

WORLD TRADE ORGANIZATION

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Committee on Trade and Environment
Special Session

Original: English

ENVIRONMENTAL GOODS

Submission by New Zealand

Paragraph 31(iii)

I. SUMMARY

1. This paper points to previous work that may help clarify the concept of environmental goods. That clarification will be needed to provide a basis for the CTE's role in monitoring the negotiations.

II. BACKGROUND

2. Paragraph 31(iii) of the Doha ministerial declaration calls for negotiations on the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services. Under the negotiating structure adopted by the Trade Negotiations Committee in February, negotiations on market access for non-agricultural products were to take place in the Negotiating Group on Market Access and negotiations on services in the Council for Trade in Services in Special Session, while negotiations on trade and environment were to take place in the Committee on Trade and Environment in Special Session.

3. At the March Special Session there was discussion on the roles of the CTE and the Negotiating Group on Market Access in relation to the 31(iii) mandate. The Chair, in summarising, noted that there was broad support for conducting negotiations on environmental goods and services in the market access negotiating group and the Council for Trade in Services respectively. The Chair also noted that the CTE Special Session could work towards clarifying the concept of environmental goods, provided that no sequencing would be involved between that work and the actual market access negotiations in the Negotiating Group on Market Access. The Special Session could also keep track of the work done in the Committee on Agriculture Special Session. Finally she added that there appeared to be broad support for the idea that the CTE Special Session play a monitoring role.

4. "Environmental goods" are not further defined in the Doha declaration. However there is earlier material on the issue which can help clarify the scope of this negotiation and assist in defining the respective roles of the CTE in special session and the market access negotiating group.

III. ATL: ENVIRONMENTAL GOODS

5. A paper submitted by New Zealand in 1999 on the basis of work by APEC members (WT/GC/W/138/Add.1) included details of a **sectoral liberalisation proposal on environment**. The proposal was developed over a two-year period to the point where it was able to attract support from a cross-section of developed and developing economies in the Asia-Pacific region. It addressed goods (including non-tariff measures) and, to a lesser extent, services.

6. Both the **working definition** and the **proposals for product coverage** based on that definition are relevant to the negotiation called for under paragraph 31(iii) of the Doha declaration.

7. The descriptive section of the 1999 proposal (see WT/GC/W/138/Add.1) reads as follows:

At the APEC Economic Leaders meeting, in November 1997, the environmental goods and services sector was one of nine sectors selected to be advanced under the accelerated liberalization initiative. Over the course of 1998 a series of technical experts meetings took place to elaborate the details of this trade liberalization proposal. The resultant proposal that was presented and endorsed by APEC Leaders at their annual meeting in Kuala Lumpur, in November 1998, was a comprehensive initiative that included undertakings on the following four elements:

- (1) tariffs
- (2) services
- (3) non-tariff measures, and
- (4) economic and technical cooperation (Ecotech)

The nominating APEC economies recognized the challenges in defining and classifying these goods and services (including technologies) in a manner that would readily serve as the basis for reaching agreement on trade liberalization. For this exercise, APEC economies utilized the OECD definition that the environment industry is defined as consisting of "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 eco-systems. Clean technologies, processes, products and services which reduce environmental risk and minimize pollution and material use are also considered part of the environment industry." Proceeding from this definition, APEC economies identified, by their Harmonized System (HS) codes, a list of goods to be covered under the agreement. This process was further guided by the list of categories of environmental goods presented in Annex III.1.

Trade barriers faced by the sector

Identifying barriers to trade in environmental goods (and services) will be facilitated by the development of an increasingly precise definition of scope. In general terms, barriers to trade may arise from specific market access restrictions, e.g., tariffs, non-tariff barriers or restrictions on commercial presence.

Driven by the burgeoning world demand for energy efficiency and renewal, for the sustainable management of natural resources and biodiversity, and for more global responsiveness to issues such as climate change and ozone layer depletion, many economies within the APEC region have already felt the need to have access to the most advanced and efficient environmental goods, services and technologies. Trade liberalization in this vital sector will help all countries to better respond to the many environmental challenges

which have arisen in recent years. The improved selection and availability of environmental goods and services at lower cost will help improve the overall quality of the basic environmental infrastructure, lower costs of environmental protection and promote further growth in a sustainable manner while minimizing economic, health and social costs.

