Annex 2) Environmentally Rejected Items

Product Description	***Specification***	**Environmental Benefits**
Fixed Vegetable Fats And Oils And Their Fractions, Whether Or Not Refined But Not Chemically Modified, Nesoi		Biodiesel produced from algae. Biodiesel is a renewable fuel derived from vegetable oils or animal fats, suitable as a diesel fuel substitute or diesel fuel additive or extender. The fuel can be used in standard compression-ignition (i.e. diesel) engines with small or no modifications. It is biodegradable, non-toxic, and essentially free of sulphur, aromatic hydrocarbons (such as carcinogenic benzene), and produces far less particulate matter during combustion. Also includes chemicals (mixtures of surfactants and solvents) that convert oil on sea/water surface into small droplets that disperse in the water column to low concentration, reducing the impact on wildlife and speeding up natural decomposition process.
Vegetable Fats And Oils And Their Fractions, Hydrogenated, Interesterified, Reesterified Or Elaidinized, Whether Or Not Refined, Not Further Prepared		Biodiesel produced from algae. Biodiesel is renewable fuel derived from vegetable oils or animal fats, suitable as a diesel fuel substitute or diesel fuel additive or extender. The fuel can be used in standard compression-ignition (i.e. diesel) engines with small or no modifications. It is biodegradable, non-toxic, and essentially free of sulphur, aromatic hydrocarbons (such as carcinogenic benzene), and produces far less particulate matter during combustion. Also includes chemicals (mixtures of surfactants and solvents) that convert oil on sea/water surface into small droplets that disperse in the water column to low concentration, reducing the impact on wildlife and speeding up natural decomposition process.
Animal or vegetable fats and oils and their fractions, boiled, oxidised, dehydrated, sulphurised, blown, polymerised by heat in vacuum or in inert gas or otherwise chemically modified, excluding those of heading 15.16; inedible mixtures or preparations of animal or vegetable fats or oils or of fractions of different fats or oils of this Chapter, not elsewhere specified or included	Oil fouling removing agent	Adding oil fouling removing agent to lubricating oil will remove stagnant layer of fouled oil, prevent future oil fouling and improve the efficiency of machines

Petroleum oils and oils obtained from bituminous minerals (other than crude) and preparations not elsewhere specified or included, containing by weight 70% or more of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations, containing biodiesel, other than waste oils	Base oil from recycling; Lubricating oil from recycling	Used engine oil can be recycled and treated to become base oil again, which helps to reduce the consumption of crude oil and the impact of manufacturing new base oil. Base oil could be blended with additives to become different lubricants for vehicles, machineries. Recycled lubricating oil could be used in vehicles, machineries, etc. to reduce carbon footprint, prolong the useful life of petroleum resources
Cobalt oxides and hydroxides	Cobalt oxide	Cobalt oxide catalyst is a core technology of CTL (Coal-To-Liquid).
Prepared binders for foundry moulds or cores; chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural products), not elsewhere specified or included. - Other	Clay-based soil stabilizers.	Clay-based soil stabilizer composed of enzymes, electrolytes and surfactants. This product increases compaction and strength of the soil, reduces its permeability and its water absorption, and decreases the swelling capacity of individual soil particles. Clay-based soil stabilizers help preventing soil erosions and reduce costs and maintenance of unpaved road. They are a solution for potholes, wash boarding, rutting, heaving, and dust. This product is non-toxic and 100% biodegradable.
	Biodiesel (also includes oil spill dispersant chemicals as nominated in the Environmental Remediation and Clean-Up category)	Biodiesel is renewable fuel derived from vegetable oils or animal fats, suitable as a diesel fuel substitute or diesel fuel additive or extender. The fuel can be used in standard compression-ignition (i.e. diesel) engines with small or no modifications. It is biodegradable, non-toxic, and essentially free of sulphur, aromatic hydrocarbons (such as carcinogenic benzene), and produces far less particulate matter during combustion. Also includes chemicals (mixtures of surfactants and solvents) that convert oil on sea/water surface into small droplets that disperse in the water column to low concentration, reducing the impact on wildlife and speeding up natural decomposition process.

Biodiesel and mixtures thereof, not containing or containing less than 70% by weight of petroleum oils or oils obtained from bituminous minerals.		Biodiesel is a renewable fuel that can be used in conventional vehicles in blends containing up to a certain percentage of biodiesel, depending on the country. Because of the carbon dioxide (CO2) absorbed by the plant feedstock used to produce biofuel, biofuels produce overall less CO2 than fossil fuels on a life cycle analysis. Using biodiesel also reduces several tailpipe emissions such as particulate matter, hydrocarbon, and carbon monoxide from most modern four-stroke combustion ignition or diesel engines.
		Biodiesels generally have lower greenhouse gas emissions than fossil fuels, lower toxicity and more rapid degradation.
OTHER FELT NOT IMPREGNATED COATED COVERED OR LAMINATED	Felt, whether or not impregnated, coated, covered or laminated, cut to size; Mattresses made of synthetic materials, for soundproofing.	Felt is used as a damper (shock absorbent). Typically found in door panels, car sound systems (automotive industry). Mainly used to reduce sound vibrations and noise pollution
		Liners prevent leachate (seeping of waste and chemicals into groundwater), provide soil protection and anti-erosion. Prevent contaminated water runoff. (Also relevant in waste management)
Other gas turbines: Of a power not exceeding 5,000 kW.		Gas turbines for clean power generation including recovered landfill gas, coal mine vent gas, or biogas. These turbines are also an essential component of relatively-efficient combined-cycle power plants running on natural gas or biogas. Natural gas emits less greenhouse emissions than coal based power. It also provides a transition into renewable and clean energy solutions.
		Gas turbines are used for electrical power generation from biogas, recovered landfill gas, or national gas which emits less CO2 than conventional generation. They are also used for co-generation ((CHP) which allows for a more effective use of energy than conventional generation).
Other gas turbines: Of a power exceeding 5,000 kW.	Possible ex-out may include gas turbines that burn natural gas	Gas turbines for clean power generation including recovered landfill gas, coal mine vent gas, or biogas.

		Gas turbines for clean power generation including recovered landfill gas, coal mine vent gas, or biogas. These turbines are also an essential component of relatively-efficient combined-cycle power plants running on natural gas or biogas. Natural gas emits less greenhouse emissions than coal based power. It also provides a transition into renewable and clean energy solutions.
		Gas turbines are used for electrical power generation from biogas, recovered landfill gas, or national gas which emits less CO2 than conventional generation. They are also used for co-generation ((CHP) which allows for a more effective use of energy than conventional generation).
Turbo-jets, turbo-propellers and other gas turbines: Parts: Other.	Parts for gas turbines of subheading 8411.81 or 8411.82.	Parts of gas turbines for clean power generation including recovered landfill gas, coal mine vent gas, or biogas. These turbines are also an essential component of relatively-efficient combined-cycle power plants running on natural gas or biogas. Natural gas emits less greenhouse emissions than coal based power. It also provides a transition into renewable and clean energy solutions.
Heat exchange units	Exhaust gas recirculation coolers	Exhaust gas recirculation (EGR) is a nitrogen oxide (NOx) emissions reduction technique used in gasoline and diesel engines. EGR works by recirculating a portion of an engine's exhaust gas back to the engine cylinders.
	Heat exchangers of a kind used in renewable energy systems or natural gas liquefaction	Heat exchangers are key components of solar water heaters, geothermal heat pump systems and biomass heating systems, and are also used in natural gas liquefaction applications.
Oil or petrol-filters for internal combustion engines		The equipment is used to filter out the solid impurities in fuel oil.
Track laying : Bulldozers and angledozers : Self-propelled bulldozers, angledozers, graders, levellers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers.	Intelligent Machine Control Dozer; Excavator	By ICT control technology, construction works such as digging or site preparation are automated done more accurately and smoothly. Therefore this machine realizes shorter construction time and less energy consumption.
Tamping machines and road rollers	Self-propelled sanitary landfill compactors	Used in solid waste treatment or recycling
MACHINERY FOR EXTRACTING OR PREPARING ANIMAL OR FIXED VEGETABLE FATS OR OILS		Machinery for the extraction of oil from feedstock for biofuels, which is a renewable resource as compared to traditional fuels

Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves; parts thereof: Other appliances	Exhaust gas recirculation valves; Diesel exhaust fluid injectors	Exhaust gas recirculation (EGR) is a nitrogen oxide (NOx) emissions reduction technique used in gasoline and diesel engines. EGR works by recirculating a portion of an engine's exhaust gas back to the engine cylinders. Diesel exhaust fluid is used as a consumable in selective catalytic reduction (SCR) in order to lower NOx concentration in the diesel exhaust emissions from diesel engines.
		These items facilitate the delivery of safe drinking water and sanitation, and are used in handling and transport of wastewater or slurries during treatment.
	Flush and waste diversion valves; Telescoping valves; Water condition control valves; Air valves; Plug valves; Butterfly valves; Gate valves	Flush and waste diversion valves prevent useful greywater from entering wastewater streams. Telescoping valves siphon clean water from the surface of one tank or body into another, without disturbing the sediment that sinks to the bottom. Water condition control valves separate the hard water coming into the tank from the softened water entering the home, and are thus essential for effective potable water delivery. Air valves are specially designed to operate with liquids containing solid particles such as wastewater and effluents. Plug valves are used extensively in wastewater treatment plants because of their robust design and the ability to provide tight shutoff even in applications that contain high concentrations of solid waste material. Butterfly valves are used in wastewater pump check control systems as well as to control influent and effluent in wastewater treatment facilities. Gate valves have a wedge or disc that travels up and down to either block or allow the flow of wastewater in wastewater treatment facilities.
	Drinking water, taps, valves and distribution kits.	Improved delivery of drinking water, reduced spilling and waste. Through closing or water-saving mechanisms, water use is significantly reduced.
	Plunger lift systems	A plunger lift is an artificial lift method of deliquifying a natural gas well. A plunger is used to remove contaminants from productive natural gas wells, such as water (in liquid, mist, or ice forms), sand, oil and wax, and significantly reduces methane emissions associated with blowdown operations.

Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers in primary forms: Copolymers.	Dust control products composed of polymers.	Dust Stop Powder. 100% environmentally friendly, non-toxic/ non-corrosive dust suppressant/ dust control product, composed of polymers, applicable to any soil types. Dust stop powder prevents dust by acting as a binder and forming a film over the surface of a road/soil and binding all of the loose material together. This film encapsulates all the material it comes into contact with to form a hard surface and a barriers to prevent the release of dust.
Acrylic polymers in primary forms: Other.	Dust control products composed of polymers.	Dust Stop Liquid Concentrate (DSLC). 100% environmentally friendly, non-toxic/ non-corrosive dust suppressant/ dust control product composed of polymers, applicable to any soil types. DSLC provides long-term dust and erosion control of tailings piles of any type. Dust Stop is a concentrated liquid product that is mixed with water and applied topically to the tailings. After application of the emulsion to the tailings, the water evaporates and the polymer particles pack closely together to form a continuous film. The ability of Dust Stop to coalesce into a durable, strong, water resistant film allows it to encapsulate all of the dust generating material to prevent it from becoming airborne particulates.
Tubes, pipes, and hoses, rigid, of polymers of propylene	Pentatricopeptide repeats (PPR)	PPR is light, corrosion resistant, anti-scaling, designed for long, reliable service life, widely used in the water supply and drainage for buildings, in both urban and rural areas, power transmission and so on.
PLATES SHEETS FILM FOIL & STRIP OF VINYL CHLORIDE POLYMERS NON-CELLULAR & NOT REINFORCED LAMINATED SUPPORTED OR COMBINED WITH OTHER MATERIALS WITH WEIGHT 6% OR MORE OF PLASTICISERS	Plastic geomembranes for soil protection, watertightness, anti-erosion of soil.	Considered most economical and safest method to install geosynthetic containment systems since they are less susceptible to ground movement. More effective than traditional products such as concrete, asphalt and compacted clay, in protecting environment and water resources.
PLATES SHEETS FILM FOIL & STRIP OF VINYL CHLORIDE POLYMERS NON-CELLULAR & NOT REINFORCED LAMINATED SUPPORTED OR COMBINED WITH OTHER MATERIALS WITH WEIGHT LESS THAN 6% OF PLASTICISERS	Plastic geomembranes for soil protection, watertightness, anti-erosion of soil.	Considered most economical and safest method to install geosynthetic containment systems since they are less susceptible to ground movement. More effective than traditional products such as concrete, asphalt and compacted clay, in protecting environment and water resources.
Other plates, sheets, film, foil and strip, of plastics, of polymers of styrene		Plates and sheets used for thermal isolation. This product is used to increase the thermo isolation of walls, floors and ceiling, and it allows savings of 60-90% of thermo energy or electric energy necessary to air condition houses.

Other plates, sheets, film, foil and strip, of plastics: of polymers of vinyl chloride;		Liners prevent leachate (seeping of waste and chemicals into groundwater), provide soil protection and anti-erosion. Prevent contaminated water runoff. (Also relevant in waste management)
Tubes, pipes and hoses, of vulcanised rubber other than hard rubber, with or without their fittings (for example, joints, elbows, flanges)	Expansion joints	Sealing devices ensure the efficient use of resources in many processes and sectors (like food and beverage, chemical, water treatment) preventing leakages and other systemic failures. In addition to this, the deployment of sealing technologies in key sensitive industries, like the oil and gas one, could directly contribute to the abatement of GHGs emissions. Expansion joints are used in installations where pipework is subject to temperature variations and can expand or retract. The expansion joints allow the pipework to move without causing leakage at joints.
Wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness exceeding 6 mm: Coniferous		These wood products are typically used structurally in wood building construction. Timber can also substitute for products derived from manufacturing processes that emit carbon. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator. Many forests are certified by internationally recognised agencies such as FSC. Plantation forests replace timber in destination markets which may have originated from non-sustainable sources.
Sheets for veneering (including those obtained by slicing laminated wood), for plywood or for similar laminated wood and other wood, sawn lengthwise, sliced or peeled, whether or not planed, sanded, spliced or end-jointed, of a thickness not exceeding 6 mm:		These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.

Coniferous		These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.
Particle board, oriented strand board (OSB) and similar board (for example, waferboard) of wood or other ligneous materials, whether or not agglomerated with resins or other organic binding substances: Of wood: Oriented strand board (OSB).		These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.
Other plywood, consisting solely of sheets of wood (other than bamboo), each ply not exceeding 6 mm thickness: Other.	Coniferous.	These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.
Plywood, veneered panels and similar laminated wood: Other: Other.	Coniferous.	These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.
Builders' joinery and carpentry of wood, including cellular wood panels, assembled flooring panels, shingles and shakes: Posts and beams.	Coniferous.	These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.

Builders' joinery and carpentry of wood, including cellular wood panels, assembled flooring panels, shingles and shakes: Other.	Coniferous.	These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.
Tableware and kitchenware, of wood.	Disposable bamboo chopsticks, and other bamboo tableware and kitchenware	Bamboo is more sustainable than other woods, which has a short growth cycle, even in nutrient depleted soil.
Sewing thread of man-made filaments, whether or not put up for retail sale.	of Synthetic filaments (not put up for retail sale)	As a kind of filter material for dust removal, it serves as an indispensible component of the bag-type dust remover for air pollution control.
Textured filament yarn, of nylon or other polyamides, measuring per single yarn not more than 50 tex, not put up for retail sale	nylon 6 fibres	可回收再利用 Recycling used material contributes to save carbon consumption of fossil fuel resources and helps reduce green house gases.
Textured filament yarn, of nylon or other polyamides, measuring per single yarn more than 50 tex, not put up for retail sale	nylon 6 fibres	可回收再利用 Recycling used material contributes to save carbon consumption of fossil fuel resources and helps reduce green house gases.
Other elastomeric filament yarn, single, untwisted or with a twist not exceeding 50 turns per metre, of nylon or other polyamides, not put up for retail sale	nylon 6 fibres	可回收再利用 Recycling used material contributes to save carbon consumption of fossil fuel resources and helps reduce green house gases.
Other filament yarn, single, untwisted or with a twist not exceeding 50 turns per metre, of nylon or other polyamides, not put up for retail sale	nylon 6 fibres	可回收再利用 Recycling used material contributes to save carbon consumption of fossil fuel resources and helps reduce green house gases.
Other filament yarn, single, with a twist exceeding 50 turns per metre, of nylon or other polyamides, not put up for retail sale	nylon 6 fibres	可回收再利用 Recycling used material contributes to save carbon consumption of fossil fuel resources and helps reduce green house gases.
Nonwovens, whether or not impregnated, coated, covered or laminated: Of man-made filaments: Weighing more than 150 g/m2.	Weighing more than 150 g/m2: Impregnated, coated, covered or laminated	As a kind of filter material for dust removal, it serves as an indispensible component of the bag-type dust remover for air pollution control. It also serves as the drainage mat for landfills to prevent contamination of the underground water.

