

Real World Experience on Technology Transfer

TECHNOLOGY MECHANISM:

WAY FORWARD FOR TECHNOLOGY TRANSFER UNDER the UNFCCC

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Outline

- Background: Convention Milestones
- Bali Action Plan
- The Cancun Agreements: Key elements
- The Technology Mechanism: TEC and CTCN
- Technology needs and efforts to support action on ground action
- Towards a fully operational Technology Mechanism in 2012



Background: Convention Milestones

- The UNFCCC was signed in Rio in 1992.
- The 1st COP took place in Berlin in 1995. *It launched the Berlin Mandate, the two year process that led to an agreed outcome on the Kyoto Protocol.*
- The Kyoto Protocol was adopted by COP 3 in 1997. *It established, for the first time, limited emission reductions in developed countries and launched a carbon market through CDM, JI and emissions trading.*
- The Kyoto Protocol was made operative at COP 7 in 2001 (Marrakech).
- COP 13 (2007) in Bali launched the Bali Road Map Process with the goal of an agreed outcome towards a post-2012 climate change agreement.
- COP16 (2010) : the Cancun Agreements (decision 1/CP.16)
- Durban Conference: Towards a post-2012 climate change agreement



- Bali Action Plan (BAP) includes five pillars:
 - Shared vision for long-term cooperative action
 - Enhanced national/international action on mitigation
 - Enhanced action on adaptation
 - Enhanced action on technology development and transfer to support action on mitigation and adaptation
 - Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation

The Cancun agreements: Key elements

- Articulates a global goal of keeping temperature increase under 2 degrees, as well as a review of that goal on the basis of best available science
- Established a comprehensive institutional framework to support implementation of action on mitigation and adaptation and related support
- Launches implementation steps on various elements of the Bali Action Plan
- Provides direction to further work by articulating further tasks to:
 - a) AWG-LCA:
 - b) SBI and SBSTA

The institutional framework under decision 1/CP.16

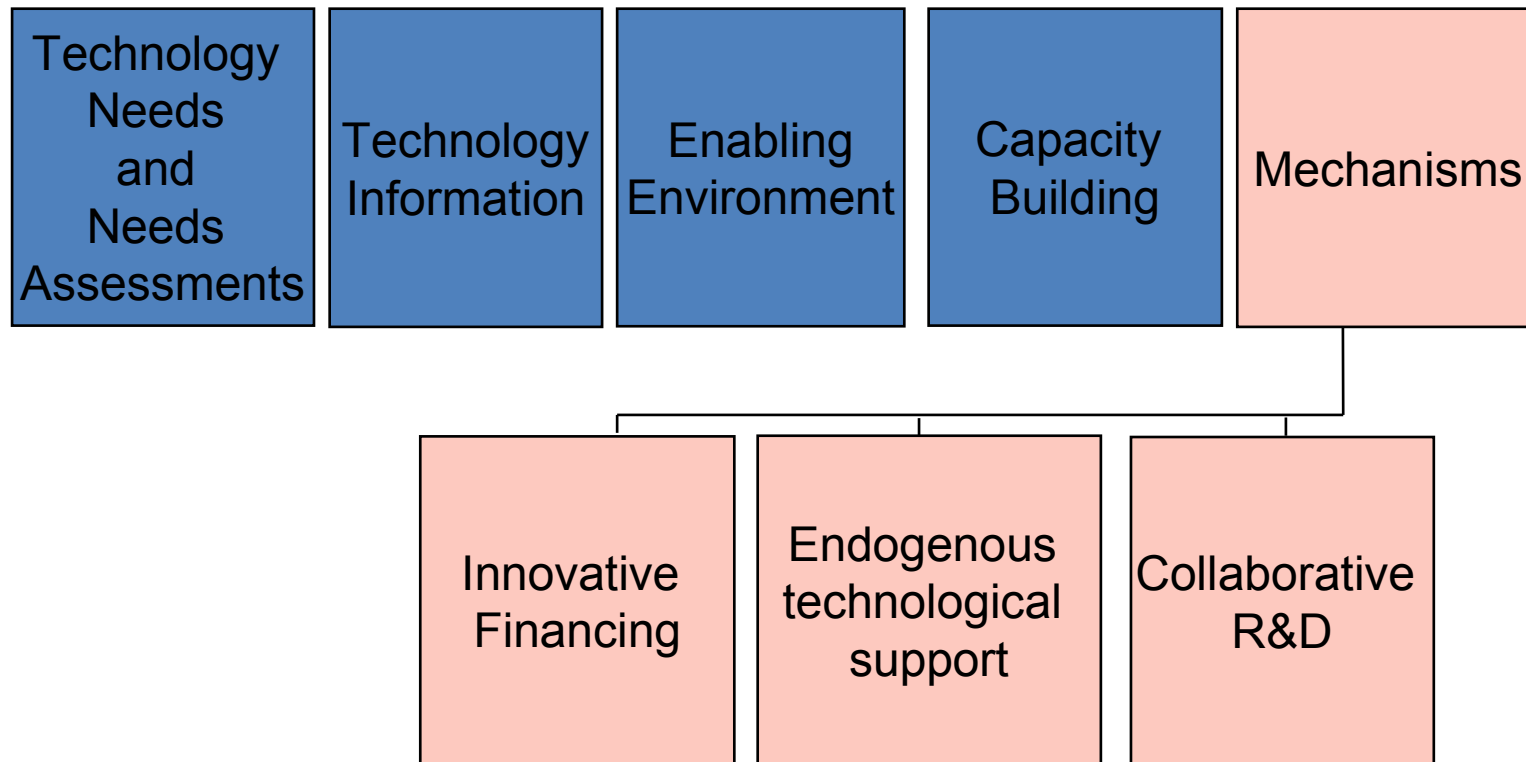
- Adaptation Framework including an Adaptation Committee
- Registry of national appropriate mitigations actions by developing countries (NAMAs)
- Green Climate Fund to be designed by a Transitional Committee
- Technology Mechanism consisting of a Technology Executive Committee and Climate Technology Centre and Network
- 1/CP.16 contains further undertakings for each institution