8. The annex referred to above setting out proposed “**categories of environmental goods**” is attached. The paper also included an annex giving details of proposed **product coverage** for environmental goods and a further annex giving **estimates of import levels** of those goods for APEC economies. Though they were developed specifically for the purposes of the APEC initiative, and therefore have to be regarded as only indicative, both are useful in illustrating the potential impact of reduction or elimination of tariff and non-tariff barriers to environmental goods in the current WTO negotiations. The annexes are attached in their original form.

IV. ENVIRONMENTAL SERVICES

9. There is close linkage between the goods and services elements of “environmental goods and services”, reflected in the fact that published commentaries on the subject typically examines both together. Further material on possible scope of work on environmental services can be obtained from papers submitted to the CTE in recent years. An early United States paper (WT/CTE/W/70 of November 1997) comments on definition as well industry structure and outlook, together with trade dimensions. The Secretariat produced a detailed overview paper in 1998 (WT/CTE/W/67/Add.1 of 13 March 1998) which included material on scope and definition. WT/CTE/W/96 summarises the results of a 1998 UNCTAD Expert Meeting on Strengthening Capacities in Developing Countries to Develop their Environmental Services Sector. The OECD in 2000 produced a comprehensive study, *Environmental Goods and Services: An Assessment of the Environmental, Economic and Development Benefits of Further Trade Liberalisation*, a summary of which was circulated by the OECD Secretariat (WT/CTE/W/172 of 20 October 2000).

V. CONCLUSION

10. Material previously circulated in WTO bodies provides a good starting point for discussion on the CTE's role in clarifying the concept of environmental goods and monitoring the negotiations on environmental goods and services.

ANNEX III.1 to WT/GC/W/138.Add.1

(22 April 1999)

Developing Coverage for an Agreement on Environmental Goods

Proceeding from the working definition that environmental goods and services are those “used to measure, prevent, limit or correct environmental damage to water, air, and soil, as well as problems related to waste, noise and eco-systems, and may also include clean technologies, processes, products and services which reduce environmental risk and minimize pollution and material use”, the following table, derived in part from the April 1995 work of the OECD/Eurostat informal working group on the environment industry, provides a useful summary categorization of those goods and services that are included under this initiative. An example (with corresponding HS/CPC code) is presented for each. It is expected that for each of the categories cited below, a variety of goods and their components with corresponding HS codes, as subsequently agreed, would be covered under the terms of the broader agreement.

Table III.1

Categories of environmental goods	Illustrative example(s)
Air pollution control	soot removers for boilers 8404.10 scrubbers/precipitators (wet/dry; electrostatic); catalytic converters 8421.39 waste gas incinerators 8417.80
Water pollution control	pumps (sewage) 8413.60 and .70 equipment for filtering/purifying water or other liquid industrial discharge 8421.21 and .29
Solid/hazardous waste management	waste incinerators: electric - resistance heated 8514.10, induction or dielectric 8514.20, and other 8514.30 trash compactors 8479.82
Remediation/clean-up of soil and water	absorbent material used in booms or socks used for containing oil spills 2302.10 inflatable spill recovery barges 8907.10 pollution protection booms 8907.90
Noise/vibration abatement	industrial mufflers 8409.91 8409.99
Monitoring/analysis and assessment	pH meters 9027.80 gas or smoke analysis apparatus 9027.10
Potable water treatment	water treatment systems 8421.21
Other recycling systems	metal recycling equipment 8462.91 machinery for cleaning or drying bottles or other containers 8422.20

Categories of environmental goods	Illustrative example(s)
	asphalt recycling equipment 8474.32
Renewable energy plant	wind turbine pumps 8413.81 solar panels 8541.40
Heat/energy management	heat exchangers 8419.50 economizers for boilers 8404.10
Other: soil conservation	erosion control matter 4601.20 environmental protection cloth 5911.90

Source: OECD/EUROSTAT Informal Working Group on the Environment Industry, OECD/GD(96)1.

Note: (1) Categories of goods which the OECD considers to be "core" components of the environmental industry are shaded.