	Landfill drainage mats; Fabric or filter cloth or filter bags, of polyethylene, polypropylene, or nylon, for filtering wastewater.	Fabric of polyethylene, polypropylene, or nylon for filtering wastewater. Can also be used as landfill drainage mats, for leachate or gas landfill drainage.
	Landfill drainage mats; Fabric or filter cloth or filter bags, of polyethylene, polypropylene, nylon, or PET for filtering wastewater.	Used to purify water.
Other ceramic articles	Ceramsite filter material and ceramsite filling material	During the filtering process, when the filter medium contacts the suspended solids in the water, most of the particulates will be absorbed by filter medium through physical and chemical processes; smaller particles will also be partly removed. The filling material can float in the water, which microbes can attach to (i.e. film colonization), enhancing the reaction between the pollutants and microbes.
Grain-oriented : Of silicon-electrical steel : Flat-rolled products of other alloy steel, of a width of 600 mm or more	Grain Oriented Electrical Steel (GOES)	Grain Oriented Electrical Steel (GOES) is used for the cores of power and distribution transformers, achieving efficient energy-saving. The product contributes to minimizing transmission loss by reducing core loss compared to that of conventional steel products.
Grain-oriented : Of silicon-electrical steel : Flat-rolled products of other alloy steel, of a width of less than 600 mm	Grain Oriented Electrical Steel (GOES)	Grain Oriented Electrical Steel (GOES) is used for the cores of power and distribution transformers, achieving efficient energy-saving. The product contributes to minimizing transmission loss by reducing core loss compared to that of conventional steel products.
Other, of stainless steel: Flanges		Sealing devices ensure the efficient use of resources in many processes and sectors (like food and beverage, chemical, water treatment) preventing leakages and other systemic failures. In addition to this, the deployment of sealing technologies in key sensitive industries, like the oil and gas one, could directly contribute to the abatement of GHGs emissions. Flanges are a key element of expansion joints. Expansion joints are used in installations where pipework is subject to temperature variations and can expand or retract. The expansion joints allow the pipework to move without causing leakage at joints.
Articles of iron or steel, nesoi	Exhaust hoods, not incorporating a filter	Exhaust hoods extract pollutants such as exhaust gas or dust from industrial processes.

	Floor drains and manhole covers.	Manhole covers, and similar articles of iron or steel used to filter water at the entrance of drains. These items facilitate the delivery of safe drinking water and sanitation.
	Steel floor drains	These drains help to prevent harmful solids from entering wastewater flows.
	Sea lion exclusion device or SLED; Possum, stoat, and rat traps	The SLED is a grid fitted in the net before the cod end, with the spacing between the bars designed to prevent sea lions passing through. The grid is angled so that the sea lions are directed upward towards a hole in the top of the net, and they are able to escape from the net; These Possum, stoat, and rat traps are made from Polyethylene and Galvanised Steel. Stoats are implicated in the extinction of many indigenous bird species and as the major cause of decline of many other species. They are known predators of many other native birds and also feed heavily on reptiles and invertebrates. Stoat numbers can be extremely low and yet can still make a substantial difference to bird survival. In New Zealand possums have a huge impact on ecosystems. They have no natural predators. Possums ignore old leaves and select the best new growth. In some areas they have eaten whole canopies. Possums compete with native birds for habitat and for food such as insects and berries. They also disturb nesting birds, eat their eggs and chicks and may impact on native land snails. Possums can spread bovine tuberculosis. Rats can have a major impact on wildlife because they eat native animals and their eggs. They also eat a wide range of native fruit and plants, which puts them in competition with native wildlife for food. Some rats are large enough to kill nesting adult seabirds and prey on animals that live, roost or nest close to the ground.
Copper tubes or pipe fittings (for example, couplings, elbows, sleeves). Of copper alloys.		The couplings secure tight water distribution pipes and thereof reduce the leakage ration in the water supply system. As a consequence the energy consumption connected to cleaning of water / water production and the pumping of water will be reduced. The couplings are made out of corrosion resistant material that secures the energy saving water supply over a minimum lifetime of 50 years.

	—	This product has excellent properties for use in pre-treatment filters in desalination plants, both in filters for filtration of coagulated water and in biological processes. Use of Filtralite will provide low SDI values, reduced danger for bio-fouling of the RO membranes and long filter runs between backwashes.
Water tube boilers with a steam production exceeding 45 t per hour : Steam or other vapour generating boilers : Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers.	Boilers of a kind used in combined heat and power applications, with a steam production exceeding 45 t per hour; Heat recovery steam generators	Combined heat and power contributes significantly to energy efficiency by utilizing the waste heat in power generation activities. A heat recovery steam generator, or HRSG, is an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).
	FULL /	1. Boilers for the production of heat and power on the basis of (renewable) biomass fuels or LNG etc. These boilers can be used as mixed combustion boilers. 2. Waste heat recovery boilers are used to support waste heat recovery processes without any fuels.
	Chemical recovery boiler	Chemical recovery boilers use black liquor, a byproduct of the pulping process, to generate electricity, as well as retrieve chemicals used in the pulping process for reuse.
Steam generating boilers, pressure vessels, biomass boilers	Cement kiln waste heat boiler	The boiler recovers waste-heat in cement kiln. The steam generated can be used in co-generation or to driving the turbine in the combined cycle process.
	Boilers of a kind used in combined heat and power applications, with a steam production not exceeding 45 t per hour; Heat recovery steam generators	Combined heat and power contributes significantly to energy efficiency by utilizing the waste heat in power generation activities. A heat recovery steam generator, or HRSG, is an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).
		Used for the production of heat and power. These boilers burn different kinds of biomass fuels, derived from woody and non-woody wastes and residues, like forest residues, yard clippings, municipal solid waste, or industrial waste and co-products.
	FULL /	1. Boilers for the production of heat and power on the basis of (renewable) biomass fuels or LNG etc. These boilers can be used as mixed combustion boilers. 2. Waste heat recovery boilers are used to support waste heat recovery processes without any fuels.

Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers: Other vapour generating boilers, including hybrid boilers.	Boilers of a kind used in combined heat and power applications; Heat recovery steam generators	Combined heat and power contributes significantly to energy efficiency by utilizing the waste heat in power generation activities. A heat recovery steam generator, or HRSG, is an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).
	Biomass boilers.	Boilers which use biomass fuels for the production of heat and power do so on the basis of renewable fuels. Biomass uses bio-residues and waste to produce heat and electricity with less effect on the environment than fossil fuels.
Window or wall types, self-contained or "split-system" : Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated.	Thermal-boosted hybrid air-conditioners	Reduces dependence on external input of energy for heating or cooling purposes, thereby increasing energy access for other purposes.
	1. Air conditioners with inverter 2. Air conditioners using refrigerant with a GWP less than 750	1. Inverter can change motor speed as per the need, thus consuming less power. 2. Air conditioner using refrigerant with a GWP (Global-warming Potential) less than 750 is consistent with national regulation of many countries to reduce the risk of global warming.
	Split type air conditioner using refrigerant R290, refrigerant. effect≤4000 Cal/hour, window type or wall type; and self-contained air conditioner using Refrigerant R290, window type or wall type.	Natural refrigerant R290 is ozone-friendly, eco-friendly (with its global warming potential-GWP close to zero), while significantly improves the energy efficiency of AC.
Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated: Other: Incorporating a refrigerating unit and a valve for reversal of the cooling/heat cycle (reversible heat pumps).	1. Air conditioners with inverter 2. Air conditioners using refrigerant with a GWP less than 750	1. Inverter can change motor speed as per the need, thus consuming less power. 2. Air conditioner using refrigerant with a GWP(Global-warming Potential) less than 750 is consistent with national regulation of many countries to reduce the risk of global warming.
	Thermal-boosted hybrid air-conditioners	Reduces dependence on external input of energy for heating or cooling purposes, thereby increasing energy access for other purposes.
OTHER AIR CONDITIONERS INCORPORATING A REFRIGERATING UNIT	Thermal-boosted hybrid air-conditioners	Reduces dependence on external input of energy for heating or cooling purposes, thereby increasing energy access for other purposes.

