

China's Proposal on Innovative Mechanism for Development and Transfer of ESTs

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Outlines

- Concepts on ESTs
- Proposal on International Mechanism for D&D&T of ESTs
 - Institutional Arrangement
 - Innovative Financial Mechanism: MTAF
 - Performance Assessment and Monitoring

Concept: ESTs may only be effective when they work as a whole package

- Hardware: devices, equipment, process, and complementary technological system, etc.;
- Software: awareness, knowledge, information, know-how, IPRs, designs, etc;
- Human resources: well trained and qualified;
- Financial resources to make D&T&T happen, and
- Enabling environment: regulating framework by both developed and developing countries, appropriate institutional arrangement; and infrastructure

Concept: Governments play important and different roles in the whole cycle of ESTs

Stage of tech dimensions	Invention R&D	Innovation R&D (demo)	Diffusion and Deployment
Stakeholder	Research institutes, Universities, Government	Large company, Research institute, Universities, joint venture, gov't	Companies, Brokers, government
Financial resources	Public finance for R&D	Public finance, Company invest. Venture capital	company investment, Bank, stock, bonds, public finance
Policy instruments	Subsidies, Planning, awareness	Subsidies, planning, norms, permit, standard, directorate,	Taxation, subsidies, pricing, promoting competition, permit, norms, compulsory licensing, patent pool...

Why we need innovative mechanism?

- Request by Article 4.5 and Bali Action Plan to address global externality
- Crucial roles of ESTs
- Urgent needs for D&D&T of ESTs (lock-in)
- Little progresses made since 1994
- barriers of TT to be overcome

We need to speed up D&D&T of ESTs to meet climate challenge

Major Components of the Innovative Mechanism for Development and Transfer of ESTs

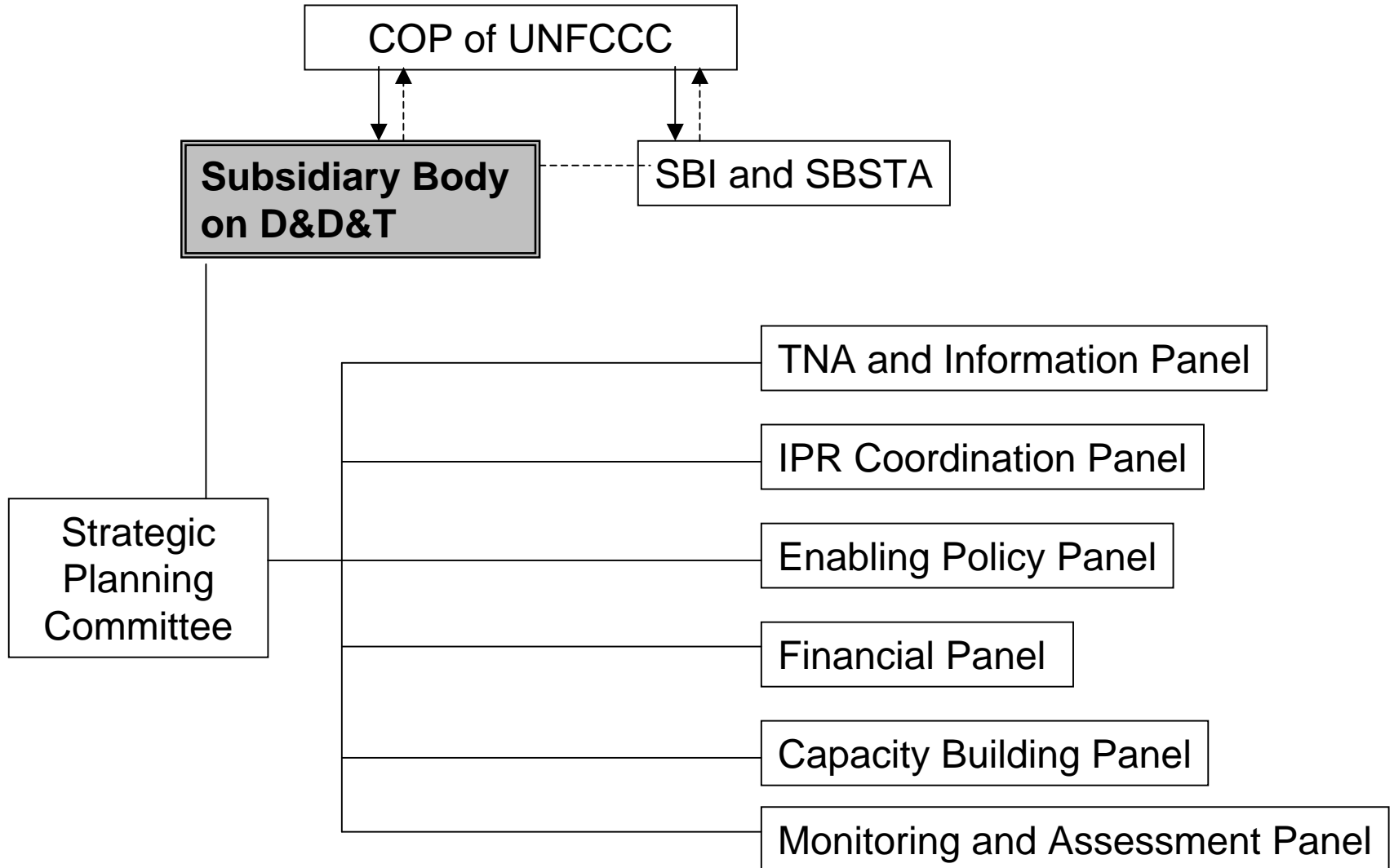
- Institutional Arrangement: Intergovernmental Body under UNFCCC
- Financial Mechanism for D&D&T of ESTs
- Performance Assessment and Monitoring

