

Singapore Classification of Environmental Purposes 2025 – Detailed Definitions (PDF Version)

Last updated: 21 May 2025

Department of Statistics, Ministry of Trade & Industry, Republic of Singapore

Contents

Division 01 AIR AND CLIMATE	1
Group 0101 REDUCTION AND CONTROL OF GREENHOUSE GASES.....	1
Class 010101 Prevention of Greenhouse Gas Emissions	1
Sub-class 01010100 Prevention of greenhouse gas emissions.....	2
Class 010102 Treatment of Greenhouse Gases	3
Sub-class 01010201 Exhaust gas and air treatment of greenhouse gases	3
Sub-class 01010202 Carbon capture and storage (CCS)	4
Sub-class 01010203 Carbon capture and utilisation (CCU)	4
Class 010103 Monitoring and Measurement of Greenhouse Gases	5
Sub-class 01010301 Goods for monitoring and measurement of greenhouse gases	5
Sub-class 01010302 Services for monitoring and measurement of greenhouse gases	5
Class 010199 Others for Reduction and Control of Greenhouse Gases n.e.c.....	6
Sub-class 01019900 Others for reduction and control of greenhouse gases n.e.c.	6
Group 0102 REDUCTION AND CONTROL OF OTHER AIR POLLUTANTS	6
Class 010201 Prevention of Other Air Pollutant Emissions	6
Sub-class 01020100 Prevention of other air pollutant emissions	7
Class 010202 Treatment of Other Air Pollutants	7
Sub-class 01020200 Treatment of other air pollutants	8
Class 010203 Monitoring and Measurement of Other Air Pollutants	8
Sub-class 01020301 Goods for monitoring and measurement of other air pollutants.....	8
Sub-class 01020302 Services for monitoring and measurement of other air pollutants...	9
Class 010299 Others for Reduction and Control of Other Air Pollutants n.e.c.....	9
Sub-class 01029900 Others for reduction and control of other air pollutants n.e.c.	10
Division 02 ENERGY	11
Group 0201 ENERGY FROM RENEWABLE SOURCES	11
Class 020101 Production of Energy From Renewable Sources.....	12

Sub-class 02010101 Energy from solar	13
Sub-class 02010102 Energy from biomass (including biogas and biofuels)	13
Sub-class 02010103 Energy from other renewable sources (including cogeneration)	14
Sub-class 02010104 Low-carbon hydrogen and ammonia used as feedstock	15
Sub-class 02010105 Biomass from sustainable resources.....	15
Class 020102 Equipment and Technologies for Renewable Energy.....	16
Sub-class 02010201 Solar panels, cells and wafers	16
Sub-class 02010202 Other equipment for generation of renewable energy	17
Sub-class 02010203 Equipment for renewable energy storage	17
Class 020103 Supporting Services for Renewable Energy	18
Sub-class 02010301 Supporting services for solar modules and panels	18
Sub-class 02010302 Supporting services for other renewable energy production sites and associated energy storage.....	18
Class 020104 Monitoring and Measurement of Energy From Renewable Sources	19
Sub-class 02010401 Goods for monitoring and measurement of energy from renewable sources	19
Sub-class 02010402 Services for monitoring and measurement of energy from renewable sources	19
Class 020199 Others for Energy From Renewable Sources n.e.c.....	19
Sub-class 02019900 Others for energy from renewable sources n.e.c.	20
Group 0202 ENERGY SAVINGS AND MANAGEMENT	20
Class 020201 Energy Savings Through in-Process Modifications	20
Sub-class 02020101 Equipment for smart grid systems	21
Sub-class 02020102 Supporting services for smart grid systems	21
Sub-class 02020103 Non-renewable energy from efficient plants (e.g. cogeneration) ...	21
Sub-class 02020104 Equipment and supporting services for energy savings from non- renewables sources.....	22
Class 020202 Energy-Efficient Buildings; Other Efficient Energy-Demand Technologies	23
Sub-class 02020201 Energy-efficient buildings.....	23
Sub-class 02020202 Energy-efficient domestic appliances	24

