



**UNIVERSITÉ  
DE GENÈVE**

**FACULTÉ DE DROIT**



**ECOLOMICS OCCASIONAL PAPERS SERIES**

<http://www.ecolomics-international.org/>

No. 07-01, April 2007

**INAUGURAL ISSUE**

## **TECHNOLOGY TRANSFER, TRADE, AND ENVIRONMENT PROJECT**

### **WTO NEGOTIATIONS ON ENVIRONMENTAL GOODS: PROMOTING TRANSFER OF TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT?**

Summary of the Informal Roundtable Discussion

List of Speakers and topics: Annex

Wednesday, 14 March, Auditoire Jacques Freymond, IUHEI

Organized by the Faculty of Law of the University of Geneva  
jointly with IUHEI, UNCTAD, UNEP and INECE

Project Sponsored by RUIG/GIAN

**Project Coordination:** Prof. Anne Petitpierre  
Faculty of Law, University of Geneva

**Report:** María Julia Oliva  
Urs P. Thomas  
Faculty of Law, University of Geneva

## **Introduction**

This informal roundtable discussion was organized in the context of the RUIG/GIAN project on Technology Transfer, Trade, and the Environment,<sup>1</sup> which aims to increase awareness of the synergies between trade and environment in relation to access and dissemination of technology and promote dialogue between the trade and environmental communities. In particular, the focus of the roundtable was on the World Trade Organization (WTO) negotiations on environmental goods under paragraph 31(iii) of the Doha Ministerial Declaration, which are considered to be an important opportunity to increase the flow of environmentally sound technologies, but are still stalled as negotiators struggle to address a number of conceptual, methodological, and political questions. Discussions acknowledged these difficulties, but also raised some ideas that may facilitate the definition of a “landing zone” for the conclusion of these negotiations. In addition, interventions reflected willingness to continue working towards a solution agreeable to all WTO Members. Finally, it is clear that technology-related issues are central in the debate and will be a critical aspect of any potential solution. It is hoped the RUIG/GIAN project will continue to contribute in this regard.

The present report highlights some of the key issues brought forward during the roundtable, both in presentations and in subsequent discussions. Participants, primarily delegates from the Permanent Missions to the WTO, seemed to appreciate the possibility to exchange views on WTO-related issues in the context of an academic forum, and engaged in a constructive debate. All contributions were made by the participants in their personal capacities.

The agenda for the roundtable is Annex I of this document. The drafts of the papers distributed prior to the workshop as discussion documents, as well as related analyses are available online at an ICTSD ([www.trade-environment.org](http://www.trade-environment.org)) website,<sup>2</sup> and will also be made available by EcoLomics International on a dedicated ‘Environmental Goods’ page once the final versions are available.<sup>3</sup>

## **Transfer of technology in the context of international sustainable development**

The various presentations and interventions on the links between technology, liberalization of environmental goods, and sustainable development emphasized the range of experience, research, and ideas on these issues, but acknowledged that much of it may not be relevant or feasible at such late stages of the negotiations. Studies pointed out during discussions, for example, show a number of economic issues that impact on the use of environmental goods, which should be taken into account for an effective solution. In this regard, while it is clear that countries benefit from importing environmental goods, a paper by Prof. Lynn Mytelka notes that the assumption of a link between liberalization of environmental goods and sustainable development is not enough, other measures or policies need to be taken into consideration in order to ensure the flow of knowledge.