Technology Mechanism

- Cancun Agreements established a Technology Mechanism, consisting of:
 - Technology Executive Committee (TEC) as the policy and strategy arm of the Mechanism
 - Climate Technology Centre and Network (CTCN) to provide direct support to technology actions in developing countries to address climate change
- Technology Mechanism will play a key role in helping developing country Parties to prepare nationally appropriate mitigation actions and adaptation plans
- Technology Mechanism will be a very practical tool to build technological capacity within developing countries

Technology Mechanism:

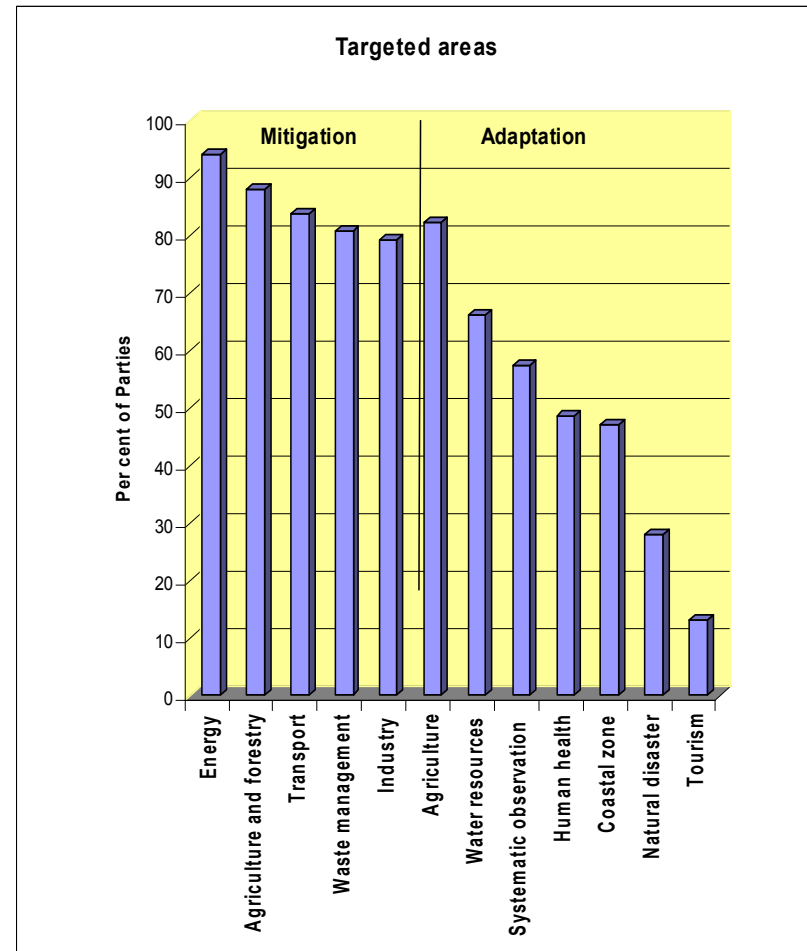
Buidling on existing Technology Transfer Framework established by Marakesh Accord (decision 4/CP.7)