Sub-class 02020203 Energy-efficient machinery	24
Class 020203 Monitoring and Measurement for Energy Savings and Management	24
Sub-class 02020301 Goods for monitoring and measurement for energy savings and management.....	25
Sub-class 02020302 Services for monitoring and measurement for energy savings and management	25
Class 020299 Others for Energy Savings and Management n.e.c.....	25
Sub-class 02029900 Others for energy savings and management n.e.c.	25
Division 03 WASTEWATER AND WATER RESOURCES	27
Group 0301 WASTEWATER MANAGEMENT.....	27
Class 030101 Prevention of Wastewater Pollution	27
Sub-class 03010100 Prevention of wastewater pollution	28
Class 030102 Management of Sewerage Networks	28
Sub-class 03010200 Management of sewerage networks	28
Class 030103 Treatment of Wastewater	29
Sub-class 03010300 Treatment of wastewater	29
Class 030104 Treatment of Cooling Water	30
Sub-class 03010400 Treatment of cooling water.....	30
Class 030105 Monitoring and Measurement for Wastewater Management.....	31
Sub-class 03010501 Goods for monitoring and measurement for wastewater management.....	31
Sub-class 03010502 Services for monitoring and measurement for wastewater management.....	31
Class 030199 Others for Wastewater Management n.e.c.	31
Sub-class 03019900 Others for wastewater management n.e.c.	32
Group 0302 WATER SAVINGS AND MANAGEMENT OF WATER RESOURCES	32
Class 030201 Reduction of Water Intake	32
Sub-class 03020100 Reduction of water intake	33
Class 030202 Water Reuse and Savings, Reduction of Water Losses and Leaks	33
Sub-class 03020201 Water saving systems.....	33

Sub-class 03020202 Water reuse systems	34
Class 030203 Management of Water Supply Networks	34
Sub-class 03020300 Management of water supply networks.....	35
Class 030204 Monitoring and Measurement of Water Savings and Water Resources	35
Sub-class 03020401 Goods for monitoring and measurement of water savings and water resources.....	36
Sub-class 03020402 Services for monitoring and measurement of water savings and water resources.....	36
Class 030299 Others for Water Savings and Management of Water Resources n.e.c.	36
Sub-class 03029900 Others for water savings and management of water resources n.e.c.	37
Division 04 WASTE, MATERIALS RECOVERY AND SAVINGS	38
Group 0401 WASTE MANAGEMENT	38
Class 040101 Prevention of Solid Waste Pollution	39
Sub-class 04010100 Prevention of solid waste pollution	39
Class 040102 Collection and Transport of Waste.....	40
Sub-class 04010201 Goods for collection and transport of waste	40
Sub-class 04010202 Services for collection and transport of waste	40
Class 040103 Treatment and Disposal of Hazardous Waste	41
Sub-class 04010301 Goods for treatment and disposal of hazardous waste	41
Sub-class 04010302 Services for treatment and disposal of hazardous waste	42
Class 040104 Treatment and Disposal of Non-Hazardous Waste	43
Sub-class 04010401 Goods for treatment and disposal of non-hazardous waste	43
Sub-class 04010402 Services for treatment and disposal of non-hazardous waste.....	44
Class 040105 Monitoring and Measurement for Waste Management	44
Sub-class 04010501 Goods for monitoring and measurement for waste management..	45
Sub-class 04010502 Services for monitoring and measurement for waste management	45
Class 040199 Others for Waste Management n.e.c.	45
Sub-class 04019900 Others for waste management n.e.c.	45
Group 0402 MATERIALS RECOVERY AND SAVINGS.....	46

Class 040201 Reduction of the Intake of Wood.....	47
Sub-class 04020101 Reduction of the intake of wood through increased efficiency	47
Sub-class 04020102 Reduction of the intake of wood through substitution	47
Sub-class 04020103 Reduction of the intake of wood through recovery and reuse of materials	48
Class 040202 Reduction of the Intake of Minerals	48
Sub-class 04020201 Reduction of the intake of minerals through increased efficiency ..	48
Sub-class 04020202 Reduction of the intake of minerals through substitution.....	49
Sub-class 04020203 Reduction of the intake of minerals through recovery and reuse of materials	49
Class 040203 Reduction of the Intake of Fossil Fuels for Non-Energy Uses	49
Sub-class 04020301 Reduction of the intake of fossil fuels for non-energy uses through increased efficiency.....	50
Sub-class 04020302 Reduction of the intake of fossil fuels for non-energy uses through substitution	50
Sub-class 04020303 Reduction of the intake of fossil fuels for non-energy uses through recovery and reuse of materials	50
Class 040204 Reduction of the Intake of Natural Resources for Textiles.....	51
Sub-class 04020401 Reduction of the intake of natural resources for textiles through increased efficiency.....	51
Sub-class 04020402 Reduction of the intake of natural resources for textiles through substitution	52
Sub-class 04020403 Reduction of the intake of natural resources for textiles through recovery and reuse of materials	52
Class 040205 Reduction of the Intake of Other Materials.....	52
Sub-class 04020501 Reduction of the intake of other materials through increased efficiency	53
Sub-class 04020502 Reduction of the intake of other materials through substitution....	53
Sub-class 04020503 Reduction of the intake of other materials through recovery and reuse of materials	53
Class 040206 Monitoring and Measurement for Materials Recovery and Savings	54