ANNEX III.2 to WT/GC/W/138.Add.1

(22 April 1999)

Proposed Coverage of Environmental Goods for EVSL
4 November 1998

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
1	R/C	2302.10	ex	Bran, sharps and other residues, whether or not in the form of pellets, derived from the sifting, milling or other working of corn	Booms or socks consisting of ground corn cobs contained in a textile covering
2	WWM	3926.90	ex	Other articles of plastics and articles of other materials of headings 3901 to 3914; other	Bio-film medium that consists of woven fabric sheets that facilitate the growth of bio-organisms.
3	WWM	3926.90	ex	Other articles of plastics and articles of other materials of headings 3901 to 3914; other	Rotating biological contactor consisting of stacks of large (HDPE) plates that facilitate the growth of bio-organisms.
4	WWM	4601.20	ex	Mats, matting, and screens of vegetable materials	Erosion control matting (biodegradable)
5	WWM	4601.20	ex	Mats, matting, and screens of vegetable materials	Ecologically safe ground covers (biodegradable)
6	WWM	5603.14	ex	Non-wovens, whether or not impregnated, coated, covered or laminated: of manmade filaments; weighing more than 150 g/m ²	Fabric of polyethylene/polypropylene/nylon for filtering wastewater.
7	WWM	5911.90	ex	Textile products and articles, for technical uses, specified in note 7 to this chapter; other	Environmental protection cloth
8	M/A	6902.10	ex	Refractory bricks, blocks, tiles and similar refractory ceramic constructional goods, other than those of siliceous fossil meals or similar siliceous earths; containing by weight, singly or together, more than 50% of the elements Mg, Ca or Cr, expressed as MgO, CaO or Cr ₂ O ₃	Industrial incineration
9	M/A	6902.20	ex	Refractory bricks, blocks, tiles and similar refractory ceramic constructional goods, other than those of siliceous fossil meals or similar siliceous earths; containing by weight more than 50% of alumina (Al ₂ O ₃), of silica (SiO ₂) or of a mixture or compound of these products	Industrial incineration

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
10	M/A	6902.90	ex	Refractory bricks, blocks, tiles and similar refractory ceramic constructional goods, other than those of siliceous fossil meals or similar siliceous earths; other	Industrial incineration
11	M/A	6903.10	ex	Other refractory ceramic goods (for example, retorts, crucibles, muffles, nozzles, plugs, supports, cupels, tubes, pipes, sheaths and rods), other than those of siliceous fossil meal or of similar siliceous earths; containing by weight more than 50% of graphite or other carbon or of a mixture of these products	Laboratory refractory equipment
12	M/A	6903.20	ex	Other refractory ceramic goods (for example, retorts, crucibles, muffles, nozzles, plugs, supports, cupels, tubes, pipes, sheaths and rods), other than those of siliceous fossil meal or of similar siliceous earths; containing by weight more than 50% of alumina (Al ₂ O ₃) or of a mixture or compound of alumina and silica (SiO ₂)	Laboratory refractory equipment
13	M/A	6903.90	ex	Other refractory ceramic goods (for example, retorts, crucibles, muffles, nozzles, plugs, supports, cupels, tubes, pipes, sheaths and rods), other than those of siliceous fossil meal or of similar siliceous earths; other	Laboratory refractory equipment
14	M/A	6909.19	ex	Ceramic wares for laboratory, chemical or other technical uses; other	Laboratory equipment
15	M/A	7017.10		Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated; of fused quartz or other fused silica	
16	M/A	7017.20		Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated; of other glass having a linear coefficient of expansion not exceeding 5×10^{-6} per Kelvin within a temperature range of 0 C - 300 C	
17	M/A	7017.90		Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated; other	
18	APC	8404.10		Auxiliary plant for use with boilers of heading No. 8402 or 8403 (for example, economizers, super-heaters, soot removers, gas recoverers)	