Technology Needs Assessments: country-driven activity by developing countries

Mitigation and adaptation related sectors

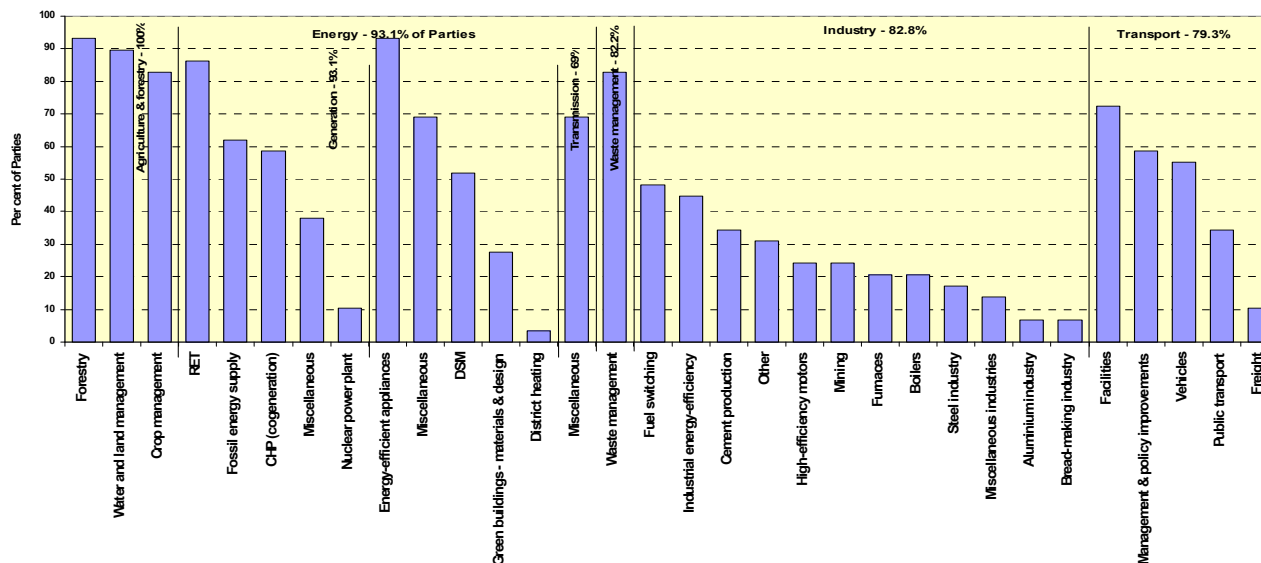
- Most commonly identified **mitigation related sectors** included energy generation, agriculture and forestry, and transport;
- Most commonly identified **adaptation related sectors** contained agriculture and forestry, water management, systematic observation and monitoring;



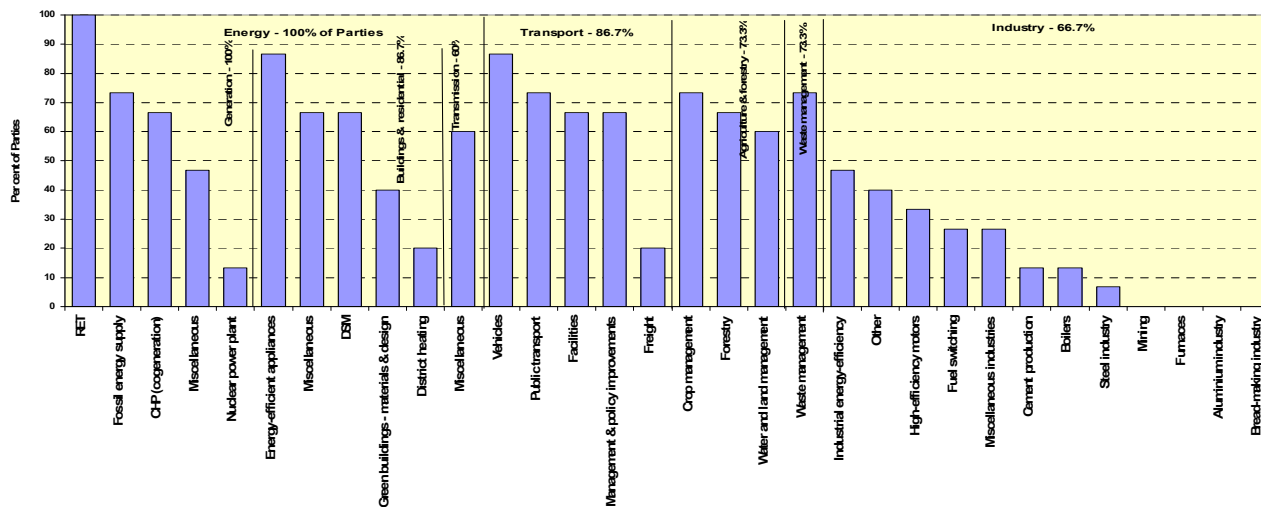


Regional analysis – sectors and technologies related to mitigation

African Parties addressed technology needs in **agriculture, forestry and land use sectors**, followed by the **energy sector** (including increasing of the use of RET, electrification of rural areas), **waste management, industry and transport** as their main priority.



