Enhancing climate technology action through the UNFCCC

Intellectual property and its role in the generation and diffusion of green technologies WTO regional workshop Hong Kong, 11 to 13 November 2014



Mr. Kunihiko Shimada Vice-Chair of the Technology Executive Committee

Introduction

- United Nations Framework Convention on Climate Change (UNFCCC)
- Climate technology in UNFCCC process
- Technology Mechanism
 - Technology Executive Committee
 - Climate Technology Centre and Network
- Technology discussions under ADP
- Summary



United Nations Framework Convention on Climate Change

What is UNFCCC?

Multilateral forum for countries to discuss action on climate change

1992 - Convention agreement. Ultimate objective:

"Stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system"

1994 - Entered into force. Now near universal membership: 190+ Convention Parties

1997 - Kyoto Protocol. Agreement with legally-binding emission reduction targets

2009 - Limit global temperature rise to < 2 degrees Celsius

2012 ongoing - ADP. Post 2020 action, pre-2020 workplan



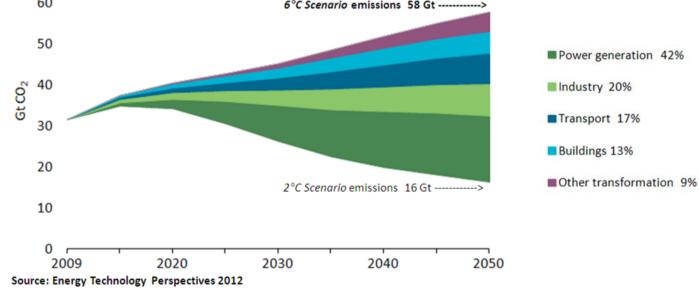
To achieve ultimate objective of Convention, climate technologies have central role to play

What are climate technologies?

Climate technologies – mitigation of greenhouse gases

e.g. solar PV, efficient lighting, wind turbines, hydropower, biomass/biogas

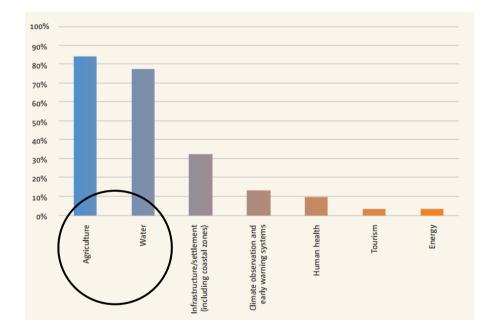
60 6°C Scenario emissions 58 Gt -----50 40





• Climate technologies – adaptation to adverse effects of climate change

e.g. drought resistant crops, improved agricultural practices, rain-water harvesting, water catchments





• Climate technologies - Both hard technologies (e.g. wind turbines) and soft technologies (e.g. energy efficient practices)



How are technology issues considered in UNFCCC process?

"All Parties ... shall promote and cooperate in the <u>development, application and diffusion, including</u> <u>transfer, of technologies, practices and processes</u> that control, reduce or prevent anthropogenic emissions of greenhouse gases..." Art. 4.1(c)

"The developed country Parties ... shall take all practicable steps to promote, facilitate and finance, as appropriate, <u>the transfer of, or access to, environmentally sound technologies and know-how</u> to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention." Art. 4.5

 Since 1995, Parties have continually considered how to enhance climate technology <u>development</u> and <u>transfer</u> => To support enhanced action on climate change



Major milestones

2001 - Technology Transfer Framework

• Technology needs assessments, technology information, enabling environments, capacity building, mechanisms for technology transfer

2007 - Bali, COP 13

- Recommendations for enhancing Technology Transfer Framework
- Mechanisms for technology transfer: innovative financing, international cooperation, endogenous development of technologies, collaborative R&D

<u> 2008 – Poznan Strategic Programme</u>

- GEF programme to promote investment in technology transfer
- Help developing countries to address their climate technology needs







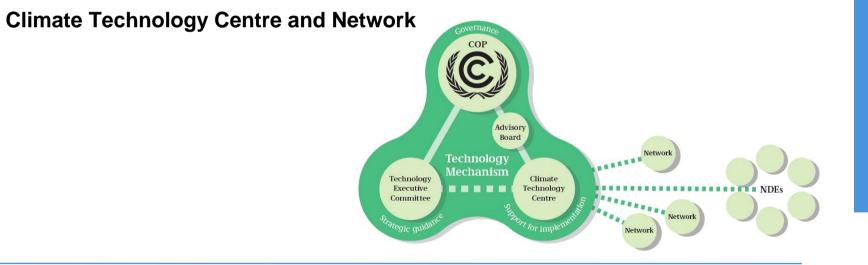




Major milestones

<u>2010 – Technology Mechanism</u>

- Mechanism to enhance action on technology development and transfer
- Technology Executive Committee





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Technology Mechanism

Technology Executive Committee

Policy arm of Technology Mechanism



- Undertakes analysis and provides policy recommendations on climate technology
- 20 member executive committee with balanced regional representation
- Currently implementing 2014-2015 rolling workplan
- Workplan areas include:
 - Technology needs assessments, climate technology financing, enabling environments and barriers, technologies for adaptation and mitigation, stategic and emerging issues



Regarding IPRs, the TEC undertakes work on <u>enabling environments and barriers</u> to climate technology (this may include IPRs):

- 2012 Two thematic dialogues on enabling environments and barriers
 - Highlighted issues
 - Identified challenges and opportunities, good practices and lessons learnt
- 2012 Key messages to COP on this area, including:

"Intellectual property rights were identified as an area for which more clarity would be needed on their role in the development and transfer of climate technologies based upon evidence on a case by case basis."