Not incorporating a refrigerating unit : Other : Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated.	1. Air conditioners with inverter 2. Air conditioners using refrigerant with a GWP less than 750	1. Inverter can change motor speed as per the need, thus consuming less power. 2. Air conditioner using refrigerant with a GWP(Global-warming Potential) less than 750 is consistent with national regulation of many countries to reduce the risk of global warming.
Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated: Parts.	Parts for geothermal reversible heat pump systems of subheading 8415.81.	Parts of geothermal heat pump systems that transfer ("pump") the heat available in land and water masses to either heat or cool buildings. They reduce the energy required for heating and cooling. These systems take advantage of underground stable temperature conditions when they differ substantially from temperatures above the ground (either higher or lower) and, in conjunction with the use of heat-exchangers, convert these temperature differences into electricity, heat or cool air, as required.
	1. Air conditioners with inverter 2. Air conditioners using refrigerant with a GWP less than 750	1. Inverter can change motor speed as per the need, thus consuming less power. 2. Air conditioner using refrigerant with a GWP(Global-warming Potential) less than 750 is consistent with national regulation of many countries to reduce the risk of global warming.
Furnace burners for pulverized solid fuel or for gas, including combination burners	LO-Nox burners	These burners significantly reduce nitrogen oxide emissions from boilers and process heaters.
		These goods are essential parts of furnaces, to be run on biomass fuels. Such fuels can derive from woody and non-woody wastes and residues, like forest residues, yard clippings, municipal solid waste, or industrial waste and co-products.
	Self-recuperative burners	Self-recuperative burners are used in high-temperature industrial kilns and furnaces. They use the heat from the exhaust gas to preheat the combustion air, reducing energy consumption by 30 percent or more.
Mechanical stokers, including their mechanical grates, mechanical ash dischargers and similar appliances		These goods are complementary to the ones covered by 841620.
Parts of furnace burners for liquid fuel, pulverized solid fuel or gas; parts of mechanical stokers, grates, ash dischargers and similar appliances	Parts for 841620 and 841630.	Parts are used to assemble and maintain the equipment classified in 841620 and 841630.

Other : Parts : Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases.	Parts of 842121 and 842139	1. Parts of physical, mechanical, chemical or electrostatic filters and purifiers for the removal of VOC, solid or liquid particles in gases, etc. 2. Parts for the gas clean-up units which are used for removing acid gas such as hydrogen sulphide and/or carbon dioxide from synthesis gas generated at gasifiers, prior to supply it with gasified biomass power generation, IGCC (Integrated coal Gasification Combined Cycle) or chemical products synthesizing plant such as SNG(Substitute Natural Gas), diesel fuel, fertilizer, etc.
Machinery with a 360° revolving superstructure : Mechanical shovels, excavators and shovel loaders : Self-propelled bulldozers, angledozers, graders, levellers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers.	①Hybrid type excavator ②Battery type Excavator ③Intelligent Machine Control Hydraulic excavator ④Electric excavator	①With electric motor and capacitor, energy made by swing braking is changed into electricity, stored and reutilized to assist engine acceleration, contributing to less energy consumption. ②With electric drive, CO2 emission is reduced and also there is no exhaust gas emission. ③By ICT control technology, construction works such as digging or site preparation are automated done more accurately and smoothly. Therefore this machine realizes shorter construction time and less energy consumption. ④With electric drive, CO2 emission is reduced and also there is no exhaust gas emission.
Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal		Sealing devices ensure the efficient use of resources in many processes and sectors (like food and beverage, chemical, water treatment) preventing leakages and other systemic failures. In addition to this, the deployment of sealing technologies in key sensitive industries, like the oil and gas one, could directly contribute to the abatement of GHGs emissions. Gaskets are materials used to prevent leaks where pipes are joined to each other or to other pieces of equipment with flanges. Different materials and designs are used depending on operating temperatures and pressures, and the particular fluids or gases being handled.

Mechanical seals		Sealing devices ensure the efficient use of resources in many processes and sectors (like food and beverage, chemical, water treatment) preventing leakages and other systemic failures. In addition to this, the deployment of sealing technologies in key sensitive industries, like the oil and gas one, could directly contribute to the abatement of GHGs emissions. More specifically, mechanical seals control leakage around reciprocating or rotating mechanisms, such as pumps and compressors.
Machinery parts, not containing electrical connectors, insulators, coils, contacts or other electrical features, nesoi	Industrial mufflers	Also referred to as "industrial silencers", these products are used in manufacturing and processing facilities to reduce noise to acceptable occupied space and environmental noise levels.
Electric motors and generators (excluding generating sets): Motors of an output not exceeding 37.5 W.		Hydrogen can be extracted from water using an electrolysis process, which requires the input of electrical energy to drive an otherwise non-spontaneous chemical reaction. Hydrogen is the ideal gas to store renewable energy overcapacity.
Electric motors and generators (excluding generating sets). --Of an output not exceeding 750 W	Energy saving motors and fans for commercial refrigeration applications	Energy saving motors and fans are designed using fewer raw materials than traditional inefficient motors and other electronically commutated motors. In particular, these motors use less copper and less steel, have no stamped laminations, and have a large number of lightweight moulded plastic components.
Electric motors and generators (excluding generating sets): Other DC motors; DC generators: Of an output exceeding 750 W but not exceeding 75 kW.	Motors that fulfil the requirements of efficiency class IE2 or IE3 of the Norm IEC 60034-30-1 (2014).	Hydrogen can be extracted from water using an electrolysis process, which requires the input of electrical energy to drive an otherwise non-spontaneous chemical reaction. Hydrogen is the ideal gas to store renewable energy overcapacity. This subheading also includes solar trackers, motors and generators, which are essential components of solar power plants, which generate low or no carbon emissions and no soil and water pollution. Also, sunlight is a renewable resource.
Electric motors and generators (excluding generating sets): Other DC motors; DC generators: Of an output exceeding 75 kW but not exceeding 375 kW.	Motors that fulfil the requirements of efficiency class IE2 or IE3 of the Norm IEC 60034-30-1 (2014).	Hydrogen can be extracted from water using an electrolysis process, which requires the input of electrical energy to drive an otherwise non-spontaneous chemical reaction. Hydrogen is the ideal gas to store renewable energy overcapacity. This subheading also includes solar trackers, motors and generators, which are essential components of solar power plants, which generate low or no carbon emissions and no soil and water pollution. Also, sunlight is a renewable resource.

