20th APEC ECONOMIC LEADERS' Declaration Vladivostok, Russia

ANNEX C

APEC LIST OF ENVIRONMENTAL GOODS

APEC plays an important role in pursuing green growth in the region. While each economy has its own environmental and trade policies, it is vitally important to pursue common approaches to environmental challenges, and take coordinated actions to address climate change, such as promoting trade and investment in goods and services needed to protect our environment and developing and disseminating relevant technologies.

Trade and investment liberalization in environmental goods will help APEC businesses and citizens access important environmental technologies at lower cost, which in turn will facilitate their use and benefit the environment, in addition, it will contribute significantly to APEC's core mission to promote free and open trade and investment, as embodied in the Bogor Goals.

In that light, we are pleased to endorse the below APEC List of Environmental Goods that directly and positively contribute to green growth and sustainable development objectives on which we will reduce applied tariff rates to 5 per cent or less by the end of 2015 taking into account economies' economic circumstances and without prejudice to their positions in the World Trade Organization (WTO), as we committed in 2011.

We commit to continue capacity-building activities to assist economies in implementing tariff reductions on the agreed list of environmental goods.

We believe that reducing our tariffs on environmental goods demonstrates our commitment to pursuing green growth objectives, addressing climate change and securing sustainable economic development, and are committed to continuing APEC's leadership role in this regard.

APEC LIST OF ENVIRONMENTAL GOODS

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
	441872		Other Assembled Flooring Panels, Multilayer, of Bamboo (44187210)		Renewable bamboo-based products are substitutions of wooden necessities. Since bamboo is characterized by short growing cycle, these environment-friendly products can save a great deal of water, soil and air resources.
840290	840290	840290	Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers. [Ca, J, NZ, K] Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers; Parts: [US] Parts for super-heated water boilers and steam or other vapour generation boilers (other than central heating hot water boilers) [HK] Super-heated water boilers and parts	Au] Parls for biomass boilers. (US) Management of solid and hazardous waste (BD)	Parts for the biomass pollers described above. [Ca, J, NZ, US, K, HK, Au] Parts for the boilers for the production of heat and power on the basis of (renewable) biomass fuels. [HK] Part for biomass boilers for the production of heat and power on the basis of renewable biomass fuels. This product should be seen in relation to HS840219, biomass boiler. Biomass in heating systems uses agricultural, forest, urban and infristrial residues and waste to produce heat and electricity with less effect on the environment than fossil fuels. This type of energy production has a timited long term effect on the environment because the carbon in biomass is part of the natural carbon cycle. [S, ED]
840410	B40410	840410	of steam generating boilers [S, BD] Auxiliary plant for use with boilers of heading 84.02 or 84.03 (for example, economisers, super-heaters, soot removers, gas recovers'); condensers for steam or other vapour power units. [C, J, NZ, K, Au, Ru, M, BD] Auxiliary plant for use with boilers of heading 8402 or 8403 (for example, economizers, super-heaters, soot removers, gas recovers'). [US] Auxiliary plant for use with steam or other vapour generating boilers, super-heated water boilers and central heating boilers. [HK] Auxiliary plant for steam, water and central boiler [S]	Auxiliary plant for use with 840219x. [Ce, J, NZ, K, Au] For central healing boilers of heading 8403 [M, BD]	Components of industrial air pollution control plant which minimise the release of pollutants into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment, or renewable energy resource recovery applications. (Ca. J. NZ, K. Au. 6D) Components of industrial air pollution control plant which minimise the release of pollutants into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment, (biomass energy generation - US only) and other renewable energy resource recovery applications. [US, HK, M] These are soot removers and components of industrial air pollution control plant, which minimise the release of pollutants into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment or renewable energy resource recovery applications. [SI]
B40420		840420	Auxiliary plant for use with boilers of heading 84.02 or 84.03 (for example, economisers, super-heaters, soot removers, gas recovers'); condensers for steam or other vapour power units.		Used to cool gas streams to temperatures which allow the removal of conteminants, e.g. volatile organic compounds (VCC) like benzene.
840490	840490	840490	Parts for auxiliary plant for boilers, condensers for steam, vapour power unit. [Ca, J, NZ, K] Auxiliary plant for use with boilers of heading 8402 or 8403 (for example, economizers, super-heaters, soot removers, gas recovers'); condensers for steam or other vapour power units; Parts. [US, Au, Ru] Parts for subheading 840410100 [M, BD]	Air pollution control (BD)	These parts are used in the repair and maintenance of the equipment classified under 840410 above. This secondary equipment is also used to support waste heat recovery processes, such as boilers mentioned above, in waste treatment, or renewable energy resource recovery applications. (C. J. NZ, US, Au, R. Th, M) Components of industrial air policition control plant which minimise the release of policiants into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment, or renewable energy resource recovery applications (BD)

