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ADVANCING THE WTO ENVIRONMENTAL GOODS NEGOTIATIONS: OPTIONS AND OPPORTUNITIES

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Joint GIAN-Funded Project 'Technology Transfer, Trade, and the Environment: Promoting Synergy for Sustainable Development among the World Trade Organisation and Multilateral Environmental Agreements'

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I. INTRODUCTION

Paragraph 31 (iii) of the Doha Ministerial Declaration instructs Members to negotiate the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services, with a view to enhancing the mutual supportiveness of trade and environment. Underlying the mandate is the view that reducing tariff and non-tariff barriers to trade in environmental goods and services will promote access to and use of environmental technologies and services and, thereby, help in managing a range of environment and development issues. Environmental goods and services are produced and used by developed and developing countries alike and so liberalizing trade is seen as a way to improve market access and to further the commercial, environmental and developmental goals of WTO Members, simultaneously producing "win-win-win" outcomes.[1]

Despite the importance of this mandate, advancing the negotiations has proven challenging to WTO Members. Agreeing a definition of "environmental goods" has remained elusive. WTO Members have grappled with a range of technical issues about the type and treatment of different kinds of environmental goods. More recently, discussions on two diverse approaches to the negotiations – the "list" approach and the "project" or "integrated" approach – have slowed progress. Responding to this, Ministers at the WTO Hong Kong Ministerial Meeting in December 2005 instructed Members to "complete work expeditiously under paragraph 31(iii) of the Doha Agenda". WTO Members have recognized both the importance of this mandate as well as the large volume of work that remains to be undertaken, and so there seems to be renewed interest in identifying ways to encourage convergence among different views and approaches and to move the negotiations forward.

This paper seeks to identify a range of opportunities to secure convergence in the paragraph 31(iii) negotiations taking place in the WTO Committee on Trade and Environment meeting in Special Session relating to environmental goods. The paper commences by examining a range of relevant international agreements and declarations, including multilateral environmental agreements with obligations relating to the transfer of environmentally sound technologies. It then offers a brief history of the WTO negotiations and a description of the list and project/integrated approaches, summarizing the main questions raised about each approach by proponents of the other and by WTO Members who have not formally aligned themselves with either approach. The paper does not aim to evaluate these approaches, but rather recognizes that a range of concerns have been raised by different participants in the negotiations, and suggests that an effort to secure convergence is both possible and desirable for WTO Members given the importance and complexity of the mandate's subject matter, as well as the timing of the Committee on Trade and Environment's work in relation to that of other relevant WTO negotiating groups and the WTO Doha Work Programme in general.

This paper has been drafted in the context of a Geneva International Academic Network-funded research project entitled *Technology Transfer, Trade, and the Environment: Promoting Synergy for Sustainable Development among the World Trade Organisation and Multilateral Environmental Agreements*. Implemented through collaboration between the University of Geneva, the Graduate Institute of International Studies, UNEP, UNCTAD and the International Network for Environmental Compliance & Enforcement, the project seeks, among other things, to research critical issues concerning the relationship between technology transfer, trade and the environment and to draft and disseminate practical publications on a range of topics, including on the status and main issues arising

[1] *Negotiations on Environmental Goods – Submission by the United States,* 9 July 2002, (TN/TE/W/8)

in relevant negotiations at the WTO.[2] This paper addresses these goals by examining the status and main issues arising in the WTO negotiations on environmental goods, their linkages with obligations in relevant international instruments and multilateral environmental agreements, as well as practical ways the negotiations might advance to promote the shared objectives of the WTO and these other instruments.

II. THE IMPORTANCE OF ENVIRONMENTAL GOODS AND TECHNOLOGIES

The environmental goods negotiations at the WTO have an important role to play. Environmental goods, including environmentally sound products and technologies, contribute to addressing the most pressing environment and development challenges facing humanity.[3] Climate change alone threatens to cost the equivalent of "at least 5% of global GDP each year" and if a wider range of risks are considered "could rise to 20% of GDP or more".[4] Ecosystems, too, are under threat, resulting in a "substantial and largely irreversible loss in the diversity of life on Earth", serving as a "barrier to achieving the Millennium Development Goals"[5] and holding serious implications for business, industry and trade.[6] Most vulnerable to these changes are poor communities and countries, which regularly lack the capacities and resources required to mitigate and adapt to these changes.

Environmental goods and technologies offer an important part of the solution. Addressing climate change requires access to environmental technologies in areas such as renewable energy, and energy savings management.[7] Sustaining ecosystems and the communities relying on them requires access to technologies for environmental monitoring and for management of air and water, soils and solid wastes. Environmentally sound technologies and other environmental goods are consequently a central focus of numerous multilateral environmental agreements (MEAs) and the outcomes of many major international instruments and declarations.[8]

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[2] For further information on the project see the GIAN website at: http://www.ruig-gian.org/research/projects/projectlg.php?ID=136

[3] There is no single internationally agreed definition of the terms environmentally sound technology, environmental good, or environmental services. The OECD/EUROSTAT Manual defines the environmental goods and services industry as encompassing "activities which produce goods and services to measure, prevent, limit, minimize or correct environmental damage to water, air and soils, as well as problems related to waste, noise and eco-systems. This includes cleaner technologies, products and services that reduce environmental risk and minimize pollution and resource use (*The Environmental Goods and Services Industry: Manual for Data Collection and Analysis*, OECD/EUROSTAT 1999 at 9). Agenda 21 defines environmentally sound technologies to include environmental goods and services (Agenda 21, Chapter 31, paragraph 34.3, see below). From a WTO perspective, the product or "hardware" component of many environmental technologies would likely be considered a "good" for the purposes of WTO agreements. The "soft" component of environmental technologies – such as know-how and procedures – is often provided through what the WTO would define as "services". Regardless of the definition adopted, it is clear that there is substantial overlap between the concepts of environmental technologies, goods and services. Consequently, the coverage of WTO negotiations on environmental goods and services is likely to overlap significantly with the coverage of other international obligations and discussions relating to environmentally sound technologies.

[4] *Stern Review: The Economics of Climate Change*, Executive Summary, available at: http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm

[5] Report of the UN Millennium Ecosystem Assessment, *Ecosystems and Human Wellbeing: Synthesis (Summary for Decision-makers)*, available at: http://www.millenniumassessment.org/documents/document.356.aspx.pdf

[6] Report of the UN Millennium Ecosystem Assessment, *Ecosystems and Human Wellbeing: Opportunities and Challenges for Business and Industry*, available at: http://www.millenniumassessment.org/documents/document.353.aspx.pdf

[7] S Pacala and R. Socolow, *Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies*, Science Magazine, Volume 305, 13 August 2004, available at: http://carbonsequestration.us/Papers-presentations/htm/Pacala-Socolow-ScienceMag-Aug2004.pdf

[8] For an overview of MEA provisions relating to technology identification and transfer see *A Preliminary Analysis of MEA Experiences in Identifying and Facilitating the Transfer of Technology – What Insights Can Be Drawn for the WTO EGS Negotiations?* (UNEP, 2007). http://www.unep.ch/etb/areas/pdf/MEA%20Papers/MEA_EGS%20Paper.pdf

Major international instruments and declarations

The Rio Declaration, adopted at the 1992 Rio Earth Summit, provides that:

> States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies (Principle 9).

Agenda 21 similarly emphasizes the importance of environmental technologies, goods and services. Chapter 34 on transfer of environmentally sound technology, cooperation and capacity building defines environmental technologies to include goods and services:

> Environmentally sound technologies are not just individual technologies, but total systems which include know-how, procedures, goods and services, and equipment as well as organizational and managerial procedures. This implies that when discussing transfer of technologies, the human resource development and local capacity-building aspects of technology choices, including gender-relevant aspects, should also be addressed. Environmentally sound technologies should be compatible with nationally determined socio-economic, cultural and environmental priorities (Paragraph 34.3).

It states that:

> There is a need for favourable access to and transfer of environmentally sound technologies, in particular to developing countries, through supportive measures that promote technology cooperation and that should enable transfer of necessary technological know-how as well as building up of economic, technical, and managerial capabilities for the efficient use and further development of transferred technology. Technology cooperation involves joint efforts by enterprises and Governments, both suppliers of technology and its recipients. Therefore, such cooperation entails an iterative process involving government, the private sector, and research and development facilities to ensure the best possible results from transfer of technology. Successful long-term partnerships in technology cooperation necessarily require continuing systematic training and capacity-building at all levels over an extended period of time (Paragraph 34.4).

The importance of environmental technologies, goods and services is also reflected in other Chapters of Agenda 21 such as those relating to changing consumption patterns (Chapter 4) and protection of the atmosphere (Chapter 9).

The role and importance of technology transfer in specific contexts is further elaborated in the Johannesburg World Summit on Sustainable Development (WSSD) Plan of Implementation, which emphasized that:

> The gap between developed and developing countries points to the continued need for a dynamic and enabling international economic environment supportive of international cooperation, particularly in the areas of finance, technology transfer, debt and trade, and full and effective participation of developing countries in global decision-making, if the

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For a broader review of relevant international instruments, see *UNCTAD, Compendium of International Arrangements on Transfer of Technology: Selected Instruments* (UNCTAD/ITE/IPC/Misc.5) available at http://www.unctad.org/en/docs/psiteipcm5.en.pdf

> momentum for global progress towards sustainable development is to be maintained and increased (paragraph 4)

When considering the available means for implementing sustainable development, the WSSD Plan of Implementation further states that:

> The internationally agreed development goals, including those contained in the Millennium Declaration and Agenda 21, as well as in the present plan of action, will require … access to and transfer of environmentally sound technologies on a concessional or preferential basis, as mutually agreed. (paragraph 75)

Specifically in the context of international trade, the WSSD Plan of Implementation emphasizes the importance of technology transfer and calls for efforts to:

> Enhance the benefits for developing countries, as well as countries with economies in transition, from trade liberalization, including through public-private partnerships, through, inter alia, action at all levels, including through financial support for technical assistance, the development of technology and capacity-building to developing countries… (paragraph 90)

The WSSD Plan of Implementation refers repeatedly to the role of environmental goods and technologies in the context of specific issue areas such as poverty eradication, food security, eco-efficiency, energy, transportation, waste management, fresh water, climate change, agriculture, desertification, biodiversity, forests and public health, as described further in the Annex.