Electric motors and generators (excluding generating sets): Other DC motors; DC generators: Of an output exceeding 375 kW.		Hydrogen can be extracted from water using an electrolysis process, which requires the input of electrical energy to drive an otherwise non-spontaneous chemical reaction. Hydrogen is the ideal gas to store renewable energy overcapacity. This subheading also includes solar trackers, motors and generators, which are essential components of solar power plants, which generate low or no carbon emissions and no soil and water pollution. Also, sunlight is a renewable resource.
	Concentrated Solar Photovoltaic Systems	Renewable energy production.
	Energy saving motors and fans for commercial refrigeration applications	Energy saving motors and fans are designed using fewer raw materials than traditional inefficient motors and other electronically commutated motors. In particular, these motors use less copper and less steel, have no stamped laminations, and have a large number of lightweight moulded plastic components.
Generating sets with spark-ignition internal combustion piston engines : Electric generating sets and rotary converters	Household MCHP (Micro Combined Heat and Power) gas engine cogeneration unit	Household MCHP (Micro Combined Heat and Power) gas engine cogeneration unit, which runs by burning natural gas or LPG (liquefied propane gas) for electricity generation and using the exhaust heat for hot water supply and heating,
Having a power handling capacity not exceeding 650 kVA : Liquid dielectric transformers : Electrical transformers, static converters (for example, rectifiers) and inductors		Important component of all power plants using renewable energy.
		Necessary and major component of all power plants using renewable energy. Transformers are essential for the alternating current (AC) transmission, distribution, and utilization of electrical energy.
Having a power handling capacity exceeding 650 kVA but not exceeding 10,000 kVA : Liquid dielectric transformers : Electrical transformers, static converters (for example, rectifiers) and inductors		Important component of all power plants using renewable energy.
		Construction and erection parts, wind power
		Necessary and major component of all power plants using renewable energy. Transformers are essential for the alternating current (AC) transmission, distribution, and utilization of electrical energy.
Having a power handling capacity exceeding 10,000 kVA : Liquid dielectric transformers : Electrical transformers, static converters (for example, rectifiers) and inductors		Important component of all power plants using renewable energy.
		Necessary and major component of all power plants using renewable energy. Transformers are essential for the alternating current (AC) transmission, distribution, and utilization of electrical energy.
Having a power handling capacity not exceeding 1 kVA :		Important component of all power plants using renewable energy.

Other transformers : Electrical transformers, static converters (for example, rectifiers) and inductors		Necessary and major component of all power plants using renewable energy. Transformers are essential for the alternating current (AC) transmission, distribution, and utilization of electrical energy.
Having a power handling capacity exceeding 1 kVA but not exceeding 16 kVA : Other transformers : Electrical transformers, static converters (for example, rectifiers) and inductors		Important component of all power plants using renewable energy.
		Necessary and major component of all power plants using renewable energy. Transformers are essential for the alternating current (AC) transmission, distribution, and utilization of electrical energy.
Having a power handling capacity exceeding 16 kVA but not exceeding 500 kVA : Other transformers : Electrical transformers, static converters (for example, rectifiers) and inductors		Necessary and major component of all power plants using renewable energy. Transformers are essential for the alternating current (AC) transmission, distribution, and utilization of electrical energy.
	High temperature superconducting (HTS) equipment	Superconductors are materials that conduct electricity with 100 percent efficiency, losing nothing to resistance at temperatures above the boiling point of liquid nitrogen. Extraordinary superconducting and magnetic properties for wide-ranging technological applications including power transmission.
Having a power handling capacity exceeding 500 kVA : Other transformers : Electrical transformers, static converters (for example, rectifiers) and inductors		Necessary and major component of all power plants using renewable energy. Transformers are essential for the alternating current (AC) transmission, distribution, and utilization of electrical energy.
	High temperature superconducting Transformers	High Temperature superconducting transformers not only eliminate the electrical resistance in the wires but also allow the construction of useful transformers without a core. The core will generate heat as the magnetic domains are constantly flipped in the alternating field of the windings of the transformer, and this is the biggest energy loss in most practical transformers. In a superconducting transformer the primary dissipates no power except for a small electromagnetic radiation term, so near 100% efficiency can be obtained with no core at all.
Of a kind solely or principally used in an automatic data processing system of heading 84.71	LED Screen - computer monitors	Low CO2 emission, using less electricity
Other	LED Screen - computer monitors	Low CO2 emission, using less electricity
OTHER ELECTRIC SOUND OR VISUAL SIGNALLING APPARATUS EXCL THOSE OF 8512 OR 8530	Gas or smoke detectors and alarms, monitors, including sensors. Other apparatus.	Equipment used to signal presence of gas or smoke.

PARTS OF ELECTRIC SOUND OR VISUAL SIGNALLING APPARATUS EXCL THOSE OF 8512 OR 8530	Gas or smoke detectors and alarms, monitors, including sensors. Parts thereof.	Parts of equipment used to signal presence of gas or smoke.
Other : Other parts and accessories of bodies (including cabs) : Parts and accessories of the motor vehicles of headings 87.01 to 87.05	①Torsional Vibration Dumper ②Centre Bearing Support	①Torsional Vibration Dumper is applied to engines to reduce vibration. ②Centre Bearing Support is applied to propeller shafts to reduce vibration.
Carriages for disabled persons, whether or not motorised or otherwise mechanically propelled. - Not mechanically propelled.		Specialised vehicles (whether powered or un-powered) for disabled people are energy efficient compared to alternative forms of transport.
Carriages for disabled persons, whether or not motorised or otherwise mechanically propelled. - Other.		Specialised vehicles (whether powered or un-powered) for disabled people are energy efficient compared to alternative forms of transport.
Parts and accessories of vehicles of headings 87.11 to 87.13. - Of carriages for disabled persons.		Specialised vehicles (whether powered or un-powered) for disabled people are energy efficient compared to alternative forms of transport.
Dredgers		Environmental dredging is a key element of soil and water remediation activities. It consists in the removal of contaminated sediments from a body of water for purposes of sediment remediation. Through excavation activities, it allows to gather up sediments and other hazardous substances, to make possible further appropriate treatment or disposal. Being located underwater and representing a potential threat to human health and the environment, such contaminated sediments require specific intervention devices and techniques.

X-ray tubes		This product category contains X-ray Fluorescence Spectrometer (XRF). This analytical instrument is used for monitoring hazardous substances in consumer products. <Hazardous materials in consumer products> XRF is used to monitor the hazardous substances such as lead (Pb), mercury (Hg), cadmium (Cd), chrome VI and brominated flame retardants (PBB and PBDE) in consumer products. Especially it is effective analytical instrument to prove that these hazardous substances does not contain before the product is placed on the market to prevent environmental pollution by their disposal. It is a dispensable instrument for demonstration of compliances such as European standard RoHS. < Cleaner or more resource efficient technologies and products> As Cleaner or more resource efficient technologies and products, the analytical instrument is used for a study of new materials contributing to environment such as a solar battery, lithium ion battery, a catalyst extensively.
Other, including parts and accessories : Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus		This product category contains X-ray Fluorescence Spectrometer (XRF). This analytical instrument is used for monitoring hazardous substance in consumer products. <Hazardous materials in consumer products> XRF is used to monitor the hazardous substances such as lead (Pb), mercury (Hg), cadmium (Cd), chrome VI and brominated flame retardants (PBB and PBDE) in consumer products. Especially it is effective analytical instrument to prove that these hazardous substances does not contain before the product is placed on the market to prevent environmental pollution by their disposal. It is a dispensable instrument for demonstration of compliances such as European standard RoHS. < Cleaner or more resource efficient technologies and products> As Cleaner or more resource efficient technologies and products, the analytical instrument is used for a study of new materials contributing to environment such as a solar battery, lithium ion battery, a catalyst extensively.

Automatic regulating or controlling instruments and apparatus. - Other instruments and apparatus : -- Hydraulic or pneumatic	For instruments and apparatus with applications such as waste water treatment, air pollution control and process controls to manage energy efficiency	These include control-related instruments and apparatus which have many environmental applications such as water treatment, wastewater treatment, air pollution control as well as efficient process controls for many industrial applications.
Automatic regulating or controlling instruments and apparatus: Other instruments and apparatus: Other.	Automatic regulating or controlling instruments and apparatus for economizer systems, heating, ventilating and air conditioning (HVAC) systems, lighting systems, building energy management, catalytic incinerators, and fuel-to-air ratio combustion systems for buildings; Differential pressure controllers	These systems enable better energy management in buildings and industrial processes, including movement of air, water or other media. Differential pressure controllers can be used for load shedding by controlling pump speed in an HVAC system using a variable speed drive.
	Battery Unit Sub Assembly	It is a component which supports a dedicated component for HEV, EV.
	Variable Discharge Volume Oil Pump unit	Variable discharge volume oil pump adjusts the volume of the discharged oil into the optimum level needed for the engine rpm. Fuel efficiency improvement can be achieved due to the large reduction of the oil pump workforce at intermediate range of engine rpm that has a big influence on fuel consumption.
	Electric Vacuum Pump unit	Electric vacuum pump generates the negative pressure needed to use the conventional vacuum brake system of hybrid, plug-in hybrid, and electric vehicles. Because the power unit of these vehicles do not generate enough negative pressure to operate the conventional brake system, this electric vacuum pump generates and supplies sufficient negative pressure.
	Electric Oil Pump unit	Electric oil pump supplies necessary oil volume for motor cooling and transmission lubrication in the engine-stop situation used in the idling-stop and hybrid vehicles for fuel efficiency improvement. It operates electrically and the oil pump operation can be controlled so that optimum oil volume can be delivered at necessary timing. It eliminates any waste in fuel consumption.

