

Environmental Goods and Services Series



# WTO Negotiating Strategy on Environmental Goods and Services for Asian Developing Countries



By Vicente Paolo B. Yu III  
South Centre



International Centre for Trade  
and Sustainable Development

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## LIST OF ACRONYMS AND ABBREVIATIONS

APEC	Asia–Pacific Economic Cooperation
BATNA	Best Alternative to a Negotiated Agreement
CIEL	Centre for International Environmental Law
CTESS	Committee on Trade and Environment Special Sessions
EG	Environmental Good
EGS	Environmental Goods and Services
EPA	Environmental Project Approach
EPP	Environmentally Preferable Products
ES	Environmental Service
ESM	Emergency Safeguard Measures
GATS	General Agreement on Trade in Services
HS	Harmonised Commodity Description and Coding System
LDC	Least Developed Country
MFN	Most Favoured Nation
NAMA	Non–Agricultural Market Access
OECD	Organisation for Economic Cooperation and Development
PPM	Process and Production Methods
SDT	Special and Differential Treatment
SPS	Sanitary and Phytosanitary
TBT	Technical Barriers to Trade
TRIPS	Trade–Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

## FOREWORD

Environmental goods and services (EGS) as a subset of goods and services was singled out for attention in the negotiating mandate adopted at the Fourth Ministerial Conference of the World Trade Organization (WTO) in November 2001. Increasing access to and use of EGS can yield a number of benefits including reducing air and water-pollution, improving energy and resource-efficiency, and facilitating solid-waste disposal. Gradual trade liberalisation and carefully managed market opening in these sectors can also be a powerful tool for economic development by generating economic growth and employment and enabling the transfer of valuable skills, technology and know-how embedded in such goods and services. In short, well-managed trade liberalisation in EGS can facilitate the achievement of sustainable development goals laid out in global mandates such as the Johannesburg Plan of Implementation, the UN Millennium Development Goals (MDGs) and various multilateral environmental agreements.

Rapid liberalisation in EGS, whether including traditional 'end-of pipe' goods and preventive technologies only, or environmentally preferable products (EPPs), will create enormous market opportunities for EGS firms and for countries that have a competitive domestic capacity in EGS. In order to capture a share of this growing market, developing countries must build up their domestic capacities for production and export of EGS. At the moment, the greatest potential for doing so lies in Asia. While constituting a small part of the environmental services sector globally, the sector has witnessed double-digit growth in Asia. Asia is also a region characterised by rapid economic growth, urbanisation and increasing pressure on available urban infrastructure to meet human needs. There are also significant environmental problems such as air-pollution and solid waste that EGS may help to prevent or mitigate.

At the same time production of traditional 'end-of pipe' goods and clean technologies is concentrated in developed countries and many developing countries are concerned that EGS negotiations may not offer them much in terms of export opportunities and are worried about impacts on revenues from import duties if tariffs are lowered. Where export opportunities exist for developing countries, there may be significant trade barriers, especially non-tariff ones to contend with in the major export markets. While a number of Asian countries have established domestic firms producing not only EPPs but also 'traditional' environmental goods as well as environmental services such as environmental consultancy, these are still mainly concentrated in SMEs. While the role of imports, foreign investment and partnerships in the introduction of new technologies and know-how is acknowledged, there are serious concerns about the impact of imports on domestic jobs and viability of domestic firms including SMEs. There are also concerns that imports by themselves will not lead to the development of a sound technological base and learning process, or result in meaningful access to technologies and know-how by domestic firms.

Thus, while Asian countries have many common elements of concern regarding the sustainable development impacts of EGS liberalisation, they are also characterised by diverse interests and priorities resulting from varying degrees of development, domestic capacities and environmental concerns. All of this implies that they will need to carefully tailor their negotiating strategies on EGS at the WTO to reflect these common and diverse elements of concern.

This paper by Vicente Paolo-Yu provides a number of options for Asian developing countries to craft a negotiating strategy based on 'developmental' approaches that would respond to the

sustainable development needs and concerns of these countries. The paper advocates carefully tailoring EGS liberalisation so that it can deliver meaningful trade and development benefits while responding to environmental priorities in Asian developing countries. This could be done through a strategy of selecting specific sectors within EGS and obtaining appropriate flexibilities within WTO that would deliver import and export benefits in the context of countries' own strategic sustainable development policies.

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The paper is part of a series of issue papers commissioned in the context of ICTSD's Environmental Goods and Services Project, to address a range of cross-cutting, country specific and regional issues of relevance to the current EGS negotiations. The project aims to enhance developing countries' capacity to understand trade and sustainable development issue linkages with respect to EGS and reflect regional perspectives and priorities in regional and multilateral trade negotiations. We hope you will find this paper to be stimulating and informative reading and useful for your work.



Ricardo Meléndez-Ortiz  
Chief Executive, ICTSD

## EXECUTIVE SUMMARY

The key to successful negotiations lies in the ability and capacity of the negotiating participants to feel that it can result in a “win-win” mutually beneficial outcome for all concerned - or in the case of the WTO environmental goods and services negotiations, a “win-win-win” outcome for trade, environment, and development. This means that participants must be willing to adopt “integrative” approaches to the negotiations - i.e. the participants must be willing to work towards a negotiated outcome that addresses their respective interests in an integrated manner.

The achievement by the World Trade Organization (WTO) of its development objectives depends, in large part, on the ability of the organization’s institutional governance mechanisms to balance competing interests among Members, reflect and take into account differing perspectives, provide adequate mechanisms to address and redress institutional structural deficiencies, and ensure equitable and fair decision-making outcomes. The current impasse in the negotiations reflects the difficulties that Members face in doing this balancing act.

In 2005, the global environment industry was estimated to be USD607 billion, with the US, Western Europe and Japan together accounting for 84 percent of this market. The global exports of environmental goods (EGs), as classified by the OECD list, for 2002 was estimated to be USD238 billion. An UNCTAD study has pointed out, that “developing countries have an important export surplus with developed countries in a number of groups of EGs, in particular EPPs, including manufactured apparel from natural cotton fibers, apparel manufactured from natural wool and silk fibres, wood and wood-based products, clean fuels and renewable energy, other Type A EGs [these include manufactured goods and chemicals used directly in the provision of environmental services], and the core list of EPPs.” In terms of sectors of the global environmental market, the environmental services (ES) sector (including resource management and energy) is much larger than the goods sector. In 2001, environmental services accounted for 78 percent of the total market by value.

However, although regional levels of South-South trade in Asia and Latin America are relatively high (showing that the potential for increased South-South trade in EGs exist in these regions), EG trade flows continue to be predominantly North-South in orientation. Developing economies continue to rely on developed economies as their principal source of EG imports (82 percent of developing country EG imports came from the North in 2000), and developing country exports continue to be predominantly directed to the closest developed country markets.

The Asian environment market (excluding Japan) in 2005 was worth USD37.5 billion, barely 6 percent of the global market, but is expected to increase to 9 percent by 2010. The environmental markets of Latin America, Asia and East Europe are also potentially high growth markets, since a large part of their respective populations continue to lack basic environmental services like clean water, sanitation and waste management.

The main ES sectors in which there is market growth potential in Asia are:

- a) water and wastewater treatment and management; and
- b) solid waste management.

In the same vein, the main EGs in which there is growth potential in Asia would be:

- a) water equipment and chemicals (relating to water and wastewater management);
- b) air pollution control; and
- c) solid waste management equipment.