840690	840690	840690	Parts for steam and other vapour	Optional ex-outs may include	Parts used for repair and main(enance of
			Iurbines. [Ca, J, NZ, K, Au. BD] Parts of steam turbines. [US, M]	parts suitable for use with stationary steam turbines over 40MW; stationary steam turbines	energy recovery turbines listed in 840681 and 840682 above. [Ca, J, NZ, K, Au]
				not over 40 MW, other vapour turbines; parts for 840681x and 840682x, [Ca, J. NZ, K, Au]	Parts for the aforementioned ex-outsigoods of 8406 [US]
				Parts for 840681x and 840682x. [US]	Turbines designed for the production of geothermal energy (renewable energy) and co- generation ((CHF) which allows for a more
				Renewable energy plant (BD)	effective use of energy than conventional generation) (BD)
941199	044400	841182		Only for stator blades, rotors and their blades [R]	
04(102	041102	041102	Other gas turbines of a power exceeding 5,000 kW. [Ca. J. NZ, US, Au, Th, S, BD]	Possible ex-out may include gas turbines that burn natural gas [Au]	Gas turbines for electrical power generation from recovered landfill gas, coal mine vent gas, or blogas (dean energy system). Note that these turbines do "exceed 5,000 kW". [Ca., .],
	į		Gas turbines, except turbo-jets and turbo-propellers, of a power exceeding 5,000 kW. [HK]	Gas turbines for electrical generation from recovered landfil gas (exceeding 5,000	HK NZ, Au, M, BD) Gas turbines for clean power generation
			Turbojets, turbo-propellers and other gas turbines of a power exceeding	(k/V) [BD] Of a power exceeding 5000 kW	including recovered (andfill gas, coal mine vent gas, or biogas, (US)
			5,000 kVV [M]	but not exceeding 50 000 kW	Gas turbines are used for electrical power generation from recovered fandfill gas, bost mine vent gas, blogas or national gas. Lower
					emission of pollutants compared with traditional fire power generation methods [5]
	841290	841199 841290	Parts of gas turbines. Engine and motor parts, nesoi [US]	Parts for 841181 and 841182. Wind turbine blades and hubs	Parts for gas turbines described above.
			Parts of the engines & motors of	[US]	These blades and hubs are integral components to wind turbines. [US]
			8412.10-8412.80 (S, BD)	Only for civil aviation (R)	Parts thereof wind turbinos. Parts used for repair and maintenance of wind turbines with
841780	841780	841780	Other industrial or laboratory	Optional ex-outs may include:	the attendant benefits. (S, BD) These products are used to destroy solid and
			furnaces and ovens, including incinerators, non-electric [Ca, J, NZ, K, Au, Ru, M, BD]	waste incinerators; heat or catalytic incinerators. [Ca. J. NZ, K, Au, M]	hazardous wastes. Catalytic incongrations are designed for the destruction of pollutants (such as VOC) by hasting polluted air and containing of organic components. [Ca, J. NZ, K, Au, M,
			Industrial or laboratory furnaces and ovens, including incinerators,	Waste incinerators; Heat or catalytic incinerators [US]	lus, BDJ
			nonelectric, and parts thereof: Other, except parts. [US]	Waste incinerator; Flue gas treatment system for incinerator	Used to achieve innocent treatment and disinfection of household waste through high- temperature incineration disposal. Used for
			Municipal Waste Incinerator (ex- 84178090); Incinerators for radioactive waste (84178020) [Ch]	[BD]	radioactive waste disposal. [Ch]
841790	841790	841790	Industrial or laboratory furnaces and ovens, including incinerators, non- electric: Parts. [Ca, J, NZ, K, Au, Ru, M]	parts for 841780x. [Ca, J, N2, K,	These parts can help maintain and reputifications that are used to destroy solid and hazardous wastes. Similarly, the parts for catalytic incinerators can help maintain end
			Industrial or laboratory furnaces and ovens, including incinerators, nonelectric, and parts thereof: Parts. [US]	Parts of waste incinerators and heat or catalytic incinerators. [US, BD]	repair items that can assist in the destruction of pollutants (such as VOC) by heating polluted air and oxidation of organic components. [Ca, J, NZ, US, K, Au, R, BO]
0.202		سِيمِينِ	Parts (BD)		
841919	841919	841919	Instantaneous or storage water heaters, non-slectric (other than instantaneous gas water heaters).	Solar water heaters. [Ca, J, NZ, US, K, HK, Au, BD]	Uses solar thermal energy to heat water producing no poliution. Use of solar water heating displaces the purring of other.
			[Ca, J, NZ, K, HK, BD) Instantaneous or storage water	Excluding other Domestic. of copper and other [M]	pollution-creating finals. [Ca, J, NZ, US, K, HK, Au, Th]
			heaters, non-electric: Other (US, Au) Solar water heaters (S)		Uses solar energy to heat water, producing no poliution. Use of solar water healing displaces the burning of other pollution-creating fuels. (5.
			Solar water heaters (84191910) [Ch]		BD
					Used for water hearing through solar energy which is regenerative and clean compared to burning fuot. [Ch]