	Heliostats, temperature sensor for solar boiler/water heater; Differential temperature controller for solar boiler/water heater.	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.
Brooms, brushes (including brushes constituting parts of machines, appliances or vehicles), hand-operated mechanical floor sweepers, not motorised, mops and feather dusters; prepared knots and tufts for broom or brush making; paint pads and rollers; squeegees (other than roller squeegees). - Brooms and brushes, consisting of twigs or other vegetable materials bound together.		The primary inputs (twigs, straw etc) used in the production of this good have a high probability of a low overall environmental impact over their life-cycle. Alternative cleaning technologies may be far less environmentally sustainable, e.g. motor driven leaf blowers or brooms made of synthetic materials.
Animal or vegetable fats and oils and their fractions, boiled, oxidised, dehydrated, sulphurised, blown, polymerised by heat in vacuum or in inert gas or otherwise chemically modified, excluding those of heading 15.16; inedible mixtures or preparations of animal or vegetable fats or oils or of fractions of different fats or oils of this Chapter, not elsewhere specified or included	Oil fouling removing agent	Adding oil fouling removing agent to lubricating oil will remove stagnant layer of fouled oil, prevent future oil fouling and improve the efficiency of machines
Anthracite	Anthracite filter medium	As a kind of filter material for water treatment, anthracite filter medium is widely used in the industrial sewage treatment processes of various industries such as chemicals, metallurgy, thermal power, printing, pharmaceuticals and so on.

Iron oxides and hydroxides	Iron oxide	Iron oxide is an important component of soil colloid, which can activate and change the physical and chemical equilibrium of the adsorption, desorption, precipitation and dissolution of heavy metal pollutants in soil and some oxo-acid radicals, such as H2PO32-hydronium, and then affect the biological toxicity of the heavy metal pollutants and the nutrient availability of soil. In addition, iron oxide catalyst is a core technology of CTL .
Other sulphates	Ferrous sulphate	As a flocculating agent for sewage treatment, ferrous sulphate can accelerate the precipitation of pollutants. As a purifying agent for sewage treatment, ferrous-sulphate can effectively reduce the alkalinity. In addition, fertilizer containing ferrous sulphate can adjust the pH value of soil.
Other organo-inorganic compounds: Other.	Chemical reactive soil modifiers.	Chemical reactive soil modifiers convert all soil types from hydrophilic polar (water loving) to hydrophilic non polar (water hating). This non-toxic product has the ability to help retain strength of road bases and resistance to deformation in wet and dry weather. It provides significant water resistant properties to the treated soil, thus helping to control soil erosion.
Animal or vegetable fertilisers, whether or not mixed together or chemically treated; fertilisers produced by the mixing or chemical treatment of animal or vegetable products		Organic fertilisers are an alternative to synthetic, chemical-based fertilisers and are used in organic farming.
Ion-exchangers based on polymers of headings 39.01 to 39.13, in primary forms.		Ion exchange is widely used in household and industrial water purification to produce soft water and to remove poisonous (e.g. copper) and heavy metal (e.g. lead) ions from solution.
Other, not reinforced of otherwise combined with other materials, without fittings	Drip irrigation belt (tube)	It can deliver water through the holes or water dropper of plastic pipe with 16mm in diameter to the roots of crop for partial irrigation, which is used in agricultural irrigation and gardening to achieve even-spreading and conservation of water.
Tableware, kitchenware, other household articles and hygienic or toilet articles, of plastics	Household & toilet articles of plastic	Waste collection equipment
Reservoirs, tanks, vats and similar containers, of a capacity exceeding 300 l	Water storage tanks of PVC-coated fabric	Prevents light penetration and resulting algae growth, thereby reducing changes of contamination.
		Containers of plastic, of any form, for liquid or solid waste, including for municipal or dangerous waste.

Tubes, pipes and hoses, of vulcanised rubber other than hard rubber, with or without their fittings (for example, joints, elbows, flanges), with fittings	Expansion joints	Sealing devices ensure the efficient use of resources in many processes and sectors (like food and beverage, chemical, water treatment) preventing leakages and other systemic failures. In addition to this, the deployment of sealing technologies in key sensitive industries, like the oil and gas one, could directly contribute to the abatement of GHGs emissions. Expansion joints are used in installations where pipework is subject to temperature variations and can expand or retract. The expansion joints allow the pipework to move without causing leakage at joints.
Fuel wood, in logs, in billets, in twigs, in faggots or in similar forms.		Fuel wood can be used in boilers to produce power. They come from renewable resources (wood) and they produce fewer emissions than fossil fuels when they burn. In addition, wood captures CO2 when it grows.
Wood in chips or particles: Coniferous.		Wood chips can be used in boilers to produce power. They come from renewable resources (wood) and they produce fewer emissions than fossil fuels when they burn. In addition, wood captures CO2 when it grows. Also, new "second-generation" biodiesel can be produced from any lignocelluloses biomass (such as wood products). Because of the carbon dioxide (CO2) absorbed by the plant feedstock used to produce biofuel, biofuels produce overall less CO2 than fossil fuels on a life cycle analysis.
Wood in chips or particles: Non-coniferous.		Wood chips can be used in boilers to produce power. They come from renewable resources (wood) and they produce fewer emissions than fossil fuels when they burn. In addition, wood capture CO2 when it grows. Also, new "second-generation" biodiesel can be produced from any lignocelluloses biomass (such as wood products). Because of the carbon dioxide (CO2) absorbed by the plant feedstock used to produce biofuel, biofuels produce overall less CO2 than fossil fuels on a life cycle analysis.
Sawdust and wood waste and scrap, whether or not agglomerated in logs, briquettes, pellets or similar forms: Wood pellets.		Wood pellets can be used in boilers to produce power. They come from renewable resources (wood) and they produce fewer emissions than fossil fuels when they burn. In addition, wood capture CO2 when it grows.

Sawdust and wood waste and scrap, whether or not agglomerated in logs, briquettes, pellets or similar forms: Other.		Sawdust and wood waste can be used in boilers to produce power. They come from renewable resources (wood) and they produce fewer emissions than fossil fuels when they burn. In addition, wood captures CO2 when it grows. Also, new "second-generation" biodiesel can be produced from any lignocelluloses biomass (such as wood products). Because of the carbon dioxide (CO2) absorbed by the plant feedstock used to produce biofuel, biofuels produce overall less CO2 than fossil fuels on a life cycle analysis.
Sheets for veneering (including those obtained by slicing laminated wood), for plywood or for similar laminated wood and other wood, sawn lengthwise, sliced or peeled, whether or not planed, sanded, spliced or end-jointed, of a thickness not exceeding 6 mm: Coniferous		These wood products are typically used structurally in wood building construction. For buildings and building products, life-cycle assessments (LCA) show that wood is generally better for the environment than other commonly used building materials in terms of embodied energy, air and water pollution, and greenhouse gas emissions. Wood grows naturally using energy from the sun, is renewable, sustainable and recyclable. It is also an effective insulator.
Staple fibres of polyesters, not carded, combed or otherwise processed for spinning	―	可回收再利用 Recycling used material contributes to save carbon consumption of fossil fuel resources and helps reduce green house gases.
Processed Marble-Travertine		Environment friendly production and eco-friendly decoration product
Articles of asbestos-cement, of cellulose fibre-cement of the like: containing asbestos	Sound insulation barriers	It is placed in the peripheral area to the source for noise abatement.
Brake linings and pads : Not containing asbestos : Friction material and articles thereof (for example, sheets, rolls, strips, segments, discs, washers, pads), not mounted, for brakes, for clutches or the like, with a basis of asbestos, of other mineral substances or of cellulose, whether or not combined with textile or other materials.	Copper less/free type brake pad	Brake pads coping with legislation in the states of California and Washington in 2010 that requires reduction in use of copper to 1. Below 5wt percent by 2021 and below 2. 0.5wt percent by 2023～2025 and not discharging environmental impact copper.
Nuclear reactors; fuel elements (cartridges), non-irradiated, for nuclear reactors; machinery and apparatus for isotopic separation: Nuclear reactors.		Nuclear power plants produce very low rates of greenhouse emissions and are therefore a clean energy. New generations of nuclear power plants ensure high levels of safety and can be designed to use recycled nuclear fuel, thus reducing hazardous nuclear fuel waste.

