

PASCN Discussion Paper No. 98-02

**Analysis of the Proposed Early Voluntary
Sectoral Liberalization Program for the
Environmental Goods and Services Sector**

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The *PASCN Discussion Paper Series* constitutes studies that are preliminary and subject to further revisions and review. They are being circulated in a limited number of copies only for purposes of soliciting comments and suggestions for further refinements.

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Analysis of The Proposed Early Voluntary Sectoral Liberalization Program for the Environmental Goods and Services Sector*

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Abstract

This paper evaluates the potential impacts of the EVSL program for the environmental goods and services sector, and discusses the actions developed as a response to the proposed program. It argued that the program has several potential benefits in terms of improved environmental protection and management, and better economic performance both at the sectoral and national levels. The program, however, has potential costs also and these should be mitigated by forceful measures designed to help the disadvantaged sectors, especially the local environmental goods and services industry. The paper further explained that based on multisectoral consultations, a cautiously supportive response to the EVSL program is preferred, due mainly to the hesitance of affected sectors to make broader decisions based on inadequate data and information.

* The views expressed herein do not necessarily represent the official views of the Philippine government in general, and/or the WTO/AFTA Advisory Commission in particular. This industry paper was prepared to provide some basic or background information; hence, in no way it is exhaustive. The intent is to offer the initial set of information for discussion and in the process, elicit the ideas that could be helpful in formulating the appropriate strategies in the development of this industry sector.

This paper was prepared under the "APEC Early Voluntary Sectoral Liberalization" project which was jointly funded by the WTO/AFTA Commission and the Philippine APEC Study Center Network (PASCN) in furtherance of the general objective of undertaking consensus building activities and other necessary measures to promote the Philippines as a competitive player in the global economy.

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I. Introduction

The early voluntary sectoral liberalization (EVSL) program for specific economic sectors has been proposed within the Asia-Pacific Economic Cooperation (APEC) in light of the need to accelerate trade between member countries. Among the sectors targeted is environmental goods and services.

The objectives of this paper are to analyze the potential impacts of the EVSL program for the environmental goods and services sector and discuss the actions developed during a recently concluded multi-sectoral consultations in response to the proposed program. First, the paper traces the likely positive, negative and net effects of the program on the government in terms of its environmental protection and management efforts, local environmental goods and services industry, domestic users of environmental goods and services, and the whole economy. Then, it presents the specific actions involving tariff reduction schedules, facilitation measures and economic and technical (Ecotech) measures for the proposed program.

II. Background of EVSL and the Environmental Goods and Services Sector

2.1 The EVSL Program

The EVSL is a program envisioned to promote early liberation in APEC through tariff and non-tariff measures, trade facilitation measures and Ecotech measures. As a process, it commenced in the Subic Bay Meeting of November 1996 when the Economic Leaders of APEC instructed their respective Trade Ministers to identify specific economic sectors where early voluntary liberalization would have favorable impacts on the individual economies as well as the entire region. Subsequently, 15 sectors were identified, namely, environmental goods and services, fish and fish products, toys, forest products, gems and jewelry, oilseeds and oilseed products, chemicals, telecommunications mutual recognition arrangement (MRA), energy, food, natural and synthetic rubber, fertilizers, automotive, medical equipment and instruments, and civil aircraft.

The EVSL program for the above-mentioned economic sectors were later endorsed by the Economic Leaders in the Vancouver Meeting in November 1997. Also

in this meeting, the Leaders instructed the Trade Ministers to finalize the EVSL for 9 of the 15 sectors. This reduced list includes environmental goods and services, fish and fish products, forest products, medical equipment and instruments, telecommunications MRA, energy, toys, gems and jewelry, and chemicals. The Philippines signified its strong support for the implementation of EVSL in 5 sectors, namely, environmental goods and services, fish and fish products, medical equipment and instruments, toys, and gem and jewelry.

2.2 *The Environmental Goods and Services Industry*

The environmental goods and services sector is only recently recognized as a distinct economic sector both internationally and locally. Thus, its definition is still developing. In general, it is described as encompassing "activities which produce goods and services to measure, prevent, limit or correct environmental damage to water, air, and soil as well as problems related to waste, noise and ecosystems. It also includes activities that produce clean technologies, processes, products and services which reduce environmental risk and minimize pollution and material use" (e.g. OECD 1995).

The above definition of the environmental goods and services sector has not been followed always in the literature where disagreement exists. There are reasons why a common definition is hard to attain (OECD 1996). First, there is a highly heterogeneous set of environmental products and services that could be potentially classified under the sector. Second, there is a lack of agreement among experts on the criteria establishing its boundaries. Third, several environmental goods are embodied in primary products and this makes them not readily separable for measurement purposes. There have been on-going studies at the international level to come up with a commonly acceptable description of the industry (e.g. Gaston and Santiago 1996).

In the Philippines, efforts to define the environmental goods and services sector is only beginning. In line with the current evaluation of the proposed EVSL program, the government is in the process of identifying and listing the specific products and services which fall under the industry, based on the general OECD definition cited above and the Harmonized System (HS) of product classification.

Based on estimates of various institutions, the OECD (1996) presented some background data on the international environmental goods and services industry (Table 1). The global market of the industry is already large and expected to grow even more in the coming years. As of the early nineties, the industry has an estimated global market of about \$200-295 billion. By the year 2000, the market will balloon to \$300-580 billion. A significant portion of the current market is in North America, notably the United States. Europe also has a large share while Asia-Pacific has the smallest regional share (For additional background information on the world market and the industry situation in other countries, refer to Higgins 1996 and OECD 1995).

Table 1. Global environment market (US\$ billion).

	OECD		ECOTECH			ETDC		Environmental Business International	
	1990	2000	1992	2000	2010	1990	2000	1992	1998
North America									
United States	78	113	85	125	200	115	185	134	180
Canada	7	12	14	18	30	7	14	10	17
Mexico	-	-	1	5	10	3	18	1	2
Sub-total	85	125	100	147	240	125	217	145	199
Latin America	-	-	2	5	15	-	-	6	10
Europe									
France	10	15	-	-	-	10	30	-	-
Germany	17	23	60 ¹	89 ¹	144 ¹	21	65	94 ¹	132 ¹
United Kingdom	7	11	-	-	-	11	28	-	-
Rest of European Union	12	20	-	-	-	15	48	-	-
Rest of Western Europe	5	9	-	-	-	6	17	-	-
Eastern Europe/NIS	15	21	5	9	23	15	25	14	27
Sub-total	66	99	65	98	167	78	213	108	159
Asia-Pacific									
Japan	24	39	30	44	72	24	65	21	31
Australia/New Zealand	2	3	-	-	-	2	4	3	5
Chinese Taipei	-	-	-	-	-	5	30	-	-
Hongkong	-	-	5 ²	12 ²	50 ²	-	3	-	-
South Korea	-	-	-	-	-	1	8	-	-
Rest of the Asia Pacific	-	-	-	-	-	14	28	6	13
China	-	-	2	5	20	-	-	-	-
India	-	-	1	2	7	-	-	-	-
Sub-total	26	42	85	63	149	46	138	30	49
Rest of the world	21	34	-	-	-	6	12	6	9
Total world	200	300	210	320	570	255	580	295	426

Notes:

1 - All Western Europe.

