

## Paper I.4

# TECHNOLOGY TRANSFER AND IPR: A MATTER OF FINANCE?

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## 1. Introduction

The issue of technology transfer and Intellectual Property Rights has been an issue for debate between North and South in most sectors – and the low carbon technology sector is no different in this respect. It is different in one key respect however, namely the global significance of rapid deployment of low carbon technologies around the world.

Enshrined in UNFCCC article 4.5 is the commitment by the developed country Parties to “take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly to developing countries to enable them to implement the provisions of the Convention”<sup>i</sup>. Developing countries argue however that that simply has not been happening – or at least no where near the degree required.

These arguments are rehearsed below and a way forward is sought, embracing the potential powers of compulsory purchase of the IPR, a decision making body – and a reduction of the problem to one of finance.

## 2. Well rehearsed arguments

The developing world has tended to argue for the free transfer of IPR and has focussed more on the Government’s role<sup>ii</sup>. The emphasis has been on ownership and access to IPR once it has been developed – rather than on the process of its development. They have tended to stress the need to depart from a business as usual approach in the treatment of IPRs related to addressing the climate change emergency<sup>iii</sup>.

The developed world however, tends to focus more on the role of the private sector, and the emphasis is on innovation and the creation of IPR<sup>iv</sup>. The concern is that any steps that reduce the strength of ownership of IPR risk reducing the rate of its development. One solution focuses on taking steps to increase direct investment<sup>v</sup>.

Whilst the developing country view described above is the view most often articulated within negotiations, nevertheless it is not universally held. Indian businessmen often argue for instance that IPR is not a major issue. They are able to access technology when they need to. The diversity of view reflects the emerging status of Indian business on the world stage.

Sectoral analogies are often made, for instance with the pharmaceutical industry. There are important differences in the economics of the two industries. The often low marginal cost of pharmaceuticals relative to the price fuels the sense of injustice; in

contrast, with low carbon technologies the financial cost of accessing IPR is relatively low.

### 3. Intellectual Property Implications: PV, Biofuel and Wind

In 2007, Professor Barton of Stanford Law School performed a study on intellectual property and access to clean energy technologies in developing countries<sup>vi</sup>. His findings indicated that the nature of the problem varied somewhat between the different low carbon technologies, but that in the main concerns over IP were limited.

TECHNOLOGY	PV	BIOFUEL	WIND
IP access limitations on current market for energy (For reducing emissions or participating in CDM).	Few concerns over IP.	Essentially no concerns over IP.	Possible concerns over IP, but likely to involve at most a small royalty.
Major developing country concerns in future market for energy	Possible difficulties in obtaining advanced IP-protected technologies.	Possible barriers or delays in obtaining cellulosic technologies.	Possible risk of anticompetitive behaviour given concentration of industry.
IP access limitations on entering the industry as a producer of key components or products	Possible barriers or delays in obtaining or creating the highest quality production systems.	Possible concerns over access to new enzymes and conversion organisms – but at most a royalty issue.	Possible difficulty in obtaining most advanced technologies.
Most important overall concerns in area.	Access to government funded technologies, Standards.	Global trade barriers in the sugar/ethanol/fuel context. Access to government funded technologies, Standards.	Access to government funded technologies, Plausible anticompetitive behaviour, Standards.

**Table 1. Intellectual Property Implications: PV, Biofuel and (Barton 2007)**

### 4. Cooperation / joint working

Some argue that technology transfer can be achieved through collaboration. That is undoubtedly true, but it depends on what people agree to. In many of the more significant joint research programmes, a participant need only provide access to background IPR if it is needed to carry out the project<sup>vii</sup>. Ownership, in any event, stays firmly with the originator. The danger is that if company A thought that, by collaborating on some research with company B, it was going to lose all its IPR, then the company A would refuse to collaborate. This would ultimately be to the detriment of society.

### 5. An ultimate sanction, finance and a decision body

The Indian business comment above indicates that in many cases IPR is not a problem and technology can be transferred. There are clearly situations where this is not the case however. Where there is a strong case for access to technology, and the owner of the IPR is refusing to grant access to the technology on reasonable terms, then one option is to grant some authority the right to enforce the access. It is

to be hoped that such a move would be as a last resort. Similar powers exist within the WTO where the threat of imposition in practice deters parties from behaving unreasonably. As a result, the issue would come down to one of finance. The cost of purchasing access to such technology becomes simply one further element in the funding negotiations that are at the heart of climate change.

To what extent should Governments of developed countries that have the wherewithal to support and commit resources for innovation and technology development, facilitate IPR sharing and technology transfer to developing countries for use in mitigation and adaptation. Just as they create the facilities, support technology development, provide export incentives etc., should a way be found to compensate their commercial entities for know-how fees, royalties etc for transfer to an entity in a developing country, without removing the incentive to innovate. The cost of recompensing technology developers for purchasing the use of such technology could be another element in the funding negotiations.

Perhaps a decision making body could help remove the remove barriers to practical action within the EU and India on issues such as Intellectual Property Rights and technology transfer or investment for clean development, adaptation and mitigation. Such a body would need a very clear remit, acting in the joint interests of the parties.

## 6. Conclusions

The issues of Technology Transfer and IPR are complex and fraught with difficulty. Key questions remain such as

- Should a special case be made in relation to low carbon technologies?
- What is the best way to transfer and implement the new clean technologies to developing countries fast – without jeopardising their generation?

Clearly developing countries should have access to new low carbon technologies. If that proves difficult and the owner of the IPR refuses to license the technology on reasonable terms, then the introduction of a system of compulsory purchase should act as a deterrent to such behaviour. The agreement could go further than granting access, to the point of procuring the technology for use in developing countries. An appropriate body would need to be identified to make such decisions. The access would cost money, as, clearly would the outright purchase. The issue would be reduced, in such circumstances, to a question of finance.

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<sup>i</sup> UNFCCC 1992 Text of the Convention. United Nations Framework Convention on Climate Change.

<sup>ii</sup> Ockwell et al 2007 UK-India collaboration to identify the barriers to the transfer of low carbon energy technology.

<sup>iii</sup> Barton, J. *Intellectual Property and access to clean energy technologies in developing countries* International Centre for Trade and Sustainable Development, Geneva, Switzerland.

<sup>iv</sup> Barton, J supra note iii

<sup>v</sup> Ockwell et al supra note ii

<sup>vi</sup> Barton, J. supra note iii

<sup>vii</sup> European Union Community Research 2007 *Guide to Intellectual Property Rules for FP7 projects*