Nuclear reactors; fuel elements (cartridges), non-irradiated, for nuclear reactors; machinery and apparatus for isotopic separation: Fuel elements (cartridges), non-irradiated.		Nuclear power plants produce very low rates of greenhouse emissions and are therefore a clean energy. New generations of nuclear power plants ensure high levels of safety and can be designed to use recycled nuclear fuel, thus reducing hazardous nuclear fuel waste.
Nuclear reactors; fuel elements (cartridges), non-irradiated, for nuclear reactors; machinery and apparatus for isotopic separation: Parts of nuclear reactors.		Nuclear power plants produce very low rates of greenhouse emissions and are therefore a clean energy. New generations of nuclear power plants ensure high levels of safety and can be designed to use recycled nuclear fuel, thus reducing hazardous nuclear fuel waste.
Producer gas or water gas generators, with or without their purifiers; acetylene gas generators and similar water process gas Generators, with or without their purifiers; parts thereof: -Parts	parts of 845010x	Parts for the gasifiers which are used as synthesis gas generator for gasified biomass power generation, IGCC (Integrated coal Gasification Combined Cycle), or chemical products synthesizing plant such as SNG(Substitute Natural Gas), diesel fuel, fertilizer, etc.
Other reciprocating positive displacement pumps	Diesel exhaust fluid supply module	Diesel exhaust fluid is used as a consumable in selective catalytic reduction (SCR) in order to lower NOx concentration in the diesel exhaust emissions from diesel engines.
	Peristaltic pumps; Diaphragm pumps; High-density solid pumps	Peristaltic pumps are used in the handling of sewage sludge and in the chemical treatment process at wastewater treatment facilities. Diaphragm pumps are often used in wastewater treatment applications due to their effective handling of sludges and slurries with high amounts of grit and solid content. High-density solid pumps pump dewatered sewage sludge directly into furnaces via a pipe network. This avoids direct contact with the sludges and prevents contamination and odour.
Pumps for liquids, whether or not fitted with a measuring device; liquid elevators: Other rotary positive displacement pumps.		see also WMWT. Oil transfer pumps are necessary for the functioning of oil skimmer systems
	Electric controlled brake for HEV, PHEV, EV, FCEV	-It is a dedicated component for HEV, PHEV, EV, FCEV Function: It can function co-ordinately with regenerative brake. It makes up for braking force which regenerative brake cannot make up for.
	Water Pump Assembly for Motor & Bracket	-It is a component which supports a dedicated component for HEV, PHEV, EV, FCEV. Function: It can help cooling components in order to keep the performance of HEV, PHEV, EV, FCEV.

	Submersible mixer pump to circulate water in wastewater treatment process; sewage pumps, screw type	These items are for handling and transport of wastewater or slurries during treatment
Other centrifugal pumps	Slurry pumps	Slurry pumps are used in several stages of the flue gas desulfurization process, from pumping lime slurry through the primary scrubbing process, sludge pumping to clarifiers, and pumping ash products out of the system and into waste disposal ponds or containment areas.
	Centrifugal pumps (RFPP, PVDF, Ti, Viton, Seal) lined to prevent corrosion; motor output power not less than 0.4kw.	For handling and transport of wastewater or slurries during treatment.
Hoods having a maximum horizontal side not exceeding 120cm.	Range hoods	The device can effectively purify the cooking fumes from catering industry.
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.	Scroll compressors and inverter compressors	Scroll and inverter compressors are used in heat pump systems.
	Industrial hoods; aerators; blowers; diffusers; refrigerant recovery units.	Air handling equipment used in the transport or extraction of polluted air, corrosive gases or dust. Also, refrigerant recovery units can be used to recover refrigerants (including CFCs, HCFCs and HFCs) from refrigeration and air conditioning equipment, thus preventing emissions of these refrigerants to the atmosphere. CFCs, HCFCs and HFCs are ozone-depleting substances and some are potent greenhouse gases.
	Range, ventilating, canopy and industrial hoods; Refrigerant recovery units	These hoods reduce indoor air pollution by capturing combustion by-products and harmful pollutants. Refrigerant recovery units prevent toxic refrigerants from entering the atmosphere.
	Aerators; Blowers; Diaphragm pumps; Diffusers	Aerators transfer air into settling basins and provide the mixing required for dispersing air and for contacting the reactants (that is, oxygen, wastewater and microbes). Blowers assist in the removal of fat and grease from sewage and recovering fat as froth. They are also used to force media through roughing filters in large wastewater treatment applications. Diaphragm pumps are often used in wastewater treatment applications due to their effective handling of sludges and slurries with high amounts of grit and solid content. Diffusers oxidize wastewater sludge.

	Variable Speed Drive Air Compressor	Air compressor with inverter which controls motor speed depending on the need, thus consuming less power.
	Hygroscopic, Air filtering and Energy saving systems. Based on brine (salt desiccant) for greenhouses and chicken coops.	
	Pumps for airs, whether or not fitted with a measuring device; other pumps Industrial hoods; aerators; blowers; and diffusers.	Air handling equipment used in the transport or extraction of polluted air, corrosive gases or dust. Vacuum pumps are used in adsorption technologies, which can help to control emissions by capturing and releasing Volatile Organic Compounds (VOC), CO2 and other pollutants from the air.
Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters: Parts.	—	Air handling equipment used in the transport or extraction of polluted air, corrosive gases or dust. Vacuum pumps are used in adsorption technologies, which can help to control emissions by capturing and releasing Volatile Organic Compounds (VOC), CO2 and other pollutants from the air.
	Parts for articles of air or vacuum pumps of subheadings 8414.10, 8414.59, and 8414.80.	Parts of air handling equipment used in the transport or extraction of polluted air, corrosive gases or dust. Vacuum pumps are used in adsorption technologies, which can help to control emissions by capturing and releasing Volatile Organic Compounds (VOC), CO2 and other pollutants from the air.
	Industrial hoods and parts thereof	Used in industries or laboratories to remove polluted air, corrosive gases or dust.
Distilling or rectifying plant	Desalination systems; biogas refinement equipment; and solvent recycling plants.	Desalination plants remove salt from water and are particularly important in conditions of water scarcity. Proper disposal of by-products is also required. - Biogas refinement equipment "upgrades" biogas resulting from organic matter to give it the same properties as natural gas. Allows the recovery and reuse of solvents, e.g. solvents used in the printing, painting or dry cleaning industries.
	Optional ex-outs may include: desalination systems; biogas refinement equipment; and solvent recycling plants.	Desalination plants remove salt from water and are particularly important in conditions of water scarcity. Proper disposal of by-products is also required. - Biogas refinement equipment "upgrades" biogas resulting from organic matter to give it the same properties as natural gas. Allows the recovery and reuse of solvents, e.g. solvents used in the printing, painting or dry cleaning industries.