Multilateral environmental agreements

The importance of access to and transfer of environmentally sound technologies is also reflected in the text of many MEAs and in the documents developed by their Conferences of Parties and various subsidiary bodies. The UN Framework Convention on Climate Change, for example, provides that:

> …promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors" (Article 4(1)(c)).

The Convention further provides that:

> The developed country Parties and other developed Parties included in Annex II shall 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 developing country Parties, to enable them to implement the provisions of the Convention (Article 4(5)).

The Kyoto Protocol to the UN Framework Convention on Climate Change calls on developed country parties to "provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of advancing the implementation of existing commitments" (Article 11).

Decision 4/CP.7 of the Convention's Conference of Parties regarding the development and transfer of technologies establishes a framework for meaningful and effective actions to enhance the implementation of Article 4(5) of the Convention, and states:

> The successful development and transfer of [environmentally sound technologies] ESTs and know-how requires a country-driven, integrated approach, at a national and sectoral level. This should involve cooperation among various stakeholders (the private sector, governments, the donor community, bilateral and multilateral institutions, non-governmental organizations and academic and research institutions), including activities on technology needs assessments, technology information, enabling environments, capacity building and mechanisms for technology transfer. (Decision 4/CP.7, Annex, paragraph 2, "Overall approach")

The Decision calls for analysis of barriers to technology transfer and responses on a sectoral basis:

> Technology needs and needs assessments are a set of country-driven activities that identify and determine the mitigation and adaptation technology priorities of Parties other than developed country Parties, and other developed Parties not included in Annex II, particularly developing country Parties. They involve different stakeholders in a consultative process to identify the barriers to technology transfer and measures to address these barriers through sectoral analyses. (Decision 4/CP.7, Annex, paragraph 3)

The Decision identifies as one area for capacity building for the transfer of, and access to, environmentally sound technologies and know-how:

> Strengthening of the capacities of existing national and regional institutions relevant to technology transfer, taking into account country- and sector-specific circumstances, including South-South cooperation and collaboration (Decision 4/CP.7, Annex, paragraph 18(e))

Discussions of technology transfer have taken place within the Conference of Parties, the Subsidiary Body for Scientific and Technical Advice (SBSTA) as well as in the Expert Group on Technology Transfer (EGTT) in accordance with decision 4/CP.7. In accordance with the Marrakech Accords, discussions have addressed five main themes:

- Technology needs & needs assessments
- Technology information
- Enabling environments
- Capacity building
- Mechanisms for technology transfer

A number of the technology needs assessments under this framework have been undertaken on a sectoral basis, examining areas or categories such as energy, industry, forests, agriculture and wastes.[9] These assessments provide a good overview of the technological needs of Parties to the UN Framework Convention in order to mitigate and adapt to climate change.

Just as the UN Framework Convention on Climate Change and the Kyoto Protocol emphasize transfer of environmental technologies, so too do other multilateral environmental agreements call for efforts to transfer environmentally sound technologies to developing countries.

- ***The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*** emphasizes the need to promote technology transfer for the sound management of hazardous and other wastes and has prepared a range of technical documents regarding

[9] See for example, Albania's technology assessment at http://ttclear.unfccc.int/ttclear/jsp/index.jsp?mainFrame=../html/TNAOverview.html. Other country assessments are available at: http://ttclear.unfccc.int/ttclear/jsp/index.jsp?mainFrame=../html/TNAOverview.html

technology selection and use.[10] Promoting technology transfer is a major goal of the Convention's Regional Centres for training and technology transfer.[11]

- ***The Convention on Biological Diversity*** states that access to and transfer of technology plays a key role in achieving the Convention's objectives and provides that access to and transfer of technology "shall be provided and/or facilitated under fair and most favourable terms, including on concessional and preferential terms where mutually agreed" and in a manner "consistent with the adequate and effective protection of intellectual property rights."[12]
- ***Convention on International Trade in Endangered Species of Wild Fauna and Flora*** includes no formal treaty obligations relating to technology transfer but does emphasize the sharing among its Parties of relevant know-how and experience.[13]
- ***The Montreal Protocol on Substances that Deplete the Ozone Layer*** recognizes the need for "promoting international cooperation in the research, development and transfer of alternative technologies . . ."[14] It has established a number of international panels to assist in technology identification and has disbursed over $US 2.3 billion in financial and technical cooperation for developing countries, including technology transfer.[15]
- ***The Stockholm Convention on Persistent Organic Pollutants*** notes the need to strengthen the national capabilities of developing countries for the management of chemicals, including through the transfer of technology, and calls for regional and sub-regional centers for capacity building and technology transfer.[16]

As demonstrated by these references, environmental technologies, goods and services play a key role in securing the successful implementation of many MEAs and in achieving the national environmental and sustainable development goals of their country parties. Efforts to reduce the cost and increase the availability and transfer of these technologies is a goal systematically identified in many MEAs, as well as in the decisions and other outcomes of their Conferences of Parties and subsidiary bodies.

Other relevant international instruments

As well as supporting the implementation of major multilateral environmental agreements, liberalization of environmental goods and services can potentially support the implementation of other international objectives such as those set out in the Millennium Development Goals (MDGs). MDG 7, for example, calls for a halving of the proportion of people without sustainable access to safe drinking water and could be supported through improved access to technologies for enhanced environmental monitoring and analysis, waste water management and potable water treatment. The related goal of reversing the loss of environmental resources, similarly, requires significantly improved access to environmental technologies, goods and services.

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[10] See, for example Decisions II/13 of the Basel Convention Conference of Parties at paragraph 3, III/13 paragraph 2, VI/37 annex and VII/12 annex (http://www.basel.int/meetings/frsetmain.php).

[11] For further analysis of the technology transfer provisions of the Basel Convention, and their relationship with relevant obligations in the Stockholm Convention and the Rotterdam Convention on Prior Informed Consent, see Urs P. Thomas, *The Geneva-based Wastes and Chemicals Conventions and Technical Cooperation* (forthcoming). For further information on the Basel Convention see www.basel.int/

[12] CBD, Article 16, paragraph 2. For further information on the Convention on Biological Diversity see http://www.cbd.int/default.shtml

[13] For further information on CITES see www.cites.org/.

[14] Montreal Protocol, Preamble, paragraph 9. *See also*, Montreal Protocol Article 9 stating "in promoting, directly or through competent international bodies, research, development and exchange of information on: (a) best technologies for improving the containment, recovery, recycling, or destruction of controlled substances or otherwise reducing their emissions; (b) possible alternatives to controlled substances, to products containing such substances, and to products manufactured with them; and (c) costs and benefits of relevant control strategies."

[15] For further information on the Montreal Protocol see http://ozone.unep.org/.

[16] For further information on the Stockholm Convention see http://www.pops.int/.

Responding to growing demand, the environmental sector is expanding rapidly. Exports of environmental goods constitute 3.6 to 4 per cent of total merchandise trade in 2002, or approximately USD 240 billion in products on the Organization for Economic Cooperation and Development (OECD) list of environmental goods, and USD 215 billion in products on the Asia Pacific Economic Cooperation (APEC) forum list (WTO Secretariat, JOB(05)/21). Trade in "environmentally preferable products" – defined as products "that cause significantly less 'environmental harm' at some stage of their 'life cycle' than alternative products serving the same purpose" – have been identified as one area where developing countries have a comparative advantage.[17] The OECD has estimated that half of the environmental goods that are likely to be in use within the next decade do not currently exist.[18]

Securing access to improved environmental goods and services is an objective of all countries – and liberalizing trade is one way to achieve this goal. But it must be done in a way that is complimented by other efforts to build supply side-capacity, improve the competitiveness of domestic firms, and ensure that imported goods and services can be accessed and applied in a way that is tailored to local needs and circumstances. Efforts to liberalize trade in environmental goods should consequently be seen as part of a broader, integrated effort to address interrelated challenges of trade, environment and development.

III. BRIEF HISTORY OF THE WTO ENVIRONMENTAL GOODS NEGOTIATIONS

Since its first meeting in 2002, the Committee on Trade and Environment has met in Special Session nineteen times. At its first meeting on 22 March 2002, the CTESS discussed a range of procedural and substantive issues.[19] On paragraph 31(iii), WTO Members generally supported the idea that the negotiations on environmental goods and services be conducted in the Negotiating Group on Market Access for Non-Agricultural Products and the Council for Trade in Services Special Session, respectively, and that the CTE Special Session focus on clarifying the concept of environmental goods. Some participants noted that while they would not be opposed to definitions being developed in the CTE Special Session, they could not accept any sequencing between this work and that of the Negotiating Group on Market Access. Other members also noted that some environmental goods were agricultural in nature and requested the Special Session to keep track of the work undertaken in the Committee on Agriculture Special Session.

At its second meeting on 11-12 June 2002, WTO Members discussed a submission by New Zealand that focused on the definition of environmental goods and noted work undertaken by APEC and the OECD. At this meeting a range of issues were raised about the 31(iii) mandate including:

- Whether products with dual and multiple end-uses should be classified as "environmental goods";
- Whether end-use criteria and process and production methods (PPMs) would be required to define environmental goods, and implications for the concept of "like products";
- How goods would be captured by the harmonized system; and

[17] UNCTAD, *Environmentally Preferable Products (EPPs) as a Trade Opportunity for Developing Countries* (UNCTAD/COM70, 1995)

[18] OECD, *The Global Environmental Goods and Services Industry* (OECD, 1998)

[19] *Statement by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee*, 12 April 2002, (TN/TE/1). To ensure an accurate portrayal of the history of the CTESS negotiations under paragraph 31(iii) of the Doha Ministerial Declaration, this section draws directly and extensively from this and other reports by the Chairperson of the CTESS.