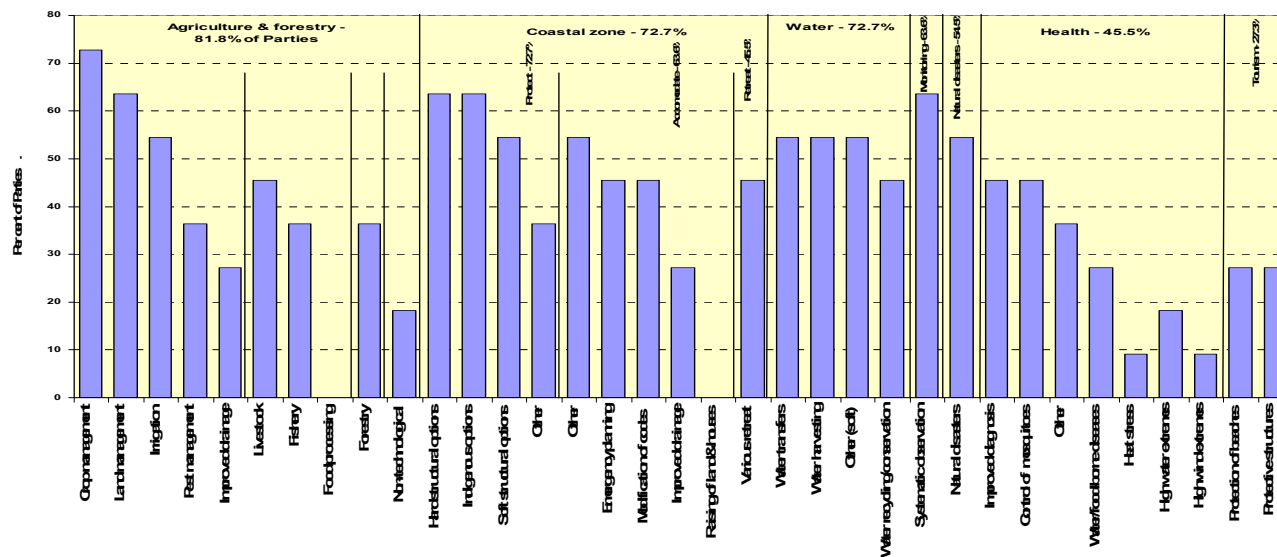
Parties from **Latin America and the Caribbean** identified their technology needs mostly in the **energy sector**. They identified the need to foster **clean energy technologies**, such as RET, **lower carbon fuels** and **high efficiency power generation**.