841939	9 84193	9 84193	Dryers, other:	Sludge driers.	Device used in waste water management, which requires sludge to be treated
841960	84196	0 84196	Machinery for liquefying air or other gases.		For separation and removal of pollutants: through condensation [Ca. J. NZ, US, K, Au]
841989	841999	84198	Machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 85.14), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilising, pasteurising, steaming, drying, evaporating, vaporising, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage water heaters, non-electric. [Ca, J, NZ, Au] Industrial machinery, plant or equipment for the treatment of materials, by process involving a change in temperature, nesoi, [US] Machinery, plant or laboratory equipment - Other machinery, plant and equipment: Other, [Ru] Chlorine dioxide generator, Other Machinery, Plant & Equip For Treat of Mat. B (84198990) [Ch]	refinement equipment. [Ca, J, NZ, Au] Evaporators and dryers, for water and under the second	Can also help anaerobic digestion of organic matter. [Ca, J, NZ, Au] For processing water and waste water and the separation and removal of pollutants. Includes fluidised bed systems (bubbling, circulating, etc.) and biomass boilers. Can also help anaerobic digestion of organic matter. Well cooling towers are very efficient air so obbies.
341990	841990	841990	Other machinery, plan or laboratory equipment [S] !Parts of machinery, plant and	Ontional over the land	
			equipment [BD] of heading No 84.19, [Ca, J, NZ, CT, Au, Ru] Parts of machinery, plant or laboratory equipment for the trealment of material involving temperature change (except domestic machinery), nesoi. [US] Parts of machinery, plant or laboratory equipment of heading	for solar boller/water heater; insulation, temperature sensor for solar boller/water heater; Differential temperature controller for solar boller/water heater; Evacuated glass tubes for solar boller/water heater; Evacuated glass tubes for solar boller/water heater; heater for solar boller/water heater. Parts of 841980x, 841950x, 84190x, 84190x, 84190x, 84190x, 84190x, 84190x, 84190x, 841	Parts used in the maintenance and repair of solar water heaters (etc), which use solar thermal energy to heat water, producing no photologistic. Use of solar water heating displaces the burning of other, pollution-creating fuels [Ca, J, NZ, C1, Au] Parts for algrementioned goods/ex-octs of heading 8419, [US] Parts used in the maintenance and repair of the above products [S]
			Parts of Water Heaters (84199010)	excluding 8411990100), 841990200, 841990300 [M] Solar water heater paris [BD]	These are parts and accessories for the solar water heater classified in 8419 and described above [BD] Used for water heating through solar energy
42121 8	42121 8		purifying water. [Ca, J, NZ, K, Au, Ru, S] Water filtering or purifying (M)	Waste water management (BD)	which is regenerative and clean companied to burning fuel. [Ch] Used to filter and purity water for a variety of environmental, industrial and scientific applications, including water treatment plants and wastewater freatment facilities. [Ca, J, NZ, K, Δμ]
			machinery and apparatus. [US, BD] Household filtering or purifying water machinery and equipment (84212110). Device for the removal of Heavy metal lons for industry uses; Membrane bioreactor, High rate anaerobic reactors; reverse		Used to filter and purity water for a variety of environmental, industrial and scientific applications, including water treatment plants and wastowater treatment facilities. This line also includes newer water/wastewater filtration echnologies like ozone and ultraviolet disinfection equipment. [US]

			osmosis filters for industry uses; Water purification Machine; EDI ultra-pure water equipment (ex- 84212190) [Ch]		For wastewater. Used to filter and purify water for a variety of environmental, industrial and scientific applications including water treatment plants and wastewater treatment facilities. For instance, membrane systems can be used to produce water from wastewater, seawater or brackish groundwater, either through purification or filtration; (S)
842129	842129	842129	apparatus for liquids: other. [Ca, J, NZ, US, K, Au] Other [M]	Refrigerent recovery and recycling units. JUST excluding oil filter and for use in oil drilling operation [M]	Such devices are essential components for filtration and purification of drinking water. [Cn] Used to remove contaminants from wastewater, by chemical recovery, nikwater separation, screening or straining. [Cs. J. NZ, K] These units recover both liquid and gaseous
			Press Filters (84212910); etching solution recycling equipment for printed circuit board; equipment for the recycling and treatment of reclaimed water; ion exchanger; complete sets of equipment for alkali recovery of black liquor; aerator;	1	rofrigerants from ratingeration and air conditioning equipment and purify the refrigerant after its rocovery. This process prevents the emission of a variety of air pollutants. (US)
			olectrodialysis device (ex-84212990) [Ch]		Components in motor vehicles. [Au] Used for fifteration by injecting mechanical force on filtering media. [Ch] Etching solution is an essential component of PCB etching but is on kind of high pollutant. These equipment are designed for recycle-processing-reuse of etching solution through solvent extraction, memorano treatment and electrode method. [Ch] These equipment are used to turn westewater into nonpotable water, which can be widely applied in origition afforestation, flushing supply, etc. [Ch] These equipments are designed for water softening, alkali removal and desafination by ion exchange resins swapling bits of themselves with ions which have same electrical property in the pre-treated water under certain conditions the pre-treated water under certain conditions and recycling of black liquor, effectively eliminate pollution and improve resource utilization. Applications include pulp washing machine, pre-hung filter, putting-down machine, causticizer, etc. [Ch] Aerators both above and below the water's
B42139 84	42139 6		apparatus for gas (other than intake air filters for internal combustion	Optional ex-out may include:	surface are essential components of oxygenic aeration of drainage. [Ch] Elactrodialyzers exploit ion exchange mombrane and DC electric field, maxing electrolytes develop migration selectivity, thoreby desalinate the water. [Ch] Physical, mechanical, chemical or electrostatic filters and purifiers for the removal of COV, solld or liquid particles in gases, etc. [Ca, J. NZ.]
	•		Filtering or purifying machinery and apparatus for gases, nesoi. [US, Au,	rated at 550 kPa or greater / Industrial gas cleaning equipment / Electrostatic lilters (precipitators), [Ca, J, NZ, K]	K, Au] Catalytic converters convert harmful pollutarits, like carbon monoxide, into less harmful emissions. Other technologies in this line litelated a process.
			Filtering Purifying Machines For Gases Nes, Househ (84213910); Electrostatic Dust Collectors For Industry Uses (84213921); Baghoused Dust Collectors For Industry Uses (84213922); Cyclone	Excluding other filters of a kind used as components in motor vehicles. [Au] Catalytic converters / Dust collection and air purification equipment / Gas separation equipment / Pneumatic fluid power filters rated at 550 kPa or	include physical, mechanical, chemical and electrostatic filters and purifiers for the removal of VOCs, solid or liquid particles in gases, etc. [US] For wastewaler, Used to filter and purify water for a variety of environmental, inclustrial and scientific applications including water treatment plants and wastewater treatment plants and wastewater treatment facilities. For instance, membrane systems can be used to