- How relativity in the concept of "environmental friendliness" could be addressed when goods considered environmentally friendly in some countries could be seen as unfriendly in others).[20]

These and other issues were discussed in subsequent meetings. A number of WTO Members, while noting the value of APEC and OECD lists of environmental goods, proposed that a "WTO list" should be developed. WTO Members also discussed definitions and criteria for the identification of environmental goods, and a number of delegations offered lists of products that they wanted considered as environmental goods for the purposes of the negotiation.

Several participants stated their preference for product end-use criteria as opposed to the use of process and production methods (PPM) as a criterion in the identification of environmental goods.[21] It was questioned whether chemicals, wastes and certain environmentally preferable, but nonetheless environmentally harmful, products should be included in a list of environmental goods.[22]

A number of delegations emphasized the importance of ensuring that the negotiations reflected the interests of developing countries, and noted that technical assistance was necessary to help identify environmental goods of export interest to developing countries.[23] The question was also raised again whether any list of environmental goods ought to include agricultural products.[24]

Following the Cancun Ministerial Meeting in September 2003, WTO Members discussed a number of proposals for advancing the negotiations. The United States submitted a proposal calling for the establishment of a "core" and a "complementary" list of environmental goods.[25] The core list would include products on which there was a consensus that they constituted environmental goods. The complementary list would include products for which a definitive consensus could not be reached, but for which there was a high degree of acknowledgment that they were significant for environmental protection, pollution prevention or remediation, and sustainability.

China subsequently proposed the creation of two environmental goods lists, a "common" and a "development" list. The common list would include products on which there was a consensus that they constituted environmental goods, with priority given to products of export interest to developing and least-developed countries. The development list would include products selected from the core list by developing countries for special and differential treatment.[26]

During 2004, a number of delegations submitted lists of proposed environmental goods. Some delegations argued that a list-based approach may not work in isolation, and that there could be a need for the development of criteria or a definition of environmental goods. Several developing country delegations stated that they were net importers of environmental goods, and that the negotiations

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[20] *Statement by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee,* 4 July 2002, (TN/TE/2)

[21] *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee,* 2 December 2002, (TN/TE/3).

[22] WTO Document, *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee,* 2 December 2002, (TN/TE/3).

[23] *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee,* 28 February 2003, (TN/TE/5)

[24] *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee,* 6 June 2003, (TN/TE/6)

[25] *Market Access for Non-Agricultural Goods: U.S. Contribution on an Environmental Goods Modality*, 7 July 2003, (TN/MA/W/18/Add.5 and TN/TE/W/38). See also *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee,* 20 April 2004, (TN/TE/8)

[26] *Statement by China on Environmental Goods at the Committee on Trade and Environment Special Session (CTESS) of 22 June 2004*, 6 July 2004 (TN/TE/W/42).

should address their objectives by improving technology transfer and supporting the competitiveness of their domestic industries.[27]

In early 2005, New Zealand suggested an approach in which participants would "define by doing" (i.e. adopt an inductive approach to defining goods from lists submitted by Members). It also suggested that certain "reference points" guide the identification of environmental goods, and suggested that any agreed list be updated on a periodic basis to reflect technological change (a "living list").[28] The European Commission proposed the use of certain "guiding principles" to help identify environmental goods, and suggested that all Members, except least developed countries, should agree to "deeper tariff cuts" on environmental goods.[29] A number of developing countries reiterated the need for a balanced negotiation, with adequate consideration of technology transfer and special and differential treatment.

In June 2005, India noted ongoing concerns with the "list approach" and suggested an alternative "environmental project approach" to the negotiations.[30] Under this approach, Members would identify the environmental goods and services they want to liberalize for the purposes of direct inclusion in environmental projects identified by a "designated national authority". The projects could be aimed at meeting national environmental objectives as well as objectives of any bilateral or multilateral environmental agreement. The criteria for "environmental projects" would be agreed upon in the CTESS with due consideration to the policy space of national governments. India submitted that the project approach provided a number of advantages over the list approach, including addressing issues of multiple-use, capacity building and technology transfer.

Since mid-2005, discussions have focused extensively on the nature and respective advantages and disadvantages of the list and project approaches to the negotiations.[31] Without prejudice to these approaches, WTO Members subsequently exchanged views about the environmental attributes of goods through a number of Information Exchange Sessions, and presented information on national environmental projects and initiatives.[32]

More recently, Argentina proposed an "integrated approach" to the negotiations that combines some of the elements of each approach.[33] India sought to further refine and clarify the project approach.[34] And

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[27] *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee*, 20 April 2004, (TN/TE/8)

[28] *Environmental Goods - Submission by New Zealand*, 10 February 2005, (TN/TE/W/46). See also, *Environmental Goods: Submission by New Zealand*, 26 May 2005, *(*TN/TE/W/49).

[29] *Market Access for Environmental Goods - Communication from the European Communities*, 17 February 2005, (TN/TE/W/47). See also, *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee*, 14 March 2005, (TN/TE/11)

[30] *An Alternative Approach for Negotiations under Paragraph 31(iii) - Submission by India*, 3 June 2005, (TN/TE/W/51). See also, *Statement by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee*, 20 July 2005, (TN/TE/12)

[31] *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee*, 12 October 2005, (TN/TE/13)

[32] *Report by the Chairperson of the Special Session of the Committee on Trade and Environment to the Trade Negotiations Committee*, 27 April 2007, (TN/TE/15)

[33] *Integrated Proposal on Environmental Goods for Development – Submission by Argentina*, 14 October 2005, (TN/TE/W/62)

[34] See, for example, *Procedural and Technical Aspects of the Environmental Project Approach – Submission by India*, 19 September 2005, (TN/TE/W/60) and *Environmental Project Approach: Compatibility and Criteria - Submission by India*, 13 June 2006, (TN/TE/W/67).

proponents of the list approach proposed modalities[35] and undertook an effort to agree on a reduced set of goods based on their importance to the environment and customs workability, which, in their judgement, offer the potential for a high degree of convergence among WTO Members (referred to as a "Potential Convergence Set").[36]

In June 2007, Argentina and India submitted a revised "integrated approach" under which WTO Members would identify and agree on environmental activities (e.g. air pollution control, water and waste water management, and so on) and then identify a list of public and private entities that carry out these activities.[37] These lists would be negotiated and notified to the WTO, and all goods imported by the notified entities for use in the agreed activities would be granted preferential tariff treatment, as agreed by WTO Members.

At the end of the June 2007 CTESS, a number of delegations called for efforts to find convergence between two different approaches to the paragraph 31(iii) mandate – the list approach, and the project or integrated approaches. Moving a discussion about convergence forward requires an understanding of the two approaches, as well as the views of WTO Members about their respective advantages and disadvantages. It also requires the identification of a number of areas where the approaches overlap or converge, as the basis of a discussion about a shared effort to move the negotiations forward.

IV. THE LIST APPROACH

Article 31(iii) calls for the reduction or, as appropriate, elimination of tariff barriers to environmental goods. Proponents of the list approach note that a logical – even necessary – step in fulfilling the mandate is to identify which goods are covered and to enumerate them on a list. Lists of products have been identified in other related processes, including those at APEC and the OECD. And taking into account rapid advances in the environmental goods sector, as well as the wider membership of the WTO, it would seem appropriate for the WTO to develop its own agreement on product coverage.

To the proponents of the list approach, developing a list or lists does not necessarily preclude other ways of identifying environmental goods. Adopting a bottom-up or "defining by doing" approach to product coverage by exchanging lists does not preclude top-down or inductive approaches to developing definitions, criteria or categories. Nor does listing goods necessarily preclude broader discussions about special and differential treatment, non-tariff barriers or links with environmental services.[38]

Proponents of the list approach have suggesting that the negotiations:

- Aim at a list of environmental goods that could be broadly accepted and applied to all WTO Members (Korea, TN/TE/W/48).
- Identify products of interest to developed and developing countries alike (United States, TN/TE/W/18/Add.4).

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[35] *Market Access for Environmental Goods - Communication from Canada, European Communities, New Zealand, Norway, Singapore, Switzerland, and the United States*, 9 May 2006, (TN/MA/W/70 TN/TE/W/65)

[36] *Continued Work Under Paragraph 31(III) of the Doha Ministerial Declaration – Non-Paper by Canada, the European Communities, Japan, Korea, New Zealand, Norway, the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, Switzerland, and the United States of America*, 27 April 2007, (JOB(07)/54)

[37] *Integrated Approach to Paragraph 31(III) – Submission by Argentina and India*, 6 June 2006, (JOB(07)/77)

[38] Notably, Canada, European Communities, New Zealand, Norway, Singapore, Switzerland and the United States have submitted a proposed liberalization modality for environmental goods. See TN/MA/W/70, TN/TE/W/65.

- Not expect Members to implement the agreed cuts according to a single timetable. Developed and developing countries might follow different timetables (European Communities, TN/TE/W/47)
- Welcome further discussion in the CTESS on how best to address the needs of developing countries (Canada, TN/TE/W/50).
- Consider further flexibilities for developing countries including exclusions for a limited number of products (e.g. similar to a "complementary" or "development" list) (Canada et al, TN/TE/W/65).
- Seek to address non-tariff barriers in general and those that correspond to environmental goods in particular (United States, TN/TE/W/8).