2 - East and South-east Asia.

Source: OECD (1992), excluding "clean technologies"; ECOTECH (1994) excluding "clean technologies"; ETDC (Environmental Technologies Development Cooperation, in Higgins, 1994) including replacement "clean" technologies only, excluding entirely new "clean" processes, "clean" and alternative energy generation, and "clean" products; Environmental Business International, in OTA (1994) including some "clean" technologies, such as alternative energy source.

It is interesting to note that in Table 1, two institutions which used a relatively limited definition of the industry, OECD and ECOTEC, did not indicate a market for environmental goods and services in the "Rest of Asia Pacific" category where the Philippines belongs. Using a more inclusive definition, the other two institutions, ETDC and Environmental Business International, estimated a market in the area of about \$6-\$14 billion in the early 90s which is expected to double within the current decade. The OECD explained that the international environmental goods and services industry is increasingly trade-oriented. This suggests that liberalization in APEC in the trading of environmental goods and services may have significant implications to the global industry in the coming years.

III. Potential Impacts of the EVSL Program

In this section, the potential impacts of the EVSL program are discussed. Only a qualitative evaluation is done because of lack of data. Moreover, only a general analysis of the EVSL program is possible, where EVSL is taken to mean some reduction in tariff rates and non-tariff barriers, improvement in trade facilitation and implementation of Ecotech measures.

3.1 Potential Impacts at the Sectoral Level

Positive Impacts on the Environmental Protection Efforts of the Government

The implementation of the EVSL program for the environmental goods and services industry will reduce the local acquisition cost of environmental products and increase the availability of foreign-provided environmental services. Other things the same, these will have the following favorable impacts on the environmental protection and management efforts of the government:

- a. Proliferation of the use of imported environmental technologies – With EVSL, a greater cross-section of firms will have the opportunity to choose between a wider array of environmental technologies. This impacts on the environmental protection and management efforts of the government in that at present, compliance to regulations and standards is generally weak. An often-cited reason is that many firms, especially the smaller ones, do not have the wherewithal to purchase the equipment needed to meet requirements. The EVSL program will allow not just large firms but also small and medium enterprises (SMEs) to purchase imported technologies needed for environmental protection.
- b. Shift from the use of brown to green technologies and from old to modern technologies - Another potential impact of EVSL favorable to the environmental protection and management efforts of the government is the shift in emphasis from the use of "brown" or end-of-pipe, abatement technologies to "green" technologies which prevent or produce less pollution. Presently, most environmental equipment used by

firms are of the former type as the newer green technologies are expensive to avail. With EVSL, the acquisition cost of green technologies will be significantly lowered making it possible for firms to acquire them.

In general, aside from the shift favoring green technologies, the EVSL program can lead to the overhauling of old environmental technologies in favor of new ones. Many of the environmental equipment presently used by firms are outdated because replacing them is not feasible at current prices. With the EVSL program, the costs of imported new technologies are lowered, making the modernization of environmental infrastructure and equipment more likely.

c. Decrease in the rate of use of natural resources – This potential positive impact of EVSL occurs if the imported environmental goods help reduce the natural resource inputs in production processes. For instance, if a new technology significantly reduces the wood input of some wood-based products, this will lower the demand for lumber and promote the conservation of trees. In effect, the efforts of the government to save the remaining forests will be enhanced.

d. Improvement in the quality and quantity of environmental services – The unhindered entrance of foreign consultants into the local market will increase the quantity and quality of expertise available to both the public and private sectors. New and cutting edge knowledge will be made available. This will improve environmental protection and management as a whole and in specific areas where local expertise is especially wanting.

e. Reduced cost of environmental management – Another potential desirable impact of EVSL is the more effective management of the environment sector by the government. When compliance becomes cheaper among firms, they will be more likely to obey and cooperate with government regulators in all stages of their operations. This will lower administrative costs on the part of the government, e.g. litigation costs, which greatly drain resources at present. Furthermore, when equipment become cheaper, public environmental monitoring can be done with maximum assistance from the private sector and this again cuts the cost of public administration.

Positive Impacts on the Local Environmental Goods and Services Sector

Aside from above, the EVSL in the environmental goods and services sector will significantly impact on the local producers of such products and services. The potential desirable effect of the program on this sub-sector is as follows:

a. Long-term growth and development of the local environmental goods and services industry – The EVSL program will contribute to a stronger local environmental goods and services industry over the long term. There are a couple of reasons why this will happen. The proliferation of foreign environmental technologies and services due to EVSL will hasten the dissemination of technical knowledge about newly developed and

cutting-edge technologies among local producers. This diffusion in know-how will in turn make it easier for local producers to improve on foreign technologies or develop entirely new ones which are cheaper and more suitable to domestic needs. In addition, following standard economic theory, the competition brought about by EVSL will weed out inefficient local producers resulting to a better allocation of resources and the formation of a more competitive local industry.

Positive Impacts on the Environmentally-Sensitive Industries

The EVSL program will also impact on the local environmentally sensitive firms which are the demanders of environmental technologies and services. The following are the likely effects on this sub-sector:

- a. Decrease in the cost of environmental protection and compliance – The lower acquisition cost and easier trade of environmental technologies will lower the cost of environmental protection and management among environmentally-sensitive firms. This cost reduction effect will positively impact on the financial standing of firms and the viability of industries they belong to.
- b. Improvement of financial profitability due to technology use - There have been reports that the use of modern environmental technologies itself contribute to substantial financial returns to investment among firms. For example, firms which cooperated with the Industrial Environmental Management Project (IEMP) in the Philippines in the use of waste minimization technologies were able to increase their profitability levels significantly (PRC Environmental Management, Inc. 1996). This similar experience was reported among firms in Thailand (TEI 1996). EVSL can potentially enhance not only environmental protection among firms but also their viability as business enterprises by encouraging them to employ environmental technologies.
- c. Increased foreign demand for local products – The improved environmental protection among local firms with the EVSL program may enhance their international image as environmentally-friendly producers. This could help stimulate foreign demand for domestic products since the tastes and preferences of outside consumers over the years have shifted in favor of goods produced in an environmentally-friendly manner. A higher international demand for local products will mean more exports and a better competitive position for local firms.