Growth in the water and wastewater management, air pollution control, and solid waste management EG and ES sectors in Asia will be fuelled by the continuous need for increased supplies of and access to potable water and sanitation services associated with the growing Asian population. In addition, increased policymaking attention to the adoption of more environmentally-friendly patterns of production and consumption, and to environmental protection, in many Asian economies (reflected in the adoption and implementation of more stringent environmental regulations and standards) could also mean an increasing demand for EGs and ESs as essential inputs into Asian economies' development paths. When coupled with the lack, in many Asian economies, of sufficient domestic supply-side capacity to provide the necessary EGs and ESs (especially for water and wastewater management and solid waste management), it seems clear that there is much room for further growth in the Asian market for the trade in EGs and ESs.

While Asian developing economies continue to rely predominantly on Northern sources for their EG imports (especially with respect to those in the OECD and APEC lists), they have significant growth and export competitiveness potentials as exporters of the renewable/clean energy technology-related goods contained in the APEC and OECD lists and in the EPPs listed by UNCTAD. In addition, great export potential for Asian EGs also lies in natural resource-based EPPs.

For developing economies, environmental protection is an important policy objective within the context of its own development path. This is in recognition of the fact that three-fourths of the world's population live in developing economies and that the environmental space within which the development process takes place is an indispensable prerequisite to the start and continuation of such process.

While developed economies need to lessen their environmental footprint by re-engineering their economies into becoming high input efficiency (i.e. low resource consumption) and environmentally responsible, developing economies, on the other hand, should be assisted in leapfrogging their economies from ones that are heavily dependent on primary natural resource extraction and export into ones that are more industrialized but also highly input efficient and environmentally sustainable, capable of increasing standards of living for their peoples in an equitable manner.

Considering the diversity of economic development levels, industrial capacity, governmental and institutional stability, and environmental conditions, different Asian economies will likely need to adopt their own unique and context-dependent economic development strategies.

It seems fair to conclude that there are only a few EGs and ESs in which they could find some trade and developmental benefits. Their specific developmental conditions mean that their needs are currently only with respect to a few ESs and their associated EGs, and their export capacities indicate that their trade advantage lies in only a few EGs. This would imply, therefore, that Asian economies' negotiating approach in the WTO EGS negotiations should be guided by the objective of promoting liberalization in only those EGs and ESs sectors that they need and have the capacity to absorb at their current levels of development, as well as those EGs in which they have the ability to export at competitive levels.

A possible negotiating approach based on a modified positive list strategy that Asian developing countries could take with respect to the WTO's EG negotiations could involve a multi-step **sectoral positive list approach** where:

- a) specific EG sectors that would be the focus of trade liberalization would first be identified. These could be those **EG sectors in which individual Asian developing countries may require freer flows of goods and technologies for purposes of improving the environmental sustainability of their development process**. For many Asian developing countries, these could be the broad EG sectors covering:
- water and wastewater treatment
  - air pollution management and control
  - solid waste management and control
  - renewable and/or clean energy
  - renewable natural resources
- b) once the EG sectors that may be subject to trade liberalization have been identified, Asian developing countries may then choose to identify - either using a list approach or a criteria approach (depending on what would work best for individual Members) - specific products or a group of products **from within such EG sectors** for which they would be willing to provide tariff concessions or for which they would wish to seek tariff concessions from other WTO Members.
- c) only those EGs identified by Members as subject to trade liberalization would qualify for negotiated tariff concessions through the WTO negotiations. In negotiating tariff concessions for identified EGs, Asian developing countries will need to also ensure that the principle of special and differential treatment, as reflected in NAMA negotiating modalities as less than full reciprocity, should be applicable to developing countries and made operational.

The inclusion of the environmental services negotiations within the mandate of GATS negotiations means that the problems that the latter are facing will also necessarily affect the former. In this context, Asian developing economies will need to ensure that the implementation of Annex C of the Hong Kong Ministerial Declaration be undertaken in a manner that would clearly promote their development interests.

The developmental aspects of the GATS negotiations could be highlighted by Asian developing countries in a way that ensures that the outcomes reflect the GATS' developmental objectives. This could include operationalizing GATS Article XIX:2 which allows developing economies to liberalize at a slower pace and in line with their levels of development.

In terms of ESs to focus on, Asian developing economies most likely would benefit from undertaking a strategic approach to liberalizing only those ES sectors in which foreign services providers could assist in effectively providing such services to their consuming public or in supporting the development of competitive domestic services providers. These sectors could include:

- water and wastewater treatment and management (but excluding water distribution)
- solid waste management and control
- air pollution management and control

However, Asian developing countries need to be careful and be strategic in determining which particular segments of these services sectors should be the subject of liberalization. They can do this by ensuring that prior to putting anything in their services liberalization offers, they have a clear understanding of the issues and the implications involved with respect to the opening up of

any particular sector or segment. This also means, for example, clearly understanding what the legal, policy and practical implications would be of using any particular services sector classification system with respect to environmental services.

The liberalization of trade in EGs and ESs may assist developing economies in Asia (and elsewhere) in building their economies along more environmentally sustainable lines. However, developing economies should only do so in the context of a strategic sustainable development policy. Continued growth in the EGs and ESs sectors, both in Asian regional terms as well as globally, that provides economic benefits to the trading partners depends on the existence not only of policy conditions that allow freer trade in these goods and services, but also on the development of a viable consumer market and production base that is capable of purchasing, producing, and trading such goods and services on a competitive and equitable footing.

# 1 INTRODUCTION: FOCUSING ON A DEVELOPMENTAL NEGOTIATING SITUATION

The key to successful negotiations lies in the ability and capacity of the negotiating participants to feel that it is possible to reach a mutually beneficial “win-win” outcome for all concerned - or in the case of the World Trade Organization (WTO) environmental goods and services (EGS) negotiations, a “win-win-win” outcome for trade, environment and development. Reaching such an outcome depends on the extent to which the participants are able to find “win-win-win” aspects in these negotiations. This means that participants must be willing to adopt “integrative” approaches to the negotiations - i.e. the participants must be willing to work towards a negotiated outcome that addresses their respective interests in an integrated manner. Equally, participants must understand that negotiating is not necessarily a zero-sum game where one side has to lose and the other side has to win. Negotiations may, in fact, result in outcomes that provide gains for both sides and hence, the primary concern

should be to look for ways to maximise those gains and to minimise losses. In doing so, the negotiating participants will be more likely to focus on cooperative approaches that seek to reduce information asymmetries and enhance mutual problem solving.

Negotiators should not enter into negotiations with a blank slate. The key to effective negotiating and to implementing a successful negotiating strategy lies in:

- Understanding the negotiating context by, inter alia, identifying the negotiating positions and dynamics;
- Identifying one’s underlying interests that need to be addressed for the outcome to be positive; and
- Defining one’s negotiating strategy.

The above elements will be the subject of this paper.

## 2 UNDERSTANDING THE NEGOTIATING CONTEXT

Most negotiators do not enter negotiations completely blind. At the very least, they already have a preconceived notion of how they would expect the negotiation to go. Such preconceptions may, in turn, define how they would approach the negotiations. Hence, it is important for negotiators to assess those preconceptions in light of the negotiating context. It is also important for negotiators to examine closely their partners' negotiating positions and the dynamics among participants. This is particularly important in the context of the WTO negotiations.