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
19	APC	8404.20		Condensers for steam or other vapour power units	
20	APC	8405.10	ex	Producer gas or water gas generators, with or without their purifier; acetylene gas generators and similar water process gas generator, with or without their purifiers	Include only those with purifiers.
21	N/V	8409.91	ex	Parts suitable for use solely or principally with the engines of heading No. 8407 or 8408; suitable for use solely or principally with spark-ignition internal combustion piston engines.	Industrial mufflers
22	APC	8409.99	ex	Parts suitable for use solely or principally with the engines of heading No. 8407 or 8408; other	Industrial mufflers
23	REP	8410.11		Hydraulic turbines and water wheels of a power not exceeding 1,000 kW	
24	REP	8410.12		Hydraulic turbines and water wheels of a power exceeding 1,000 kW but not exceeding 10,000 kW	
25	REP	8410.13		Hydraulic turbines and water wheels of a power exceeding 10,000 kW	
26	REP	8410.90		Hydraulic turbines and water wheels; parts, including regulators	
27	WWM	8413.60	ex	Pumps for liquids, whether or not fitted with a measuring device; other rotary positive displacement pumps	Submersible mixer pump to circulate water in wastewater treatment process; sewage pumps, screw type
28	WWM	8413.70	ex	Pumps for liquids, whether or not fitted with a measuring device; other centrifugal pumps	Centrifugal pumps lined to prevent corrosion; centrifugal sewage pumps
29	PWT	8413.81	ex	Pumps for liquids, whether or not fitted with a measuring device; other pumps	Wind turbine pump
30	M/A	8414.10		Vacuum pumps	
31	APC	8414.59		Fans (and blowers) other than table, floor, window, ceiling or roof fans with a self contained electric motor of an output not exceeding 125W	

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
32	M/A	8414.80		Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters; other	
33	S/H	8417.80	ex	Industrial or laboratory furnaces and ovens, including incinerators, non-electric; other than bakery ovens and furnaces for treatment of ores	Waste Incinerators
34	S/H	8417.90	ex	Parts of Industrial or Laboratory Furnaces and Ovens, Including Incinerators, Non-electric	Parts of waste incinerators
35	REP	8419.19	ex	Other instantaneous or storage water heaters, non-electric	Solar Water Heaters
36	M/A	8419.40		Distilling or rectifying plant	
37	H/E	8419.50		Heat exchange units	
38	M/A	8419.60		Machinery for liquefying air or other gases	
39	M/A	8421.19		Centrifuges, including centrifugal dryers, other than cream separators and clothes-dryers	
40	WWM	8421.21		Filtering or purifying machinery and apparatus for liquids: for filtering or purifying water	
41	WWM	8421.29		Filtering or Purifying Machinery and Apparatus For Liquids; other	
42	APC	8421.39		Filtering or Purifying Machinery and Apparatus For Gases; other	
43	M/A	8421.91	ex	Parts of Centrifuges, Including Centrifugal Dryers	Centrifuges, Accessories & Parts; except clothes dryers and clothes dryer furniture
44	APC	8421.99		Parts of filtering or purifying machinery and apparatus for liquids or gases	
45	ORS	8422.20		Machinery for cleaning or drying bottles or other containers	
46	WWM	8428.33	ex	Other continuous-action elevators and conveyors, for goods or materials; other, belt type	Belt-type above ground conveyor used to transfer solids or slurries between plants
47	WWM	8436.80	ex	Other agricultural, horticultural, forestry, poultry-keeping or bee-keeping machinery	Hot water weed killing system

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
48	S/H	8462.91	ex	Machine tools for working metal, other than punching or notching and combined punching and shearing; hydraulic presses	Shredders/balers for metals; hydraulic
49	S/H	8472.90	ex	Other office machines	Paper shredders
50	S/H	8474.10	ex	Sorting, screening, separating or washing machines	Machines of a kind for use in screening and washing coal
51	ORS	8474.10	ex	Sorting, screening, separating or washing machines	Waste foundry sand reclamation equipment
52	ORS	8474.32	ex	Machines for mixing mineral substances with bitumen	Asphalt recycle equipment
53	WWM	8479.82	ex	Mixing, kneading, crushing, grinding, screening, sifting, homogenizing emulsifying or stirring machines	Agitator for wastewater treatment
54	ORS	8479.82	ex	Mixing, kneading, crushing, grinding, screening, sifting, homogenizing emulsifying or stirring machines	Other than kneading machinery
55	S/H	8479.89	ex	Machines and mechanical appliances having individual functions, not elsewhere specified or included in this chapter, other	Radioactive waste press
56	WWM	8479.89	ex	Machines and mechanical appliances having individual functions, not elsewhere specified or included in this chapter, other	Trash compactors
57	PWT	8479.90	ex	Parts of Machines and mechanical appliances having individual functions, not elsewhere specified or included in this chapter, other	Parts of trash compactors
58	REP	8502.31		Generating sets, electric, wind-powered	
59	S/H	8505.90	ex	Electro-magnets; other, including parts	Electromagnet
60	S/H	8514.10	ex	Industrial or Laboratory Furnaces and Ovens; electric, resistance heated	Waste incinerators or other waste treatment apparatus
61	S/H	8514.20	ex	Industrial or Laboratory Furnaces and Ovens; electric, induction or dielectric	Waste incinerators or other waste treatment apparatus
62	S/H	8514.30	ex	Industrial or Laboratory Furnaces and Ovens, electric, other	Waste incinerators or other waste treatment apparatus
63	S/H	8514.90	ex	Parts of industrial or laboratory electric furnaces and ovens or other laboratory induction or dielectric heating equipment	Parts of Waste incinerators