Negative Impacts on the Environmental Protection Efforts of the Government

On the negative side, The EVSL program may have the following potential undesirable effects on the environmental protection efforts of the government:

- a. Loss of revenues that could be earmarked for environmental protection – The program will result to revenue losses from the eliminated or reduced tariff. If these foregone revenues are large and could be earmarked for environmental projects, then

environmental protection suffers. Otherwise, if the revenues were traditionally allotted to all sectors, the negative consequences on the environment will be commensurately smaller.

b. Worsening instead of improving total environmental degradation - An issue against EVSL is that it can actually lead to higher levels of total environmental degradation even if it helps improve environmental protection at the firm level. New and profitable technologies could encourage the expansion of environmentally sensitive industries as meeting environmental regulations and standards become affordable and profitable. The entry of more firms results to worsening total environmental degradation at the industry level.

Negative Impacts on the Local Environmental Goods and Services Industry

For the local environmental goods and services sector, the classic case against EVSL is as follows:

a. Displacement of the local environmental goods and services industry – Instead of promoting the local environmental goods and services industry, EVSL may lead to its demise given that the industry is still in its infancy stage. The cheaper foreign technologies could edge out locally produced substitute products. This problem worsens when along with foreign technology comes foreign experts who are free to compete against less internationally-connected local consultants and other providers of environmental services.

Negative Impacts on the Environmentally-Sensitive Industries

In the case of environmentally sensitive firms, a potential negative impact of the EVSL is the following:

a. Importation of inappropriate or inferior foreign technology – The EVSL program may encourage the hasty importation by firms of foreign technologies which are inappropriate or inferior given local conditions. When these technologies are eventually found to be ineffective, firms lose. Also, the desired level of environmental protection is not attained.

Potential Net Sectoral Impacts

Weighing the aforementioned pros and cons of early liberalization may also provide useful insights about the desirability of the program. On the positive side, improvements in environmental protection and compliance especially among SMEs would be a major benefit from EVSL since compliance among these firms leaves much to be desired. The program should be highly welcome as well if it results to the proliferation of green and newer technologies, conservation of the already dwindling natural resource base, improvement of public sector management of the environment,

and the increased profitability and foreign demand for the products of local environmentally sensitive firms.

On the negative side, the issue of lost government revenues due to EVSL may actually have less relevance in terms of environmental protection. In reality, revenues from tariff are generally not earmarked for any sector, much less the environment. It is safe to assume that the incidence of lower revenues due to the program will be distributed across the board and the subsequent effects on environmental protection will be proportionately less.

The influx of inappropriate or inferior foreign technologies as an issue may have relevance only in the short-run and at the firm level. It is possible that some firms which are motivated by lower acquisition costs will hastily acquire technologies they do not need. However, over time, as the learning process takes hold, fewer firms will commit this mistake. On an industry-wide scale, the purchase of inappropriate or inferior technology is not likely to occur given that the profit motive will force firms to base purchase decisions on solid background information. Just the same, if inappropriate or inferior technologies are a real concern, the industry associations can put up a local clearing house for both internationally and domestically produced technologies. This clearing house should establish linkage with international clearing houses and make separate research in the gathering of critical information that are not available to individual firms. It should advise and help firms make the correct decisions on the technologies they will buy.

The concern that the EVSL program could result to higher levels of overall environmental degradation even if it improves protection among individual firms is contentious. Whether total degradation will increase when there are more firms, even when firms on average pollute less on average, depends on the magnitude of the increase in the number of firms and the fall in the capability of individual firms to pollute.

Finally, it is uncertain whether the EVSL program will eventually negatively impact on the local environmental goods and services industry. Both of the contending arguments purporting development or demise can happen under certain conditions. Therefore, whether the EVSL program will in fact eventually help in the long-term development or death of the local industry is a question that can only be answered over time.

3.2 Potential Impacts at the National Level

Positive Impacts

a. Increase in investment, production and employment – This expected consequence of EVSL follows from the previous discussions. The program will result to the acquisition by environmentally sensitive firms of modern technologies which help them become more profitable and efficient. This attracts new firms into environmentally

sensitive industries and increases investment, output and employment. If in the long-run, EVSL also helps in the development of the local environmental goods and services industry as theory argues, investment, production and employment in this sub-sector likewise rises.

b. Increase in exports – This also follows from the previous discussions. As the profitability and efficiency of environmentally sensitive firms and the local environmental goods and services industry improves due to EVSL, they become more competitive in the foreign market. Likewise, as firms use modern technologies and become environment friendly, their products become more attractive in the foreign market. These combined factors will help raise exports of firms.

Negative Impacts

a. Decrease in investment, production and employment – If the EVSL program will eventually discourage the development of the local environmental goods and services industry, a fall in investment, production and employment in this sector and the economy occurs.

b. Loss in government revenues – The reduced or eliminated tariff that EVSL bring will mean revenue losses. These losses may be significant if EVSL is applied to a wide array of goods and services which currently enjoy relatively high levels of tariff protection.

Net Impacts on the Economy

Whether or not the EVSL program contributes favorably to the economy on the net depends on whether or not it impacts positively on the different sectors. Clearly, the likelihood of success of the program, as well as its acceptability, will be enhanced if effective actions will be done to help alleviate the costs it will impose on those it will disadvantage, particularly the local environmental goods and services industry.

IV. Action Plan for the Proposed EVSL in the Environmental Goods and Services Sector

In light of the proposal for EVSL in the environmental goods and services industry, the Philippine government has recently initiated a series of multi-sectoral consultations among key representatives from the government, industry, non-government organizations, and other interested parties. A series of actions were developed in the process, which are discussed below (A more detailed report of the multi-sectoral consultations is Israel (1998)):

4.1 Tariff Reduction Schedules

Environmental Goods

The suggested action here is to cautiously support the proposed EVSL program by proposing the phasing out of tariffs only for specific goods. The rationale for this approach is to not make broad commitments in the absence of reliable industry data and information.

Specifically, 37 products were considered for tariff phase out under the EVSL program (Appendix Table 1). These products are perceived as critical to environmental protection and management but are either not locally manufactured or locally manufactured but not in sufficient quantity and/or quality. Some of the products fall under different categories and thus are listed more than once. The projected tariff rates are up to 2004 although the proposal is to bring down the rates to 0 as early as 1999 or 2000.

The list of products whose tariff rates were considered for phased down under the EVSL program are listed in Appendix Table 2. These products are either locally manufactured in sufficient quantity and/or quality, need detailed description or are also classified not totally as a non-environmental product. Again, the products which fall under different categories are listed more than once. Also, the specific tariffs proposed up to the year 2004 are presented.

It should be mentioned that the listings presented above are temporary. The next suggested action is to conduct a thorough study and survey of the environmental goods to accurately identify and describe the products under it. The output of this activity will be used to revise the listings.