The need for a more holistic approach was also mentioned – compartmentalized negotiations cannot do justice to the wide ramifications of the interface between technology, trade and environment. For example, dividing the treatment of ethanol, which is part of the agriculture negotiations, and biodiesel, included in the Non-Agriculture Market Access negotiating group, is arbitrary. It thus makes a coherent approach to the facilitation of environmentally sound technologies related to biofuels more difficult. Similarly, policy goals

---

<sup>1</sup> <http://www.ruig-gian.org/research/projects/projectlg.php?ID=136>

<sup>2</sup> <http://www.trade-environment.org/page/theme/goods.htm>

<sup>3</sup> [http://www.ecolomics-international.org/headg\\_tandea\\_env\\_goods.htm](http://www.ecolomics-international.org/headg_tandea_env_goods.htm)

of technology cooperation and of capacity building, central to the Doha Work Program although not included explicitly in paragraph 31(iii), were seen by some to be critical for a balanced and effective liberalization of environmental goods. Other related issues raised included capturing changes in technology and the role of tacit knowledge in the transfer of technologies.

Another issue that raised much interest was the role of subsidies in technology, trade, and sustainable development negotiations. Subsidies were seen as perhaps not directly relevant for ongoing negotiations on environmental goods, but nevertheless as an important issue insofar as they may pose non-tariff barriers (NTBs) and impede the flow of technology. Indeed, examples were provided on how subsidies are used or impact the flow of technology across borders. There is also a need to take into consideration links between subsidies and more stringent environmental regulations, or leakage between different types of subsidies. At the same time subsidies may make the already complicated issue of dual use even more intractable.

The question of the link between subsidies and non-tariff barriers has not received great attention in the environmental goods negotiations but it will become more important in the final stage. In any discussion of the development and dissemination of environmentally friendly technology, it is unavoidable to look at subsidies, so often used to promote relevant sustainable development policies. Developing countries, which often lack the resources to provide subsidies, may – in the context of international discussions – thus require financial support for certain technologies.

Subsidies may influence the selection of specific goods. One reason why dual use is such a big issue is that in many cases countries desire to protect domestic industries. It is not clear what differences result from the choice of either subsidies or tariffs but such studies would be interesting. This may be more of an issue in developing countries but industrialized countries also have sensitive products such as e.g. ethanol, which explains the position of the OECD on ethanol. It comes back to the question as to whether the real priority is the protection of the environment or the protection of certain industries.

The biofuels industry is a case in point with a conundrum of environmental and industrial interests at stake (not to mention social issues to the extent that an increased demand for biofuel feedstock has already driven up food prices in some instances). The complexity of the biofuels issue is heightened by the fact that life cycle analyses of fuels like ethanol are highly contentious, with large differences between available data sets -- in some instances in fact the energy input may be higher than the output. There is still no consensus on the question whether ethanol should qualify for the label of an Environmental Good. This classification will presumably have a major impact on the product's trade pattern.

During discussions, it became clear that the issue of technology transfer, while “floating around” environmental goods negotiations, has not been sufficiently developed or discussed. Nevertheless, it was noted that this issue would need to be addressed in order to achieve an outcome that will be positive not only from the economic but also from the environmental and social perspectives.

### **Para. 31(iii) of the Doha Ministerial Declaration: No Consensus on the Approach to Liberalization**

The liberalization of environmental goods is broadly seen as an opportunity to deliver a “triple win” – a positive outcome from the trade, environmental, and development perspectives - given it would result in the increased availability of environmental technologies and lower prices through tariff reductions. There is no consensus among the WTO Members, however, as to the manner in which this trade liberalization should take place in order to have such encouraging effects. Industrialized countries, which include the *demandeurs* of these negotiations, insist on an approach based on *Environmental Lists*, i.e. an enumeration of products identified, through the negotiations, as environmental goods - much in the manner already undertaken in the OECD context. Developing countries, on the other hand, generally

favour an approach based on *Environmental Projects*, in which liberalization covers a set of goods needed for a particular project, such as the construction of a water purification plant or an incinerator, and is limited in time to the duration of this project.

