UNEP RRC.AP and other partners. The second Asia Pacific Adaptation Forum was held on 12 to 13 March 2012 in Bangkok, Thailand.
- 6 Enhancing Knowledge on Climate Technology and Financing Mechanisms (Asian Clean Energy Fund). This project, launched in 2011, will facilitate dialogues for and understanding of Asian countries on interrelated issues on climate change financing and climate technology to increase knowledge and advance their views on the ongoing discussions regarding climate change finance. Specifically, the project will provide a series of workshops and knowledge products focusing on areas of climate finance such as governance, access and modalities; and imparting best country experiences on balancing adaptation and mitigation financing. The increased knowledge and better awareness on climate change finance of national climate institutions of developing member countries (DMCs) would contribute to better participation in global discussions including the development of Green Climate Fund and the operations of the Technology Mechanisms.
- 7....To promote climate technology development and transfer through carbon market program of ADB. ADB launched its Carbon Market Initiative in 2006 (renamed as Carbon Market Program in 2009) which supported the CDM project development in DMCs through technical assistance on developing project design

document, facilitating project validation and verification, and through providing upfront funding for project implementation for contracting projects. During the process, ADB provided advice and support to project owners for the application and deployment of advanced technologies to achieve better GHG emission reduction benefits and demonstrate the requirement of additionality, which help climate technology development, transfer and deployment.

Key element 4: Linkages with other relevant institutional arrangements under the Convention

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Key element 4: Linkages with other relevant institutional arrangements under the Convention

Key modalities:

- a) Cross-participation in the meetings of the relevant bodies, including workshops and events organized by such bodies, or jointly organized, on issues of common interest;
- b) Inviting inputs to support the implementation of particular activities as specified in the workplan of the TEC;
- c) Providing inputs into other institutional arrangements under the Convention, in response to requests by the Conference of the Parties and/or invitations by respective institutions, to facilitate the work of those institutions;
- d) Knowledge and information sharing.

Organization name: Asian Development Bank

Key element 4: Linkages with other relevant institutional arrangements under the Convention

Actions undertaken by the organization relevant to the TEC in performing its functions:

- a) ADB is partnering with WRI to explore how the technology and financial mechanisms can work in tandem to make significant advancements in both mitigation and adaptation technologies, and will provide inputs for TEC and GCF for consideration.
- b) ADB cooperated with the Secretariat of CDM Executive Board to promote the equitable distribution of CDM projects and knowledge sharing on CDM project development with LDCs and SIDEs, which helped indirectly the technology development and transfer through CDM project development in LDCs and SIDEs.

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Key element 5: Linkages with other relevant institutional arrangements outside the Convention

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Key modalities:

- a) Offering participation in the TEC meetings as observers or expert advisers;
- b) Technical task forces, stakeholder forums and/or consultative groups;
- c) Bilateral cooperative arrangements;
- d) Web-based communication channels, including through the technology information clearing house (TT:CLEAR);

Organization name: Asian Development Bank

Key element 5: Linkages with other relevant institutional arrangements outside the Convention

Actions undertaken by the organization relevant to the TEC in performing its functions:

- a) ADB is so far the only development finance institution, including multilateral, bilateral, and national banks, actively participating in the TEC meetings. ADB is keen to contribute its views and inputs from the perspective of development and financing so that the TEC's work can be enhanced and bear tangible fruits in many countries.
- b) ADB has established a pilot Asia-Pacific Climate Technology Finance Center (CTFC) with the view to join the CTCN as a Network member once the CTCN is fully operational. The pilot regional CTFC aims to mobilize investments for technology development and transfer and will coordinate closely with UNEP who has established the pilot Asia-Pacific Climate Technology Network.
- c) ADB, as an implementing agency of Global Environment Facility (GEF) and Climate Investment Funds (CIF), has been implementing a large of portfolio climate mitigation and adaptation projects, many of which are related to advanced technology development and deployment.

Key element 6: Information and knowledge sharing

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Key modalities:

- a) The TEC should disseminate its outputs and facilitate knowledge sharing through a well-functioning information platform that responds to the information and knowledge service requirements of its potential users, including Parties and a wide range of technology actors, experts and stakeholders.
- b) The platform would be a tool used to promote the collaboration between various actors and to seek cooperation with relevant international organizations and initiatives. It would support the efforts of the TEC in the following ways: exploring opportunities for information sharing, establishing links with existing knowledge platforms and implementing joint initiatives and programmes.
- c) The TEC should consider upgrading TT:CLEAR with an expanded and more strategic focus, tailored to the functions of the TEC, and building on existing technology information networks.

Organization name: Asian Development Bank

Key element 6: Information and knowledge sharing

Actions undertaken by the organization relevant to the TEC in performing its functions:

As a regional knowledge bank, ADB promotes knowledge management and dissemination of good practices and lessons learned. A number of regional projects have as key objectives the development of knowledge products and services related to climate change, and facilitate a range of knowledge management activities in partnership with other organizations, including regional conferences and workshops.

A new ADB center on knowledge sharing and lessons learned is being established, and ADB is seeking to promote increased South-South cooperation on knowledge sharing.

ADB will also establish a pilot Clean Energy Technology Marketplace that will allow both sellers and buyers of climate technologies to register their products/needs and receive, on a selective basis, assistance from external advisors on the transaction coupled with financial assistance, where available and applicable.