Reflections on the Current Negotiations: Climate Change, Technology Transfer and IPRs
Based on a forthcoming Article:

**Economic and Legal Considerations for the International Transfer of Environmentally Sound Technologies**

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The Current Negotiations

- Consistent recognition of the indispensable role of technology in efforts to reduce greenhouse gas emissions and other climate change goals, esp. adaptation and mitigation.

- Global architecture is required to address a pyramid of issues:
Reduce GHG Emissions

- Innovation at a rapid scale is required
- Heterogeneous Technologies/ heterogeneity of emissions sources
- Diffusion and Adaptation in global markets
Complex Public Goods Problem

- There is underinvestment in:
  - GHGs mitigation technologies
  - New technologies
  - Market-based diffusion.
On a global scale, there is:
- too little investment by private actors
- insufficient public supports to achieve globally optimal solutions to climate change.

As a result, both IPRs and other broader policies suffer from a coordination failure.
The EGTT recognizes the vulnerability of any failure to address coordination.

The recent strategy paper for the long-term perspective (see FCC/SB/2009/3, 27th May 2009) emphasizes dynamic welfare gains that are possible in an environment where policy options regarding innovation, deployment and diffusion are concerned.
The Role of IPRs

- IP regulation is a policy intervention in information markets and its role in achieving/addressing innovation, deployment and diffusion of ESTs remains largely unsettled.

- IPRs clearly play a role in innovation and diffusion and has long been the classic mechanism of choice to serve these purposes in leading economies.
The Role of IPRs

- But with regard to ESTs, the central preoccupation lies in the role of IPRs with respect to ToT. Why?
  - the scale issue: rapid diffusion on a global level is needed to address urgency of GHG emissions
  - developing and least-developed countries lack capacity to respond efficiently, dynamically and quickly, to requisite technological responses to climate change.
The Role of IPRs

-ToT can help address the heterogeneity issue and thus enhance technological convergence.

-ToT policies could help overcome barriers to private investment in R&D particularly in sectors where market size/rigidity may undermine possibility of returns.

-ToT plays a role in multiple areas for climate change: 1) innovation; 2) diffusion; 3) adaptation.

And much more....
Potential for Enhanced IPR Responses

- The current negotiations recognize the importance of government intervention in the innovation market. IP rights should correspondingly be tailored to reflect extent of subsidization.

- The current negotiations recognize a mix of public/private partnerships at the national, institutional, regional and global levels. IP rights should be allocated to preclude hold-outs in licensing opportunities, esp. to DCs & LDCs. Ex. Patents
Potential for Enhanced IPR Responses

- The current negotiations appear to view IPRs only in light of the private sector. Gov’t ownership and use of IPRs is possible and would yield a wider array of options for innovation and diffusion models (e.g., use of “Open Source” licensing; prizes; regulatory incentives to re-allocate R&D funds efficiently, etc).

- The current negotiations focus inordinately on compulsory licensing (CL) as a means of diffusion particularly where mkt. failure may exist.
Potential for Enhanced IPR Responses

- Mkt. failure should not be presumed in the absence of evidence showing that heterogeneity problem is acute in a particular country/sector or market.

- CL has proved highly unstable and ineffective in DCs and LDCs for reasons unrelated to IPRs, but instead institutional weakness and regulatory incoherence. With respect to ESTs, CLs should not be the first best option.
Potential for Enhanced IPR Responses

- Other flexibilities in multilateral IP regimes should be included in current negotiations. In particular, doctrinal limits imposed on IPR scope, exercise of rights, and subject matter should be core components of the national and global IPR architecture as retooled to address ESTs.

- This is particularly important for adaptation of ESTs to address particular socio-cultural, economic and regulatory features of DC and LDC markets. Residual (i.e., downstream rights) should be made available freely. Perhaps an auction mechanism could help in this regard.
Potential for Enhanced IPR Responses

- Current negotiating text (and EGTT efforts) could benefit from recognizing the role of IPRs in ALL phases of EST development. This could require addressing multiple IPRs on EST through other regulatory mechanisms, e.g., antitrust, consumer protection, etc.

- Current text could also benefit from incorporating mechanisms that limit “opt-out” of diffusion-oriented IP models.
The Global Innovation Environment

- The need for dynamic innovation responses to GHG means that incentives for PPPs, R&D and IPR reform must be coordinated.
- IP issues at stake in the CC context may reflect failure of global IPR policies in general.
- **Sustainable** responses to GHG and CC generally requires recognition of interdependence of EST and general purpose technologies.
- Accordingly, the UNFCC framework should preserve linkages between ToT aspirations for ESTs, and the regulatory environment for global innovation.