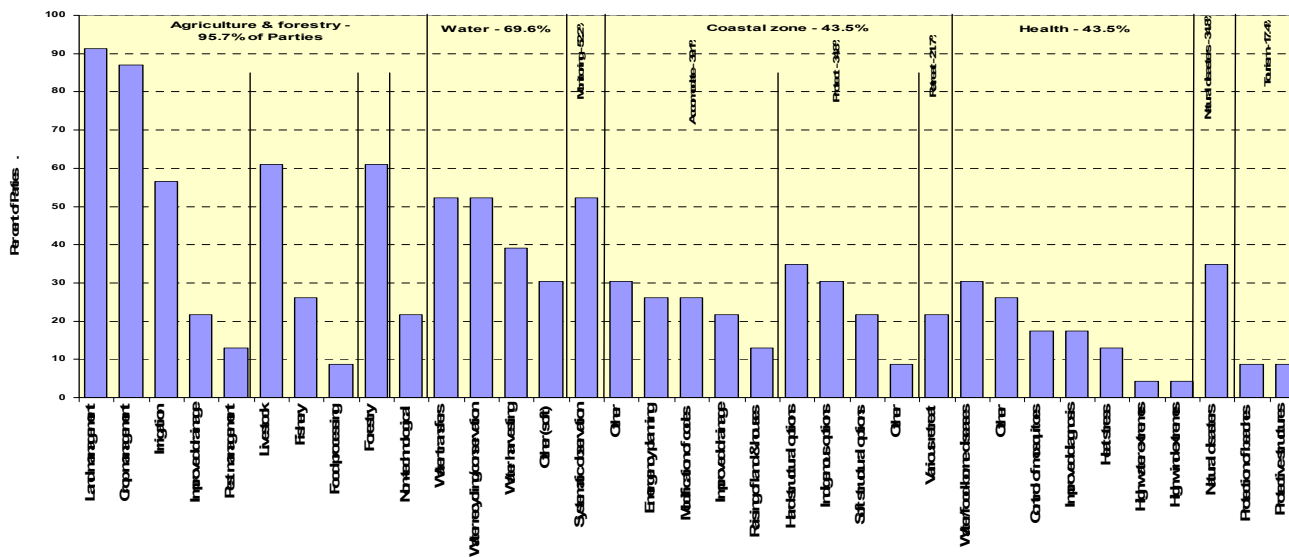


Regional analysis – sectors and technologies related to adaptation

Majority of the **LDCs** addressed adaptation technology needs for modernization of the **agriculture and forestry** sectors. LDCs also identified water related needs, such as **water transfers, recycling and conservation**, and technologies for **systematic observat. and monitoring**, **health** and **coastal zone** as the most appropriate.



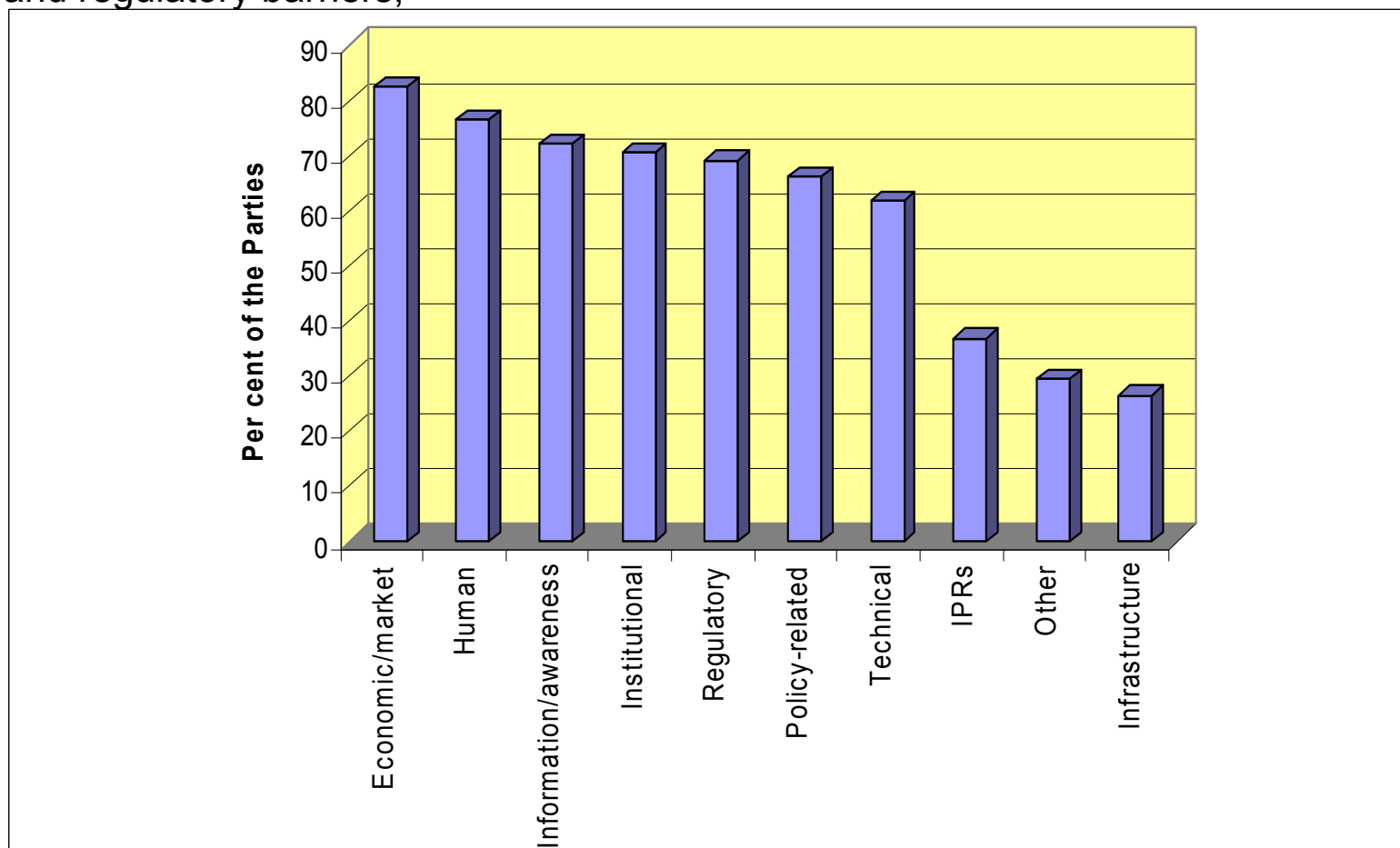
Many new ESTs relevant to the sustainable development of **SIDS** are now becoming available. Some SIDS identified **agriculture, coastal zone, and water management** as their main adaptation related sectors. **Crop and land management technologies, systematic observation and monitoring technologies** were considered key to successfully deal with natural disasters.