At the same time, a range of concerns have been raised by other delegations, a number of which merit further serious consideration by proponents of the list approach. Some of the concerns raised include that:

- There is an absence of a clear definition of environmental goods, or of reference criteria for validating the inclusion of products in any potential list of environmental goods.
- Efforts to secure product coverage that is "as comprehensive as possible" or to eliminate tariffs are inconsistent with developing countries' commercial and development interests.
- The direction of the negotiation so far (including the APEC and OECD lists) has focused on goods which are likely to give highly industrialized countries a comparative advantage.
- The direct gains from liberalization in environmental goods and services may flow largely to the more advanced WTO Members, which stand to benefit from improved access to expanding markets in developing countries.
- The inclusion of dual use and consumer goods may have significant effects on industrial sectors in developing countries where industry is largely dominated by small and medium enterprises.
- The inclusion of dual use products renders it difficult to ascertain a priori whether they will be used for environmental or other purposes.
- Unrestricted imports of environmental goods and services may be adverse to the development of domestic pollution prevention and control enterprises.
- Technologies may not be available or affordable due to intellectual property protection, export restrictions or conditionalities, or may not be appropriate in view of developing countries' factor endowments and environmental standards.
- Liberalization may result in the transfer of environmentally risky products such as wastes and chemicals, or obsolete technologies (e.g. old landfill liners).
- Living lists threaten to "lock in" the technological dominance of developed countries by lowering tariffs on existing technologies and on new technologies as they emerge.
- Simply listing environmental goods does not allow an integrated focus on environmental goods and services when many environmental activities entail the delivery of services in conjunction with the use of goods.
- The list approach does not easily lend itself to an integrated focus on related capacity building, technical assistance and technology transfer.
- A focus on links with the NAMA negotiations could be seen to imply that agricultural products of interest to developing countries are excluded, yet neither the mandate nor a consensus decision by Members justifies this view.

A number of these concerns have been addressed by some delegations. Some Members, such as New Zealand, have provided detailed data on their trade in environmental goods with developing countries. Wastes and chemicals (as well as yachts and bicycles) have been removed from proposed convergence lists. Proposals – albeit fairly limited ones – have been submitted on modalities for special and differential treatment. Proponents of the list approach also emphasize that these negotiations are not

designed to resolve environmental and development issues, merely to contribute to doing so. Delegations have also provided extensive comments and information in an attempt to address these and other issues in their interventions in the CTESS and in small group settings.

Nevertheless, a range of concerns – particularly those relating to the balance of the negotiation and its likely impact on development – remain, and are strongly felt by a large number of WTO Members. Securing convergence will thus require renewed efforts to understand and address these concerns, particularly through a principled discussion of the negotiation's scope and product coverage, special and differential treatment, non-tariff barriers and links with other negotiations including NAMA and agriculture.

V. THE PROJECT AND INTEGRATED APPROACHES

In light of concerns about the list approach some delegations have proposed alternative approaches to the negotiations. India has proposed an "environmental project approach" which it argues is better placed to fulfil the Doha Mandate and to achieve the sustainable development goals enshrined in the WTO preamble and the Millennium Development Goals (TN/TE/W/51). Under the project approach, environmental projects meeting certain criteria would be considered by a designated national authority. If approved, they would qualify for trade concessions on the goods and services included in the project. The national authority could comprise representatives of government, the private sector and civil society and would be responsible for appraising proposals, permitting or refusing tariff and services concessions, and collecting information on environmental projects to support new projects and facilitate trade.

Seeking to combine the project and list approaches, Argentina has proposed an "integrated approach" that calls on the CTESS to identify environmental categories and, for each category, the goods that would be of interest to developing countries in terms of national environmental projects (TN/TE/W/62). Under this approach, Members would agree on the liberalization of tariff and non-tariff barriers multilaterally, taking account of special and differential treatment. Tariff concessions would be available for a specific period (e.g. project implementation phase) and conditions of access to technology and local capacity building would be negotiated in the context of the project.

Together, Argentina and India have more recently proposed a revised "integrated approach" under which Members would first identify and agree on environmental activities of concern to Members (such as air pollution control, water and waste water management and so on). Once a list of activities is agreed, Members would identify the public and private entities that normally carry out these activities in their territory, and submit these lists for negotiation and notification to the WTO. Goods and services imported by the notified entities to carry out agreed environmental activities would be granted preferential tariffs and treatment. WTO Members would be expected to cooperate in the transfer of technologies, and would consider a structured work programme to address non-tariff barriers.

According to its proponents, the project approach:

- Addresses concerns relating to dual and multiple-use because goods and services are procured for a particular environmental project, reducing concerns they may be put to non-environmental uses.
- Allows countries to tailor the outcome of the negotiations to their specific national needs, local environmental conditions, and different capacities for absorbing technology.
- Provides market access as well as scope for developing countries to enhance their capacities, achieve national environmental priorities, and develop synergies among environmental goods and services.

- Can help to advance national environmental goals as well as those of relevant bilateral or multilateral environmental agreements.
- Addresses diversity in national environmental standards with common and differentiated responsibilities, offering national governments an appropriate level of policy space.
- Provides scope to improve the environmental performance of local industries, enhance attractiveness to foreign investment and secure environmental and health benefits.
- Provides a framework to help local firms acquire managerial and organizational capacity, supporting technology transfer, strengthening the competitiveness of domestic firms, and improving future export opportunities.

A number of delegations have raised concerns about both the project and revised integrated approaches. They have suggested that a number of questions about the project approach remain unaddressed, and that the integrated approach raises new questions, including that:

- The approaches may not be compatible with the interests of smaller economies which face challenges in attracting foreign investment, and small and medium enterprises which often lack capacity to meet additional administrative burdens.
- It is unclear how the approaches would support small-scale projects or entities as the costs of registering a project or entity may outweigh the benefit of any tariff or trade concessions.
- Tariff concessions to listed entities would provide them with a market advantage, and could serve as barriers to new firms seeking entry into a market, especially smaller firms.
- In establishing the mandate, Ministers did not envisage "case-by-case" liberalization on the basis of projects or entities, but rather multilaterally agreed reduction or, as appropriate, elimination of tariffs and non-tariff barriers.
- While they may offer environmental benefits, and similar approaches are already being used by some Members, they do not require multinational negotiations to support their implementation.
- These approaches operate in tension with the WTO's negotiations on trade facilitation which seek to "to further expedite the movement, release and clearance of goods".
- These approaches discriminates between "like" environmental products on the basis of the entity importing them or project using them, cutting against WTO principles of non-discrimination.
- It is unclear how these approaches would address issues of special and differential treatment, technology transfer and non-tariff barriers in practice, or how they would relate to ongoing WTO discussions in these areas.
- It is unclear which environmental goods would be covered, and whether they would need to be included on a list. Would any new products be added through notification, or through further negotiations?
- Listing entities under the integrated approach is burdensome, given their large and expanding numbers, rapid entry into and out of the market, and diversity of fields of operation.
- The integrated approach fails to resolve dual-use issues, as many entities will perform both environmental and non-environmental services.
- Products may be on-sold, or not used in the project for the entirety of their useful life, re-raising concerns about dual or multiple-use.

WTO Members have also asked a range of questions about how the revised integrated approach would work in practice: Would Members be required to list a minimum number of entities? What criteria would be used to select entities? Must entities be somehow "representative" of the sector? How would lists be negotiated and notified? How would authorities ensure goods are used for their intended purpose? How in practical terms does it address the proponent's concerns about technology transfer, non-tariff barriers or special and differential treatment?

In response to questions from other delegations, India has provided further information on its proposed links with the multilateral trading system, its role in technology transfer, and the functioning of the designated national authority (TN/TE/W/54). It has explained the approach's positive elements, the role of the designated authority in facilitating trade and environment, and functional linkages with the Committee on Trade and Environment (TN/TE/W/60). And it has sought to respond to concerns about the approach's novelty, predictability and transparency, its capacity to offer additional tariff concessions as required by the Doha mandate and its compatibility with core WTO principles such as MFN (TN/TE/W/67). In presentations to the CTESS, the delegations of Argentina and India also sought to address a range of new questions arising about the integrated approach.

Despite these efforts, many delegations continue to have concerns about the project and integrated approaches. While some delegations have offered support for the goals of these approaches, none besides India and Argentina have formally endorsed them. A number of Members accept that these approaches may offer benefits in theory, but have expressed concern that the situation may be different in practice. Still others remain highly skeptical and have formally stated that they do not see the integrated approach as a basis for further discussion.

VI. ADVANCING THE NEGOTIATIONS

Advancing the negotiations requires an effort to resolve or reduce differences among proponents of the list and project/integrated approaches, and to address the concerns of those countries which have not aligned themselves with either approach. The appropriate timing and pace of negotiations depends in part on negotiations elsewhere in the Doha Work Programme, including those on non-agricultural market access. However, given the complexity of the subject matter of the environmental goods negotiations – and its importance – there is some value in seeking to continue the analytic work of the CTESS in order to ensure that delegations are prepared in the event there is a breakthrough elsewhere in WTO discussions. As described below, there are a number of areas where WTO Members could usefully continue a discussion without prejudice to their existing views regarding the appropriate approach to the negotiations.

VII. ENVIRONMENTAL ACTIVITIES AND CATEGORIES

One area of potential convergence is between the environmental "activities" and "categories" proposed by different delegations. Proponents of the integrated approach have suggested that "the approach now proposed would be to first identify and agree on *environmental activities* of concern to Members" (JOB(07)/77, emphasis added). Proponents of the list approach have, in turn, divided their set of products "into *environmental categories* to make them more recognizable from an environmental perspective" (JOB(07)/54, emphasis added). Identifying and exploring the commonalities between these classifications may form one opportunity for convergence between the two approaches.