### 2.1 Identifying Negotiating Positions and Dynamics

#### 2.1.1 Environmental Goods

After the Hong Kong Ministerial meeting (December 2005) the environmental goods (EG) negotiations continue to remain focused on discussing various approaches on how to define "environmental goods" for purposes of the negotiations. This work is being carried out by the Committee on Trade and Environment's Special Sessions (CTESS). Several approaches have been proposed, including:

- a) establishing a positive list based on, for example, the Asia-Pacific Economic Cooperation (APEC) and/or Organization for Economic Cooperation and Development (OECD) lists of "environmental goods" (Howse and Van Bork, 2005);
- b) establishing a list of "environmentally preferable products" (EPP), with variations on whether or not environmentally preferable process and production methods (PPMs) should be included in the definition (Howse and Van Bork, 2005);
- c) adopting the environmental project approach (EPA) suggested by India, under which environmental goods and services would be liberalised within the framework of national environmental projects; and
- d) Argentina's proposal for a combination of the environmental project and the list approaches.

The debate has so far focused on the EPA and the list approaches (ICTSD, 2005). These negotiations are not taking place in a vacuum and WTO Members have remained divided on which approach to use (see Table 1). This divide was reflected in the paragraphs in the Hong Kong Ministerial Declaration that relate to the environmental goods and services negotiations, which avoided taking positions and simply instruct Members to "expeditiously complete the work" under paragraph 31(iii).

#### 2.1.2 Environmental Services

Developing economies' ability to provide key services for their people is essential to their development. In general, developing economies do not have strong domestic service providers, particularly in sensitive sectors such as the financial, telecommunication, distribution, health and education sectors. Thus, it is in the interest of developing economies to support strong and sustainable domestic providers of such services. Liberalising markets prematurely would preclude their ability to strengthen sufficiently their domestic supply capacity. It would also crowd out smaller domestic suppliers thus, preventing them from competing fairly with foreign service suppliers. Further, given weak data on the impacts of services liberalisation on developing economies, Members cannot afford to simply hope that commitments under the General Agreement on Trade in Services (GATS) automatically result in development gains. Studies have yet to show a causal relationship between liberalisation and increases in foreign direct investment.

Due to these real concerns, developing economies have placed a higher priority on the completion of rules, particularly on emergency safeguard measures (ESM) and negotiations related to disciplines on domestic

Table 1<sup>1</sup>: Environmental Goods: List Approach vs. EPA vs. Integrated Approach vs. EPP

WTO Member	List	EPA	Integrated	EPP
Argentina			X	
Australia				
Bolivia				
Brazil		X		X
Canada *	X			X
Chile				
China			X	
Colombia				X
Cuba		X		
EC *	X			
Ecuador				
Egypt				
India		X		
Indonesia				X
Japan *	X			
Jordan	X			
Korea *	X			
Malaysia				
Mexico				
New Zealand *	X			X
Norway				
Oman				
Panama				
Paraguay				
Qatar *	X			
Switzerland *	X			X
Taiwan *	X			
Thailand				
US *	X			X
Venezuela		X		

\* Has submitted list

regulations, to safeguard their right to regulate and assessment and review of progress in negotiations. Moreover, lack of progress in these other areas creates uncertainty on what rights and obligations developing economies will have for their liberalisation commitments. Despite this clear ambiguity, progress in the negotiations on rules and domestic regulations as well as

the assessment and review, lags far behind negotiations on liberalisation commitments.

At their current stage, the negotiations raise the following issues: progressive liberalisation in environmental services (ES), especially for Mode 3 and Mode 4; assessing and updating the classification of environmental services;

a common understanding of what is meant, in a commercial sense, by some proposed new categories of services such as biodiversity protection, remediation and clean-up of soil and water; a need for a clear picture of the extent and scope of subsidisation of environmental services; government procurement; qualification and certification requirements for individual service providers; tied aid and technology transfer. Proposals have been made to develop a model list that would include certain services not covered by W/120 (e.g. implementation of environmental auditing and management systems, evaluation and mitigation of environmental impacts, advice on the design and application of clean technologies). These proposals are accompanied by a call for dismantling regulatory barriers to the temporary movement of natural persons. Issues relating to ecosystem services have also been raised.

After contentious negotiations during the Hong Kong Ministerial Conference and despite reservations expressed by Cuba and Venezuela, the Hong Kong Ministerial Declaration's Annex C seems to indicate that there will be a significant change in emphasis in the services negotiations. The primary focus of Annex C is to increase liberalisation levels without consideration to their development impacts or gains. The introduction of specific objectives for each mode of services delivery (i.e. Modes 1 to 4), the reference to sectoral and modal objectives identified mainly by the demandeurs in the negotiations, and the endorsement of plurilateral negotiations, can all be considered as moving away from what was initially laid out in Doha, the Negotiating Guidelines and what was envisaged in the July 2004 Framework. The only other area of negotiations that shares a close emphasis is the mandate to develop GATS Article VI: 4 disciplines on domestic regulation by the end of the round. Annex C, however, did little to address development concerns over weak regulatory capacity and services capacity; lack of access to technology, distribution channels and information networks; and barriers in Mode 4. Issues of interest to developing economies, Article IV implementation, review of

progress of negotiations and assessment based on the Guidelines and Procedures for Negotiations remain missing from the negotiations.

## 2.2 Negotiating Challenges for Developing Economies in the World Trade Organization<sup>3</sup>

Achieving the WTO's development objectives depends, in large part, on the ability of the organisation's institutional governance mechanisms to: balance competing interests among Members, reflect and take into account differing perspectives, provide adequate mechanisms to address and redress institutional structural deficiencies and ensure equitable and fair decision-making outcomes. However, discussions and negotiations at the WTO do not take place on a level playing field in terms of both power and negotiating capacity among WTO Members. The WTO has relied more and more on informal processes for decision-making. However, these have had a largely negative impact not only on the development of formal groupings of developing countries but also on the ability of individual developing economies (especially the poorer ones) to participate effectively. This reinforces the power imbalances in the organisation. Unfair or inequitable governance mechanisms that effectively marginalise developing economies will lead to inequitable and unfair substantive outcomes and move the WTO even further from achieving its developmental objectives.

The fact that many developing economies lack effective negotiating capacity also exacerbates power imbalances in the WTO negotiations. Small, over-stretched and resource-constrained delegations are not likely to be able to make full use of their right to participate in the WTO negotiations and decision-making processes. This leaves the negotiating field by default to those delegations (mainly from developed economies) that have sufficient negotiating capacity to be able to participate effectively. Furthermore, under the current consensus-based mode of decision-making in the WTO, economies that have not participated in the initial discussions or that are not fully aware



of the issues involved often find it difficult to intervene effectively or to raise objections at later stages of the decision-making process.

Developing economies' reduced capacity to engage in effective trade negotiations manifests itself through:

- a) difficulties in defining and promoting a clear national negotiating policy position in trade negotiations. This may be due to a lack of coherence in both national policies and national policy-making institutions or due to the lack of, or insufficiently, coordinated involvement of relevant agencies and stakeholders in the policy-making process; and
- b) reduced technical preparedness for trade negotiations due to the limited resources available to national trade negotiators. This translates into a lack of capacity to identify key negotiating issues and to undertake effective and timely analyses of the implications of proposals on such issues. It also leads to constraints on the capacity to participate effectively in negotiations and other discussions (e.g. submit information or respond to negotiating proposals and questions) in a timely manner.