Barriers to technology transfer

The main barriers to technology transfer were **economic and market barriers**, followed by human capacity, information and awareness, institutional, policy related and regulatory barriers;





United Nations Framework Convention on Climate Change

The new TNA guiding tools:

- Took into account the need to implement the results of the TNAs;
- Were designed to assist Parties to conduct and prioritize their technology needs and prepare technology transfer projects for financing



Green economy

Transformation to a low emission and climate resilient society

- Requires the acceleration in the development, deployment, diffusion and transfer of environmentally sound technologies and know-how to facilitate, support and catalyze the full, effective and sustained actions at the global, regional, and national levels, from now, up to and beyond 2012.

Pathway for future technologies is clear.

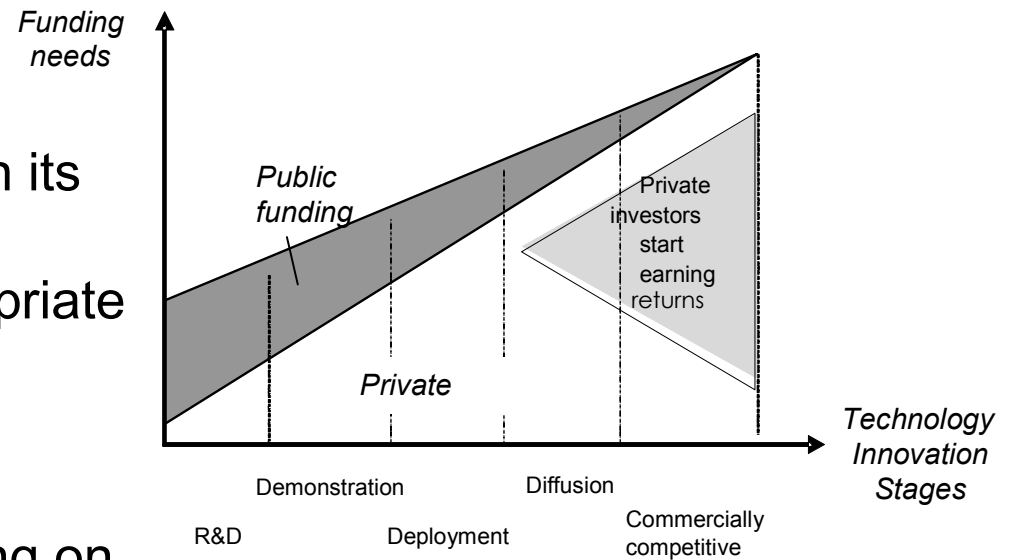
- We need a global focus on four key sectors: power, transport, buildings and industry
- Action is therefore required to create markets for innovation and diffusion that work in a globalize world
- Although we have the technologies we need through to 2020, new technologies – many available but not yet commercially proven – will be needed to meet the more challenging long-term goals.
- As we deploy existing solutions, we must invest in future technology options, necessary for them to operate at scale.

Pathway for future technologies is clear.