A precise comparison of the two approaches will require further information from each side about the intended content of their classification. Some information on the content of the list approach's environmental categories is available through a review of the listed products. Additional information would be required from proponents of the project approach to help delegations understand their classification of environmental activities. On a preliminary analysis, however, there would seem to be substantial overlap between the environmental activities and categories identified by these WTO Members:

	Environmental activities (JOB(07)/77)	**Environmental categories (re-ordered) (JOB(07)/54)**
1	Air pollution control	Air pollution control
2	Water and waste water management	Waste water management and potable water treatment Clean up or remediation of soil and water
3	Soil and soil conservation	Clean up or remediation of soil and water
4	Solid waste management	Management of solid and hazardous waste and recycling systems
5	Environmental monitoring and analysis	Environmental monitoring and analysis equipment
6	Energy saving management	Heat and energy management
7	Renewable energy	Renewable energy plant
8		Environmentally preferable products, based on end use or disposal characteristics
9		Cleaner or more resource efficient technologies and products
10		Natural risk management
11		Natural resources protection
12		Noise and vibration abatement

A number of previous proposals have also referred to various classifications as a means to advance the negotiations. India suggested the following areas as ones in which broad criteria for environmental projects could be agreed upon by the CTESS: air pollution control, water and waste management, solid waste management, remediation and clean-up, noise and vibration abatement, environmental monitoring and analysis, process optimization, energy saving management, renewable energy facilities and environmentally preferable products (TN/TE/W/51). Argentina's initial proposal on an integrated approach similarly called on the CTESS to identify categories of environmental projects "such as air pollution control, water and waste water management, soil and soil conservation, solid waste management, remediation and clean up, noise and vibration abatement, environmental monitoring and analysis, process optimization, energy saving management, renewable energy, and environment-friendly products (TN/TE/W/62). Other delegations, have also offered various classifications or parts of classifications including but not limited to New Zealand (TN/TE/W/Rev2), Canada (JOB(04/98), Korea (TN/TE/W/48), the European Communities (TN/TE/W/47) and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu (TN/TE/W/44), Qatar (TN/TE/W/14) and the United States (TN/TE/W/34).

WTO Members have discussed environmental goods in a number of these areas during technical exchange sessions undertaken by WTO Members during 2006. The first of these, on 4-5 April 2006, provided opportunities to share technical information on the areas of Air Pollution Control and Renewable/Clean Energy. The second, on 10-12 May 2006, focused on Waste Water Management and Solid and Hazardous Waste Management. The third, on 12-13 June 2006, addressed other categories proposed by WTO Members. At these meetings, WTO Members provided detailed information on the character and environmental credentials of a variety of environmental goods.

Efforts to develop a common classification should build on (rather than repeat) this discussion. Rather than focusing initially on individual goods, such an approach could commence with an examination of the areas identified in the most recent proposals on an "integrated approach" (JOB(07)/77) and "potential convergence set" of products (JOB(07)/54). Identifying an area or set of areas of common interest to WTO Members could help to more clearly define the scope of the negotiations, sharpen

focus on the goals of liberalization in specific areas, and facilitate discussions about how to achieve those goals through the liberalization of particular classes or types of goods.

An agreed classification of environmental areas could then provide a framework for discussing shared goals and international priorities in each area (e.g. "water and waste water management" and related Millennium Development Goals on water), which in turn could help frame a discussion of appropriate product coverage for the negotiations. Defining the scope of the negotiations could also help allay the concerns of many developing countries that the negotiations are basically "open-ended" or that product coverage will be unreasonably large.

VIII. AGREEING PRODUCT COVERAGE

Agreeing a set of environmental activities or categories would, to a certain extent, help to circumscribe or define the negotiation's product coverage. Within any agreed set of environmental areas, however, issues will still arise about which products should be considered as falling within or outside the scope of the negotiations. A discussion of product coverage is thus a second area where efforts will be valuable in any attempt to promote convergence.

WTO Members recognize the need for a discussion of product coverage. Proponents of the integrated approach have suggested that "all goods imported by the notified entities for carrying out any of the agreed environmental activities would be granted preferential tariff treatment" (JOB (07)/77).[39] Proponents of a "proposed convergence set" of products have reviewed each of their items "on the basis of both its importance for the environment and customs workability" (JOB(07)/54). In both cases, delegations will need to arrive at some agreement on the products encompassed by the term "environmental goods" and the means by which to identify them.

Some delegations have suggested that single end-use products should serve as the basis for discussions, as multiple end-use products raise a range of questions relating to customs identification and non-environmental uses. It seems clear that single end use products offer potential for a high degree of convergence among Members as candidates for inclusion in the negotiation's product coverage.

It has been noted that the number of single end-use products is relatively small. According to the OECD:

> The aspect of dual or multiple use is intrinsic to environmental goods; only a few products are solely used for environmental purposes (e.g. wind turbines) at least at the level of HS 6 digit, while many more single use environmental products can be identified at the lower level. As many of the products that are used for environmental protection and improvement are also used for other purposes, the benefits of liberalising trade in environmental products will be limited if dual or multiple use goods are to be excluded categorically.[40]

[39] Responding to concerns that this approach seems overly broad, at the most recent CTESS Meeting the delegate of India stated that a list of excluded products could be developed to identify which products would not be subject to trade liberalization under the project approach.

[40] OECD, *Issues of Dual Use and Reviewing Product Coverage of Environmental Goods*, OECD Trade and Environment Working Paper No. 2007-01, Joint Working Party on Trade and Environment (COM/ENV/TD(2006)30/FINAL). See also, R. Steenblik, *Liberalizing Trade in Environmental Goods: Some Practical Considerations*, OECD Trade and Environment Working Paper No 2005-05 (OECD, 2005).

It may therefore prove politically difficult to circumscribe the negotiations to cover *only* single end-use products. At the same time, a large number of Members have expressed serious concerns about the implications of a broader approach. There is consequently a need to find a way to undertake a principled discussion about what should – and should not – find its way into the scope of the negotiations. As noted by New Zealand:

> Although it might be possible to proceed with negotiations without a formally agreed definition of "environmental goods", it is worth reflecting on the potential for difficulties when, in the absence of an agreed definition, a list of environmental goods is under development. What products will be on the list and which ones will be excluded? How will Members be able to credibly include specific products on the list in the face of questions by other Members who may doubt the environmental credentials of the product? (TN/TE/W/46)

New Zealand's response was to offer a "reference points" approach, which provides a screening mechanism to ensure any product proposed for inclusion in the negotiation's product coverage meet a basic threshold before they can be proposed as environmental goods for the purposes of the WTO negotiations. According to this approach reference points could help establish a product's environmental credentials. Potential reference points included: the OECD's definition of environmental industries; APEC's conceptualization of environmental goods; and approaches to environmental goods agreed through high quality and comprehensive regional or bilateral Free Trade Agreements.

This approach thus provides a useful means for commencing – but not necessarily concluding – a discussion about whether a product should be classified as an environmental good for the purposes of the negotiations. As noted by New Zealand, the existence of the requisite reference point "simply means that a discussion can be initiated" it does not "automatically confer environmental goods status" (TN/TE/W/46). A further discussion is therefore now required to identify an appropriate, but more stringent, set of factors or criteria that can be used as a reference for justifying inclusion of a particular product in the negotiations' product coverage. The importance of undertaking such top-down as well as bottom-up approaches has been noted by a number of delegations. China, for example, has stated that they "prefer a combined approach of both top-down and bottom-up in parallel" (TN/TE/W/42). The European Communities have similarly stated "work on categories and on possible products should proceed together and be mutually reinforcing" (TN/TE/W/47).

Broadly speaking, any set of factors identified by WTO Members to help evaluate proposed environmental goods should be rooted in the principles expressed in the preamble to the WTO Marrakech Agreement, the Doha Ministerial Declaration and other key WTO documents, and should seek to secure a "triple win" for trade, environment and development. Any such factors should thus reflect the need for positive efforts to ensure developing countries secure a "share in the growth in international trade commensurate with the needs of their economic development" (WTO Preamble), "place the needs and interests of developing countries at the heart of the WTO work programme" (Doha Declaration, paragraph 2), and reflect that "development concerns form an integral part of the Doha Ministerial Declaration" by, among other things, ensuring that "special attention shall be given to the specific trade and development related needs and concerns of developing countries, including capacity constraints" (1 August 2004 General Council Decision ("July Package")). They should reflect the commitment by Ministers to make the development dimension "a meaningful reality, in terms both of the results of the negotiations on market access and rule-making and of the specific development related issues" (Hong Kong Ministerial Declaration, paragraph 2). When considering product coverage Members may also wish to recall the Doha Ministerial Declaration's call for negotiations on non-agricultural market access to:

> …aim, by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, *in particular on products of export interest to developing countries*. (emphasis added) (Doha Ministerial Declaration, paragraph 16).

Any set of factors identified by WTO Members to help evaluate proposed environmental goods should also reflect the Doha Ministerial Declaration's call to "to maintain the process of reform and liberalization of trade policies, thus ensuring that the system plays its full part in promoting recovery, growth and development" (paragraph 1) and to contribute to a "mutually supportive" relationship between trade and environment (paragraph 31).

Submissions by WTO Members on paragraph 31(iii) identify a number of factors upon which a principled discussion of paragraph 31(iii)'s product coverage could be based. An initial criterion could include that any products covered by the negotiation contribute to addressing one or more of any agreed environmental activities or categories. Other general criteria could include that:

- ***They contribute to the fulfilment of international priorities***. According to the European Commission, environmental goods could be defined as contributing to the fulfilment of priorities "including Multilateral Environmental Agreements, the Millennium Development Goals (in particular to safe water and sanitation), Agenda 21 and the WSSD Plan of Implementation" (European Communities, TN/TE/W/47). India has suggested an alternate approach which achieves "the sustainable development goals enshrined in the WTO Preamble and the Millennium Development Goals" (TN/TE/W/60).
- ***They are directly used to address environmental problems***. According to one delegation, "the APEC experience suggest that this "direct use" characteristic could be a practical and effective criteria for Members to use in negotiations" (Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu, TN/TE/W/44) (see also TN/TE/W/64). "In terms of its end use, the good must have some direct and verifiable environmental application" (Colombia (Job(06)/149).
- ***Their use has a direct environmental benefit.*** It is "appropriate to assess the environmental credentials of products, i.e. to consider whether the product has a "direct environmental benefit" (New Zealand, TN/TE/W/49/Rev.2); "Does the product have a clear and direct environmental benefit?" (United States, TN/TE/W/64)
- ***They do not have other significant non-environmental uses***. "The end use of the product should be primarily for an environmental purpose. The products with other significant uses are excluded" (Korea, TN/TE/W/48);
- ***They offer opportunities for developing countries***. Liberalization should "offer opportunities for developing countries to increase exports of such goods where they have competitive advantages" or lead to "the use of technologies adapted to the needs of developing countries" (Brazil, TN/TE/W/59).