Environmental Services

The proposed action in this case is again to limit the scope of the implementation of EVSL until enough data and information on the services sub-sector is generated. The four subclasses of environmental services which were considered for inclusion in the EVSL program under the "60% domestic – 40% foreign equity arrangement" are shown in Appendix List 1. These are: Hazardous Waste Collection Services (Subclass 94221), Waste and Scrap and Other Material for Recycling (Subclass Dealing with ***95), Metal Waste and Scrap Recycling Services (Subclass 86931), and Non-Metal Waste and Scrap Recycling Services (Subclass 86932). These are the services which are critical to environmental protection and management but cannot be adequately provided by local expertise.

A study will also be conducted to identify the exact type of services which fall under the category of environmental services, determine which of these can be adequately provided by local consultants and other professionals, and which cannot but are critical to environmental protection and management.

4.2 *Non-Tariff Measures*

No action on non-tariff measures (NTMs) were proposed until the local environmental goods and services industry is accurately defined, the products and services falling under it are identified, and the existing NTMs related to their trade are exactly known. The proposal of the original country proponents of EVSL for the sector to launch a work program within APEC that will identify significant NTMs in the industry will be supported, however.

4.3 *Facilitation Measures*

The suggested action is to actively propose facilitation measures locally and within APEC. The following are the measures which can be taken by the government to help facilitate the foreign trade in environmental goods and services:

- Streamlining the bureaucracy, including institutions and procedures, related to the international trading of all products in general and environmental products in particular. This will help reduce the high cost of paper facilitation which is hurting business and constraining trade, probably even more than the tariffs.
- Extension of government assistance to the local producers in product promotion and market development in international markets. This could be done, for instance, by actively involving embassies as well as pertinent trade agencies in the search for foreign markets to local environmental products.
- Strong support to the local consultants and other providers of environmental services in the search for consulting opportunities abroad. As in the case of products, this can be done by involving embassies and trade agencies in the monitoring and relaying of potential foreign demand for local services.

The proposed measures for trade facilitation under APEC are the following:

- Conduct of seminars and information campaigns targeted to the local producers and demanders on the environmental products which will be covered under EVSL for individual APEC countries and on trade-related procedures and requirements. These will expose local producers and buyers to the trade opportunities offered by the program.
- Creation of an APEC-wide organization of consultants and other providers of environmental services where experts from both developed and developing countries could expand their networks and markets. This will help raise the international exposure of local consultants.

4.4 *Ecotech Measures*

The action here is also to actively propose Ecotech measures which can be undertaken by the government alone and within APEC. The local measures are the following:

- Strong support for product R & D conducted in both public and private universities and research institutions where many environmental goods originate from. The support may come in the form of funding grants, awards and other incentives granted to researchers and institutions.
- Establishment of strong linkage between the government and the private sector in the conduct of R & D. This could be done by creating a jointly funded program that develops and/or tests environmental products for commercialization.
- Establishment of a technology dissemination program where potential investors, especially SMEs, can learn about new environmental products and technologies.
- Streamlining the bureaucracy, including institutions and procedures, which license the production and commercialization of all products in general and environmental products in particular. This will help lower the paper cost of doing business.
- Conduct of a detailed study of the local environmental goods and services industry, including its present and potential supply and demand. This will provide the necessary information for the future development of the industry.

The proposed Ecotech measures which can be done under APEC are the following:

- Establishment of a technology transfer program from developer countries to the Philippines. This program may include full or partial grants in the form of environmental equipment, infrastructure and training personnel from the developer countries.
- Establishment of an APEC based development fund which can help provide cheap financing to SMEs in the environmental goods and services sector. This fund is necessary to counter the deleterious effects of high interest rates prevailing in the country at present.
- Conduct of an APEC wide study on the potential market, i.e., supply and demand, for environmental goods and services in the region, including those related to SMEs. This study will help in the development of foreign markets for local environmental goods and services.

Conclusions

In summary, data and information on the environmental goods and services sector in the Philippines are generally unavailable because of its newness in the country and even elsewhere. In this respect, a major effort must be geared toward defining the sector, identifying the specific products and services falling under it and then gathering the necessary data to adequately describe them.

Even in the absence of data, an analysis of potential impacts suggests that early liberalization for the environmental goods and services industry has a lot of potential desirable benefits to the country. It should be remembered, however, that the success of the program will be enhanced if some steps will be undertaken to assist parties who may be disadvantaged by it, including the local environmental goods and services industry.

The proposed set of actions which came out of the multi-sectoral consultations can be described as cautiously supportive of EVSL. The guarded stance specifically in the case of tariffs is to a large extent due to the uncertainty brought about by lack of adequate data and information. Once this problem is addressed, it is possible that the list of products and services will expand. The desire for facilitation and ecotech proposals is more active and reflects the hope that the Philippine government and APEC will exert significant efforts to make early liberalization pay for the largest number of sectors and the whole economy.

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BLE 1: LIST OF ENVIRONMENTAL GOODS WHICH COULD BE BROUGHT DOWN TO 0% TARIFF LEVEL

HS Code	HS Description	Proposed EVSL Rates (%)						
		1998	1999	2000	2001	2002	2003	2004
	AIR POLLUTION CONTROL							
	Particulate emissions collectors							
8421.9900	Glass fiber filters	10	5	0	0	0	0	0
	Other air pollution control equipment							
8414.9010	Parts of ventilating and recycling hoods	10	5	0	0	0	0	0
8414.9090	Parts of ventilating and recycling hoods	10	5	0	0	0	0	0
8428.2000	Pneumatic elevators and conveyors	5	0	0	0	0	0	0
8428.3200	Other, bucket types continuous action conveyers	5	0	0	0	0	0	0
8481.4000	Safety or relief valves	5	0	0	0	0	0	0
	WASTE WATER TREATMENT							
	Industrial Separators (including centrifuges)							
8421.1900	Other, centrifuges including filtering or purifying machine for liquid.	5	0	0	0	0	0	0
8421.2900	Other, filtering or purifying machines for liquids	5	0	0	0	0	0	0
	Sampling equipment (Automated and manual)							
9025.1100	Thermometers and pyrometers, not combined with other instruments	5	0	0	0	0	0	0
9025.1900	Other	5	0	0	0	0	0	0
9025.8090	Other instruments	5	0	0	0	0	0	0