Power imbalances in WTO negotiations may be remedied to some extent through improved capacity and through coalition-building among developing economies (as has already been shown in recent years with more and

strengthened informal and formal developing country regional- and issue-based coalitions in the WTO). The existence of sufficient negotiating capacity at the national level is the foundation for effective participation in the negotiations. It facilitates the ability of WTO Members from developing countries to work together for their common interests, to influence agenda-setting and decision-making in their favour and to substantially affect the negotiation outcomes. In this respect, achieving increased coordination among developing economies at the technical and working levels is important.

Changes need to be made to the WTO decision-making process. These include: shifting from "passive" to "active" consensus as the primary decision-making mechanism, strengthening procedural rules relating to transparency and effective participation and prioritising direct and group-based negotiations.

In addition, trade-related technical assistance and capacity-building programmes will need to be reviewed and qualitative changes made to ensure that they match and respond to the participation needs and constraints of developing economies. Such programmes should be targeted at helping free up domestic resources which economies can use to bolster their negotiating capacity and to provide additional external resources which can be used to fund country-owned trade capacity-building projects developed by the beneficiary economies.



### 3 IDENTIFYING UNDERLYING INTERESTS

One negotiates because of one's interest to obtain or achieve something. Hence, the fundamental basis for one's negotiating positions and approaches will be the interests and needs that prompted the initial desire to negotiate. In the context of the WTO negotiations, these could be:

- Acquiring trade and economic benefits;
- Achieving sustainable development;
- Enhancing development policy space.

#### 3.1 Trade and Economic Benefits

##### 3.1.1 The Broad Picture

In 2005, the global environment industry - referring to the set of industries focused on the production, trade, and provision of environmental goods and services - was estimated to total USD607 billion, with the US, Western Europe and Japan together accounting for 84 percent of this market. The US, Germany, France, Japan and the UK have the most mature environmental markets with some of largest environmental firms in the world, which export equipment, technology and services worldwide (Sawhney, 2006).

Global exports of environmental goods, as classified by the OECD list, were estimated to be worth USD238 billion in 2002 (Sawhney, 2006). The majority of environmental goods traded relate to: waste water management (34 percent); environmental monitoring and analysis (16 percent); solid waste management (13 percent); air pollution control (10 percent) and noise abatement (12 percent). The annual growth in environmental goods traded from 1990 to 2002 amounted to 14 percent - more than twice the growth rate for other non-agricultural goods which is estimated at 6 percent annually (Sawhney, 2006).

Despite these values, however, trade in environmental goods on the APEC and OECD lists constitute less than 6 percent of the value

of world trade in non-agricultural goods, no more than 3 percent of developing country exports and 6 percent of their imports in value terms. All developing economies for which trade data are available are net importers of environmental goods on the APEC list. Only two developing economies are net exporters of environmental goods on the OECD list, but this is due to exports of one or two chemical products. Developed economies account for over 80 percent of world exports, while developing economies' share constitutes only around 15 percent. Exports from the top nine exporting economies represent 90 percent of total developing country exports (UNCTAD, 2003). Exports of products on the APEC list from African countries total less than USD80 million.

However, developing economies may have more export opportunities in some items. Developing economies as a group are net exporters of 26 out of the 182 environmental goods on the OECD and APEC lists (see UNCTAD, 2003, para. 25, for a list of these goods). But a closer look at exports and imports of the 20 largest developing country traders in environmental goods, shows that in most cases harmonised system (HS) descriptions start with "other" or "parts of", suggesting that the "environmental good" fraction of trade in these items may be small (UNCTAD, 2004a, para. 11). In addition, the high share of multiple use products in their imports implies that developing economies may face a difficult trade-off between reduced tariff revenues and uncertain environmental benefits (UNCTAD, 2004a, para. 12), especially since the approximate applied tariff rates of 10 percent for EGs in developing economies remain higher as compared to those in developed economies (UNCTAD, 2004a, para. 13).

An UNCTAD study has pointed out, that "developing countries have an important export surplus with developed countries in a number of groups of environmental goods, in particular EPPs, including manufactured items from

natural cotton fibres, items manufactured from natural wool and silk fibres, wood and wood-based products, clean fuels and renewable energy, other Type A environmental goods and the core list of EPPs. ... For all groups of environmental goods identified in this study (and excluding environmental goods on the OECD and APEC lists) developing countries would have an export surplus of USD67 billion in 2003 ...” (Hamwey, 2005).<sup>4</sup>

South-South trade may be relatively more important, particularly in Asia (UNCTAD, 2004a, para.10). Among developing economies, those in Asia dominate trade in environmental goods on the OECD and APEC lists (accounting for around 75 percent of total trade in environmental goods by developing economies), while developing economies in Africa and least developed countries (LDCs) have the weakest trade positions (UNCTAD, 2003, para. 21). South-South export flows of environmental goods account for roughly 42 percent (mostly due to intra-regional Asian developing country trade and, at much lower levels, intra-regional trade in Africa and Latin America) (UNCTAD, 2003, para. 24). South-South inter-regional flows, however, remain small (Hamwey, 2005, paras. 39 and 41 and Table 2).

Although regional levels of South-South trade in Asia and Latin America are relatively high (proving that the potential for increased South-South trade in environmental goods exists in these regions) (UNCTAD, 2003, para. 23), trade flows in environmental goods continue to be predominantly North-South. Developing economies continue to rely on developed economies as their principal source of imported environmental goods (in 2000, 82 percent of developing country imports of environmental goods came from the North) and developing country exports continue to flow predominantly to the closest developed country markets (UNCTAD, 2003, paras. 24 and 29).

The environmental services sector (including resource management and energy) is much larger than the goods sector in terms of the global environmental market. In 2001, environmental services accounted for 78 percent of the total

market by value. The two largest segments in environmental services are water and wastewater treatment services and solid waste management services (non-hazardous wastes), which constitute 30 percent and 22 percent of the total global environmental market respectively (Sawhney, 2006, pp. 3-4).

### 3.1.2 Asian Commercial Interests in Environmental Goods and Services

In 2005, the Asian environment market (excluding Japan) was worth USD37.5 billion, barely 6 percent of the global market, but is expected to increase to 9 percent by 2010. The environmental markets of Latin America, Asia and Eastern Europe are also potentially high growth markets, since a large part of their respective populations continues to lack basic environmental services like clean water, sanitation and waste management (Sawhney, 2006, p.3).

The main sectors in environmental services for which there is market growth potential in Asia are (Sawhney, 2006, p.5):

- c) water and wastewater treatment and management; and
- d) solid waste management.

In 2000, water utilities and wastewater treatment services together accounted for about 37 percent of Asia’s total environmental industry. Solid waste management services constituted 15 percent of the total industry in 2000, with environmental services including waste collection, construction of sanitary landfills or other treatment facilities and safe disposal constituting the bulk of this sector (Sawhney, 2006, p.5).

It should be noted, however, that liberalisation of the water and wastewater management services sector, should be undertaken carefully and strategically. Opening up water distribution services by privatising water utilities and allowing foreign direct investment in this sector may not necessarily result in the achievement of economic, environmental or public consumer benefits (Sawhney, 2006, pp. 32-33). Public

water utilities and small to medium-sized domestic private water utilities may often seem and prove to be the only viable providers of potable water services to the poorer populations of Asia (Sawhney, 2006, pp. 38-39). Domestic environmental industries in these economies continue to remain dependent on imports of equipment and technology from the more advanced markets, although economies like Korea, Taiwan and China have also become competitive suppliers to the US for certain environmental goods in the Asia-Pacific region (Sawhney, 2006, pp. 37-39). Although the US is the global environmental market leader, Japan is the primary source of environmental goods for Asian markets, followed at some distance by the US (Sawhney, 2006, p. 4). Several Asian economies such as China, Taiwan, Korea and India are now also exporting to Asian and other emerging economies (Alavi, 2006, p. 10).