Institutional Arrangement 1

- Enhanced mechanism under UNFCCC: need a more effective and implementation-oriented/operational body to:
 - Provide advice, guidance, and recommendations;
 - Coordinate actions by different international stakeholders and governments' policies;
 - Guide and supervise utilization of special TT fund based on public finance;
 - Promote communication and info/knowledge sharing; and
 - Monitor and assess the performance and progresses.
- Panels under the UNFCCC body

Institutional Arrangement 2

Organizational Structure



Institutional Arrangement 3

With priorities on:

- Policy dialogues and coordination for better incentives to private sectors and markets;
- Financing basic research and R&D; and
- Direct transfer and diffusion of publicly owned technologies.

Institutional Arrangement 4

Policy coordination to provide incentives for private sector

- Tax exemption for ESTs exports of companies in developed countries;
- Subsidies to encourage R&D and transfer of ESTs;
- Favorable conditions for EST-related export credits: guarantee for technology export credits, subsidies, etc.;
- Removal of technology export bans; and
- Other regulations, policies and measures.

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Multilateral Technology Acquisition Fund (MTAF)

- A PPP framework for financing D&D&T of ESTs may be feasible by linking public and private finance;
- Significant amount of public finance from developed countries should play a leading role in guiding and attracting private financial resources into D&D&T of ESTs
- A special fund based on public finance from developed countries need to be established and used to create incentives to private sectors through various policy instruments with impacts on capital market
- A range of financial instruments may be applied for financing D&D&T of ESTs.
- Venture capital might be a typical form for private investment in ESTs

Financial Flowchart for the Proposed Financial Mechanism

Public Finance from Developed Countries: Key Source Items

1. R&D budget
2. Revenue from energy and environmental taxes; and
3. Revenue from auction of carbon credits

MTAF based on Public Finance
from Developed Countries

Guiding Incentives:

- tax exemption,
- subsidies and
- carbon market development

In forms of Venture Capital

**Private funds
in capital market**

Technology Market
for transfer and
development of
ESTs: R&D, Demo,
Diffusion and
Deployment

Performance Assessment & Monitoring

- Speed of technology flow
 - Considering to avoid lock-in effects in developing countries
 - Needed time for innovation (R&D) and diffusion
- Range of technology flow
 - Covering most of the meaningful sectors
 - Larger market share and penetration
- Effectiveness
 - Emission reduction
 - Affordable and least cost and expected benefits

Thank you for your attention!

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