1	1	1	1 m m m m m m m m		
			(84213923); Other Dust Collectors for Industry Uses (84213929); Five Gas Desulfurization Apparatus (84213940); Spraying Saturator;	disInfection equipment, [US]	produce water from wastewater, seawater or brackish groundwater, either through purification or filtration. (S)
			Concentrated adsorption - catalytic combustion equipment; Activated carbon fiber - granular activated	possible ex-out: air purifier and laminar flow units [M]	Air Pollution Control [Th]
			Carbon equipment; (ex-84213990) [Ch]	Laminar flow units, catalytic converter and carbondyoxide removal unit imported to use at	Indoor hazardous gas purification equipment, especially for formaldehyde and banzene (Ch)
		3 842199	dryers; filtering or purifying machinery and apparatus, for Irquids or gases: parts (other than of centrifuges and centrifugal dryers); filtering or purifying machinery and apparatus for water and parts thereof. [Ca, J, NZ, K] Parts for filtering or purying machinery and apparatus forliquids or gases [US] Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases: parts (other) [Au] for subheading 842129300 [M, BD] Parts Of Household Filtering and Purifying Machines For Gases (84219910) [Cn]	components in motor vehicles [Au]. Parts for 842121, 842129x and 842139 (US). Excluding for subheadings 842123100, 842129510 [M, BD].	Parts for aforementioned goods/ex-outs ofneading 8421. [US]
847420	847420	847420	Crushing or grinding machines ICa	excluding concrete or monar	Used for solid waste treatment or recycling.
			J. NZ. US, K, CT, Au, Ruj	mixers [M̄, Au]	1
			Crushing/grinding machines for earth/stone/ores/other mineral substance, in solid (incl. powder/paste) form [S]		Waste compactor machines. Used for sofir(waste treatment or recycling, (S)
947090	847982	047000	Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including powder or paste) form; machinery for agglomerating, shaping or moulding solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines for forming foundry moulds of sand. Crushing or grinding machines [M]		
047302	047902		screening, sifting, homogenising, emulsifying or stirring machines not elsewhere specified in Chapter 84. [Ca, J, NZ, K, CT, S]	focculator. [Ca, J, NZ, K, US,	Used to prepare waste for recycling, mixing of wastewater during freatment; preparing organic waste for composting; (composting can minimise the amount of waste going to landfill as well as recovering the valuable nutrient and energy content of the waste). [Ca, J, NZ, K, CY, Au]
		İ	emulsifying or stirring machines. [US, Ru, BD] Waste sorting, screening, crushing, grinding, shredding, washing and compacting devices. Agitator for wastewater troatment; flash mixer and flocculator. [Au]	appliances: Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsilying or stirring machines. [Au]	Used to prepare waste for recycling; removing or shredding the rags and dabris typically found in wastewater; mixing of wastewater during freatment; preparing arganic waste for composting (composting can minimise the amount of waste going in randfile as well as recovering the valuable nutrient and energy content of the waste). [US, BD]
			Dosing and mixing equipment for water treatment (ex-84793200); Recycling equipment for waste plastics /rubber /broken tire (84798200) [Ch]		Waste separator machines. Prepares waste for recycling, separating waste allows for more efficient treatment of each type; for example, separating organic waste allows for composting, which minimises the amount of waste going to landfill as well as recovering the

