Government of India Submission to UNFCCC on Technology Transfer Mechanism

I. Rationale

Enhanced mitigation and adaptation under the UNFCCC requires an acceleration in the development, deployment, adoption, diffusion and transfer of environmentally sound technologies among all Parties, particularly from Annex II Parties to non-Annex I Parties, in order to avoid the lock-in effects of non-environmentally sound technologies on developing country parties, and to promote their shift to sustainable development paths, thus enhancing the goals of the Convention. There is a critical and urgent need to provide access to technology for adaptation at a regional and national level, enabled by capacity-building and provision of new and additional funding to meet the costs of both integration of adaptation into the development process and stand-alone adaptation activities.

Currently, access to financing is limited, and should be enhanced to deliver technology development, deployment, diffusion and transfer to non-Annex I Parties. Barriers to technology transfer and trade also inhibit the adoption of environmentally sustainable technologies in non-Annex 1 Parties, highlighting the urgency for access to these technologies while balancing rewards for innovators with the common good of humankind, including jointly developed technology and intellectual property rights (IPR) sharing.

The immediate and urgent delivery of technology development, deployment, diffusion and transfer to non-Annex I Parties requires suitable responses, including a continued emphasis by all Parties on the enhancement of enabling environments, facilitating access to technology, and financing that leverages private sector financial resources. Current institutional arrangements are insufficient to deliver immediate and urgent technology development, deployment, diffusion, and transfer to non-Annex I Parties.

To address these challenges, this mechanism will build on existing activities within the Convention, including the work of the EGTT, and promote coherence by integrating expanding and ongoing activities related to technology. It will provide a means to enhance delivery on the Convention obligations on technology and related finance and capacity building.

II. Objective of a Technology Mechanism

An enhanced institutional mechanism will address all aspects of cooperation on technology research, development, diffusion and transfer in accordance with Articles 4.1(c), 4.3, 4.5 and other relevant articles of the Convention, in order to enable mitigation and adaptation under the relevant paragraphs of decision 1/CP.13.

III. Guiding Criteria

The technology mechanism will operate under the authority and guidance of the COP and be accountable to it. It shall aim to achieve:

- Accessibility, affordability, appropriateness and adaptability of technologies required by developing countries for enhanced action on mitigation and adaptation;
- Provision of full costs and full incremental costs, as per Article 4.1 of the Convention;
- Adequacy and predictability of funds for technology transfer
- Removal of barriers for technology development and transfer.

IV. Institutional Arrangements

The mechanism comprises an Executive Body and a Multilateral Climate Technology Fund operating under the Conference of Parties.

A. Executive Body on Technology

An Executive body on Technology shall be established as a subsidiary body of the Convention in accordance with its Article 7(2)(i) to enable implementing the Convention by enhancing action on technology development and transfer to support mitigation and adaptation. This subsidiary body shall comprise government representatives, (elected by the COP and with balanced regional representation, who are experts on matters related to technology transfer, and be open to input from other experts. The subsidiary would comprise and be supported by:

- i) Strategic Planning Committee to develop strategy; provide regular guidance; assess and elaborate technology-related matters; continuously evaluate progress; and develop updates for the Technology Action Plan, as described below, for regular intervals.
- **Technical Panels** to generate and compile current expert information related to: capacity building; policies and measures; intellectual property cooperation; sectoral, cross-sectoral, and cross cutting cooperation; assessment, monitoring and compliance; and other necessary topics. The Executive Board may establish additional technical expert committees, panels or or working groups to or other bodies to provide scientific, technical, and operational expertise, and to consolidate and provide advice to the Executive Body and COP in order to assist it in the performance of its functions. In this context, it shall take fully into account the consideration of regional balance.
- **Verification Group** to verify the financial and technological contributions made to the mechanism in accordance with the overall "measurable, reportable, verifiable" requirement of Decision 1/CP.13.
- **Secretariat** to support and facilitate the activities of the Executive Body. The secretariat will compile and prepared a final report on financial and technological contributions made and reported by Parties to the technology mechanism in accordance with the overall "measurable, reportable, verifiable" Decision of the 1/CP.13.

B. Multilateral Climate Technology Fund (MCTF)

This fund will provide technology-related financial requirements as determined by the Executive Body. The fund will operate under the COP as part of the enhanced multilateral financial mechanism described in the Indian proposal on financial architecture.