 Jun. 2014 – Subsidiary bodies invited TEC to strengthen linkages with organizations which undertake work relating to enablers and barriers



Work on enabling environments and barriers

- Oct. 2014 Workshop on national systems of innovation. Workshop sessions:
 - I. How to strengthen national systems of innovation
 - II. Issues related to knowledge transfer between national systems of innovation (including clarity about role of IPRs)
 - III. Knowledge transfer mechanisms: ways to enhance collaboration





Work on enabling environments and barriers

- Oct. 2014 Workshop on national systems of innovation (cont.). Participants noted:
 - Climate innovation is driver of economic growth and well-being
 - National systems of innovation are broad and complex and have key role to play in enhancing national climate action
 - Strengthening national systems of innovation:
 - Strengthen actors, linkages between actors and institutional context
 - Network with stakeholders, share knowledge, develop shared vision and support experimentation
- 2015 Additional work on enabling environments and barriers (part of 2014-2015 rolling workplan)
 - TEC Brief on national systems of innovation
 - Key messages to COP
 - Further work on this area



Related to IPRs, the TEC also undertakes work on technology needs assessments (TNAs):

- The technology needs of developing countries
- TNA third synthesis report, principal barriers primarily:
 - Economic and financial
 - Technical
- UNFCCC secretariat presentation later in workshop to discuss in more detail

Figure 8: Reported barriers to the development and transfer of technologies for adaptation (percentage of Parties)





Technology Mechanism

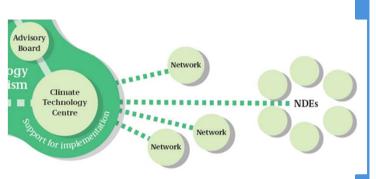
Climate Technology Centre and Network

- Implementation arm of Technology Mechanism
- Consists of:
 - Climate Technology Centre (hosted by UNEP)
 - Climate Technology Network (currently 20 members)

Three core services

1. Respond to requests from developing countries

- Developing countries may submit requests for technical assistance to CTCN
- Currently responding to 24 requests
- More than 100 countries have nominated their national designated entities





Climate Technology Centre and Network

2. Foster collaboration and access to information

- Online open data platform: access to resources, tools, reports, information
- Developing a knowledge management system with Norwegian DNV GL

3. Strengthen networks, partnerships and capacity-building

- 7 training regional workshops
- Programme for least developed countries

Status of Network

- Currently contains 20 network members, more applications expected
- WIPO is CTCN network member
- Developing countries may submit requests to CTCN on issues related to IPRs (in context of climate technology)

=> Could be addressed by network member WIPO



Issues under discussion in ADP

2012 ongoing - Ad hoc working group on Durban platform for enhanced action (ADP)

- 1. Post 2020
 - Develop by 2015 an outcome with legal force applicable to all Parties
 - Come into effect in 2020
- 2. <u>Pre 2020</u>
 - Explore how to enhance mitigation ambition to close pre-2020 ambition gap
- 2015 Countries will finalize ADP elements in Paris, December 2015

Technology in ADP

- Countries discuss climate technology development and transfer in context of ADP
- Some countries mention strengthening Technology Mechanism to further enhance technology action, both pre and post 2020
- Discussions will continue at COP 20 in Lima



Summary

- In the UNFCCC, IPRs are raised in context of climate technology:
 - o **Development** of climate technologies
 - o i.e. role of IPRs in stimulating and promoting innovation
 - **Transfer** of climate technologies to developing countries
 - $\circ~$ i.e. role of IPRs in facilitating and promoting access to climate technologies
 - Both elements are necessary (**and need to be enhanced**) to effectively mitigate greenhouse gases (< 2 degrees) and adapt to adverse effects of climate change



Summary

• The Technology Mechanism supports countries on issues related to climate technology development and transfer. This may include IPRs:

Technology Executive Committee

- Undertakes work (which may be related to IPRs)
- Identifies policy recommendations to enhance climate technology action

Climate Technology Centre and Network

- 3 core services, including responding to developing countries requests
- Network member WIPO may support developing countries on IPR matters



Summary

<u>ADP</u>

- Countries continue to discuss climate technology development and transfer in context of the ADP
- Some countries have mentioned strengthening the Technology Mechanism to further address critical issues related to technology
- Discussions will continue at COP 20 in Lima



United Nations Framework Convention on Climate Change

Thank you!



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