TABLE 1: LIST OF ENVIRONMENTAL GOODS WHICH COULD BE BROUGHT DOWN TO 0% TARIFF LEVEL

HS Code	HS Description	Proposed EVSL Rates (%)						
		1998	1999	2000	2001	2002	2003	2004
9026.1090	For measuring or checking the flow or level of liquids	5	0	0	0	0	0	0
9026.2090	For measuring or checking pressure	5	0	0	0	0	0	0
9026.8000	Other measuring and checking instruments	5	0	0	0	0	0	0
9026.9090	Instruments parts and accessories	5	0	0	0	0	0	0
9027.1000	Instruments for analysis	5	0	0	0	0	0	0
9027.2000	Electrophoresis instruments	5	0	0	0	0	0	0
9027.3000	Spectrophotometers	5	0	0	0	0	0	0
9027.4000	Exposure meters	5	0	0	0	0	0	0
9027.5000	Instruments using optical radiations	5	0	0	0	0	0	0
9027.8000	Other instruments and apparatus	5	0	0	0	0	0	0
9028.1000	Gas meters	5	0	0	0	0	0	0
9028.2090	Liquid meters	5	0	0	0	0	0	0
9031.4900	Other optical instruments and appliances	5	0	0	0	0	0	0
	Fluid filters (Including housings)							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Deionization equipment							
9030.1000	Instruments and apparatus for measuring or detecting ionizing radiations	5	0	0	0	0	0	0

TABLE 1: LIST OF ENVIRONMENTAL GOODS WHICH COULD BE BROUGHT DOWN TO 0% TARIFF LEVEL

HS Code	HS Description	Proposed EVSL Rates (%)						
		1998	1999	2000	2001	2002	2003	2004
	Pumps							
8413.5000	Other reciprocating positive displacement pumps	5	0	0	0	0	0	0
8413.6000	Other rotary positive displacement pumps	5	0	0	0	0	0	0
8413.7010	Other centrifugal pumps	10	5	0	0	0	0	0
8413.7090	Other centrifugal pumps	5	0	0	0	0	0	0
8413.8100	Other pumps, turbine pumps, windmill pumps	5	0	0	0	0	0	0
8414.1000	Vacuum pumps	5	0	0	0	0	0	0
8525.4010	Still image video cameras and other video (under ITA)	5	5	0	0	0	0	0
	RENEWABLE ENERGY							
	Residential photovoltaics							
8541.4000	Photosensitive devices (under ITA)	5	5	0	0	0	0	0
	MONITORING/ANALYSIS AND ASSESSMENT							
	Chromatography (including gas, liquid and others)							
9027.2000	Gas, liquid, and other chromatographs	5	0	0	0	0	0	0
	Mass Spectrometers							
9027.3000	Spectroscopes, spectrophotometers, spectrometers	5	0	0	0	0	0	0

TABLE 1: LIST OF ENVIRONMENTAL GOODS WHICH COULD BE BROUGHT DOWN TO 0% TARIFF LEVEL

HS Code	HS Description	Proposed EVSL Rates (%)						
		1998	1999	2000	2001	2002	2003	2004
	Radiation detection devices							
9030.1050	Instruments and apparatus for measuring or detecting ionizing radiations	5	0	0	0	0	0	0
	Gas detectors							
9027.1000	Gas or smoke analysis apparatus	5	0	0	0	0	0	0
	REMEDIATION/CLEAN-UP OF SOIL AND WATER							
	Dry sieves							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Dry sieve separation							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Dual phase extraction							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Critical fluid extraction							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Foam Separation							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Geophysics characterization							
9027.1000	Gas or smoke analysis apparatus	5	0	0	0	0	0	0
9027.2000	Gas, liquid, and other chromatographs	5	0	0	0	0	0	0
9027.3000	Spectroscopes, spectrophotometers, spectrometers	5	0	0	0	0	0	0

TABLE 1. LIST OF ENVIRONMENTAL GOODS WHICH COULD BE BROUGHT DOWN TO 0% TARIFF LEVEL

HS Code	HS Description	Proposed EVSL Rates (%)						
		1998	1999	2000	2001	2002	2003	2004
9027.5000	Other instruments and apparatus using optical radiations	5	0	0	0	0	0	0
	In situ vitrification equipment							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Infrared thermal destruction equipment							
9013.2000	Lasers	5	0	0	0	0	0	0
	Incinerators							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Membrane filtration equipment							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Microfiltration equipment							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Soil vapor extraction equipment							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Solvent extraction equipment							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0
	Thermal vacuum extraction equipment							
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	0	0	0	0	0	0