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
				other laboratory induction or dielectric heating equipment	
64	REP	8541.40	ex	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes	Solar cells
65	WWM	8543.89	ex	Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter; other	Ozone production system
66	R/C	8907.10	ex	Inflatable rafts	Inflatable oil spill recovery barges
67	R/C	8907.90	ex	Other floating structures	Pollution protection booms
68	M/A	9015.40		Photogrammetrical surveying instruments and appliances	
69	M/A	9015.80		Other surveying, hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses	
70	M/A	9015.90	ex	Parts and accessories of surveying, hydrological, meteorological, or geophysical instruments and appliances, excluding compasses	Photogrammetric instruments; parts and accessories for articles of subheading 9015.40
71	M/A	9022.29		Apparatus based on the use of X-rays or of alpha, beta or gamma radiations for other than medical, surgical, dental or veterinary uses	
72	M/A	9022.90	ex	Apparatus based on the use of X-rays or of alpha, beta or gamma radiations for other than medical, surgical, dental or veterinary uses	Parts and accessories for goods of subheading 9022.29
73	M/A	9025.11		Thermometers and pyrometers, not combined with other instruments: liquid-filled, for direct reading	
74	M/A	9025.19		Thermometers and pyrometers, not combined with other instruments: other than liquid-filled, for direct reading	
75	M/A	9025.80		Hydrometers and similar floating instruments, thermometers pyrometers, barometers, hygrometers, and psychrometers, recording or not, and any combination of these instruments	
76	M/A	9025.90		Parts and Accessories for Hydrometers and similar floating instruments, thermometers pyrometers, barometers, hygrometers, and psychrometers, recording or not, and any	

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
				combination of these instruments	
77	M/A	9026.10		Instruments and apparatus for measuring or checking the flow or level of liquid	
78	M/A	9026.20		Instruments and apparatus for measuring or checking pressure	
79	M/A	9026.80		Other instruments and apparatus	
80	M/A	9026.90		Parts and accessories for articles of subheading 9026	
81	M/A	9027.10		Gas or smoke analysis apparatus	
82	M/A	9027.20		Chromatographs and electrophoresis instruments	
83	M/A	9027.30		Spectrometers, Spectrophotometers and Spectrographs Using Optical Radiations (Ultraviolet, Visible, Infrared)	
84	M/A	9027.40		Exposure Meters	
85	M/A	9027.50		Other instruments and apparatus using optical radiations (UV, visible, IR)	
86	M/A	9027.80		Other instruments and apparatus for physical or chemical analysis	
87	M/A	9027.90		Microtomes; parts and accessories	
88	M/A	9028.10		Gas Meters	
89	M/A	9028.20		Liquid Meters	
90	M/A	9028.30		Electricity Meters	
91	M/A	9028.90		Parts and accessories for articles of subheading 9028	
92	M/A	9030.10		Instruments and apparatus for measuring or detecting ionising radiations	
93	M/A	9030.20		Cathode-ray Oscilloscopes and Cathode-ray Oscillographs	
94	M/A	9030.31		Multimeters	