Criteria such as these could conceivably be applied to address dual and multiple-use products, should product coverage be extended to include these goods. The United States has additionally suggested a number of questions that could be of assistance in narrowing the scope of dual and multiple-use products in the negotiations, including whether the product is sensitive or otherwise raises concerns for delegations (TN/TE/W/64). Colombia has proposed that dual or multiple-use goods "must be linked to a project, programme, plan or system that generates a verifiable environmental benefit, under review by a Designated National Authority, in accordance with internal priorities, policies, programmes and legislation" (Job (06)/149).

WTO Members have also offered proposals on how to address issues arising from the classification of various goods in the Harmonized System. One recent proposal suggests that "credible ex-outs should be sought wherever possible and, once the 6-digit HS code and the "ex-out" description of a product is

agreed by Members in the negotiations under paragraph 31(iii), implementation will be left to individual members. In this way, Members will be able to define the product according to their own domestic requirements" (JOB(07)/54).

One issue that has arisen in the negotiations is the treatment of wastes, chemicals and certain environmentally preferable, but nonetheless environmentally harmful, products. In response to concerns that tariffs could be reduced on *all* goods imported by an entity undertaking environmental activities (including harmful ones), proponents of the integrated approach have suggested that a list of excluded products could be developed. Similarly, in response to concerns that wastes and chemicals were included on lists offered by proponents of the list approach, these Members have removed these goods from their lists. It seems therefore that most delegations oppose the inclusion of environmentally risky products in the negotiation's product coverage, even where those goods may play a role in certain environmental activities. To the extent that some delegations remain seriously concerned about the potential for inclusion of products such as these in the coverage of the negotiations, WTO Members could consider developing a list of excluded products. Such a list would enumerate products or categories of products which are not environmental goods for the purposes of the negotiations.

At the present stage in the negotiations, identifying a means for conducting a principled discussion of product coverage would seem to be a priority. In the event clear criteria or other factors are not available to help guide a discussion which will make sure that the product coverage is fair and balanced and contributes to the overarching goals of the Doha Ministerial, and places the needs and interests of developing countries at the heart of the WTO work programme, it may remain difficult to secure consensus on an agreed approach to the negotiations. Given the richness and diversity of factors suggested in WTO Member's submissions for identifying product coverage, Members may wish to consider requesting the WTO Secretariat to prepare a compilation on this topic to help provide the basis for further discussion.

IX. SPECIAL AND DIFFERENTIAL TREATMENT

Product coverage will influence whether the negotiations are balanced and deliver "wins" for trade, environment and development. As well as product coverage, a balanced negotiation will also depend on the provisions available to developing countries for special and differential treatment.

WTO Members have agreed that "the negotiations and the other aspects of the Work Programme shall take fully into account the principle of special and differential treatment for developing and least-developed countries…" (Doha Ministerial Declaration, paragraph 50). Any provisions for special and differential treatment should form an "integral part" of the outcome of the negotiations, and be "precise, effective and operational" (Doha Ministerial Declaration, paragraph 44). More specifically related to non-agricultural market access, any outcome should also reflect the Doha Ministerial Declaration's call to "take fully into account the special needs and interests of developing and least-developed country participants, including through less than full reciprocity in reduction commitments" (Doha Ministerial Declaration, paragraph 16).

Some of the options available in relation to the paragraph 31(iii) negotiations for special and differential treatment include:

- Extended periods for implementation of agreed commitments.
- Different levels of tariff reduction for developed and developing countries.
- Flexibilities in product coverage in favour of developing countries.

In relation to the environmental goods negotiations, one group of developed country WTO Members has recently suggested (TN/MA/W/70 and TN/TE/W/65):

> In recognition of the attention given to environmental goods by Ministers in Doha, tariffs should be eliminated as soon as possible, but no later than 2008 for developed countries and those developing countries declaring themselves in a position to do so. For other developing countries, tariffs should be eliminated by X years thereafter. Further flexibilities for developing countries may include exclusions for a limited number of products (e.g., similar to a "complementary" or "development" list).

The European Communities had previously proposed that all Members, except the least developed, agree to deeper cuts of tariffs on environmental goods, aiming at elimination as the final goal, and have suggested that developed and developing countries may follow different timetables for implementation of their tariff commitments (TN/TE/W/47).

The former proposal offers to extend implementation periods and provide "limited" product exclusions, but does not offer different levels of tariff reductions for developed and developing countries ("tariffs should be eliminated"). The latter proposal offers to extend implementation periods and offers different levels of tariff reductions for least-developed – but not for developing – countries, and does not (at least explicitly) offer product exclusions. Notably, neither proposal explicitly offers different levels of tariff reduction commitments for developing countries – something that might reasonably be expected in light of the commitment on non-agricultural market access in the Doha Ministerial to "less than full reciprocity in reduction commitments" for developing countries.

Developing country Members have proposed additional approaches to special and differential treatment. India and Argentina have proposed, in the context of the integrated approach, that developed countries could offer a 100 percent tariff concession as a measure for special and differential treatment while developing countries would offer a lower preference margin (JOB(07)/77). Least developed countries would offer any concession that they may individually decide (JOB(07)/77). Argentina and others have argued that special and differential treatment should include provisions for longer implementation of commitments and lower tariff reductions (JOB(06)/194). Cuba has stated that developing countries should decide the proportion of goods to be liberalized and the appropriate levels of reduction, and that tariff reductions by developed countries should be sufficient to ensure the entry of environmental goods identified for export by developing countries (TN/TE/W/69).

These various forms of special and differential treatment – product exclusions, differential tariff reductions and time extensions – are available in other WTO contexts. WTO Members may also wish to consider whether there are additional factors that need to be considered in light of the specific context of the environmental goods negotiations and any specific constraints faced by developing countries (and including in light of the different approaches proposed to the negotiations).[41]

A number of delegations have suggested that the task of deciding modalities is one for the NAMA negotiations and not the CTESS. Some other delegations have disputed this interpretation of the Doha mandate and CTESS discussions. WTO Members collectively have recognized the importance of coordinating work on environmental goods between the Market Access Negotiating Group and the

[41] See, for example, *The Development Dimension as an Integral Part of the Negotiations on Environmental Goods: The Principle of Special and Differential Treatment – Communication from the Republic of Cuba*, 30 June 2006, (TN/TE/W/69).

CTESS, but have not agreed to any formal sequencing of work in the two bodies.[42] Regardless of the view adopted, it seems likely that as a political matter any discussions of modalities, including special and differential treatment, will need to take place in tandem with a focus in the CTESS on clarifying the concept of environmental goods. As noted by Cuba:

> Progress in the present negotiations will depend on the assurance the developing and least developed countries feel about proper fulfillment of the mandate. In our view, therefore, it is essential to start at once to promote a discussion involving all Members on how to ensure effective implementation of SDT so that the mandate in paragraph 31(iii) can be put into effect (TN/TE/W/69).

More substantively, considering the two together seems appropriate given that the balance of any outcome will depend both on the products covered and the modalities applying to them. Developing countries might agree to broader product coverage if the associated modalities include broader provisions for special and differential treatment. Conversely, they may call for considerably narrower product coverage in the event their flexibilities seem likely to be narrower.

X. A DUAL LIST APPROACH?

As a means to move the negotiations forward and to accommodate different WTO Member's views and interests, the establishment of two lists of environmental goods has been proposed by a number of WTO Members.

The United States has proposed a core list and complimentary list (TN/TE/W/38 and TN/MA/W/19/Add.5). The core list would include those products that WTO Members agree by consensus are environmental goods for the purposes of the negotiation. The complimentary list would include those additional products that do not secure consensus, but for which there is a high degree of acknowledgement that they can have significance for environmental protection, pollution prevention or remediation, and sustainability. According to the United States' proposal, the core list would include goods in the categories of "environmental remediation and pollution prevention" and "clean technologies". Tariffs on these goods would be eliminated as soon as possible but no later than 2010. For goods on the complimentary list, each Member would agree to eliminate tariffs on a certain *x* percent of goods on same time-frame as the core list. Members would self-select these products, but would be required to eliminate tariffs on goods in which they are export competitive. Reflecting provisions on "less than full reciprocity" in the NAMA negotiations, developing countries would be required to eliminate tariffs on a lesser percentage of goods than the *x* percent that would apply to developed countries.

China has proposed a common list and a development list (TN/TE/W/42). The common list would include those product lines that WTO Members agree by consensus are environmental goods for the purposes of the negotiations, including products of interest to developed and developing countries, with priority given to products of export interest to developing and least-developed countries. The modalities for liberalization would be developed by the NAMA negotiating group. The development list is a subset of the common list selected by developing and least-developed countries for special and

[42] See, for example, the Minutes of the 10-11 October 2002 CTESS meeting (TN/TE/R/3) noting that some WTO Members called for the CTESS to clarify the concept of environmental goods, and other WTO Members, while not opposing this, could not accept formal sequencing of the work in the CTESS and the Negotiating Group on Market Access. Some WTO Members have suggested that an understanding of modalities in NAMA should precede any agreement of product coverage under the paragraph 31(iii) negotiations. Others have suggested that the two discussions should occur in parallel. Still other delegations dispute whether the NAMA modalities are relevant to the paragraph 31(iii) negotiations or rather whether separate modalities should be developed.

differential treatment by exemption or lower levels of reduction commitments, reflecting the principle of less than full reciprocity, taking into consideration the needs of their economic development and vulnerability of relevant domestic industries. Such an approach provides one means of realizing special and differential treatment as discussed in the previous section.