Water-related environmental goods (equipment and chemicals) are the single largest segment of these goods, accounting for 13.3 percent of the total Asian environmental industry in 2000, reflecting this sector's significant market share and potential. Trade in equipment related to solid waste management, however, constituted only 4.6 percent of the industry value (Sawhney, 2006, p. 4). On the other hand, while air pollution control constitutes only a very small part of the total Asian environmental services market, the 12.5 percent market share for environmental goods related to air pollution control is actually bigger than for environmental goods related to solid waste management. Hence, the main environmental goods in which there is growth potential in Asia appear to be:

- d) water equipment and chemicals (relating to water and wastewater management);
- e) air pollution control; and
- f) solid waste management equipment.

Growth in environmental goods and services related to water and wastewater management, air pollution control and solid waste management in Asia will be fuelled by the continuous need for increased supplies of and access to potable water and sanitation services associated with the growing Asian population. In addition, the

adoption of more environmentally-friendly patterns of production and consumption, as well as increased environmental protection, in many Asian economies (reflected in the adoption and implementation of more stringent environmental regulations and standards) could also mean an increasing demand for environmental goods and services that are essential inputs of development. When coupled, in many Asian economies, with the lack of sufficient domestic supply-side capacity to provide the necessary environmental goods and services (especially for water and wastewater management and solid waste management), it seems clear that there is much room for further growth in the Asian market for trade in environmental goods and services.

Asian economies, as indicated above, are the dominant developing country exporters and importers of environmental goods (in the OECD and APEC lists) and environmental services. Asian economies account for over 60 percent of all developing country trade in EGs (Hamwey, 2005, para. 38). However, Japan has overall dominance in all categories of environmental goods, with 50 percent of the solid waste management market, 31 percent of the water and wastewater management market and 30 percent of the air pollution control market (Alavi, 2006, p. 8).

Some Asian economies (such as Malaysia, Thailand and the Philippines) maintain a trade surplus with respect to component goods required to construct renewable/clean energy technologies as included in the APEC and OECD lists (UNCTAD, 2003, para. 36). These include (UNCTAD, 2003, Table 4 and Fig. 10):

- b) ethanol;
- c) hydrogen peroxide;
- d) methanol;
- e) hydraulic turbines, water wheels and regulators;
- f) parts for hydraulic turbines, including regulators;
- g) instantaneous gas water heaters;
- h) solar water heaters;
- i) wind-powered generating sets;
- j) photosensitive semiconductor devices, including solar cells.

Concerning goods that are not on the OECD or APEC lists, but which the UNCTAD classifies as “environmentally preferable products” (EPPs), Asian developing economies’ produce 33 percent of total world exports, and account for 22 percent of global imports (UNCTAD, 2003, Fig. 12). These EPPs include (UNCTAD, 2003, para. 37):

- a) organic products;
- b) certified timber products;
- c) non-timber forest products;
- d) natural resource- or bio- products based on traditional knowledge;
- e) products made from natural fibres.

The above seems to indicate that while Asian developing economies continue to rely predominantly on northern sources for their imports of environmental goods (especially with respect to those in the OECD and APEC lists) they have significant growth and competitiveness potential as exporters of technology-related goods in the renewable/clean energy sector contained in the APEC and OECD lists and in the EPPs listed by UNCTAD. In addition, natural resource-based EPPs also provide great export potential for Asian environmental goods (Alavi, 2006, p. 53).

However, Asian exporters of environmental goods and services continue to face many non-tariff barriers. These include Sanitary and Phytosanitary (SPS) measures, Technical Barriers to Trade (TBT), subsidies for competing domestic products, tax exemptions and quantitative restrictions imposed by developed economies. Among developing country export markets, trade barriers to environmental goods and services are commonly: local content requirements, subsidies for competing domestic products, tied-aid commitments imposed by donor countries, regulatory or bureaucratic difficulties and quantitative restrictions (Alavi, 2006, p. 52).

The trading relationship, furthermore, remains primarily North-South. However, this could also indicate that there is significant growth potential in the long-term in intra- and inter-regional South-South trade depending on the

policies that are put in place to encourage such trade.

### 3.1.3 Supply-Side Capacity Development

As has been pointed out elsewhere, the global environmental services industry covers a range of firm sizes ranging from very large to very small enterprises, depending on the nature of the service in question. Many environmental services often require large scale investment for economies of scale, which results in there typically being only a few large firms in any given environmental industry sector (such as in sewerage services) and hence supporting the emergence of natural monopolies. In fact, there has been a tendency towards increasing concentration in the environmental industry. In the global market, large multinational corporations dominate a few market segments in water and wastewater treatment. Such large corporations account for about 50 percent of the total environment market. However, specialised environmental services, including analytical services and consulting, support the emergence of several small and medium-sized firms, that are often sub-contractors for large projects (Sawhney, 2006, p. 37).

Asia has the highest number of people in the world without access to clean water (700 million) or sanitation facilities (1.9 billion) (Sawhney, 2006, p. 11). However, the extent to which Asian governments are able to provide basic water, sanitation and solid waste management services varies widely among countries (depending on economic capacity and infrastructure reach) and within countries (with urban populations generally having better access than rural populations and major urban centres being better serviced than smaller ones). In addition, the quality of the environmental problem faced also differs depending on the country, with richer economies generally tending to focus more on waste reduction and poorer economies focusing on waste collection and disposal.

In general, even for the relatively richer Asian economies, Asia’s domestic environmental industry continues to be dependent on imported environmental technologies, goods



and services, especially from Japan, Europe and the US. Because Asian environmental firms are typically small to medium-sized, they often end up becoming sub-contractors to much larger multinational corporations from developed economies (Sawhney, 2006, p. 28). This continued dependence on imported environmental goods and services from the North will need to be addressed.

Indeed, some Asian economies such as China, Korea, Malaysia and Taiwan have made efforts to support their domestic environmental firms (medium and small by international standards) and increase their global competitiveness. Other Asian economies, such as the Philippines, are also trying to help improve the quality and productivity of small and medium-sized domestic environmental firms. Sub-contracts as well as joint ventures help local firms to upgrade operations and learn from larger and more experienced international firms.

Developing economies in Asia also have very small service providers in the water sector, a sector characterised by very large firms in the rest of the world. These small (and, sometimes, very small) enterprises - with less than 50 employees and often less than 10 - specialise in water delivery services. Such small entrepreneurs are prevalent in economies where public utility services are poor, population coverage is low and where parts of the country are difficult to access (such as in India, Indonesia, the Philippines, Thailand and Vietnam). These water operators while small, are often very important, particularly in peri-urban, rural and remote regions, as they may be the only viable providers of potable water to the poorer populations of Asia (Sawhney, 2006, pp. 38-39).

