## **APEC LIST OF ENVIRONMENTAL GOODS (HS 2022)**

For reference purposes only

HS (2022)	HS Code Description 2022	Ex-out / Additional Product Description
441873	Assembled flooring panels: Of bamboo or with at least the top layer (wear layer) of bamboo	Coverage is limited to assembled multilayer flooring panels of bamboo only
	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]	
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; Parts: [US]	Parts for 840219x. [Ca, J, NZ, K, Au]  Parts for biomass boilers. [US]
	Parts for super-heated water boilers and steam or other vapour generation boilers (other than centra heating hot water boilers) [HK]	Management of solid and hazardous waste [BD]
	Super-heated water boilers and parts of steam generating boilers [S, BD]	
840410	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. [Ca, J, NZ, K, Au]  For central heating boilers of heading 8403 [M, BD]
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.	
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]	Air pollution control [BD]
	Parts for subheading 840410100 [M, BD]	

840690	Parts for steam and other vapour turbines. [Ca, J, NZ, K, Au, BD]  Parts of steam turbines. [US, M]	Optional ex-outs may include parts suitable for use with stationary steam turbines over 40MW; stationary steam turbines not over 40 MW, other vapour turbines; parts for 840681x and 840682x. [Ca, J, NZ, K, Au]  Parts for 840681x and 840682x. [US]  Renewable energy plant [BD]  Only for stator blades, rotors and their blades [R]
	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]
841182	Gas turbines, except turbo-jets and turbo-propellers, of a power exceeding 5,000 kW. [HK]	Gas turbines for electrical generation from recovered landfill gas (exceeding 5,000 kW) [BD]
	Turbojets, turbo-propellers and other gas turbines of a power exceeding 5,000 kW [M]	Of a power exceeding 5000 kW but not exceeding 50 000 kW [R]
841199	Parts of gas turbines.	Parts for 841181 and 841182.
	Engine and motor parts, nesoi [US]	Wind turbine blades and hubs [US]
841290	Parts of the engines & motors of 8412.10-8412.80 [S, BD]	Only for civil aviation [R]
	Other industrial or laboratory furnaces and ovens, including incinerators, non-electric [Ca, J, NZ, K, Au, Ru, M, BD]	Optional ex-outs may include: waste incinerators; heat or catalytic incinerators. [Ca, J, NZ, K, Au, M]
841780	Industrial or laboratory furnaces and ovens, including incinerators, nonelectric, and parts thereof: Other, except parts. [US]	Waste incinerators; Heat or catalytic incinerators [US]
	Municipal Waste Incinerator (ex-84178090); incinerators for radioactive waste (84178020) [Ch]	Waste incinerator; Flue gas treatment system for incinerator [BD]
841790	Industrial or laboratory furnaces and ovens, including incinerators, non-electric: Parts. [Ca, J, NZ, K, Au, Ru, M]  Industrial or laboratory furnaces and ovens, including incinerators, nonelectric, and parts thereof: Parts. [US]	Optional ex-outs may include: parts for 841780x. [Ca, J, NZ, K, Au]  Parts of waste incinerators and heat or catalytic incinerators. [US, BD]
	Parts [BD]	
841912	Instantaneous or storage water heaters, non-electric: solar water heaters	Excluding other Domestic; of copper and other [M]
841933	Lyophilisation apparatus, freeze drying units and spray dryers	Sludge driers
841939	Dryers, other:	Sludge driers
841960	Machinery for liquefying air or other gases.	

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	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]  Other machinery, plan or laboratory equipment [S]	Evaporators and dryers, for water and waste water treatment. Condensers and cooling towers. Biogas reactors; digestion tanks and biogas refinement equipment. [Ca, J, NZ, Au]  Evaporators and dryers, for water and waste water treatment. Condensers and cooling towers. Anaerobic biogas reactors, digestion tanks and biogas refinement equipment. PV cell coaters. [US]
841990	Parts of machinery, plant and equipment [BD] or neading No 84.19. [Ca, J, NZ, CT, Au, Ru]  Parts of machinery, plant or laboratory equipment for the treatment of material involving temperature change (except domestic machinery), nesoi. [US]  Parts of machinery, plant or laboratory equipment of heading 84.19 [S]  Parts, other [M]	Optional ex-outs may include: Parts for 8419.12, 8419.33x, 8419.39x, 8419.60, and 8419.89x [Ca, J, NZ, CT, Au] excluding 8411990100, 841990200, 841990300 [M] Solar water heater parts [BD]
842121	Filtering or purifying machinery and apparatus for liquids: for filtering or purifying water. [Ca, J, NZ, K, Au, Ru, S]  Water filtering or purifying [M] machinery and apparatus. [US, BD]  Household filtering or purifying water machinery and equipment (84212110), Device for the removal of Heavy metal ions for industry uses; Membrane bioreactor; High rate anaerobic reactors; reverse osmosis filters for industry uses; Water purification Machine; EDI ultra-pure water equipment (ex-84212190) [Ch]	Waste water management [BD]
842129	Filtering or purifying machinery and apparatus for liquids: other. [Ca, J, NZ, US, K, Au]  Other [M]  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; electrodialysis device (ex-84212990) [Ch]	Refrigerant recovery and recycling units. [US] excluding oil filter and for use in oil drilling operation [M]