Each of these approaches offers some additional flexibility over a single list. If the United States' approach were adopted it is likely that WTO Members would agree to a relatively narrow "core/common list" as opportunities for special and differential treatment in relation to that list are limited. If the Chinese approach were adopted it is likely WTO Members would agree a slightly broader "core/common list" as the existence of the "development list" would provide them with additional flexibilities. The two approaches, of course, do not exhaust the options available to WTO Members. It would be possible, for example, to blend the two approaches by agreeing a development list *inside* a core/common list (as per the Chinese approach), as well as a complimentary list of additional products for liberalization *outside* a core/common list (as per the United States' approach).

As well as varying the breadth of product coverage (e.g. number of products covered), WTO Members can vary the balance of those products to ensure win-win-win outcomes by, for example, responding to the Doha Ministerial Declaration's call for the negotiations to focus "on products of export interest to developing countries" (paragraph 16). Special and differential treatment could be made available by allowing exclusions or flexibility in the product coverage of the core/common list (Chinese approach) and/or any complimentary list (United States approach), by allowing differences in tariff reductions (reflecting less than full reciprocity) and/or by allowing differences in time periods for implementation. Tariff reductions on any list or lists agreed by WTO Members could *a priori* involve tariff elimination, tariff reduction on a "formula" basis (e.g. any formula agreed in NAMA), tariff reduction on a "formula plus" basis, tariff reduction on a "formula minus" basis, or tariff reduction on a formula adjusted to give additional flexibility to developing countries (e.g. adjusted coefficients). Should a dual list approach be adopted by WTO Members, a robust set of measures for special and differential treatment would help to ensure that the development dimension is a "meaningful reality" in terms of the results of the negotiations (Hong Kong Ministerial Declaration, paragraph 2).

XI. ENHANCING CAPACITY BUILDING AND TECHNICAL ASSSISTANCE

The Doha Ministerial Declaration recognizes "the importance of technical assistance and capacity building in the field of trade and environment to developing countries, in particular the least-developed among them" (paragraph 33). It also confirms that "technical cooperation and capacity building are core elements of the development dimension of the multilateral trading system" (paragraph 38).

WTO Members have also agreed that technical assistance should focus "on the needs of beneficiary countries and reflect the priorities and mandates adopted by Members" and have endorsed "the application of appropriate needs assessment mechanisms and support the efforts to enhance ownership by beneficiaries" (Hong Kong Ministerial Declaration, paragraph 53).

Any effort on capacity building should also take into account the emphasis by Ministers in the Doha Ministerial Declaration on the "necessity for the effective coordinated delivery of technical assistance with bilateral donors, in the OECD Development Assistance Committee and relevant international and regional intergovernmental institutions, within a coherent policy framework and timetable" (paragraph 39), and on encouraging "cooperation between the WTO and relevant international environmental and developmental organizations" (paragraph 6).

Capacity building and technical assistance play a particularly important role in the field of environmental goods. A number of WTO Members have already supported capacity building for developing countries in the area of environmental goods (see, for example, the submission by Canada TN/TE/W/50). As well as efforts to assist countries to identify environmental goods for the purposes of the negotiations, more extensive efforts are likely required to assist developing countries to undertake technology needs assessments, and to identify and address any impediments to transferring goods and technologies into their domestic markets, and to exporting domestically produced technologies to markets abroad.

Based on an appropriate needs assessment, additional efforts for capacity building could, for example, focus on assisting developing countries to identify domestic environmental priorities in each of the relevant environmental areas identified within the negotiation, as well as the relevant technologies applicable in these areas, and the steps required to acquire and implement those technologies. With adequate funding, UNCTAD and UNEP, through the Capacity Building Task Force on Trade, Environment and Development, could assist countries to undertake activities such as these, in collaboration with the secretariats of relevant Multilateral Environmental Agreements.

XII. ENHANCING TECHNOLOGY TRANSFER

The transfer of technology and technical know-how is among the most important means of addressing environmental and development challenges such as climate change and ecosystem degradation, while helping to provide jobs and opportunities and enhancing the capacity of domestic industries to compete effectively in international markets. Reducing tariff and non-tariff barriers to environmental goods and services is one way of reducing the cost and increasing the availability of environmental technologies. A number of WTO Members have noted, however, that additional efforts are likely to be required to ensure effective transfer actually takes place in practice.[43]

The importance of technology transfer is reflected in calls by Ministers at the February 2007 UNEP Global Ministerial Environment Forum for efforts to "promote the transfer of environmentally sound technologies, including both clean and efficient technologies"; to "identify environmental friendly technologies at the global level and support their implementation at the national level, ensuring a balanced mix of modern and traditional knowledge and technology"; and to "develop both technologies and technology transfer mechanisms relevant to least developed countries, as well as capacity-building activities to support such technology transfer" (TN/TE/INF/11).

It is also reflected in the text of the 2002 WSSD Plan of Implementation, which includes extensive references to technology transfer (see Annex below) and explicitly calls for efforts to:

> Promote, facilitate and finance, as appropriate, access to and the development, transfer and diffusion of environmentally sound technologies and corresponding know-how, in particular to developing countries and countries with economies in transition on favourable terms, including on concessional and preferential terms, as mutually agreed, as set out in chapter 34 of Agenda 21 (paragraph 99)

Specifically, the WSSD Plan of Implementation calls for urgent actions at all levels to:

(a) Provide information more effectively;

[43] For a summary of home country measures relevant to securing technology transfer see UNCTAD, *Facilitating Transfer of Technology to Developing Countries: A Survey of Home-Country Measures* (UNCTAD/ITE/IPC/2004/5) available at http://www.unctad.org/en/docs/iteipc20045_en.pdf

(b) Enhance existing national institutional capacity in developing countries to improve access to and the development, transfer and diffusion of environmentally sound technologies and corresponding know-how;

(c) Facilitate country-driven technology needs assessments;

(d) Establish legal and regulatory frameworks in both supplier and recipient countries that expedite the transfer of environmentally sound technologies in a cost-effective manner by both public and private sectors and support their implementation;

(e) Promote the access and transfer of technology related to early warning systems and to mitigation programmes to developing countries affected by natural disasters (paragraph 99)

WTO Members have similarly recognized the importance of technology transfer. The Doha Ministerial Declaration calls for an examination "of the relationship between trade and transfer of technology, and of any possible recommendations on steps that might be taken within the mandate of the WTO to increase flows of technology to developing countries" (paragraph 37). The Hong Kong Ministerial Declaration recognizes "the relevance of the relationship between trade and transfer of technology to the development dimension of the Doha Work Programme" (paragraph 43).

Although Article 31(iii) does not explicitly include the term "technology transfer" it is understood that liberalizing tariff and non-tariff barriers to trade in environmental goods and services can help to make these goods and services more affordable and available and so contributes to the broader goals of technology transfer. A number of developing countries have noted that the environmental goods negotiations also provide an opportunity within the mandate of the WTO to increase flows of technology to developing countries, and that an explicit focus on opportunities for doing so will be particularly important in order to achieve "wins" for the environmental and developmental dimensions of the paragraph 31(iii) mandate.

A recent submission by Argentina and India, for example, calls for WTO Members "to actively co-operate in the transfer of technology related to the agreed environmental activities for the creation of technical capabilities of developing country Members" (JOB(07)/77).[44] Colombia has noted the importance to developing countries of technology transfer and capacity building in the context of environmental goods liberalization (JOB(06)/149). Cuba has similarly called for technologies of developing countries to be transferred on favourable and preferential terms along with the related know-how and training (TN/TE/W/69). In the context of the "integrated approach", India and Argentina have proposed that the WTO Secretariat monitor technology transferred on the basis of Members' notifications and report in regular CTE meetings (JOB(07)/77).

The value of a coherent approach to the liberalization of environmental goods has been identified at UNCTAD expert meetings:

> One of the key interests of developing countries in liberalization of EGS is enhanced access to and effective use of [environmentally sound technologies] ESTs. It is, however, important to take a holistic view of the transfer of ESTs, linking it to investment and access to other sources of funding, licensing of intellectual property rights (IPRs), availability of skilled staff and other services, such as engineering and construction, as well as support through development

[44] Submission by Argentina and India, *Integrated Approach to Paragraph 31(III)*, JOB(07)/77, Committee on Trade and Environment, Special Session, 6 June 2007, at 2

> cooperation and MEAs. Small and medium-sized enterprises, both in developing and in developed countries, play a key role in technological development, including cleaner technologies. All these factors underline the importance of policy coherence, at both national and international levels.[45]

Any effort regarding technology transfer should seek to identify and address the specific barriers to technology transfer facing developing countries. It could also be complimented with technical assistance and capacity building designed to remove or otherwise address those barriers. As steps towards achieving such an outcome, WTO Members could consider:

- Request Members to provide additional information on existing programmes and activities designed to promote technology transfer (building on information submitted by Canada (TN/TE/W/50/Rev.1) and other delegations).
- Identify any aspects of the work of the WTO Working Group on Trade and Transfer of Technology that may be of relevance to the work of the CTESS under paragraph 31(iii).
- Examine the potential for synergies between the technology transfer provisions in Multilateral Environmental Agreements and the WTO's work on environmental goods and on technology transfer, in order to increase flows of technologies to developing countries (through, for example, Information Exchange Sessions in the CTE).
- Identify additional activities and initiatives that could be taken in collaboration with or beyond the WTO to promote technology transfer in a manner consistent with the paragraph 31(iii) negotiations.

Based on further discussions about the relationship between environmental goods and technology transfer, WTO Members could consider establishing a work programme to examine the linkages between these issues, and identify additional steps that might be taken within the mandate of the WTO to increase flows of environmental technology to developing countries. Efforts to identify additional means to transfer technology and related technical know-how to developing countries, drawing on experiences elsewhere in the WTO, could help to secure agreement under paragraph 31(iii) and increase the likelihood of win-win-win outcomes from the environmental goods negotiations.