	Env. Act.	HTS No.		HS 6-Digit Description	Additional Product Specification
95	M/A	9030.39		Other instruments and apparatus, for measuring or checking voltage, current, resistance or power, without a recording device	
96	M/A	9030.83		Other instruments and apparatus for measuring or checking electrical quantities, with a recording device	
97	M/A	9030.89		Other Instruments and Apparatus for Measuring or Checking Electrical Quantities	
98	M/A	9030.90	ex	Parts and accessories (for nominated articles of subheading 9030)	
99	M/A	9031.10		Machines for Balancing Mechanical Parts	
100	M/A	9031.20		Test Benches	
101	M/A	9031.30		Profile Projectors	
102	M/A	9031.80		Other Measuring or Checking Instruments, Appliances and Machines, not elsewhere specified in this chapter	
103	M/A	9031.90	ex	Parts and accessories (for nominated articles of subheading 9031)	
104	M/A	9032.10		Thermostats	
105	M/A	9032.20		Manostats	
106	M/A	9032.81		Hydraulic and Pneumatic Instruments and Apparatus	
107	M/A	9032.89		Automatic Regulating or Controlling Instruments, other	
108	M/A	9032.90		Parts and accessories	
109	M/A	9033.00		Parts and Accessories (Not Specified or Included Elsewhere in this Chapter) for Machines, Appliances, Instruments or Apparatus of Ch. 90	

APC = Air Pollution Control
ORS = Other Recycling Systems
S/H = Solid/Hazardous Waste

H/E = Heat/Energy Management
PWT = Potable Water Treatment
WWM = Waste Water Management

M/A= Monitoring/Analysis
R/C = Remediation/cleanup

N/V = Noise/vibration abatement
REP = Renewable Energy Plant

ANNEX III.3 to WT/GC/W/138.Add.1

(22 April 1999)

Imports of Environmental Goods

Value (US\$000)

HS Code	690310	690320	690390	690919	701710	701720	701790
Australia	992	15,327	6,063	1,7839	703	1,669	4,497
Brunei	571	0	0	0	0	0	0
Canada	2,566	15,769	10,560	21,907	1,969	7,958	7,592
Chile	568	1,937	1,160	1,501	433	800	1,630
China	959	2,407	9,873	354	300	74	1,740
Chinese Taipei	4,070	2,205	18,328	12,176	2,906	1,527	927
Hong Kong, China	702	699	5,454	1,724	389	0	3,444
Indonesia	406	8,572	5,967	5,801	260	747	1,024
Japan	824	4,441	10,936	37,997	23,251	6,043	10,006
Korea	25,780	12,895	13,767	28,097	445	109	5,709
Malaysia	237	1,975	20,206	3,127	63	224	2,143
Mexico	3,204	21,014	9,692	1,766	3,404	524	1,647
New Zealand	342	1,932	1,083	808	72	323	1,709
Philippines	139	1,205	1,866	2,353	34	798	1,437
Singapore	48	196	10,188	975	830	756	3,290
Thailand	1,156	2,429	12,820	2,586	27	71	5,547
United States	7,868	39,691	44,915	24,699	7,623	2,894	18,529
Total	60,432	132,694	182,878	169,110	42,709	24,517	70,871

Value (US\$000)

HS Code	840410	840420	840510	840991	840999	841011
Australia	11,735	724	223	188,386	126,264	63
Brunei	230	0	963	3,350	0	0
Canada	4,402	2,004	3,251	1,340,707	329,335	0
Chile	1,544	31	8,149	15,120	38,445	128
China	63,666	7,763	7,046	177,005	249,550	366
Chinese Taipei	23,930	975	8,212	192,869	22,761	86
Hong Kong, China	2,525	23	11,257	332,162	232,986	0
Indonesia	24,799	29,996	12,817	45,234	89,522	1,312
Japan	11,623	3,518	10,789	224,028	143,973	213
Korea	31,382	5,481	45,535	161,177	436,119	618
Malaysia	11,599	4,164	15,798	37,896	56,860	1,397
Mexico	4,125	203	9,026	492,785	178,185	88
New Zealand	3,590	622	5,116	12,445	19,618	24
Philippines	2,002	1,047	3,308	8,129	48,109	264
Singapore	17,989	1,496	5,624	77,747	308,477	89
Thailand	2,707	3,282	31,517	237,364	193,770	69
United States	2,524	3,765	3,300	2,573,652	905,562	1,241
Total	241,754	70,575	181,931	6,120,056	3,379,536	6,020