	Distillation or rectifying plants for recovery and recycling	Allows the recovery and reuse of solvents, e.g. solvents used in the printing, painting or dry cleaning industries.
	Pasteurization equipment, such as digester tanks and biogas refinement equipment	This equipment removes chemicals/contaminants from raw biogas so that it may be used effectively.
INTAKE AIR FILTERS FOR INTERNAL COMBUSTION ENGINES	Filtering or purifying machinery and apparatus for gas or air	Intake air filters prevent abrasive particulate matter from entering an engine's cylinders, causing mechanical wear and contamination.
Other weighing machinery having a maximum weighing capacity exceeding 30kg but not exceeding 5,000 kg		Necessary to calculate the amount of reagents needed to treat waste. Oxidation reaction with use of reagent is one of the most efficient and common methods of removing organic compounds from industrial wastewater
Other weighing machinery		Necessary to calculate the amount of reagents needed to treat waste. Oxidation reaction with use of reagent is one of the most efficient and common methods of removing organic compounds from industrial wastewater
Mechanical appliances (whether or not hand-operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines	Variable rate irrigation system	Precision Variable rate irrigation allows different amounts of water to be applied along any part of the length of the irrigator at any one time. This is achieved by individually pulsing sprinklers on and off, while also controlling the system speed to modify the application depth along the length of the irrigator. Precision Variable rate irrigation is compatible with the following irrigation systems: centre pivot, lateral, pivoting lateral and reverse pivoting lateral. It can be installed on new irrigation systems or as an add-on to existing systems.
Input or output units, whether or not containing storage units in the same housing		Low CO2 emission, using less electricity
Storage units		Low CO2 emission, using less electricity
Other office machines (for example, hectograph or stencil duplicating machines, addressing machines, automatic banknote dispensers, coin-sorting machines, coin-counting or wrapping machines, pencil-sharpening machines, perforating or stapling machines): Other	Paper shredders	Used in waste paper collection and recycling industry

	MACHINES AND APPLIANCES FOR VENTILATION, FOR ALTERING THE HUMIDITY OR TEMPERATURE OF THE AIR:	
	Energy recovery ventilators	Energy recovery ventilators recapture 40-80 percent of the energy of exhausted building air and use it to pre-condition incoming ventilation air. This process decreases overall building system load and thus the amount of energy used by the system.
	Soil reclamation systems	Soil reclamation systems remediate soil via thermal oxidation of contaminants.
	Machines and appliances designed for a wide range of areas of environmental management including waste, waste water, drinking water production and soil remediation; excluding machines and mechanical appliances used as components in motor vehicles.	This HS6 category is very general in its coverage and so it is important to specify an ex-out which captures the very extensive range of environmental goods incorporated here.
Other : Other machines and mechanical appliances : Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter.	Ozone generating apparatus	Machines and appliances designed for a wide 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 decomposition. Trash compactors reduce the volume of solid waste, allowing more efficient transport and disposal. Used to produce biogas."Zero emission" ozone based technology for medical and bio-hazard waste treatment. The waste is treated (sterilized) with a high concentration of ozone and can then be disposed in landfills or used as fuel in a waste-to-energy facility. Waste is treated at room temperature: there is no heat, no steam, no chemicals, no fuels, no residue and no by-product of the process.
	FULL /	Machines and appliances designed for a wide 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 decomposition. Trash compactors reduce the volume of solid waste, allowing more efficient transport and disposal.

	Optional ex-outs may include; trash and other waste presses; shredders; 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.	Machines and appliances designed for a wide 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 decomposition. Trash compactors reduce the volume of solid waste, allowing more efficient transport and disposal.
	Waste screening, sorting, shredding or separating equipment, not incorporating a screen or sifter; Recycling equipment; Composting systems; Briquetters	Screening/sorting/shredding equipment is used in a variety of waste management applications, including recycling and composting. Briquetters are an efficient way to turn a variety of waste materials into a usable form.
	GARBAGE CRUSHING OR DISPOSAL MACHINE NOT OF SUBHEADING 8964	
		Machines and appliances designed for a wide 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 decomposition. Trash compactors reduce the volume of solid waste, allowing more efficient transport and disposal.

Sludge collectors and thickeners; Plate settlers; Aeration thickeners; Aerators; Air, bubble and membrane diffusers; Spargers; Blowers; Spiral concentrators; Sieve bends; Hydrocyclones; Bar and mesh screens	Sludge collectors and thickeners are designed to accumulate solids into easily disposable or reusable matter. Plate settlers are often employed in primary water treatment in place of conventional settling tanks and use a series of inclined plates to begin the separation process. Aerators transfer air into settling basins and provide the mixing required for dispersing air and for contacting the reactants (that is, oxygen, wastewater and microbes). Diffuser systems oxidize wastewater sludge. Spargers are aeration devices typically used to transfer air, and with that, oxygen into sewage or industrial wastewater, or alternatively for mixing large volumes of either. Blowers assist in the removal of fat and grease from sewage and recovering fat as froth. They are also used to force media through roughing filters in large wastewater treatment applications.
Anaerobic digesters	Anaerobic digesters are a type of biogas reactor and can produce both biogas and biofuels: non-fossil fuel energy sources that can be converted to usable electricity.
Possum, stoat, and rat traps	These traps are made from plastic composite material. Stoats are implicated in the extinction of many indigenous bird species and as the major cause of decline of many other species. They are known predators of many other native birds and also feed heavily on reptiles and invertebrates. Stoat numbers can be extremely low and yet can still make a substantial difference to bird survival. In New Zealand possums have a huge impact on ecosystems. They have no natural predators. Possums ignore old leaves and select the best new growth. In some areas they have eaten whole canopies. Possums compete with native birds for habitat and for food such as insects and berries. They also disturb nesting birds, eat their eggs and chicks and may impact on native land snails. Possums can spread bovine tuberculosis. Rats can have a major impact on wildlife because they eat native animals and their eggs. They also eat a wide range of native fruit and plants, which puts them in competition with native wildlife for food. Some rats are large enough to kill nesting adult seabirds and prey on animals that live, roost or nest close to the ground.

Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves: Safety or relief valves.	Shutoff valves; Vacuum breaker	Shutoff valves stop water flow in the event of a leak or overflow. A vacuum breaker is an attachment commonly placed on a bibcock valve or toilet or urinal flush valve, that prevents water from being siphoned backward into the public drinking water system. This prevents contamination should the public drinking water system's pressure drop.
	—	These items facilitate the delivery of safe drinking water and sanitation, and are used in handling and transport of wastewater or slurries during treatment.
		Protects pressure vessels in petroleum refining and natural gas processing by relieving static pressure on gases. For safety purposes.
Other electric vacuum cleaner		Address indoor air problems by removing dust.
		Vacuum cleaners used to capture dust and purify environment, using less electricity, reducing particulate emission
Other vacuum cleaners		Address indoor air problems by removing dust.
Parts for vacuum cleaner		Vacuum cleaners used to capture dust and purify environment, using less electricity, reducing particulate emission
Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in Chapter 90: Lasers, other than laser diodes.		Hazardous waste storage and treatment equipment. CO2 lasers are used for welding and cutting certain industrial materials like metal, plastic and ceramic. CO2 lasers can also be used for high-temperature incineration of hazardous waste as well as for decoating and decontamination of surfaces.
Ultrasonic scanning apparatus		There is no risk of radiation exposure unlike other medical devices such as CT, X-ray Ultrasound scanning apparatus do not generate waste since they do not use photographic developers.
Liquid-filled, for direct reading : Thermometers and pyrometers, not combined with other instruments : Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments	Industrial thermometers	These thermometers measure temperature in industrial equipment such as boilers, autoclaves and furnaces, and help to optimize energy use in such equipment.

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: Instruments and apparatus for measuring or checking pressure.	Excluding gauges of a kind used as components in motor vehicles.	Manometers (devices that measure pressure) are used in power plants, water delivery systems, and other applications such as monitoring indoor air. There are two principal types: digital manometers and tube manometers, both of which have important environmental applications.
Machines for balancing mechanical parts.		Environmental applications of these machines include balancing of parts and equipment to minimise noise and vibration. Alternatively, equipment used in the measurement, recording, analysis and assessment of environmental samples or environmental impact.
Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this chapter, nesoi	Vibrometers; Hand vibration meters	These meters assess the level of vibration in working machinery, which helps to diagnose machinery health and control costs.
	Interferometers measuring gas calories	It measures gas calories to control the best economical condition for burning.
	Optional ex-outs include: Profile projectors; Vibrometers; Hand vibration meters.	Equipment used in the measurement, recording, analysis and assessment of environmental samples or environmental impact.
Parts and accessories for measuring or checking instruments, appliances and machines, nesoi; parts and accessories for profile projectors	Parts of 9031.10 and 9031.49x	Equipment used in the measurement, recording, analysis and assessment of environmental samples or environmental impact.
Automatic regulating or controlling instruments and apparatus. - Manostats	Pressure switch; Differential pressure switch or regulator	These switches/regulators close an electrical contact when a certain set pressure has been reached on its input. They respond to differences in two pressures, which can help in detecting a clogged filter in a water supply system or switching a household well water pump automatically when water is drawn from the pressure tank.