					valuable nutrient and energy content of the waste). [S] These equipments are used to release and mismedicament which is an essentical step of putting flocculant in wastewater in water treatment industry. These equipments are designed for recycling
84798	9 847989	847989	Machines and mechanical appliances having individual	Optional ex-outs may include;	waste tires. [Ch] Machines and appliances designed for a wide
			appliances having individual functions, not specified or included elsewhere in this Chapter: Other. [Ca, J, NZ, US, CT, Ru] Other machines & machanical appliances, other than Machines & mechanical appliances for treating metal, incl. Industrial catalysers, electric wire coll-winders/ Mixing/ kneading/ crushing/ grinding/ screening/ sifting/ homogenising/ emulsifying/ strring machines [S] Air Humidifiers Or Dehumidifiers (84798920); Machines For Squeezing Radioactive Waste (84798950); Suction Machine; Mud Scraper; Sand suction machine; Trash compactor; Vacuum extruder for making hollow brick with Gangue and fly ash; (Fan) muffler (ex-84798999) [Ch]	spill recovery; and aquatic weed harvesters. [US, CT] Excluding machines and	range of areas of environmental management including waste, waste water, drinking water production and soil remediation. In vessel composting systems can handle large amounts of waste and speed up docomposition. Inch compactors reduce the volume of solid waste, allowing more efficient transport and disposal Very broadly, products under HS84?989 are machines and appliances designed for a wide range of areas of environmental management, including waste, waste water, drinking water production and soil remediation. [S] Parts to ensure the balance of indoor humidity. Travelling suction dredgers are designed for sevage treatment plants and horizontal sedimentation tanks of waterworks. These machines can scrape and assemble the studge to the mouths of their or mass and contains.
F 4 70 55				mechanical appliances used as components in motor vehicles. [Au]	
i¤+1 718€	847990	54/990	Parts of the mach, and mech, appls. of 84.79 [Ca. J, NZ, CT, US, Ru]	Parts for 847982x and 847989x. [US, CT]	See the environmental penetit under 847999 [Ca, J, NZ]
			Parts of Machines & mechanical appliances having individual functions, not specified/incld. elsewhere in this Ch. [S] Parts Of Air Humldifiers Or Dehumidifiers (84799020) [Ch]	mechanical appliances used as components in motor vehicles. [Au]	Parts for aforomentioned goods/ex-outs of heading 8479. [US] Parts thereof waste separator/ compactor machines. Parts used for the maintenance and repair of waste separators and compactor machines, with the attendant benefits, for example, membrane systems which can be assembled to recover resources from waste. [S] Parts to ensure the balance of indeer humidity
850164	850164		AC generators (alternator), of an output exceeding 750 kVA	To be used with furbines and generalors in combination to produce electricity from renewable energy fuels [BD]	Used in conjunction with boiler and lurbines (also listed under 840681 and 840682) to generate electricity in renewable energy plants. Must use these turbines and generators in combination to produce electricity from renewable fuels (e.g. biomass). Size is "excreding 750 kVA." [Ca. J. NZ, K. Au, BD] Used in conjunction with boiler and turbines to generate electricity in renewable energy plants. Must use these turbines and generators in combination to produce electricity from
150231	8502 31		Other electric generating sels: Wind- powered. (Ca, J, NZ, US, K, HK. Ru, M)	Amorphous Transformers [BD]	renewable fuels (e.g., biomass), [US] Electricity generation from a renewable resource (wind). [Ca J. NZ, US, K. HK, BD]
			Wind-powered electric generating sets [S]	ľ	For wind turbines. Used to generate electricity from wind power - a form of renewable energy, [S]
			Wind-powered electric generating equipment [T]	İ	Some heat exchanges are specifically designed for use in relation to renewable energy uses such as geothermal energy. Electricity

	1	1	Electric generating sets and rotary	1	generation from a renewable source (wind) (M
			Convertors: Wind-powered [BD] Wind-Powered Electric Generating		Used to produce electricity from wind energy.
05033		250500	_ Sets (85023100) [Chi		[Ch]
850300	850300	850239	Electric generating sets and rotary convertors: other. [Ca, J, NZ, K, Ru, BD] Generating sets, electric, nesol. [US Au] Biogas generator sets; Gas Generator (ex-85023900) [Ch]	systems using biomass and/or biogas; Portable solar power generation equipment; solar power electric generating sets; Small hydro powered generating plant; Wave power generating plant; and Gas turbine sets for biomass plants [Ca, J, NZ, K] and for waste heat applications [Au] Small hydro, ocean, geothermal and biomass gas turbine generating sets. [US] For heat recovery systems [ED] Parts for 850231 and optional	minimises transmission losses through national grids, reducing the need to increase centralised generating capacity and transmission networks. [Ca, J, NZ, K, Au, 80] Electricity generation from ronewable resources. [LIS] Used to produce electricity from mathema. [Ch] Parts of the generators and depending sets
			principally with the machines of heading 8501 or 8502. [Ca. J. NZ. CT. Au., Ru, Th, M, BD] Parts for 850231 and optional ex-out may include: 850239x. Parts suitable for use solely or principally with the machines of heading 85.01 or 85.02. Parts of the generators and generating sets listed under HS 850231 (for renewable energy systems). Relevant parts include for instance nacelles and blades for wind furbines. [S] Parts of Wind-Powered Electric Generating Sets (85030030) [Ch]	ex-out may include: 850239x.[Ca, J, NZ, K, CT, Au] Parts for 850161, 850162, 850163, 850164, 860211x, 850212x, 850220x, 850231 and 850239x. [US] Combined cycle generator parts [BD]	listed under 848340 (for renewable energy systems). Relevant parts include for instance nacelles and blades for wind turbines. [Ca. J. N.Z., K. M] See environmental benefit under 847989 [Cit] Parts for aforementioned goods/ex-outs of headings 8501 and 8502. [US] Parts of the generators and generating sets listed under HS 850231 (for renewable energy systems). Relevant parts include for instance nacelles and blades for wind turbines. Renewable Energy [S] Parts and accessories for electricity generation from renewable resources. [ED]
		850490	Parts for electrical transformers, static converters and inductors		Used to convert DC current from renewable energy generating sets into conventional AC electricity
	851410		furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss: resistance heated furnaces and ovens [M] Controlled Almosphere Heat Treatment Furnace (85141010); Industrial / Lab Electric Resistance Heated Furnace (85141090) [Ch]	Optional ex-outs may include: waste incherators and heat or catalytic incinerators. [Ca, J, NZ, K, CT, Au]	These products are used to destroy solid and hazardous wastes. Catalytic incinerators are designed for the destruction of pollutants (such as VOC) by heating pollutad air and exidation of organic components. These instruments are used to measure, record, analyse and assess environmental samples or environmental utilizences (Ch)
	B51420 851430	851420	Furnaces and ovens; functioning by induction or dielectric loss. Industry / Lab Electric Induction or Dielectric Fu (85142000) [Ch]	waste incinerators and heat or catalytic incinerators, [Ca, J, NZ, K, CT, Au]	These products are used to destroy solid and hazardous wastes. Catalytic tricinerators are designed for the destruction of pollutarits (such as VOC) by heating polluted air and oxidation of organic components. These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. (Ch)
		;	NZ, K, C1, Au, Ru, M]	waste incinerators and heat or catalytic incinerators. [Ca, J, NZ,	Catalytic incinerators are designed for the destruction of pollutants (such as VOC) by heating polluted air and exidation of organic components. [Ca, J. NZ, K, CT, Au]