- The MCTF shall be financed by assessed contributions from Annex II parties.
 Contributions to the mechanism shall be additional to other financial transfers to non-Annex I parties and shall meet the costs incurred by such Parties
- An agreed proportion of contributions by developed country parties and other parties included in Annex II of the Convention to bilateral and regional co-operation may be considered as contributions to the MCTF, provided that such co-operation is consistent with the policies and scope of the mechanism.
- Financial transfers to the MCTF shall be counted as measurable, reportable and verifiable commitments under para 1.b(ii) of the Bali Action Plan. Any funding not under the authority and guidance of the UNFCCC shall not be regarded as the fulfillment of commitments by developed countries under Art. 4.3 of the Convention or Decision 1/CP.13.
- The MCTF shall cover, inter alia, eligible costs of activities approved by the Executive Body; administrative costs of the Executive Body, Secretariat, and Trustee or Trustees; and costs associated with other specific decisions of the Conference of the Parties.
- In the context of the enhanced multilateral financial mechanism proposed by India, the MCTF shall be managed by a trustee or trustees, selected through a process of open bidding, who shall have fiduciary responsibility and administrative competence to manage the MCTF, and shall hold in trust, the funds, assets, and receipts that constitute the Fund, and shall comply with the principles and modalities for their management and disbursement as stipulated by the Conference of the Parties.

V. Technology Action Plan

A Technology Action Plan shall serve as a starting point for the work of the executive body. It will include clear actions and dates for the first three years, and will be updated for successive three-year periods. To realize the full potential of technology, the Action Plan shall support all stages of the technology cycle, including:

- **Research.** The Action Plan will accelerate research and invention through scientific and technical cooperation at all levels, including that of scientists and institutions
- **Development.** The Action Plan **will** accelerate the rate at which technologies are developed and brought into effect.
- **Transfer and diffusion.** The Action Plan will ensure financing for technology transfer (including all available means to ensure the affordability of technologies, products and related services).

The Technology Action Plan will define specific policies, actions and funding requirements for all relevant technologies, under the following classifications

- **Public domain technologies.** The Action Plan will Identify needs, and establish an international cooperation system to ensure lowest cost options, as well as transferring know-how to use and maintain the technologies; to adapt them to local conditions, including endogenous technologies.
- Patented technologies. The Action Plan will ensure that privately owned technologies are available on an affordable basis including through measures to resolve the barriers posed by intellectual property rights and addressing compulsory licensing of patented technologies. Technologies with shared ownership (government and private) will be made available on an affordable basis by facilitating transfer of the government proportion on a reduced or no-cost basis. Technologies that are government owned will be made available on an affordable basis by facilitating transfer at reduced or no-cost basis.
- **Future technologies.** The Action Plan will support the establishment of national and regional technology excellence centers and will reinforce north-south, south-south and triangular cooperation, including Joint Research and Development.

VI. Eligible Activities

The mechanism will cover technologies in all relevant sectors and endeavor to remove barriers to effective technology development, deployment, diffusion and transfer. It will articulate with the overarching financial mechanism of the Convention to secure necessary financing. The following list of activities and costs eligible for support by the mechanism is indicative and may be modified by the COP at any time.

Activities eligible for support include, inter alia:

Full Costs

- Promotion, facilitation and implementation of activities along the entire technology cycle to enable the accelerated adoption of ESTs;
- Support for research, development, manufacture, commercialization, deployment and diffusion of technologies for adaptation and mitigation in accordance with Decision 1/CP.13.
- adaption technologies to address the adverse effects of climate change and finance the removal of barriers to the large-scale transfer of technologies for adaptation;
- capacity building to manage and generate technological change, enhance absorptive capacity, create enabling conditions in developing countries, inter alia, costs of:
 - Research, development and demonstration of new technologies
 - Enhancing h8uman and institutional capacity;
 - Guarantees on foreign direct investment for Environmentally Sound Technologies

Incremental Costs

• Commercialization of new and emerging technologies, inter alia:

- Venture capital, with public investment leveraging private capital markets for emerging technologies;
- Research, development, and demonstration of new technologies, financed by venture capital and other sources
 - Joint technology development
- Creation of manufacturing facilities for EST, including low-GHG emission technologies, inter alia, costs of:
 - Compulsory licensing, cost of patents, designs, and royalties;
 - Conversion of existing manufacturing facilities or of establishing new facilities:
 - Research and development activities, including joint research, development, design, and demonstration;
 - Technology adaptation;
 - Retraining and dissemination of know-how;
 - Operation; and
 - Monitoring and verification.
- Procurement of low-GHG emission technologies, including software and hardware, inter alia:
 - Cost of premature modification or of replacement of existing equipment, as well as the cost of new equipment;
 - Cost of retraining and dissemination of know-how;
 - Cost of technical assistance for the design, installation, and stable operation of the technology;
 - Cost of fuel and other operational costs;
 - Cost of monitoring and verification.

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