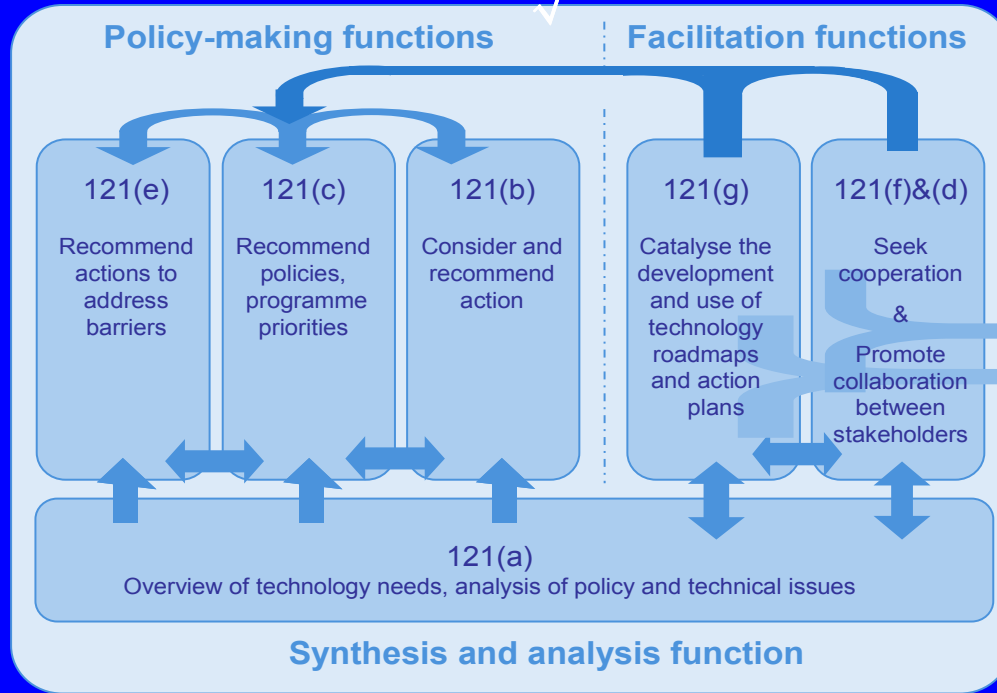
- Instead of locking in high-carbon infrastructure, countries must agree now to speed up the deployment of technologies with potential for long-term carbon reduction.
- Without strong national and multilateral signals, the industry will not make the necessary investments to meet these goals
- The Cancun agreements put in place a number of policy frameworks that enable this to happen

Financing Technology Innovation:

- Financing support by various actors is essential
- In order for a technology to reach its mitigation potential, the type and source of funding must be appropriate to stage of maturity
- Role of public sector and private sector finance changes depending on stage of development
- An acceleration of technology development in all sectors would require increased public funding for R&D and demonstration to leverage private finance



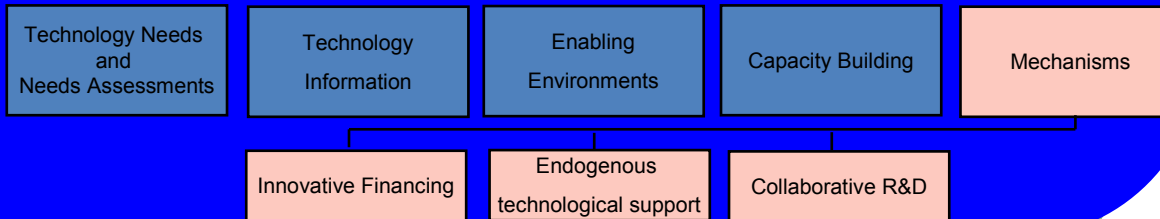
TEC Governance Model



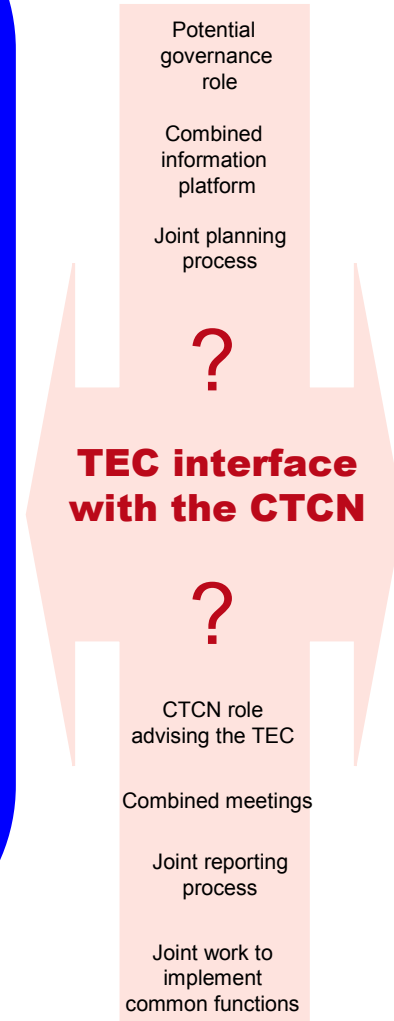
TEC Strategy and business plan?

TEC Functions

TT Framework



Modalities and Procedures?