1	i	1	i	r	
			Industrial & Laboratory Electric Furnaces & Ovens (85143000) [Ch]		These products are designed for the destruction of pollutants (such as VOCs) embedded in solid and hazardous wastes Pollutants are destroyed by heating polluted an and oxidizing organic components (US)
85140	1 851/6	0 851490) Code of induced at		These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. (Ch)
	05745	0 65 1480	Parts of industrial or laboratory electric furnaces and ovens; other laboratory induction or dielectric healing equipment. [Ca, J, NZ, K, CT, M]	Optional ex outs Include: Parts for 851410x, 851430x and 851430x. [Ca, J, NZ, K, CT, Au]	Parts for the equipment listed will facilitate the
	1		Parts for industrial or laboratory	Parts for 851410, 851420 and 851430. [US]	Parts for alorementioned goods of heading
			electric furnaces and ovens (including those functioning by induction or dielectric loss); parts for other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric		8514. [US]
854140	854140	854140	Hose IIIS An Pul	Photo and a state of the state	
			devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes. [C, J, NZ, US, K, HK, CT, Au, Th, S, M, BD]	Photovoltaic cells, modules and panels. [Ca, J, NZ, US, K, HK, CT, Au, BD] Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled	Solar photovoltaic cells generate electricity in an environmentally benign manner (with no emissions, noise or heat generated). They are particularly suited to electricity generalism in locations remote from an electricity griri. [Ca, J, NZ, US, K, CT, Au, Th. M, BD]
			Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in	in modules or made up into panels; light emitting diodes [M]	Generate electricity in an environmentally sound manner (with no emissions or noise generated). [3]
			modules or made up into panels; ilight emitting diodes; mounted piezo-electric crystals: Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes [M]		Solar batteries are eco friendly(emission- free,noiseless,non-hear generation)and are especially applicable for power supply in remote area. [Ch]
854390	854390	854390	Solar Cells (85414020) [Ch] Parts of the machines and apparatus		
		004000		Paris for 854389x. [Ca, Ja, NZ, K, CT, Aµ]	Water disinfection. Parts thereof UV disinfection ozonisers, Parts
			Parts of other machines / apparatus of heading 85.43 (85439090) [Ch]		used in maintenance and repair of the UV disinfection instruments. UV light is extremely effective in killing and eliminating bacteria, yeasts, viruses, moulds and other harmful organisms. UV systems can be used in conjunction with sediment and carbon filters to create pure dfinking water. Water disinfection Ozone (O3) can be used as an alternative to chloring for water disinfection. [S]
		~~~~			These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. (Ch)
			instruments, nesoi	Solar heliostats.	Heliostats orient mirrors in concentrated sofar power systems to reflect suntight on to a CSP receiver.
	<u>i</u>		nesoi	Parts for solar heliostats	receiver.  Heliostats orient mirrors in concentrated solar power systems to reflect sonlight on to a CSF receiver.
901580			Other surveying, hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses, not elsewhere specified in 90.15 [Ca, J, NZ, K, CT]		includes instrument and appliances necessary for measuring the ocone layer and to monitor, measure and assist planning for natural risks such as earthquakes, cyclones, (surnamis erc
]	İ		Surveying instruments and		

	]		appliances, hydrographic, oceanographic, hydrological, meteorological or gaophysical instruments and appliances nesoi (US, Au)		
90261	0 952610	902616	Instituments for measuring or checking the flow, level, pressure or other variables of liquids or gases. [Ca, J. NZ, K]	K]	Monitors to measure air pollution, basis for possible correcting measures (notably in view of health effects). [Ca. J. NZ, K]
			Instruments and apparatus for measuring or checking the flow or level of liquids. [US, CT, Au, BD]	Excluding gauges of a kind used as components in motor vehicles. [Au]	and/or flow of liquids or gases, are routinely used during complex audding and testing to onsure the efficient constitution of environmental
			Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meter), excluding instruments	Air quality monitoring automated air quality monitoring (BD)	systoms such as water and wastewater treatment plants, air polititien control systems, and hydroelectric facilities. [US, CT, Au, BD]  These instruments are used to measure, record, analyse and assess environmental
			and apparatus of heading 9014, 9015, 9028 or 9032. For measuring or checking the flow or level of illquids [M]		samples or environmental influences. [Cir]
			Instruments / Apparatus For Measure / Checking Liq (90261000) [Ch]		
BUZ620	902620	902620	Instruments and apparatus for measuring or checking pressure. [Ca, J, NŽ, K, CT, Au]	Excluding gauges of a kind used as components in motor vehicles. [Au]	are used in power plants, water delivery systems, and other applications such as
			Instruments and apparatus for measuring or checking pressure of liquids or gases, nesoi. [US]		Immillaring indoor air. There are two principal types: digital manameters and tube manameters, both of which have important environmental applications, (Cs. J. NZ, US, K.
	,	<u> </u>	For measuring and checking pressure [M]		CT, Au) These instruments are used to measure, record, analyse and assess environmental
			Other Instruments / Apparatus For Measuring / Chec (90262090) [Ch]		samples or environmental influences. (Ch)
902680	902680	902680	Other instruments and apparatus [Ca, J, NZ, K, CT, Au, M] Instruments and apparatus for	Excluding gauges of a kind used as components in motor vehicles. [Au]	These instruments include heat meters that are used to monitor and measure the distribution of heat from geothermal or biomass district