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
	AIR POLLUTION CONTROL							
	Particulate emissions collectors							
7019.9000	Glass fiber filters	5	5	5	5	5	5	5
7309.9000	Reservoirs, tanks, and vats for any material, of a capacity exceeding 300 liters	20	20	20	15	15	10	5
7310.1000	Tanks, casks, drums, cans, boxes of iron or steel	15	10	10	7	7	5	5
7610.9000	Other, aluminum structures; aluminum plates, rods, profiles, tubes and the like, prepared for use in structures	20	20	15	15	10	10	5
8414.8000	Other, except parts, air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods	10	10	10	7	7	5	5
8421.3100	Intake air filters for internal combustion engines	10	10	10	7	7	5	5
8421.3900	Other filtering or purifying machinery for gases	5	5	5	5	5	5	5
	Gaseous emissions/ control systems and devices							
8402.1100	Steam generating boilers, exceeding 45 t per hour	10	10	10	7	7	5	5
8404.1200	Steam generating boilers, not exceeding 45 t per hour	10	10	10	7	7	5	5
8402.1910	Other vapor generating boilers	10	10	10	7	7	5	5
8402.1990	Other vapor generating boilers	10	10	10	7	7	5	5
8402.2010	Super heated water boilers	10	10	10	7	7	5	5
8402.2090	Super heated water boilers	10	10	10	7	7	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
8402.9000	Parts	5	5	5	5	5	5	5
8404.1000	Auxiliary plant for use with boiler	5	5	5	5	5	5	5
8404.2000	Condensers for steam or other vapor	10	10	10	7	7	5	5
8404.9000	Parts	5	5	5	5	5	5	5
8421.3900	Other, filtering or purifying machinery for gases	5	5	5	5	5	5	5
8419.6000	Machinery for liquefying air or other gases	5	5	5	5	5	5	5
8419.8900	Machinery for treatment of materials involving a change in temperature	5	5	5	5	5	5	5
9032.8100	Other controlling instruments, hydraulic and pneumatic	5	5	5	5	5	5	5
	Mobile Source Control equipment							
8421.3900	Other, filtering or purifying machinery for gases	5	5	5	5	5	5	5
	Monitoring/Control Systems							
9032.1000	Thermostats	5	5	5	5	5	5	5
9032.2000	Controlling instruments, manostats	5	5	5	5	5	5	5
9032.8100	Other controlling instruments, hydraulic and pneumatic	5	5	5	5	5	5	5
9032.8900	Other, regulating or controlling instruments	5	5	5	5	5	5	5
9032.9000	Parts and other accessories, regulating or controlling instruments	5	5	5	5	5	5	5
9033.0000	Parts and accessories, not specified, for regulating or controlling instruments	10	10	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
	Gas separating equipment							
8421.3900	Other, filtering or purifying machinery for gas	5	5	5	5	5	5	5
	Odor control equipment							
7610.9000	Other, aluminum structures; aluminum plates, rods, profiles, tubes and the like, prepared for use in structures	20	20	15	15	10	10	5
8421.3900	Other filtering or purifying machinery for gases	5	5	5	5	5	5	5
8424.9000	Parts, appliances for dispersing or spraying liquids or powders	5	5	5	5	5	5	5
	Other air pollution control equipment							
8481.1000	Pressure-reducing valves	5	5	5	5	5	5	5
8481.3000	Check valves	10	10	10	7	7	5	5
8481.6000	Other appliances, taps, cock, valves	10	10	10	7	7	5	5
	WASTE WATER TREATMENT							
	Desalinization Equipment							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
	Storage tanks and process vessels (Including pressure vessels)							
7309.0000	Reservoirs, tanks, and vats for any material, of a capacity exceeding 300 liters	20	20	15	15	10	10	5
7310.1000	Tanks or drums of a capacity of 50 liters or more	15	10	10	7	7	5	5
7310.2100	Tanks or drum of a capacity of less than 50 liters	10	10	10	7	7	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
7310.2900	Other containers	15	10	10	7	7	5	5
7610.9000	Other, aluminum structures; aluminum plates, rods, profiles, tubes and the like, prepared for use in structures	20	20	15	15	10	10	5
8901.9010	Other vessels for the transport of goods (water storage tanks)	5	5	5	5	5	5	5
8901.9090	Other vessels for the transport of goods (water storage tanks)	10	10	10	7	7	5	5
9026.1090	For measuring or checking the flow or level of liquids	5	5	5	5	5	5	5
9026.2000	For measuring and checking pressure	5	5	5	5	5	5	5
	Industrial Separators (including centrifuges)							
8421.9100	Parts of centrifuges	5	5	5	5	5	5	5
8421.9900	Parts for filtering or purifying water	5	5	5	5	5	5	5
	Sampling equipment (Automated and manual)							
9031.8000	Other instruments, appliances, and machines	5	5	5	5	5	5	5
	Fluid filters (Including housings)							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
8421.9900	Other centrifuges, including centrifugal dryers; filtering or purifying machinery for liquids and gases	5	5	5	5	5	5	5
	Sewage treatment equipment							
5801.9000	Other woven pile fabrics and chenille fabrics	15	15	10	10	7	7	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
7304.3100	Tubes/pipes for boilers, feedwater heaters, condensers	10	10	10	7	7	5	5
7309.0000	Reservoirs, tanks, vats of iron or steel	20	20	15	15	10	10	5
7310.1000	Tanks or drums of a capacity of 50 liters or more	15	10	10	7	7	5	5
7310.2100	Tanks or drums of a capacity of less than 50 liters	10	10	10	7	7	5	5
7310.2900	Other containers	15	10	10	7	7	5	5
7610.9000	Other aluminum structures; aluminum plates, rods, profiles, tubes and the like,prepared for use in structures	20	20	15	15	10	10	5
8410.1190	Hydraulic turbines, water wheels, and regulators	5	5	5	5	5	5	5
8410.1290	Hydraulic turbines, water wheels, and regulators	5	5	5	5	5	5	5
8410.1390	Hydraulic turbines, water wheels, and regulators	5	5	5	5	5	5	5
8410.9090	Hydraulic turbines, water wheels, and regulators	5	5	5	5	5	5	5
8414.3000	Compressors of a kind used in refrigeration, including air conditioning	5	5	5	5	5	5	5
8414.8000	Other, except parts, air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods	10	10	10	7	7	5	5
8417.8000	Other, except parts, industrial or laboratory furnaces and ovens, including incinerators	5	5	5	5	5	5	5
8423.8100	Other weighing machinery, capacity not exceeding 30 KG	10	10	10	7	7	5	5
8423.8200	Other weighing machinery, capacity exceeding 30 KG but not 5,000 KG	5	5	5	5	5	5	5
8423.8900	Other, weighing machinery	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	IIS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
8424.9000	Parts, appliances for dispersing or spraying liquids or powders	5	5	5	5	5	5	5
8426.2000	Tower cranes	5	5	5	5	5	5	5
8479.8200	Mixing, kneading, crushing, grinding machines	5	5	5	5	5	5	5
8479.8900	Other, electromechanical appliances with self-contained electric motor	5	5	5	5	5	5	5
8481.8090	Other appliances, taps, cocks and valves	10	10	10	7	7	5	5
8514.1000	Resistance heated furnaces and ovens	5	5	5	5	5	5	5
8514.2000	Induction or dielectric furnaces and ovens	5	5	5	5	5	5	5
8514.3000	Other furnaces and ovens	5	5	5	5	5	5	5
8514.4000	Other induction or dielectric heating equipment	5	5	5	5	5	5	5
	Pack tower aerators							
8479.8900	Other, machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
	Deionization equipment							
8543.8900	Other electrical machines and apparatus w/ individual functions	5	5	5	5	5	5	5
	Solid/liquid separation							
8419.4000	Distilling or rectifying plant	5	5	5	5	5	5	5
	All other water and wastewater equipment							
7303.0000	Soil pipe	10	10	10	7	7	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
8419.8900	Other machinery, plant or laboratory equipment for the treatment of materials	5	5	5	5	5	5	5
8479.5000	Industrial robots, not elsewhere specified or included	5	5	5	5	5	5	5
8525.3000	Television cameras	5	5	5	5	5	5	5
8525.4090	Still image video cameras and other video	5	5	5	5	5	5	5
8543.8990	Other, electrical machines and apparatus, having individual functions	5	5	5	5	5	5	5
9006.5100	Other cameras, with through-the-lens viewfinder	10	10	10	7	7	5	5
9006.5200	Other, for roll film of a width less than 35mm	10	10	10	7	7	5	5
9006.5300	Other, for roll film of a width of 35mm	10	10	10	7	7	5	5
9006.5900	Other	10	10	10	7	7	5	5
	WATER TREATMENT							
	Boiler Materials							
8419.8900	Other machinery, plant, or laboratory equipment for the treatment of materials	5	5	5	5	5	5	5
8479.8900	Other, machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
8543.8990	Electrical machines and apparatus, having individual functions	5	5	5	5	5	5	5
	SOLID/HAZARDOUS WASTE MANAGEMENT							
	Solid waste equipment							
7309.0000	Reservoirs, tanks, and vats, of iron or steel, of a capacity exceeding 300 liters	20	20	15	15	10	10	5
7310.1000	Reservoirs, tanks, and vats, of iron or steel, of a capacity not exceeding 300 liters	15	10	10	7	7	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
7610.9000	Other, aluminum structures; aluminum plates, rods, profiles, tubes and the like, prepared for use in structures	20	20	15	15	10	10	5
8430.5000	Other moving, grading, compacting machinery, self-propelled	5	5	5	5	5	5	5
8430.6100	Other moving, grading, compacting machinery, not self-propelled	5	5	5	5	5	5	5
8430.6200	Other moving, grading, compacting machinery, not self-propelled	5	5	5	5	5	5	5
8430.6900	Other moving, grading, compacting machinery, not self-propelled	5	5	5	5	5	5	5