Value (US\$000)

HS Code	841012	841013	841090	841360	841370	841381	841410	841459
Australia	0	158	710	29,481	34,404	36,133	10,860	50,951
Brunei	0	0	485	51	739	0	402	748
Canada	187	1,253	15,853	147,913	100,832	83,428	34,756	175,164
Chile	0	9,957	1,127	8,016	31,104	6,203	4,160	13,707
China	1,146	23,634	13,421	7,971	61,569	144,825	30,048	60,885
Chinese Taipei	0	0	2,271	28,469	65,840	30,916	70,078	67,056
Hong Kong, China	0	0	322	8,035	48,383	55,742	8,817	83,905
Indonesia	0	7,191	11,213	12,296	114,551	45,003	12,671	36,660
Japan	0	8	5,698	94,836	57,618	17,349	103,161	132,939
Korea	6,211	9,283	1,298	86,402	131,403	108,226	97,234	75,683
Malaysia	267	12	2,532	12,212	58,592	38,101	15,116	19,221
Mexico	28	2,110	16,208	54,196	37,639	20,526	14,048	28,357
New Zealand	903	7	1,015	1,762	19,574	14,635	2,674	12,388
Philippines	728	0	712	3,293	25,400	19,203	2,503	9,697
Singapore	19	0	1,936	9,801	96,375	117,758	26,681	48,487
Thailand	0	2,575	72	19,259	81,943	95,493	10,099	45,851
United States	299	3,432	37,025	241,580	212,748	151,938	359,916	449,553
Total	9,788	59,620	111,898	765,573	1,178,714	985,479	803,224	1,311,252

Value (US\$000)

HS Code	841480	841780	841790	841919	841940	841950	841960	842119
Australia	112,141	2,025	14,587	94	1,944	49,332	114	11,044
Brunei	0	0	28	0	3	66	0	0
Canada	167,636	13,105	34,361	11,801	2,809	98,392	2,473	18,945
Chile	21,602	4,845	6,201	516	9,276	14,852	1,944	8,125
China	252,910	69,391	23,998	1,290	63,632	98,529	23,825	65,181
Chinese Taipei	123,358	151,549	18,520	4,323	43,408	26,020	27,295	12,429
Hong Kong, China	54,272	2,316	12,309	1,196	345	10,453	0	7,097
Indonesia	154,561	72,425	31,702	1,548	18,760	101,595	8,965	23,185
Japan	158,401	7,897	14,845	1,205	7,013	65,018	10,108	31,750
Korea	335,702	62,425	41,405	10,327	22,123	119,148	18,222	66,517
Malaysia	191,329	52,031	10,290	3,478	18,008	57,860	3,624	12,519
Mexico	81,599	9,654	11,098	2,446	9,466	55,174	11,500	19,249
New Zealand	15,137	791	326	575	399	7,285	18	3,062
Philippines	26,138	9,395	8,278	392	4,644	2,021	3,942	2,916
Singapore	240,445	42,130	8,430	1,597	7,382	68,320	4,212	18,263
Thailand	84,410	51,823	50,115	4,523	163,438	51,679	19,192	22,334
United States	464,027	19,637	72,178	81,398	36,737	145,273	36,725	76,796
Total	2,483,668	571,439	358,671	126,709	409,387	971,017	172,160	399,412