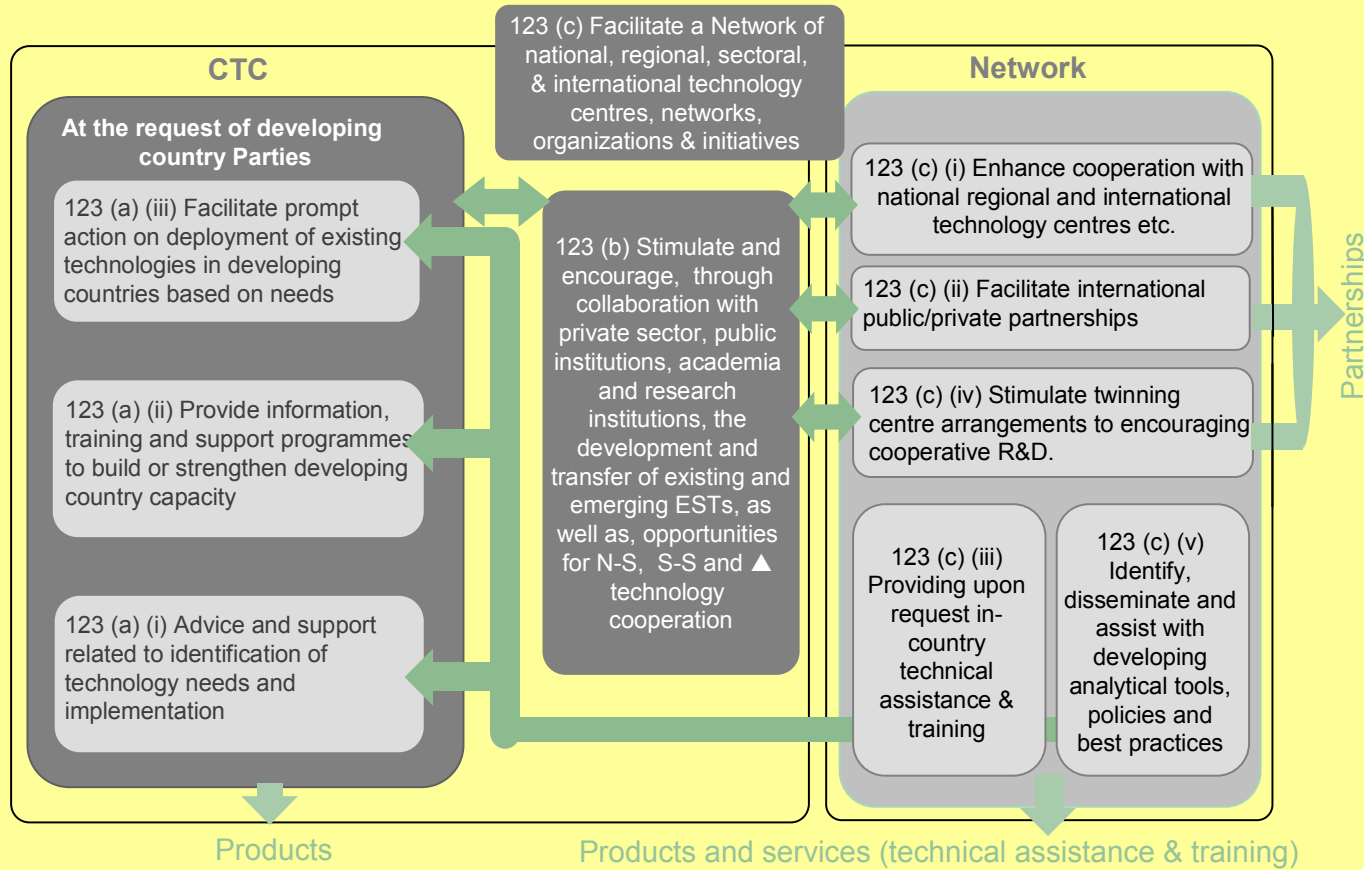
CTCN Strategy and business plan

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CTCN Governance Model?

Relationship between CTC and Network?

CTCN Functions ✓



Terms of reference +

Structure of the Network?

Expert Workshop on Technology Mechanism (Bangkok, April 2011): Some highlights

- Start small with the flexibility to grow in response to needs.
- The importance of the TNA process for identifying needs and the future of the TNA process to support LEDS, NAMAs and NAPs.
- The key role that national institutions will have in the Technology Mechanism.
- The importance of regional dimension of the CTCN.
- That the Network must be flexible and capable of harnessing all the existing efforts related to technology development and transfer.
- That the connections between the Technology Mechanism and financing will be crucial for successful implementation.
- That the private sector must be actively engaged and contribute to the Technology Mechanism at all levels.

Towards a full operational Technology Mechanisms in 2012

- Work programme under the AWGLCA in 2011 to define:
 - a) The relationship between the TEC and the CTCN, and their reporting lines;
 - b) The governance structure and terms of reference for the CTCN;**
 - c) The procedure for calls for proposals and the criteria to be used to evaluate and select the host of the CTCN;**
 - d) The potential links between the Technology Mechanism and the financial mechanism; and
 - e) Consideration of additional functions for the TEC and CTCN.



For more information

www.unfccc.int

Thank you