8431.4100	Other machinery-buckets, shovels, grabs and grips	5	5	5	5	5	5	5
8431.4200	Bulldozer or angle dozer blades	10	10	10	7	7	5	5
8417.1000	Industrial furnaces	5	5	5	5	5	5	5
8417.8000	Other, except parts, industrial or laboratory furnaces and ovens, including incinerators	10	10	10	7	7	5	5
8417.9000	Incinerator parts	5	5	5	5	5	5	5
8479.8200	Machines for crushing, grinding, sifting	5	5	5	5	5	5	5
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
8514.1000	Resistance heated furnaces and ovens	5	5	5	5	5	5	5
8514.2000	Induction or dielectric furnaces and ovens	5	5	5	5	5	5	5
8514.3000	Other furnaces and ovens	5	5	5	5	5	5	5
8705.9000	Other special purpose vehicles-designed not for the transport of people	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
	MATERIALS HANDLING EQUIPMENT							
	Spill clean-up and containment equipment							
6810.9900	Other, articles of cement, of concrete, or of artificial stone	20	20	10	10	7	7	5
7806.0000	Other articles of lead	20	20	20	15	15	10	5
	NOISE/VIBRATION ABATEMENT							
	Highway barriers							
7306.9090	Other, tubes, pipes, and hollow profiles of iron or steel	20	20	10	10	7	7	5
8409.9100	Industrial mufflers	10	10	10	7	7	5	5
8409.9900	Other, parts suitable for use solely or principally with engines of heading 8407 or 8408	10	10	10	7	7	5	5
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
	RENEWABLE ENERGY							
	Residential/Commercial/Industrial solar collectors (Including active and passive)							
8413.6000	Solar electric pump motors	5	5	5	5	5	5	5
8419.1100	Heat recovery systems	5	5	5	5	5	5	5
8419.1900	Solar water heaters	5	5	5	5	5	5	5
8541.4000	Photosensitive semiconductor devices	5	5	5	5	5	5	5
	Wind energy conversion equipment							
8413.8100	Windmill pumps	5	5	5	5	5	5	5
8502.3100	Wind powered generating units	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
	Other Turbines							
8410.1100	Hydraulic turbines and water wheels, of a power not exceeding 1,000 kw	5	5	5	5	5	5	5
8410.1200	Hydraulic turbines and water wheels, of a power exceeding 1,000 kw but not exceeding 10,000 kw	5	5	5	5	5	5	5
8410.1300	Hydraulic turbines and water wheels, of a power exceeding 10,000 kw	5	5	5	5	5	5	5
8410.9000	Parts, including regulators	5	5	5	5	5	5	5
	HEAT/ENERGY MANAGEMENT							
	Heat exchangers							
8419.5000	Heat exchangers	5	5	5	5	5	5	5
8418.6100	Compression type units whose condensers are heat exchangers	10	10	10	7	7	5	5
8419.1100	Heat recovery system,	5	5	5	5	5	5	5
8419.5000	Parts, air conditioning machines	5	5	5	5	5	5	5
8479.6000	Evaporative air coolers	5	5	5	5	5	5	5
	MONITORING/ANALYSIS AND ASSESSMENT							
	Microtomes							
9027.9000	Microtomes, parts and accessories	5	5	5	5	5	5	5
	Laboratory Separators (including centrifuges)							
9421.1900	Other, centrifuges including filtering or purifying machine for liquid or gas	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
8421.2900	Other, filtering or purifying machinery or apparatus for liquids	5	5	5	5	5	5	5
8421.9100	Parts of centrifuges	5	5	5	5	5	5	5
	Industrial process monitoring devices							
9026.1090	For measuring or checking the flow or level of liquids	5	5	5	5	5	5	5
9026.2090	For measuring or checking pressure	5	5	5	5	5	5	5
9026.8090	Other instruments or apparatus	5	5	5	5	5	5	5
9026.9000	Parts and accessories	5	5	5	5	5	5	5
9032.2000	Manostats	5	5	5	5	5	5	5
9032.8100	Other instruments or apparatus	5	5	5	5	5	5	5
	Flow measurement devices							
9026.1090	For measuring or checking the flow or level of liquids	5	5	5	5	5	5	5
9026.2090	For measuring or checking pressure	5	5	5	5	5	5	5
9026.8000	Other instruments or apparatus	5	5	5	5	5	5	5
	Other scientific and analytic instruments							
9032.8100	Other instruments or apparatus	5	5	5	5	5	5	5
9032.8900	Other, automatic regulating or controlling instruments and apparatus	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
	REMEDIATION/CLEAN-UP OF SOIL AND WATER							
	Air sparaging equipment							
8421.3900	Other, filtering or purifying machinery and apparatus for gases	5	5	5	5	5	5	5
	Bio remediation							
5911.9000	Other, textile products and articles, for technical uses	5	5	5	5	5	5	5
	Biofiltration equipment							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
8421.3900	Other, machinery or apparatus for filtering or purifying gases	5	5	5	5	5	5	5
8421.9900	Other, centrifuges, including centrifugal dryers; filtering or purifying machinery for liquids and gases	5	5	5	5	5	5	5
	Dry sieve separation							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
8421.3900	Other, machinery or apparatus for filtering or purifying gases	5	5	5	5	5	5	5
	Dual phase extraction							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
	Critical fluid extraction							
8421.2100	Filtering or purifying ,machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
	Foam Separation							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
	Geophysics characterization							
9027.4000	Exposure meters	5	5	5	5	5	5	5
9027.8000	Other instruments and apparatus	5	5	5	5	5	5	5
	In situ vitrification equipment							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
	Infrared thermal destruction equipment							
8516.2900	Soil heating apparatus	20	20	20	15	15	10	5
	Incinerators							
8417.8000	Other, except parts, industrial or laboratory furnaces and ovens, including incinerators	10	10	10	7	7	5	5
8417.9000	Parts, industrial or laboratory furnaces and ovens, including incinerators	5	5	5	5	5	5	5
8419.1900	Other, instantaneous or storage water heaters, nonelectric	5	5	5	5	5	5	5
8514.1000	Resistance heated furnaces and ovens	5	5	5	5	5	5	5
8514.2000	Induction or dielectric furnaces and ovens	5	5	5	5	5	5	5
8514.3000	Other furnaces and ovens	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
8514.4000	Other induction or dielectric heating equipment	5	5	5	5	5	5	5
	Low temperature thermal distortion equipment							
8543.8990	Other machines having individual function not specified elsewhere	5	5	5	5	5	5	5
	Intrinsic remediation equipment							
2521.0000	Limestone	5	5	5	5	5	5	5
8543.8990	Other, electrical machines and apparatus having individual functions	5	5	5	5	5	5	5
	Land farming equipment							
8429.1900	Other, bulldozers and angledozers	5	5	5	5	5	5	5
8429.2000	Graders and levelers	5	5	5	5	5	5	5
8429.3000	Scrapers	5	5	5	5	5	5	5
8429.4000	Tamping machines and road rollers	5	5	5	5	5	5	5
8429.5100	Mechanical shovels, excavators and shovel loaders	5	5	5	5	5	5	5
8429.5200	Machinery w/ a 360 revolving superstructure (backholes,shovels,clamshells, &dragline)	5	5	5	5	5	5	5
8429.5900	Other	5	5	5	5	5	5	5
	Leak prevention equipment							
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
	Membrane filtration equipment							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	IIS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
8421.3900	Other, filtering or purifying machinery and apparatus for gases Microfiltration equipment	5	5	5	5	5	5	5
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
8421.3900	Other, filtering or purifying machinery and apparatus for gases Photocatalytic oxidation equipment	5	5	5	5	5	5	5
8419.3900	Other, dryers	5	5	5	5	5	5	5
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
8543.8990	Other, electric machines and apparatus not specified or included elsewhere in this chapter Photothermal detoxification equipment	5	5	5	5	5	5	5
8543.8990	Other, electric machines and apparatus not specified or included elsewhere in this chapter Phytoremediation equipment	5	5	5	5	5	5	5
8543.8990	Other, electric machines and apparatus not specified or included elsewhere in this chapter Plasma arc vitrification equipment	5	5	5	5	5	5	5
8543.8990	Other, electric machines and apparatus not specified or included elsewhere in this chapter Pneumatic fracturing equipment	5	5	5	5	5	5	5
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
8543.8990	Other, electric machines and apparatus not specified or included elsewhere in this chapter	5	5	5	5	5	5	5
	Reductive photo-dechlorination equipment							
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
8543.8900	Other, electric machines and apparatus not specified or included elsewhere in this chapter	5	5	5	5	5	5	5
	Soil vapor extraction equipment							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
8421.3900	Other, filtering or purifying machinery and apparatus for gases	5	5	5	5	5	5	5
	Solvent extraction equipment							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
	Thermal oxidation equipment							
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
8543.8990	Other, electric machines and apparatus not specified or included elsewhere in this chapter	5	5	5	5	5	5	5
	Thermal vacuum extraction equipment							
8421.2100	Filtering or purifying machinery or apparatus for liquids for filtering or purifying water	10	10	10	7	7	5	5
8543.8990	Other, electric machines and apparatus not specified or included elsewhere in this chapter	5	5	5	5	5	5	5