842132	Filtering or purifying machinery and apparatus for gases: Catalytic converters or particulate filters, whether or not combined, for purifying or filtering exhaust gases from internal combustion engines	Optional ex-out may include: Catalytic converters / Gas separation equipment / Pneumatic fluid power filters rated at 550 kPa or greater / Industrial gas cleaning equipment / Electrostatic filters (precipitators). [Ca, J, NZ, K]  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 greater / Industrial gas cleaning equipment / Electrostatic filters (precipitators) / Ozone disinfection equipment. [US]  possible ex-out: air purifier and laminar flow units [M]  Laminar flow units, catalytic converter and carbondyoxide removal unit imported to use at natural gas service station [Th]
842139	Filtering or purifying machinery and apparatus for gases: Other	Optional ex-out may include: Catalytic converters / Gas separation equipment / Pneumatic fluid power filters rated at 550 kPa or greater / Industrial gas cleaning equipment / Electrostatic filters (precipitators). [Ca, J, NZ, K]  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 greater / Industrial gas cleaning equipment / Electrostatic filters (precipitators) / Ozone disinfection equipment. [US]  possible ex-out: air purifier and laminar flow units [M]  Laminar flow units, catalytic converter and carbondyoxide removal unit imported to use at natural gas service station [Th]

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842199	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids 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) [Ch]	Parts for 842121 and 842129 [Ca, J, NZ, K], excluding parts for other filters of a kind used as components in motor vehicles [Au]. Parts for 842121, 842129x, 842132 and 842139 [US].  Excluding for subheadings 842123100, 842129510 [M, BD].
847420	Crushing or grinding machines.[Ca, J, NZ, US, K, CT, Au, Ru]  Crushing/grinding machines for earth/stone/ores/other mineral substance, in solid (incl. powder/paste) form [S]  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, mixing or kneading machines [M]	excluding concrete or mortar mixers [M, Au]
847982	Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsifying or stirring machines not elsewhere specified in Chapter 84. [Ca, J, NZ, K, CT, S]  Mixing, kneading, crushing, grinding, screening, sifting, homogenizing, emulsifying or stirring machines. [US, Ru, BD]  Waste sorting, screening, crushing, grinding, shredding, washing and compacting devices. Agitator for wastewater treatment; flash mixer and flocculator. [Au]  Dosing and mixing equipment for water treatment (ex-84798200); Recycling equipment for waste plastics /rubber /broken tire (84798200) [Ch]	Waste sorting, screening, crushing, grinding, shredding, washing and compacting devices. Agitator for wastewater treatment; flash mixer and flocculator. [Ca, J, NZ, K, US, CT]  Other machines and mechanical appliances: Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsifying or stirring machines. [Au]  Waste compactor machines [BD]

847989	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter: Other. [Ca, J, NZ, US, CT, Ru]  Other machines & mechanical appliances, other than Machines & mechanical appliances for treating metal, incl. Industrial catalysers, electric wire coil-winders/ Mixing/ kneading/ crushing/ grinding/ screening/ sifting/ homogenising/ emulsifying/ stirring 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]	dust collection and storage devices; water and wastewater collecting and sampling equipment; chlorine generators; equipment for solid/liquid separation; flocculation or thickening of sewage sludge; machinery and apparatus for landfill gas monitoring; anaerobic digesters for treatment of organic waste including production of biogas; machinery and apparatus for landfill leachate treatment; machinery, apparatus and vehicles for composting; soil sampling equipment; soil remediation equipment; machines and appliances for oil spill recovery; and aquatic weed harvesters. [US, CT]
847990	Parts of the mach. and mech. appls. of 84.79 [Ca, J, NZ, CT, US, Ru]  Parts of Machines & mechanical appliances having individual functions, not specified/incld. elsewhere in this Ch. [S]  Parts Of Air Humidifiers Or Dehumidifiers (84799020) [Ch]	Parts for 847982x and 847989x. [US, CT]  Excluding machines and mechanical appliances used as components in motor vehicles. [Au]
850164	AC generators (alternator), other than photovoltaic generators, of an output exceeding 750 kVA	To be used with turbines and generators in combination to produce electricity from renewable energy fuels [BD]
850180	Photovoltaic AC generators	Of an output exceeding 750 kVA  To be used with turbines and generators in combination to produce electricity from renewable energy fuels [BD]
850231	Other electric generating sets: Wind-powered. [Ca, J, NZ, US, K, HK, Ru, M]  Wind-powered electric generating sets [S]  Wind-powered electric generating equipment [T]  Electric generating sets and rotary convertors: Wind-powered [BD]  Wind-Powered Electric Generating Sets (85023100) [Ch]	Amorphous Transformers [BD]

