



***Intellectual Property and its Role in the Generation and
Diffusion of Green Technologies,
Hong Kong China
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**Session VI: Role of IPRs in the
diffusion and transfer of green
technologies, including lessons from
work in the TRIPS Council**

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OVERVIEW

- Background to recent EST discussion in TRIPS Council
- Ecuador's proposal in the TRIPS Council
- Reaction of others, including opponents
- Will a Doha-type declaration help?
 - Difference between medicines and green technologies
- Concluding remarks



Background

- Environmental negotiations since 1972, including the UNFCCC negotiations on climate change, have raised issues related to transfer of ESTs.
- Marrakesh Decision on Trade and Environment
 - To consider relationship of WTO agreements and MEAs, including with reference to the relevant TRIPS provisions
- India's submissions to the CTE in 1996, 1998
 - For ex. WT/CTE/W/82
- India and China's submissions in CTE regular and special sessions in 2011 (TN/TE/W/79)
- Bolivia and Venezuela submission in the Special Session of the CTD
 - ESTs to tackle transboundary environment problems are “public goods” and IPRs could be an obstacle to tech transfer.



Ecuador's initiative

- Ecuador brought this subject to the TRIPS Council under "Other Business" for the first time in March 2013. It submitted a document entitled "Contribution of IP to Facilitating the Transfer of Environmentally Rational Technology" (IP/C/W/585, dated 5 March 2013), but no substantive discussion took place in March
- Ecuador has since brought this item to the agenda of the meetings of the TRIPS Council in June, 2013, October 2013, February 2014 and June 2014



Ecuador's objectives in IP/C/W/585

- **Reaffirmation of the existing flexibilities** in the TRIPS Agreement so that Members use them in connection with ESTs, **for example through a declaration** addressing flexibilities in the TRIPS Agreement, climate change and access to ESTs;
- Initiation of a **review of Article 31** of the TRIPS Agreement to determine which of its provisions may excessively restrict access to and dissemination of ESTs, and particularly its paragraph (f) and the need to include provisions on, as the case may be, **the transfer of expertise or know-how to implement compulsory licences**;
- Evaluation of the **regulation of voluntary licensing** and the conditions thereof from the standpoint of the most pressing needs of the most vulnerable developing countries in relation to adaptation to and mitigation of climate change;



Ecuador's objectives in IP/C/W/585 -2

- Recognition that adaptation to and/or mitigation of the harmful effects of climate change should be assimilated to the concept of "public interest", with the adoption of a provision authorizing **exemption from patentability on a case-by-case basis**, for inventions whose exploitation is vital for the diffusion of ESTs needed for adaptation and/or mitigation of climate change;
- Evaluation of Article 33 of the TRIPS Agreement to establish **a special reduction in the term of protection for a patent of [X] years** in order to facilitate free access to specific patented ESTs for adaptation and/or mitigation of the effects of climate change because of urgent need in the public interest; and
- Inclusion of a mechanism in the TRIPS Agreement **to promote open and adaptable technology licensing** for results obtained from research into climate change and ESTs **financed through public funds**.
- Could consider adopting **a declaration** in which Members would enshrine the principle that **"nothing in the TRIPS Agreement can minimize or impair the flexibilities provided for in that Agreement, nor prevent or limit Members taking measures they consider necessary to protect their population from the effects of climate change and to make use of "environmentally sound technologies"**.



Views expressed in TRIPS meetings

- All welcome discussion – US and others want this to be placed on the agenda on a meeting by meeting basis
- Some support Ecuador’s views – Bolivia, Cuba, Venezuela, El Salvador, India, Indonesia, South Africa
 - Patents create monopolies leading to high prices and lack of adequate access
 - Patents do not disclose technical information sufficiently, even if they do – no transfer
- Others support further discussion but say TRIPS is adequate and no change needed to use flexibilities for ESTs – Chile, NZ, China, Brazil
 - Chile, China, Brazil more nuanced positions – Chile emphasizes cooperative solutions like a patent pool; China stresses the principle of “common but differentiated responsibilities” accepted in the UNFCCC and both China and Brazil stress finance.



Views expressed in TRIPS meetings -2

- Others (mainly US, EU, Japan,) strongly rebut premise that IPRs are obstacles to tech transfer – most ESTs from private sector and enabling environment crucial for transfer to take place – many examples given, many arguments made
 - IPRs do not inherently make green technologies more expensive - highly competitive not only within the sector, but also between alternative sectors
 - Few patents taken out in smaller developing countries – can use patent information
 - Lack of finance, appropriate financial incentives cited as top barriers in TNAs in UNFCCC
 - WIPO Green facilitates matching of technology needs and suppliers



Will a Doha-type Declaration help? - Difference between medicines and ESTs

- Climate change technologies **highly diverse** in character and involve large number of different sectors, so not as simple as patents on medicines
- Unlike pharmaceuticals, in engineering for renewable energy (energy is the most prioritized mitigation sector),
 1. **R&D (and IPRs) cost may be small part of total costs.** Materials, after-sales service may be a larger part
 2. **Patents not the main way of appropriating returns to R&D in engineering tech**
 3. **Tacit know-how** could be a large part, making CL less feasible
 4. May be **many '00 or '000 patented technologies/products in one final product,** making CL administratively and practically difficult
 5. **Many useful technologies in public domain, yet not widely adopted unlike generic drugs**
 6. **Patents not as strong** and generally many alternative sources available.
 7. Already some developing countries like Korea, China, India are among the top owners of patented technologies so **not clear-cut North-South divide**
 8. Patents may not be renewed up to full term as **technologies may change rapidly.**
- **Response:** it cannot be BAU as ESTs are global public goods in climate change context



Will patent exclusion or reduction in patent term help?

- Not relevant whether patents induce innovation or not – existence of patents is said to be a problem
 - Patents rights **are obtained for each jurisdiction** separately and are independent of each other.
 - At the time of patent filing, or even grant, it is **not commercially proven technology** – many fall by the wayside.
 - Even if it is commercially proven, the **mere existence** of a patent on a particular clean technology in a particular country is **not, in and of itself, proof of barriers to access**.
 - It all **depends on how a patent is exploited** and this in turn depends largely on the competition and availability of close substitutes.
 - Abuse of patent rights can be dealt with under **competition law**



Will patent exclusion or reduction in patent term help? (2)

- Equally, **the absence of an enforceable patent right in a certain country does not in itself provide any guarantee of technology transfer.**
 - Most inventions are **protected in a small minority of countries** worldwide; yet concomitant transfer of that technology does not take place to those countries where there is no patent. Why not?
 - Absence of patents leaves open the prospect of using the technology disclosed in the patent document.
 - However, **much depends on skill levels, infrastructure and other factors** important to the absorption of technology
 - Without the partnership or involvement of the technology originator, and the transfer of valuable know-how for the effective exploitation of the technology, it may **often be difficult to replicate the technology** inherent in patent documents. Cannot compulsorily license know-how.
- Financial incentives to enterprises to promote tech transfer can be important.



Concluding remarks

- TRIPS contains obligations on standards of protection (and enforcement) of IPRs but also contains flexibilities to take measures to tackle climate change, provided that these are otherwise consistent with the Agreement
- TRIPS Council discussions have provided a unique forum for discussions on record on the role of IPRs in the transfer of ESTs