TABLE 2: PROPOSED TARIFF REDUCTION PROGRAM FOR OTHER ENVIRONMENTAL GOODS

HS Code	HS Description	PROPOSED EVSL RATES (%)						
		1998	1999	2000	2001	2002	2003	2004
	Ultra-Violet oxidation equipment							
8479.8900	Machines and mechanical appliances having individual functions	5	5	5	5	5	5	5
	Vapor phase bioreactors							
8479.8900	Other, electromechanical appliances with self-contained electric motor	5	5	5	5	5	5	5
	Liquid phase bioreactors							
8479.8900	Other, electromechanical appliances with self-contained electric motor	5	5	5	5	5	5	5
	OTHER RECYCLING SYSTEMS							
	Recycling							
8422.2000	Machinery for cleaning and drying bottles	5	5	5	5	5	5	5

List 1. Illustrative List of Environment Services

Based on the Draft Central Product Classification (CPC) (ServicesPart; Sections 5-9) Version 1.0

- Notes:**
1. This List is not comprehensive.
 2. Divisions and subclasses that are shown in bold below are the most obvious environmental services.
 3. CPC Version 1.0 provides further details on subclasses, i. e., short lists of services included and sometimes services excluded with crossreferences to other parts of CPC version 1.0

1. Division 94: Sewage & Refuse Disposal, Sanitation & other environmental Protection Services

Subclass 94110: Sewage treatment services

Subclass 94120: Tank emptying & cleaning services

Subclass 94211: Non-hazardous waste collection services

Subclass 94212: Non-hazardous waste treatment & disposal services

Subclass 94221: Hazardous waste collection services

Subclass 94222: Hazardous waste treatment & disposal services

Subclass 94310: Sweeping & snow removal services

Subclass 94390: Other sanitation services

Subclass 94900: Other environmental protection services

2. Division 54: Construction Services

Subclass 54342: Septic system installation services

Subclass 54650: Insulation services

3. Division 61 & 62: Wholesale & Retail Trade Services

Subclasses dealing with *76 Cleaning materials**

*****87 Other industry specific**

**machinery and equipment and
related operating supplies**

*****89 Other machinery and equipment**

n.e.c.

*****95 Waste & scrap & other material for
recycling**

4. Division 64 & 65: Land & Water Transportation Services

under various modes, e. g. , by rail, road, sea

for example:

**Subclass 65219: Other coastal & transoceanic water transport of
freight**

Subclass 65229: Other inland water transport services of freight

5. Division 69: Various Distribution Services

**Subclass 69210: Water, except steam & hot water,
distribution services through mains**

6. Division 81: Research & Development Services

Subclass 81130: Research & Development services in engineering and technology

Subclass 81190: Research & Development services in other natural sciences

Subclass 81300: Interdisciplinary research & experimental development services

7. Division 83: Other Professional, Scientific and Technical Services

Subclass 83131: Environment consulting services

Subclass 83399: Other engineering services, other projects

Subclass 83520: Subsurface surveying services

Subclass 83530: Surface surveying services

Subclass 83561: Composition & purity testing & analysis services

8. Division 86: Production Services, on a fee or contract basis

Subclass 86222: Services incidental to water supply

Subclass 86590: Installation services to other goods

Subclass 86931: Metal wastes & scrap recycling services

Subclass 86932: Non-metal metal wastes & scrap recycling services

9. Division 87: Maintenance and Repair Services

Subclass 87159: Maintenance & repair services of machinery & equipment n.e.c.