# 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



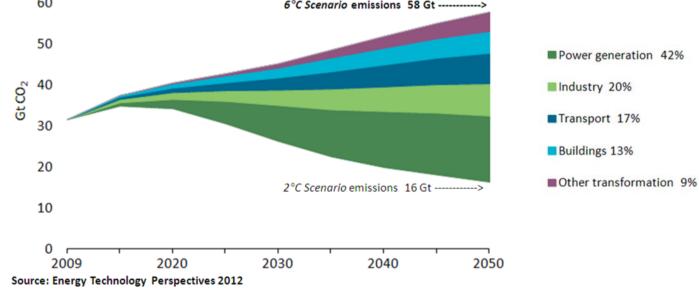
To achieve ultimate objective of Convention, climate technologies have central role to play

#### What are climate technologies?

Climate technologies – mitigation of greenhouse gases

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

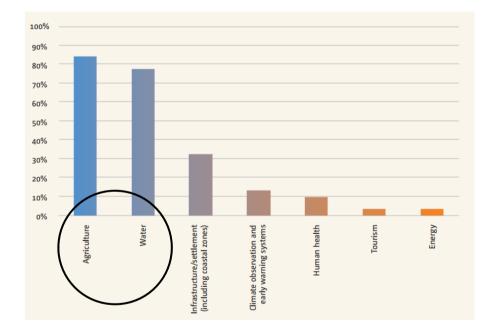
60 6°C Scenario emissions 58 Gt -----50 40





• 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







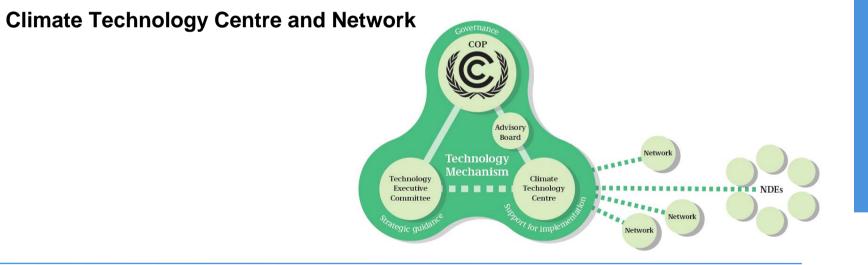




#### Major milestones

<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**

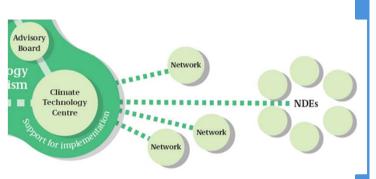
#### Climate Technology Centre and Network

- 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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