#### 3.1.4 Ensuring Continued Revenue Gains, Competitiveness and Industrial Development

As with other developing economies faced with the option of further liberalising their trading regimes in environmental goods and services, Asian developing economies need to take account of the following three major possible impacts identified by an UNCTAD study:

*First they will experience a loss of tariff revenue. Goods on the O+A [OECD and APEC] list alone accounted for over 6 percent of developing country imports in 2003. Broad based tariff reduction could thus result in significant loss of tariff revenue. Second, unintended, broad based tariff reduction of dual-use EGs would expose key national industries to increased international competition and may result in substantial import surges. Third, there is also the risk that a too broad liberalisation of EGs jeopardises infant national environmental industries.... (Hamwey, 2005, para. 16)*

### 3.2 Achieving Sustainable Development

Environmental protection is an important policy objective for developing economies. Three-fourths of the world's population live in developing economies and the environment is an indispensable prerequisite to their development process.

While developed economies need to lessen their environmental footprint by re-engineering their economies so that they become input efficient (i.e. reduce their resource consumption) and environmentally responsible, developing economies should be assisted to transform their economies from ones that are heavily dependent on primary natural resource extraction and export into ones that are more industrialised but also more input efficient and environmentally sustainable, capable of increasing standards of living in an equitable manner. This will also lessen developing economies' environmental footprint and allow them to maximize whatever remaining global environmental space exists. Indeed, rapidly changing and increasingly degraded global environmental conditions may make it more difficult for developing economies to shape and adapt their own domestic production to achieve optimum economic, social and environmental benefits, unless drastic steps are taken to address such changes.

Liberalising trade in environmental goods and services may, therefore, assist developing

economies in Asia (and elsewhere) to build their economies along more environmentally sustainable lines. However, developing economies should only do so in the context of a strategic sustainable development policy framework. Continued growth in the environmental goods and services sectors that provides economic benefits to the trading partners, both in the Asian region and globally, depends on the existence not only of policy conditions that allow freer trade in these goods and services, but also on a viable consumer market that is capable of purchasing such goods and services.

### 3.3 Development Policy Space

Policy space is about freedom of choice. For developing economies, it is about their freedom to choose the best mix of policies to achieve sustainable and equitable economic development given their unique and individual social, political, economic and environmental conditions. It refers to “the scope for domestic policies, especially in the areas of trade, investment and industrial development” (UNCTAD, 2004b) and reflects the idea that governments should have the flexibility to “evaluate the trade-off between the benefits of accepting international rules and the constraints posed by the loss of policy space.” (UNCTAD (2004b) and UNCTAD (2004c), para. 1).<sup>6</sup>

Considering the diversity of development levels, industrial capacity, governmental and institutional stability and environmental conditions, different Asian economies will most likely need to adopt their own context-dependent economic development strategies.

For example, in order to maximise benefits from trade and ensure that development follows a sustainable path, Asian economies may wish to consider negotiating trade liberalisation in environmental goods and services in a targeted and strategic manner. This could include:

- focusing on liberalising trade commitments only in those goods or services in which they have an export advantage or which they need as capital inputs into their own domestic production;
- putting in place policies that allow a gradual opening up of the domestic environmental services sectors only as and when such sectors become competitive with foreign service providers;
- maximising the use of existing flexibilities in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) to enhance the technology transfer potential of trade in environmental goods and services;
- ensuring that new international commitments provide sufficient policy space so that developing countries can put in place policies to ensure skills and technology transfers from imported environmental services that may be brought in by foreign direct investments.

In short, when applied in the context of the environmental goods and services negotiations, recognising policy space means that developing economies should not be required to adhere to international rules that they may not be ready to apply or which may be inappropriate for them at their current levels of economic development.

## 4 DEFINING A POSSIBLE NEGOTIATING APPROACH ON EGS FOR ASIAN DEVELOPING COUNTRIES

### 4.1 Promoting a Developmental Outcome for Asian Developing Countries in the Environmental Goods and Services Negotiations

Various approaches have been suggested by WTO Members since the start of the Doha negotiations on how the environmental goods and services negotiations may best be structured in order to address various competing or complementary interests. These approaches, especially concerning environmental goods, have been discussed elsewhere and will not be covered in this paper (see for e.g. Howse and Van Bork (2006) or WTO (2005)).

Having identified Asian economies' underlying interests with respect to the environmental goods and services negotiations and given the relevant statistics discussed above, it seems apparent that their interests may lie in increasing South-South trade, both intra- and inter-regionally, by granting preferential treatment to environmental goods and services coming from other developing economies. Growth potential exists for enhanced South-South trade in environmental goods and services, even if, to a large degree, many developing economies lack the advanced industrial base required for the production of higher-end environmental goods and the provision of technology-based environmental services.

In the context of the WTO negotiations, where a sole focus on enhancing South-South trade in environmental goods and services would be difficult to achieve, Asian developing countries could clarify their desired objectives in order to ensure that the multilateral framework provided by the WTO enhances their ability to benefit from trade in environmental goods and services. In this regard, the broad objectives set out with respect to the environmental goods and services negotiations are those already contained in the Doha Ministerial Declaration.

These are:

- a) The overarching objective of the Doha negotiations (including the Paragraph 31(iii) negotiations) to ensure that the needs and interests of developing economies are addressed by enabling them to secure a share in the growth of world trade commensurate with the needs of their economic development (WTO, 2001, para. 2); and
- b) The objective to enhance the mutual supportiveness of trade and environment (WTO, 2001, chapeau of para. 31).

As corollaries to these broad objectives, the following could be identified as possible specific negotiating objectives for Asian developing economies:

- Improving market access for exports of their environmental goods and services and facilitating their access to imports of those environmental goods and services that they require to support their development needs;
- Ensuring that the outcomes of the negotiations will not adversely affect their policy space;
- Flexibility to adopt measures needed to promote their sustainable development objectives;
- Supporting the development of domestic supply-side capacity to provide environmental goods and services on a sustainable and competitive basis;
- Ensuring access to and transfer of environmentally-sound goods and technologies to developing economies at preferential terms, with provision for sufficient flexibility to allow Asian developing economies to copy and innovate on such technologies to support their domestic industrial development policies.

Achieving one's negotiating objectives often lies in finding "integrative" issues - i.e. those issues around which the negotiating participants can find common ground. Often, these can be found in the underlying interests of the participants.

Since the overarching objective of the Doha negotiations (including the Paragraph 31(iii) negotiations) is to promote the development of developing economies by helping them secure a share in the growth of world trade commensurate with the needs of their economic development, it should be possible to focus on identifying whether, how and to what extent trade in environmental goods and services should be liberalised to achieve sustainable development. Liberalising trade in environmental goods and services should be seen as a negotiated, calibrated and calculated response to a stated developmental problem faced by developing countries in Asia.

Given Asian developing economies' underlying interests as identified above, it seems fair to conclude that there are only a few environmental goods and services in which they could find some trade and developmental benefits. Their specific developmental conditions mean that currently their import needs apply to only a few environmental services and their associated environmental goods. Similarly, their export capacities indicate that their trade advantage lies in only a few environmental goods.

This would imply, therefore, that Asian economies' negotiating approach in the WTO environmental goods and services negotiations should be guided by the objective to promote liberalisation only in those sectors that they need and which they have the capacity to absorb, as well as those environmental goods which they have the ability to export at competitive levels.

## 4.2 Negotiating Environmental Goods: Focusing on Only a Few Goods

The Hong Kong Ministerial Declaration did not give any clear directions to Members

on how to proceed with the environmental goods negotiations. Effectively, the pre-Hong Kong situation in which Members were still debating which approach to use to identify the environmental goods that would be the subject of liberalisation negotiations continues to subsist. It seems that there continues to be a significant lack of information and understanding with respect to key concepts.