XIII. ADDRESSING NON-TARIFF BARRIERS

In paragraph 31(iii) Ministers called on WTO Members to examine and reduce non-tariff barriers to trade in environmental goods. The importance of this part of the mandate has been underscored by a number of WTO Members. New Zealand has stated that it regards non-tariff barriers as a serious issue and has proposed "that discussion move from the abstract and conceptual to the practical" and said it "looked forward to the identification of specific non-tariff barriers that affected Members' market access for environmental goods" (TN/TE/W/49/Rev.2). Canada, the European Communities, New Zealand, Norway, Singapore, Switzerland and the United States have noted that "specifically identified non-tariff barriers on particular goods (including any time-consuming and burdensome customs formalities) should also be addressed and reduced to the maximum extent so as to facilitate trade in environmental goods" (TN/TE/W/65 and TN/MA/W/70). Cuba has suggested "taking up an outstanding issue – the analysis of non-tariff barriers – that has not been seriously addressed in this Committee" (TN/TE/W/69).

Little practical progress has been made so far in identifying non-tariff barriers in the CTESS. This is true in part because proponents of the list approach have not seen themselves as the principal demandeurs of this part of the mandate, and other delegations have been reluctant to identify products

[45] UNCTAD, *Report on the Expert Meeting on Definitions and Dimensions of Environmental Goods and Services in Trade and Development*, 9 to 11 July 2003, (TN/TE/INF/6) at 11

and associated non-tariff barriers as this risks playing into a discussion of lists. As non-tariff barriers are formally part of the paragraph 31(iii) mandate, WTO Members will ultimately need to address them. Doing so may prove easier if WTO Members are able to identify areas of possible convergence – on topics such as environmental areas, product coverage and special and differential treatment – and are able to engage more actively on related issues such as technical assistance and technology transfer. It will also require WTO Members to point to specific examples of non-tariff barriers that pose problems for their exporters.

As noted by the European Communities, any examination of non-tariff barriers in the field of environmental goods will need to take into consideration that environmental markets are "regulatory driven" (TN/TE/W/47). In many cases, regulations create environmental markets or at least augment demand for environmental goods. Good environmental regulations can also contribute to improving the competitiveness in national and international markets of firms providing environmental goods.[46] Consequently, any effort to remove non-tariff barriers would have to be careful not to undermine markets for those goods. Nor would it be appropriate to seek to "eliminate" non-tariff barriers but rather to ensure they do not pose unnecessary barriers to trade.

How might the issue of non-tariff barriers be addressed in practice? The United States has said "to the extent they are not covered generally by other disciplines or within the context of the new market access negotiation, Members should establish a mechanism for dealing with NTBs on environmental goods specifically, including through bilateral negotiations" (TN/TE/W/8). Argentina and India have recently stated that "noting that domestic regulatory requirements often act as NTBs, Members should consider relaxing those requirements to the extent necessary for the effective conduct of the agreed environmental activities. Members will also consider establishing a structured work programme to address other non-tariff barriers faced by developing country Members in the export of environmental goods" (Job(07)/77).

XIV. CONCLUSION

Proponents of both the list and project/integrated approaches point to the importance of the separate mandate established in paragraph 31(iii), but each draws a different conclusion. Proponents of the list approach tend to conclude that the separate mandate indicates Ministers' intention for "NAMA plus" negotiations, implying deeper cuts in tariff and non-tariff barriers than negotiated in the NAMA negotiations. Proponents of the project/integrated approaches tend to conclude that the separate mandate indicates Ministers' intention for "NAMA plus" negotiations, implying additional efforts to secure environmental and development "wins" through the negotiation, using special and differential treatment and other measures, for example, regarding technical assistance and technology transfer.

These two views are not fundamentally inconsistent in principle, but will require careful management of both the process and substance of the negotiation if they are to be resolved in practice. At this stage in the negotiations, it seems likely that an effort to promote convergence around environmental areas and factors for evaluating the negotiation's product coverage are more likely to yield progress than attempts to continue discussions at the level of specific products or projects. There are, of course, a variety of ways of configuring the various elements discussed above to achieve a balanced and development-oriented result from the negotiations. One way of proceeding in the medium term could involve seeking to:

[46] *The Prague Statement: The Contribution of Good Environmental Regulation to Competitiveness*, Paper by the Network of the Heads of European Environmental Protection Agencies (November, 2005) available at: http://org.eea.eu.int/documents/prague_statement/prague_statement-en.pdf

- Draw on existing classifications of activities and categories to develop an agreed classification of environmental areas, and identify shared goals in each area drawing on mutually agreed international priorities such as those expressed in the Millennium Development Goals (e.g. water and sanitation).
- Identify ways to support a principled discussion of the negotiation's product coverage in each of these areas by drawing on the existing work of the CTESS to identify a set of factors to use as a reference when identifying relevant environmental goods.
- Discuss various modalities for special and differential treatment, capacity building and technical assistance with a view to ensuring a balanced outcome from the negotiation taking into account the special needs and concerns of developing countries.

Based on such a discussion, WTO Members could re-engage in a discussion of various approaches to the negotiations, including the potential value of a "dual list" approach as a means of introducing flexibility for developing countries into the negotiations (e.g. along the lines of the Chinese proposal), as well as appropriate means for addressing issues relating to non-tariff barriers and technology transfer. These are, of course, other ways of configuring the future work of the CTESS. Regardless of how the work is advanced, it will be important for WTO Members to secure an outcome that realizes the spirit, not merely the letter, of the paragraph 31(iii) negotiations and achieves true win-win-win benefits for trade, environment and development.

Annex:
WSSD Plan of Implementation – Selected references to environmental goods and technologies

Paragraph	Issue	Reference
Paragraph 6(k)	Poverty eradication, food	Increase food availability and affordability, including through harvest and food technology and management
Paragraph 8 (a)	Poverty eradication, energy	Improve access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services and resources, taking into account national specificities and circumstances
Paragraph 8(b)	Poverty eradication, energy	Improve access to modern biomass technologies and fuel wood sources and supplies,
Paragraph 9(a)	Poverty eradication, industrial development	Provide assistance and mobilize resources to enhance industrial productivity and competitiveness as well as industrial development in developing countries, including the transfer of environmentally sound technologies on preferential terms, as mutually agreed
Paragraph 10(b)	Poverty eradication, housing	Use low-cost and sustainable materials and appropriate technologies for the construction of adequate and secure housing for the poor, with financial and technological assistance to developing countries
Paragraph 14(f)	Consumption and production, eco-efficiency	Increase eco-efficiency, with financial support from all sources, where mutually agreed, for capacity-building, technology transfer and exchange of technology
Paragraph 19 (a)	Consumption and production, energy	Take further action to mobilize the provision of financial resources, technology transfer, capacity-building and the diffusion of environmentally sound technologies according to the recommendations and conclusions of the Commission on Sustainable Development
Paragraph 19(c)	Consumption and production, energy	Develop and disseminate alternative energy technologies with the aim of giving a greater share of the energy mix to renewable energies, improving energy efficiency and greater reliance on advanced technology
Paragraph 19(i)	Consumption and production, energy	Accelerate the development, dissemination and deployment of affordable and cleaner energy efficiency and energy conservation technologies, as well as the transfer of such technologies, in particular to developing countries, on favourable terms, including on concessional and preferential terms, as mutually agreed
Paragraph 20(a)	Consumption and production, transport	Implement transport strategies for sustainable development … including through the development of better vehicle technologies that are more environmentally sound, affordable and socially acceptable
Paragraph 21(a)	Consumption and production, waste management	Develop waste management systems, with highest priorities placed on waste prevention and minimization, reuse and recycling, and environmentally sound disposal facilities, including technology to recapture the energy contained in waste

Paragraph 24	Managing natural resources, fresh water	Mobilize international and domestic financial resources at all levels, transfer technology, promote best practice and support capacity-building for water and sanitation infrastructure and services development
Paragraph 25(e)	Managing natural resources, fresh water	Support the diffusion of technology and capacity-building for non-conventional water resources and conservation technologies, to developing countries and regions facing water scarcity conditions or subject to drought and desertification
Paragraph 25(f)	Managing natural resources, fresh water	Support, where appropriate, efforts and programmes for energy-efficient, sustainable and cost-effective desalination of seawater, water recycling and water harvesting from coastal fogs in developing countries, through such measures as technological, technical and financial assistance and other modalities
Paragraph 36(f)	Managing natural resources, climate change	Develop and disseminate innovative technologies in respect of key sectors of development, particularly energy, and of investment in this regard, including through private sector involvement, market-oriented approaches, as well as supportive public policies and international cooperation
Paragraph 38(g)	Managing natural resources, agriculture	Integrate existing information systems on land-use practices by strengthening national research and extension services and farmer organizations to trigger farmer-to-farmer exchange on good practices, such as those related to environmentally sound, low-cost technologies
Paragraph 39(a)	Managing natural resources, desertification	Mobilize adequate, predictable financial resources, transfer of technologies and capacity-building at alevels
Paragraph 42(f)	Managing natural resources, biodiversity	Promote concrete international support and partnership for the conservation and sustainable use of biodiversity … in particular through the appropriate channeling of financial resources and technology to developing countries and countries with economies in transition
Paragraph 43(d)	Managing natural resources, forests	Take immediate action at the national and international levels to promote and facilitate the means to achieve sustainable timber harvesting, and to facilitate the provision of financial resources and the transfer and development of environmentally sound technologies, addressing unsustainable timber-harvesting practices
Paragraph 43(f)	Managing natural resources, forests	Create and strengthen partnerships and international cooperation to facilitate the provision of increased financial resources, the transfer of environmentally sound technologies, trade, capacity-building, forest law enforcement and governance at all levels
Paragraph 47(l)	Health and sustainable development	Transfer and disseminate, on mutually agreed terms, including through public-private multisector partnerships, technologies for safe water, sanitation and waste management