850239	Electric generating sets and rotary convertors: other. [Ca, J, NZ, K, Ru, BD]  Generating sets, electric, nesoi. [US, Au]  Biogas generator sets; Gas Generator (ex-85023900) [Ch]	Optional ex-outs may include: combined heat and power 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 [BD]
850300	Parts suitable for use solely or 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 turbines. [S]	Parts for 850231 and optional ex-out may include: 850239x.[Ca, J, NZ, K, CT, Au]  Parts for 850161, 850162, 850163, 850164, 850180x, 850211x, 850212x, 850213x, 850220x, 850231 and 850239x, [US]
850490	Parts for electrical transformers, static converters and inductors	Parts for 850440x  Not magnetic ferrite memory [R]
851419	Resistance heated furnaces and ovens : other	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, K, CT, Au]
851420	Furnaces and ovens; functioning by induction or dielectric loss.  Industry / Lab Electric Induction or Dielectric Fu (85142000) [Ch]	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, K, CT, Au]
851431	Other furnaces and ovens: Electron beam furnaces	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, US, K, CT, Au]
851432	Other furnaces and ovens: Plasma and vacuum arc furnaces	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, US, K, CT, Au]
851439	Other furnaces and ovens : Other	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, US, K, CT, Au]

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851490	Parts of industrial or laboratory electric furnaces and ovens; other laboratory induction or dielectric heating equipment. [Ca, J, NZ, K, CT, M]  Parts for industrial or laboratory 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 loss. [US, Au, Ru]	Optional ex outs include: Parts for, 851419x, 851431x, 851432x, 851439x [Ca, J, NZ, K, CT, Au]  Parts for 851419, 851420, 851431, 851432, and 851439 [US]
854142	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes (LED): Photovoltaic cells not assembled in modules or made up into panels	
854143	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes (LED): Photovoltaic cells assembled in modules or made up into panels	
854390	Parts of the machines and apparatus of 85.43 [Ca, Ja, NZ, K, CT, Au, Ru, S]  Parts of other machines / apparatus of heading 85.43 (85439090) [Ch]	Parts for 854389x. [Ca, Ja, NZ, K, CT, Au]
901380	Optical devices, appliances and instruments, nesoi	Solar heliostats.
901390	Parts and accessories for optical devices, appliances and instruments, nesoi	
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]  Surveying instruments and appliances, hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances nesoi [US, Au]	
902610	Instruments for measuring or checking the flow, level, pressure or other variables of liquids or gases. [Ca, J, NZ, K]  Instruments and apparatus for measuring or checking the flow or level of liquids. [US, CT, Au, BD]  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 and apparatus of heading 9014, 9015, 9028 or 9032. For measuring or checking the flow or level of liquids [M]  Instruments / Apparatus For Measure / Checking Liq (90261000) [Ch]	Air quality monitors; and dust emissions monitors. [Ca, J, NZ, K]  Excluding gauges of a kind used as components in motor vehicles. [Au]  Air quality monitoring; automated air quality monitoring [BD]