			measuring or checking other variables of liquids or gases, nesoi. [US]		heating systems. [Ce J, NZ, US, K, CT, Au]
902690	902690	902690	Parts and accessories [M] for articles of subheading 9026. [Ca, J, NZ, CT, K]		These are parts for the instruments and devices in 9026.10, 9026.20, and 9026.80, [Ca, J, N2, US, CT, Au, K]
			Parts and accessories for instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases, nesol. [US]		These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
			thstruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of heading 90.14.		
			90.15, 90.28 or 90.32 [Au] Parts of liquid and gas measurement/ test instrument		
02710	90271D S		(90269000) [Ch]	Air pollution emission monitorion	Gas analysers are designed to continuously
				systems	teas analysers are designed to continuously monitor single or multiple gas components, and such an instrument is used to analyse air emissions from automobiles.

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			apparatus (ex-90271000) [Ch]	e d n in e n a e ta	to be used for monitoring / analysing environmental pollution, ii. Gas analysers are designed to continuously monitor single or nultiple gas components and such an instrument is used to analyse air/gas emissions. Equipment used in the measurement, recording, enalysis and issessment of environmental samples or invitronmental impact. IV. This Facility can also precautionary measures to nontrol sit follution. [Mi]
902720	00272	902720	Ob	ITE	ecord, analyse and assess environmental amples or environmental influences. [Ch]
502720	502124	3 1902720	Chromatographs and electrophores instruments	iG aa oo do m aa E in pa	sas and liquid chromatographs use an nalytical method where a physical separation of the sample components occurs prior to election. These instruments can be use to nortion and analyse air pollution emissions, mbient air quality, water quality, etc. lectrophoresis instruments can be used to nortiony and analyse malerials such as articulates emitted from incinerators or from iesel exhaust.
ria <del>Tiba</del>				[F	NA Sequencers, Polymerase Chain Reaction PCR) Systems. Thermal cyclers serving sulfiple environmental purposes, for example, nvironmental Monitoring, Waste Management, later Treatment. Pollution Ramedeahon, enewable Energy, Natural Resources rotection, Endangered Species Protection, enetically Modified Organisms (GMO) etection [S]
9027,30	902730	902730	Spectrometers, spectrophotometers and spectrographs using optical radiations (ultraviolet, visible, infrared)	en an en ige for all en	pectromaters are used in a wide range of wironmental applications, including to identify and characterise unknown chemicals and in two needs and applications to detect towns and entity trace contaminants. They are also used in qualifative and quantitative analysis interial in qualify control departments. Vironmental control, water management, od processing, agriculture and weather onitoring.
				   ch   us   co   co	sed in a wide range of environmental oplications, including identification of unknown emicals, toxins and trace conteminants. Also of for qualitative and quantitative analysis in tality control departments, environmental nitrol, water management, food processing, riculture and weather monitoring. [S]
902750	902750	:	Other instruments and apparatus using optical radiations (UV, visible, IR) [Ca, J, NZ, CT, Au, K, S] Instruments and apparatus for physical and chemical analysis using optical radiations (ultraviolet, visible, infrared), neso. [US]	Th the inc usx sol CT	lese instruments can be used for chemical, ermal, or optical analysis of samples. Studing water quality photometers which are ed to determine the concentration of a fution from its colour intensity [Ca. J. NZ. F. Au. K]
			Automatic on-line monitor on UV absorption water quality; Automatic infrared oil content analyzer (ex- 90275000) [Ch]	the urc use soi me soi hor	ese instruments can be used for chemical, ermal, or optical analysis of samples, shuding water quality photometers which are ed to determine the concentration of a fution from its colour intensity. Exposure, sters are used, inter alla, to control light burdes and for measurements in agriculture, diculture, and other natural resources plications. [US]
			- I	rec	ese instruments are used to measure, ord, analyse and assess environmental imples or environmental influences. [Ch]

		A 17.700	<u></u>			DNA Sequencers, Polymerase Chain Reaction (PCR) Systems. These instruments include: magnetic
902780	902780	902780	physik elsew NZ, C	nere specified in 90.27. [Ca, J, T, K]	analysing noise, air, water and hydrocarbons and heavy metals in soil. [Ca, J, NZ, CT, Au, K]	rese instruments include, magnatic resonance instruments which are used in biologic and geologic analysis; and mass spectrometers which are used to identify elements and compounds.
			physic nesol	ments and apparatus for tal and chemical analysis, [US, Au]		These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
			(9027 samp Auton Autor Autor	Mass Spectrograph 8019); PM10 automatic er and measuring apparatus; natic ammonia online monitor; natic TOD online monitor; natic BOD online monitor;		
			€nvir 9027	spectrum analyzer; onmental noise monitor (ex- 8099) [Ch]		
902790	902790	902790	of ins 9027	tomes; parts and accessories truments and appliances of [Ca, J, NZ, K, CT, Au, S] tomes; parts and accessories	Optional ex-outs may include: Parts for 902710 and 902780x. [Ca, J, NZ, K, CT, Au]	These instruments include microtomes which ere devices that prepare slices of samples for analysis. Also included here are parts of the instruments classified in 9027 and described above.