Hence, in the context of the negotiations, it might be useful for Members rather than push the negotiations forward, to engage first in more thorough national and regional consultations to reflect on:

- the advantages and disadvantages of various approaches, including the project approach, in terms of reaching a solution that addresses the negotiation objectives;
- specifying the criteria for selecting EPPs;<sup>7</sup>
- further exploring special and differential treatment (SDT), including the possibility of linking tariff reductions to aid for trade in the form of facilitating access to and transfers of environmental technologies and methods;
- discussing whether or not to link organic agriculture to the Doha work programme;
- deciding on whether PPM criteria should be used in the environmental goods negotiations and if so, how (Barria, 2003, cited in South Centre and CIEL, 2006).

It might be useful for Asian developing economies to consider how trade, economic and environmental benefits may be obtained through liberalisation in environmental goods and services listed in the OECD and APEC lists and the UNCTAD's EPPs list. Such consideration will have to take into account underlying interests such as their export interests in some goods and services (e.g. renewable/clean energy technologies and natural resource-based EPPs) and the need to acquire environmental goods and services that can minimise the environmental impact of their development (e.g. those needed for water and wastewater, air pollution, and solid waste management).



Since trade in environmental goods in the OECD and APEC lists is mostly North-North in orientation and since imports by Asian developing economies from developed economies are mostly focused on only the few environmental goods identified above, the interests of both developed and Asian developing economies may coincide in fostering trade liberalisation in these environmental goods (as well as in goods contained in UNCTAD's EPPs list), rather than promoting liberalisation for all of the environmental goods listed in the OECD or APEC lists.

On the other hand, rather than focusing on lists or criteria as the bases for various types of approaches to defining environmental goods, Asian developing countries might also wish focus on the policy objectives that these negotiations are supposed to achieve - i.e. ensuring the mutual supportiveness of trade and environment and the promotion of sustainable development. In this regard, liberalisation in environmental goods and EPPs relating to reliable, affordable, economically viable, socially acceptable and environmentally sound energy resources may help move WTO Members towards effectively implementing the World Summit on Sustainable Development's Plan of Implementation (UN, 2002, para. 9(a)).

In order to ensure a more focused approach to trade liberalisation in environmental goods of mutual interest to Asian developing economies and their trading partners, the best forum for negotiating such liberalisation remains to be identified. In this context, Asian developing economies might need to ask themselves the following questions:

- Should the negotiations be in the context of a multilateral forum such as the WTO's non-agricultural market access (NAMA) negotiations, in which the negotiated outcome will be applied on a most favoured nation (MFN) basis (unless a preferential carve-out for environmental goods is agreed to)?
  - Would it be useful to push for a preferential carve-out - e.g. a special set of rules that would give preferential treatment to those environmental goods of interest to Asian economies?
  - Should the negotiations be in the context of existing or future intra- or inter-regional South-South arrangements in which the trading benefits could be more targeted?
- Moreover, any new liberalisation commitments should consider each developing country's regulatory infrastructure and their capacity concerning labelling and certification schemes (Barria *et al*, cited in South Centre and CIEL, 2006). Special and differential treatment provisions will be essential to fully recognising the concerns of developing economies. Thus, a decision must be made, among others, on whether there will be less than full reciprocity or delayed compliance or both.
- Taking into account the considerations discussed above, a possible negotiating approach, based on a modified positive list strategy, that Asian developing countries could take with respect to the WTO's environmental goods negotiations, could involve a multi-step sectoral positive list approach where:
- d) specific sectors of environmental goods would first be identified as the focus of trade liberalisation. These sectors could be the ones in which individual Asian developing countries may require freer flows of goods and technologies to improve the environmental sustainability of their development process. For many Asian developing countries, these could be the broad sectors covering:
    - water and wastewater treatment;
    - air pollution management and control;
    - solid waste management and control;
    - renewable and/or clean energy;
    - renewable natural resources.
  - e) once the environmental goods sectors that may be subject to trade liberalisation have been identified, Asian developing countries may then choose to identify - either using a list approach or a criteria approach (depending on what would work best for individual Members) - specific products or groups of products from within such sectors for which they would be willing to provide

tariff concessions or for which they would wish to seek tariff concessions from other WTO Members;

- f) only those environmental goods identified by Members as subject to trade liberalisation would qualify for negotiated tariff concessions through the WTO negotiations. In negotiating tariff concessions for identified environmental goods and services, Asian developing economies will need to also ensure that the principle of special and differential treatment is made operational. This could, for example, involve providing “less than full reciprocity” in tariff concessions by allowing developing economies to have lower tariff cuts (and hence provide for a higher degree of tariff protection to domestic goods) than developed countries.

### 4.3 Negotiating Environmental Services: Adopting a Strategic Approach

Inclusion of environmental services negotiations within the mandate of GATS negotiations means that the problems faced by the GATS negotiations will also necessarily affect those on environmental services. In this context, Asian developing economies will need to ensure that the implementation of Annex C of the Hong Kong Ministerial Declaration is undertaken in a manner that clearly promotes their development interests.

The developmental aspects of the GATS negotiations could be highlighted by Asian developing countries. This could include operationalising GATS Article XIX:2 which allows developing economies to liberalise at a slower pace that is in line with their levels of development.

In terms of trading value in the services trade, developing economies benefit much more from market access in developed economies than in developing economies. Therefore, where interests lie in furthering South-South trade, developing economies should think about engaging in bilateral negotiations with southern partners outside of the WTO.

Negotiations on disciplines on domestic regulation will be a key area. Asian developing economies must engage in the GATS negotiations on domestic regulations to ensure that rules are provided to protect their right to regulate and their development policy space. It is unclear whether or not the rules negotiations, particularly for ESM and subsidies (which are important for ensuring developing economies are not unduly harmed by GATS liberalisation and can preserve their subsidies for development purposes) will be concluded soon. It would make it more difficult for Asian developing economies to ensure developmental outcomes from services liberalisation if commitments are undertaken without proper ESM in place.

Asian developing economies most likely would benefit from strategically liberalising only those environmental services sectors in which foreign service providers could assist in effectively providing such services to their consumers or in supporting the development of competitive domestic service providers. These sectors could include:

- water and wastewater treatment and management (but excluding water distribution);
- solid waste management and control;
- air pollution management and control.