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902620	Instruments and apparatus for measuring or checking pressure. [Ca, J, NZ, K, CT, Au]  Instruments and apparatus for measuring or checking pressure of liquids or gases, nesoi. [US]	
902020	For measuring and checking pressure [M]	Excluding gauges of a kind used as components in motor vehicles. [Au]
	Other Instruments / Apparatus For Measuring / Chec (90262090) [Ch]	
	Other instruments and apparatus [Ca, J, NZ, K, CT, Au, M]	
902680	Instruments and apparatus for measuring or checking other variables of liquids or gases, nesoi. [US]	Excluding gauges of a kind used as components in motor vehicles. [Au]
	Parts and accessories [M] for articles of subheading 9026. [Ca, J, NZ, CT, K]	
902690	Parts and accessories for instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases, nesoi. [US]	I I
302030	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 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 (90269000) [Ch]	
	Gas or smoke analysis apparatus	
902710	Automatic NOX and NO2 sampler and measuring apparatus; Automatic SO2 sampler and measuring apparatus (ex-90271000) [Ch]	Air pollution emission monitoring systems
902720	Chromatographs and electrophoresis instruments	
902730	Spectrometers, spectrophotometers and spectrographs using optical radiations (ultraviolet, visible, infrared)	
	Other instruments and apparatus using optical radiations (UV, visible, IR) [Ca, J, NZ, CT, Au, K, S]	
902750	Instruments and apparatus for physical and chemical analysis using optical radiations (ultraviolet, visible, infrared), nesoi. [US]	
	Automatic on-line monitor on UV absorption water quality; Automatic infrared oil content analyzer (ex-90275000) [Ch]	
902781	Other instruments and apparatus: mass spectrometers	Optional ex-out may include: For analysing noise, air, water and hydrocarbons and heavy metals in soil. [Ca, J, NZ, CT, Au, K]
902789	Other instruments and apparatus: other	Optional ex-out may include: For analysing noise, air, water and hydrocarbons and heavy metals in soil. [Ca, J, NZ, CT, Au, K]

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902790	Microtomes; parts and accessories of instruments and appliances of 9027. [Ca, J, NZ, K, CT, Au, S]  Microtomes; parts and accessories for instruments and apparatus for physical or chemical analysis. [US]  Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes: microtomes; parts and accessories [V]  Microtomes; Parts & Access Of Instruments / Applia (90279000) [Ch]	Optional ex-outs may include: Parts for 902710, 902781x and 902789x [Ca, J, NZ, K, CT, Au]
903149	Other measuring and checking instruments, appliances and machines, not specified or included elsewhere in this chapter:Other optical instruments, appliances and machines elsewhere specified for measuring or checking. [Ca, J, NZ, K, CT]  Measuring or checking instruments, appliances and machines, nesoi. [US] Other optical instruments and appliances: Other [Au]  Optical Grating Measuring Device (90314920); Other Optical Instruments & Appliances (90314990) [Ch]	Optional ex-outs include: Profile projectors; Vibrometers; Hand vibration meters. [US]
903180	Other instruments, appliances and machines.  Other instruments, appliances and machines, not elsewhere specified in heading 90.31 [Th]	Optional ex-out may include: Vibrometers, hand vibration meters. [Ca, J, NZ, K, CT, Au]  Instruments for measuring oxygen in oxygen censer operating with catalytic convertor [Th]
903190	Parts and accessories [M] of the instruments and appliances and machines of 9031. [Ca, J, NZ, K, CT, Au]  Parts and accessories for measuring or checking instruments, appliances and machines, nesoi; parts and accessories for profile projectors. [US]  Other measuring and checking instruments, appliances and machines, not specified or included elsewhere in this chapter; profile projectors: Parts and accessories [V]  Parts & Accessories Of Instruments / Appl / Machin (90319000) [Ch]	Optional ex-out may include: Parts for 903180x. [Ca, J, NZ, US, K, CT, Au]

		Optional ex-outs may include: Heliostats, temperature sensor for solar
	Automatic regulating or controlling instruments and apparatus (excluding thermostats, manostats and hydraulic types), nesoi. [US]	boiler/water heater; Differential temperature controller for solar boiler/water heater. [Ca, J, NZ, K, Au]
		Light sensor; Sensor (elevators, escalators, etc.) [BD]
	Other: Electrically or electronically operated and other [M]	
	Parts and accessories [M] for nominated articles of subheading 9032. [Ca, J, NZ, K, CT]	
	Parts and accessories of automatic regulating or controlling instruments and apparatus. [US, Au, Ru]	
903300	Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90.	Parts of the CH 90 products above, not elsewhere specified. [US]

Footnote: The APEC list of Environmental Goods has been updated in terms of the Harmonized System (HS) classifications to reflect the nomenclature structure for HS2022 and is for reference purposes only. Economies can make use of its domestic nomenclature to reflect different treatments on its tariff lines under the 6 – digit subheadings (at 8 or more digits), and any ex-out or additional products descriptions can be reflected through its Implementation Plan for Tariff Reductions on Environmental Goods. The APEC List of Environmental Goods can be found under Annex C of the 2012 Leaders' Declaration here: https://www.apec.org/meeting-papers/leaders-declarations/2012/2012\_aelm/2012\_aelm\_annexc.aspx.