Value (US\$000)								
HS Code	842121	842129	842139	842191	842199	842220	842833	843680
Australia	26,421	55,986	44,583	4,456	40,783	4,983	5,278	18,515
Brunei	882	0	0	176	0	0	0	0
Canada	53,957	66,353	399,224	16,553	143,546	3,233	21,953	65,672
Chile	15,703	10,669	35,025	1,641	15,631	2,369	63,510	7,261
China	108,121	83,253	55,570	4,401	40,135	29,220	128,808	11,584
Chinese Taipei	36,704	26,730	91,263	6,472	87,782	6,470	12,295	3,359
Hong Kong, China	34,082	9,597	26,345	1,640	61,579	1,184	16,272	0
Indonesia	53,793	46,438	49,170	4,587	34,037	2,100	33,637	5,158
Japan	149,425	59,900	109,332	23,052	147,313	14,137	15,706	16,558
Korea	70,400	123,080	132,437	8,022	118,991	17,849	39,129	14,597
Malaysia	47,720	30,421	44,013	4,942	34,643	2,208	48,052	4,681
Mexico	50,813	41,390	93,173	12,683	95,708	11,098	38,592	8,020
New Zealand	6,824	8,521	10,417	1,640	7,359	790	6,467	8,123
Philippines	19,775	4,885	15,125	1,854	26,955	5,572	9,410	1,357
Singapore	29,187	34,380	55,547	4,131	83,835	795	7,882	386
Thailand	32,032	29,770	76,502	5,828	73,043	5,410	25,600	1,593
United States	154,486	168,079	529,549	40,292	486,502	29,783	65,680	112,372
Total	890,325	799,452	1,767,275	142,370	1,497,842	137,201	538,271	279,236

Value (US\$000)								
HS Code	847290	847410	847432	847982	847990	850231	850590	851410
Australia	39,292	8,911	1,146	17,555	83,823	114,400	5,265	3,358
Brunei	0	126	210	0	0	N/A	0	73
Canada	72,565	19,606	8,125	32,828	287,455	1,497	8,002	7,365
Chile	10,348	24,314	3,095	8,392	9,816	N/A	762	2,294
China	26,686	24,870	30,112	137,342	400,548	16,379	77,380	41,361
Chinese Taipei	29,546	52,533	4,036	19,680	217,709	N/A	93,081	712
Hong Kong, China	133,845	2,696	602	10,127	81,520	N/A	9,115	18,647
Indonesia	28,883	21,134	2,014	0	40,771	8,864	2,135	10,931
Japan	116,483	9,740	128	60,867	464,050	2,928	127,815	10,805
Korea	54,021	12,839	3,939	151,295	670,446	1,793	14,537	150,197
Malaysia	23,109	13,608	6,781	42,763	303,584	N/A	23,778	8,886
Mexico	26,500	13,599	6,178	26,045	88,751	N/A	24,080	6,731
New Zealand	10,261	3,436	0	4,612	16,469	4,594	1,175	416
Philippines	15,208	4,821	1,521	8,774	391,141	N/A	6,453	277
Singapore	40,123	15,196	988	16,498	596,822	396	19,342	6,648
Thailand	42,671	5,549	16,999	63,844	68,628	N/A	13,768	4,562
United States	944,538	68,765	1,090	113,473	647,004	290	246,828	47,393
Total	1,614,079	301,743	86,964	714,095	4,568,537	151,141	673,536	321,156

Value (US\$000)

HS Code	846291	851420	851430	851490	854140	854389	890710	890790
Australia	3,608	2,405	3,725	7,670	14,743	139,784	3,305	1,113
Brunei	88	0	0	224	0	N/A	1,070	0
Canada	9,055	4,759	14,565	24,197	76,461	222,810	1,765	6,931
Chile	1,093	353	5,250	668	1,838	N/A	446	422
China	64,860	24,857	88,577	23,778	83,601	233,054	1,074	1,837
Chinese Taipei	3,423	336	26,467	2,510	114,926	N/A	914	335
Hong Kong, China	11,225	2,896	1,358	5,300	215,784	N/A	1,235	1,793
Indonesia	24,085	7,917	10,576	4,100	3,756	5,395	617	17,071
Japan	10,040	7,767	10,177	13,565	238,070	1,354,472	1,891	4,076
Korea	25,102	35,076	116,520	63,235	148,731	253,563	620	7,649
Malaysia	59,645	2,807	51,811	25,160	91,275	N/A	1,220	4,538
Mexico	9,103	7,389	20,433	4,071	64,052	N/A	574	788
New Zealand	561	744	1,104	932	4,333	35,481	627	1,069
Philippines	3,407	272	7,465	3,327	8,581	N/A	562	1,169
Singapore	11,352	1,712	38,547	19,869	278,894	252,337	8,494	2,947
Thailand	41,520	6,234	42,007	3,773	33,372	N/A	93	13,944
United States	102,000	16,430	114,894	107,631	749,420	1,056,311	9,474	11,835
Total	380,177	121,954	553,476	310,030	2127837	3,553,207	33,981	77,517