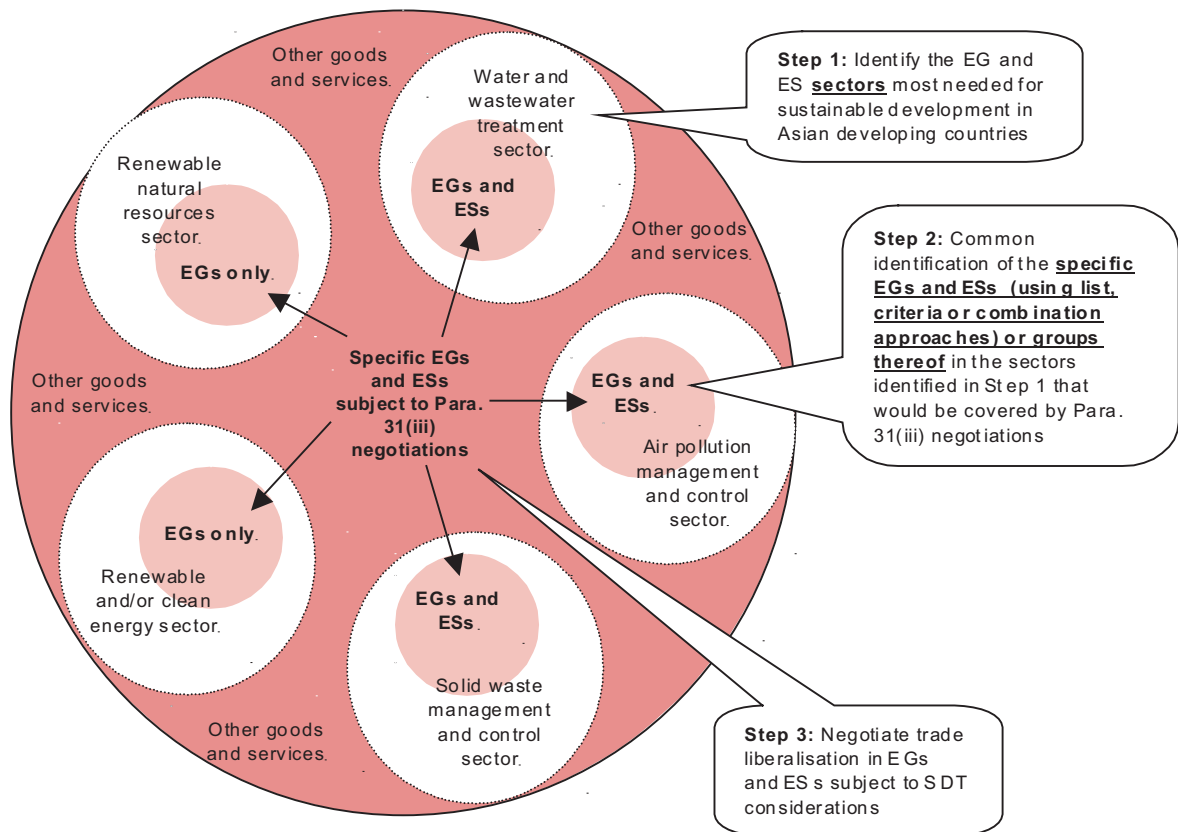
However, Asian developing countries need to be careful and strategic in determining which particular segments of these service sectors should be the subject of liberalisation. They can do this by ensuring that prior to putting anything in their services liberalisation offers they have a clear understanding of the issues and implications with respect to the opening up of any particular sector or segment. This also means, for example, clearly understanding what would be the legal, policy and practical implications of using any particular service sector classification system with respect to environmental services.

Services liberalisation that is not sequenced or carefully managed and regulated (as happened with the liberalisation and privatisation of water and sewerage utilities in many parts of

Asia (Sawhney, 2006, pp. 28-32)) in the context of a clear development plan, can have adverse impacts on the provision of such services to the public. As has been pointed out elsewhere, there is no strong empirical evidence that private firms are more efficient than public providers in supplying environmental (e.g. water) services (Sawhney, 2006, p. 32)<sup>8</sup>. In fact, “[i]n water services, the problems of population coverage

and high incidence of non-revenue water have persisted after private management took over water services in some Asian economies.... Moreover, with large sections of the poor population remaining without access to piped water, the inequity in provision of essential infrastructure services has persisted with private management” (Sawhney, 2006, p. 33).

Figure 1: Sectoral Positive List Approach to EG and ES Negotiations for Asian Developing Countries



## 5 CONCLUSION

Liberalisation of environmental goods creates many opportunities for both developed economies and Asian developing economies. Potable water production, increased production of renewable energy, increased energy efficiency, wastewater treatment and pollution abatement, all represent possible domestic, regional and global positive environmental and developmental impacts. These impacts could translate into stronger more vibrant and diverse economies and societies throughout Asia, which in turn would make Asian developing economies better trading partners for each other, for other developing economies and for developed economies in the future.

However, such liberalisation should be done strategically and carefully within the context of the overall development plan and objectives of the developing country concerned. A careful assessment of the necessity for such liberalisation, the economic sectors to be affected and the timing and extent of such liberalisation should be undertaken before making any commitments.

In the same vein, liberalisation of environmental services should be done strategically. Such an approach is required because liberalisation should take place only in the context of a clear development plan designed to increase domestic supply-side capacity to provide such services. Such a strategic approach would entail:

- Sequencing and focusing liberalisation only on those environmental services sectors in which: (a) domestic supply-side capacity is well-developed and globally competitive; or (b) domestic supply-side capacity is weak and foreign investment is required to provide the service or to provide domestic firms with technology and skills so that they may eventually provide the service; and
- Establishing a strong regulatory regime that would require foreign service providers to transfer technologies and skills to domestic service providers so as to enable the latter to eventually provide and export such services competitively.

## Endnotes

- \* A paper prepared by Vicente Paolo B. Yu III, Programme Coordinator, Global Governance for Development Programme, South Centre. The opinions in this paper are those of the author and do not reflect the official position of the South Centre or its Member States.
- <sup>1</sup> Notes to table: i) economies represented are not all those involved in the negotiations but rather those that have contributed to the recent discussion; ii) the absence of a mark simply denotes that a firm commitment has not been made, not that the issue has not been discussed or that the idea has been rejected or accepted.
- <sup>2</sup> The WTO Services Sectoral Classification List.
- <sup>3</sup> For more discussion on the participation and systemic challenges that developing economies face in WTO negotiations see, for e.g., South Centre (2003); Narlikar (2001); Yu (2005); South Centre (2004).
- <sup>4</sup> "Other Type A EGS" are goods that may be used in supplying environmental services. The "core list of EPPs" includes consumer and industrial non-durable and semi-durable EPP goods, such as natural fibres for industrial uses, textiles, natural rubber, natural vegetable derivatives, colourings, and dyes.
- <sup>5</sup> See also Sawhney, 2006, p. 23, which indicates that in developing economies, by December 2004, 37 percent of total investment flows in water and sanitation since 1990 had been cancelled or were facing problems as a result of difficulties in cost-recovery.
- <sup>6</sup> The UNCTAD Secretariat described the concept of economic policy space as referring to "the extent to which national governments have the authority to make decisions concerning economic policy and, correspondingly, the extent to which such authority is constrained by international disciplines and processes." This concept is also linked, according to the UNCTAD Secretariat, to the concept of "open nationalism" which "suggests policies and approaches that take appropriate account of the pursuit of national objectives and goals but are consistent with the growing integration of the world economy and the increasing participation of developing countries in its challenges and opportunities. Such policies and approaches are conceived primarily as efforts to upgrade the capabilities and skills of the national labour force, as well as of national capital, in order to better integrate into the global economy." See UNCTAD, 2004d, para. 26.
- <sup>7</sup> In this regard, Asian developing countries might wish to take particular care when agreeing to criteria that may be used to define environmental goods. For instance, many products may be of dual-use, i.e. they may be used for environmental and non-environmental purposes. Asian developing countries should either clearly identify what would constitute an environmental good for purposes of the negotiations, or what would be the elements for identifying an environmental good in such a way as to ensure that the impact of opening the market would be commensurate only to what the domestic market can absorb.
- <sup>8</sup> This contradicts a key theoretical underpinning for engaging in privatisation and liberalisation initiatives.

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Founded in 1996, the International Centre for Trade and Sustainable Development (ICTSD) is an independent non-profit and non-governmental organisation based in Geneva. By empowering stakeholders in trade policy through information, networking, dialogue, well-targeted research and capacity building, the centre aims to influence the international trade system such that it advances the goal of sustainable development.