



December 4, 2012

"Green Innovation: Examining Experiences in Low-Carbon Technology Transfer and Green Patenting" Side Event Report

Overseas Environmental Cooperation Center, Japan (OECC) Prepared by Jiro Ogahara

This is a report of a side event held at the 18th Session of the Conference of the Parties to the UNFCCC (COP18) from November 26th to December 7th 2012, in Doha, Qatar.

- Title: "Green innovation: examining experiences in low-carbon technology transfer and green patenting"
- Date : 16:45-18:15, Thursday, 29 November, 2012
- Organizer(s) : Georgetown University
- Venue : Side Event Room 6, Qatar National Convention Centre
- Presenter(s) : Joanna Lewis (Georgetown University), Ahmed Abdel Latif (ICSTD), Ancha Srinivasan (ADB)
- Abstract: This event featured new research from Georgetown and ICTSD for green innovation and implications for the climate negotiations. Presentations examined new model of low-carbon technology transfer and new schemes to fast track new green patent applications with examples from multiple countries.

Summary

1. Joanna Lewis. Assitant Professor of Science, Technology and international Affairs, (Georgetown University): "Low-carbon leapfrogging? - Examining cases of wind power technology transfers"

- Lewis presented a scenario in which developing countries can access low carbon technology and reinsert in the path of development. She opened the session making the following question: Leapfrogging. Is it possible?
- She presented the case of wind technologies and analyzed market share and top companies. She found that main companies are located in China, India and South Korea.
- She presented case studies of Suzlon (India) and Goldwind (China). Both leading manufacturers in their home markets and expanding globally. Both started in the 90s, which reflects how they have surpassed other developed countries in the last few years.
- Technology transfer in these companies were basically made by licensing, mergers &



acquisitions, and joint development.

- She explained in detail how both companies are connected in major webs in the area, and demonstrated that this was the way how they developed their knowledge base.
- She stated that in the case of China, technology transfer was occurring via commercial channels but although they still have opportunitites for technology improvement it was clearly a success story.

2. Ahmed Abdel Latif (ICSTD): "Fast tracking schemes for green patents: a boost to clean energy innovation"

- He introduced the concept of fast-tracking (FT) schemes for green patenting and the state of this option in several countries.
- He explained that the main impact in IPR is that some patent offices are accepting FT patent applications for green technologies. They will reduce the time to process them and products will arrive to the market quicker.
- Among its findings, he explained that FT programmes have multiplied since 2009. Some of the countries conducting this scheme are UK, US, Australia, Brazil, China, and Japan
- He explained that this scheme is allowing faster knowledge diffusion. He found that compared with other patents, FT patents received twice as many citations.
- He concuded saying that there is a demand for FT programmes. The problem was that there is a difficulty to identify green patents (2 patents out of 3 are not categorized as green patents using the usual OECD/EPO patent classification codes.)

3. Ancha Srinivasan (ADB): "Reactions and lessons for implementations"

- He presented the overall strategy of ADB in relation to support to development and transfer of technologies in the region, in three modalities: Financing, Development of Partnerships, and Programs
- One of the priorities is to promote green technologies in Asia, but he recalled that so far, investment is still very limited. Although there are some innovations hot spots, it does not mean that innovation moves directly to diffusion, which indicates that in many developing countries, initial stages of the cycle need to be supported, and ADB is trying to support deployment as well.
- He highlighted that there is a need for developing new business models and approaches for investment. The fact that investors perceive risks are very high, and also there is country related risks as well, which is one reason why investment is limited.



- He listed major limitations such as 1) Limited finance, most of the investment in wind or solar in some extent and biomass, but very little in energy efficiency; 2) Substantial gaps, because of limited technology capacity in relation to green innovation; 3) Limited collaboration NS and SS, and limited emphasis on integration from innovation to deployment; 4) Limited involvement of private sector and limited sharing of IPR
- Some approaches to spark innovation are the creation of new models of financing and IPR sharing, and piloting approaches of affordability without compromising property rights.
- He indicated that ADB wants to act as a truster broker and protect property rights of the developer. And for that, two new initiatives are undertaken in collaboration with UNEP with support from GEF.

■ Q&A

Q. Representative from the Ministry of Econimics of Germany:

In relation to the analysis made on fast tracking process, what is the main reason why you choose those patent offices. I believe Germany is also working in this area but it seems it is not included in the analysis.

A. Latiff (ICTSD):

The choice of patent offices relied on specific implementation of green patent schemes. As far as we know, there is not specific programmes for green patents in Germany.

Q. Representative from Perth University

The US is a large source of patenting through university partnerships context. Can you give your thoughts on UNFCCC mechanisms in that respect.

A. Latiff (ICTSD):

As for university green patenting and FT, I don't have specific data, but it is believed to be an interesting source. As for the UNFCCC considerations, there is a lot of discussions in the Technology Mechanism through enabling environments, IPR, etc.

A. Lewis (Georgetown University):

In the US, there are some experiences in green patenting in FT. This sort of information has to be taken to the academia, and later replicate it to developing countries. It is possible to think in one scheme that can pay fees with international money.

Q. Representative from the University of Zurich:

What kind of support there are for strengthening national innovation systems in developing countries. There is probably not much attention on this and it is a key requirement to



enhance global networks.

A. Lewis (Georgetown University):

Currently, developing countries firms operating do not have necessarily sophisticated models. Smaller partnerships are conducting a lot of collaboration through NS type of collaboration. I hope that the CTC&N help develop this kind of initiatives and be a potential platform for this kind of collaboration and expansion of global learning network.

To access the COP18 Side Event Reports, please refer to the following link: <u>http://www.mmechanisms.org/e/relation/details_oecc_COP18report.html</u>