In the roundtable, as is the case in the context of the CTESS, there was much debate in relation to the challenges and opportunities of each of these two approaches. For those supporting the project approach, it is the only solution that would conform to the Doha Round's development objectives and that would indeed achieve the promotion of environmentally sound technologies. The proponents of the list approach, however, considered that the project approach would be difficult, if not impossible, to reconcile with rules, principles, and negotiating practices at the WTO. In addition, they highlight that the mandate of paragraph 31(iii) is quite specific, calling only for "the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services." In other words, it calls for tariff reduction and not for the promotion of development policies. Nevertheless – for these delegates from industrialized countries – the tariff reduction will certainly result in the advancement of these development and environmental policies.

In an effort to reach a compromise position, Argentina has initiated an *Integrated Approach* which contains elements of both methodologies. This approach does not highlight technology transfer, but it is compatible with the integration of these and other sustainable development concerns into the paragraph 31(iii) negotiations. In the roundtable, various discussants brought additional ideas into the debate, such as the limitations of an approach based purely on market access, the importance of considering the evolution in technology transfer in international law and policy, and the valuable experience of Multilateral Environment Agreements (MEAs) on the international flow of environmentally sound technology.

There was strong support for the search of a middle ground between the list and the project approaches. It was pointed out that this middle ground should at the same time provide elements of an answer – or at least it ought to be reconcilable -- with following three priorities: (1) facilitating the management and control of domestic environmental problems; (2) building up the capacity of domestic environmental industries in the long run; (3) avoid damage to existing industries and their employment.

## **Conclusions**

After five years of negotiations on paragraph 31 (iii), there are still significant differences on basic issues and approaches among WTO Members. As a result, many more complex, yet no less relevant aspects of increasing the international flow of environmental goods, particularly environmentally beneficial technologies, have not been addressed. In particular, as was pointed out, technology transfer is always implicitly present, but extremely divisive and difficult to capture. Nevertheless, the policy and practical experience in MEAs regarding the identification and flow of technologies, as well as related capacity-building and financial aspects, may be critical in improving the chances for a positive outcome for trade and environment. The much alluded to 'landing zone' of the negotiations remains a moving target, it may be the environmental field that can contribute to delineating an area in which the interests of the different coalitions of WTO Members can meet.

Annex

TECHNOLOGY TRANSFER, TRADE, AND THE ENVIRONMENT PROJECT  
INFORMAL ROUNDTABLE DISCUSSION

WTO NEGOTIATIONS ON ENVIRONMENTAL GOODS:  
PROMOTING TRANSFER OF TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT?

Wednesday, 14 March, Auditoire Jacques Freymond, IUHEI

Organized by the Faculty of Law of the University of Geneva  
jointly with IUHEI, UNCTAD, UNEP and INECE, Sponsored by RUIG/GIAN

**Project Coordination: Prof. Anne Petitpierre, Faculty of Law, University of Geneva**

**Opening remarks**

**Ambassador Toufiq Ali, Permanent Mission of Bangladesh  
Chair of the Committee on Trade and Environment in Special Session (WTO – CTESS)**

**Chair**

**Prof. J.D.A. Cuddy, Economics Division, Institut universitaire de hautes études  
internationales/Graduate Institute of International Studies, Genève**

**Presentations**

***Mahesh Sugathan, ICTSD***

***Opening Presentation Focusing on Key Outcomes and Findings from ICTSD Research on  
Technology Transfer and Environmental Goods Negotiations***

***Ron Steenblik, Research Director, Global Subsidies Initiative, IISD***

***Presentation on Subsidies, Technology Transfer, and Implications for the Environmental Goods  
Negotiations***

***Mike Ammann, Permanent Mission of Switzerland to the WTO***

***Presentation on the List Approach and its Link to Promoting Access to Environmental  
Technologies by Developing Countries***

***Eduardo Tempone, Minister of the Permanent Mission of Argentina***

***Presentation on the Integrated Approach and its Link to Technology Transfer***

**Discussants:**

***Soledad Leal, Mexican Mission to the WTO***

***Ben Simmons, Legal Officer, UNEP-ETB***

***Maria Julia Oliva, PhD candidate, Law Faculty***

***Connie Martinez, Consultant***