	,		for in physi	atruments and apparatus for call or chemical analysis , [US]		For use with Thermal Cyclers, DNA Sequencers, Polymerase Chain Reaction (PCR) Systems, etc. Thermal Cyclers, Serving
			physi exam refrac	iments and apparatus for cal or chemical analysis (for ple, polarimeters, ctometers, spectrometers, gas loke analysis apparatus);		multiple environmental purposes, for example: Environmental Monitoring - fast, cost-effective standard for pathogen detection from a broad range of sample types including water, soil, and
			Instru mezs poros or the	ments and apparatus for uring or checking viscosity, sity, expansion, surface tension a like; instruments and		food; detects pathogen contaminations of both food and environmental surface samples to minimize risks of food borne pathogens to public health; fundamental equipment for surveillance programs monitoring pathogens or
	<u> </u> 		quan (inclu micro	ratus for measuring or checking titles of heat, sound or light iding exposure meters); intomes: microtomes; parts and issories [V]		viruses that can pose a significant risk to both human and animal health, including both naturally occurring viruses such as strains of influenza or organisms that have potential to be
	-			otomes; Parts & Access Of uments / Applia (90279000) [Ch]		used in bio-terrorism activities, such as anthrax [S]  These instruments are used to measure,
		1.04.110			Optional ex-outs include: Profile	record, analyse and assess environmental samples or environmental influences. [Ch] Equipment used in the measurement.
903149		903149	instr mac elsev	r measuring and checking iments, appliances and nines, not specified or included where in this chapter:Other al instruments, appliances and	projectors; Vibrometers; Hand vibration meters. [US]	recording, analysis and assessment of environmental samples or environmental impact. [Ca, J, NZ, K, CT, Au]
			mac	nines elsewhere specified for suring or checking. [Ca, J, NZ,		Profile projectors are used for critical tasks in engineering such as measuring and inspecting high precision, complex parts in many applications and industries. Equipment used in
			appl IUSI	suring or checking instruments, ances and machines, nesoi. Other optical instruments and ances: Other [Au]		the measurement, recording, analysis and assessment of environmental samples or environmental impact. These products inc+F127lude Inter alia, items such as vibrometers (that measure vibrations and
			(903 Instr	cal Grating Measuring Device 14920): Other Optical uments & Appliances		assess structural and other effects of such vibrations) [US]  These instruments are used to measure,
				14990) [Ch]		record, analyse and assess environmental samples or environmental influences. [Ch] These products include inter alla, items such as
903180	903180	903180	madi	r instruments, appliances and hines,	Optional ex-out may include: Vibrometers, hand vibration meters. [Ca. J. NZ, K, CT, Au]	vibrometers (that measure vibrations and assess structural and other effects of such vibrations) and electron microscopes for
			mad	r instruments, appliances and hines, not elsewhere specified in ling 90.31 [Th]	Instruments for measuring oxygen in oxygen censer operating with catalytic convertor	laboratory and testing applications. [Ca, J, NZ, K, CT, Au]

	۱ .	ļ	1		lmi	Air Pollution Control [Th]
903190	903190	903190	instrument Au Parts or ch and r acces (US) Othe	measuring and checking	Optional ex-out may include: Parts for 903180x. [Ca, J, NZ,	These are parts for the equipment classified in 9031 and described above. [Ca, J, NZ, K, CT, Au]  Parts for 903110, 903120, 903149x. [US]  These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
			mach elsev proje Parts Appl	ments, appliances and ines, not specified or included there in this chapter; profile ctors: Parts and accessories [V] & Accessories Of Instruments / Machin (90319000) [Ch]		
	903289		Autor instruction (excluded and )	matic regulating or controlling iments and apparatus uding thermostats, manostats ydrautic types), nesol. [US]  Electrically or electronically and other [M]	Optional ex-outs may include: Hellostats, temperature sensor for solar boiler/water heater; Differential temperature controller for solar boiler/water heater. [Ca, J, NZ, K, Au] Light sensor, Sensor (elevators, escalators, etc.) [BD]	These include other automatic voltage and current regulators which have renewable energy applications as well as other process control instruments and apparatus for temperature, pressure, flow and level, and humidity applications. [Ca, J, NZ, K, Au] Includes other automatic voltage and current regulators which have renewable energy and smart grid applications, process control instruments and apparatus for temperature, pressure, flow and level, and regulators for humidity applications that help increase energy efficiency. [US, BD]
	903290		Parts regui	and accessories [M] for nated articles of subheading [Ca, J, NZ, K, CT] and accessories of automatic ating or controlling instruments apparatus, [US, Au, Ru]		These are the parts for the automatic regulating and control instruments classified in 9032 and described. [Ca, J, NZ, K, CT, Au]  Parts for aforementioned goods of headings 9032. [US]
903300	903300	903300	or ind Chap instra 90. [6 8] F	s and accessories (not specified luded elsewhere in this ter) for machines, appliances, iments or apparatus of Chapter Ca. J. NZ, US, CT, Au, Ru, Th, or subheading 902140 and 50 and other [M]	Parts of the CH 90 products above, not elsewhere specified. [US]	These are the parts and accessories for the products described above. [Ca, J, NZ, CT, Au, M]  Parts of the CH 90 products above, not elsewhere specified [US]  Parts used in maintenance and repair of the liquid, electricity, radiation and measurement instruments listed above with the attendant environmental benefits. [S]