Sub-class 04020601 Goods for monitoring and measurement for materials recovery and savings.....	54
Sub-class 04020602 Services for monitoring and measurement for materials recovery and savings.....	54
Class 040299 Others for Materials Recovery and Savings n.e.c.	55
Sub-class 04029900 Others for materials recovery and savings n.e.c.....	55
Division 05 SOIL, SURFACE AND GROUNDWATER, BIODIVERSITY AND FOREST	56
Group 0501 PROTECTION OF SOIL, SURFACE AND GROUNDWATER	56
Class 050101 Prevention of Pollutant Infiltration Into Soil and Water Bodies	57
Sub-class 05010101 Strengthening of storage and handling facilities	57
Sub-class 05010102 Soil sealing and catchment for pollutant run-offs and leaks	57
Sub-class 05010103 Organic farming as well as agricultural and grazing practices	58
Class 050102 Cleaning Up of Soil and Water Bodies	58
Sub-class 05010201 Goods for cleaning up of soil and water bodies	59
Sub-class 05010202 Services for cleaning up of soil and water bodies.....	59
Class 050103 Protection From Erosion and Other Physical Degradation of Soil and Water	60
Sub-class 05010301 Goods for protection from erosion and other physical degradation of soil and water.....	60
Sub-class 05010302 Services for protection from erosion and other physical degradation of soil and water	61
Class 050104 Prevention and Remediation of Soil and Groundwater Salinity	62
Sub-class 05010401 Goods for prevention and remediation of soil and groundwater salinity	62
Sub-class 05010402 Services for prevention and remediation of soil and groundwater salinity	62
Class 050105 Monitoring and Measurement for Soil, Surface and Groundwater Protection	63
Sub-class 05010501 Goods for monitoring and measurement for soil, surface and groundwater protection.....	63
Sub-class 05010502 Services for monitoring and measurement for soil, surface and groundwater protection.....	64

Class 050199 Others for Soil, Surface and Groundwater Protection n.e.c.	64
Sub-class 05019900 Others for soil, surface and groundwater n.e.c.	64
Group 0502 PROTECTION OF BIODIVERSITY AND LANDSCAPE	64
Class 050201 Protection and Rehabilitation of Species and Habitats	65
Sub-class 05020101 Goods for protection and rehabilitation of species and habitats	65
Sub-class 05020102 Services for protection and rehabilitation of species and habitats .	66
Class 050202 Protection of Natural and Semi-Natural Landscapes.....	67
Sub-class 05020200 Protection of natural and semi-natural landscapes.....	68
Class 050203 Monitoring and Measurement for Protection of Biodiversity and Landscape	68
Sub-class 05020301 Goods for monitoring and measurement for protection of biodiversity and landscape	68
Sub-class 05020302 Services for monitoring and measurement for protection of biodiversity and landscape	69
Class 050299 Others for Protection of Biodiversity and Landscape n.e.c.	69
Sub-class 05029900 Others for protection of biodiversity and landscape n.e.c.	69
Group 0503 MANAGEMENT OF FOREST RESOURCES.....	70
Class 050301 Reforestation, Afforestation and Forest-Related Land Management.....	70
Sub-class 05030101 Goods for reforestation, afforestation and forest-related land management.....	71
Sub-class 05030102 Services for reforestation, afforestation and forest-related land management.....	71
Class 050302 Protection Against Forest Fires	72
Sub-class 05030200 Protection against forest fires	72
Class 050303 Monitoring and Measurement of Forest Resources.....	72
Sub-class 05030301 Goods for monitoring and measurement of forest resources	72
Sub-class 05030302 Services for monitoring and measurement of forest resources	72
Class 050399 Others for Management of Forest Resources n.e.c.	73
Sub-class 05039900 Others for management of forest resources n.e.c.....	73
Division 06 NOISE AND RADIATION.....	74
Group 0601 PROTECTION AGAINST NOISE AND VIBRATION	74

Class 060101 Prevention and Reduction of Noise and Vibration	74
Sub-class 06010101 Goods for prevention and reduction of noise and vibration	75
Sub-class 06010102 Services for prevention and reduction of noise and vibration	75
Class 060102 Monitoring and Measurement for Protection Against Noise and Vibration ..	76
Sub-class 06010201 Goods for monitoring and measurement for protection against noise and vibration	76
Sub-class 06010202 Services for monitoring and measurement for protection against noise and vibration	76
Class 060199 Others for Protection Against Noise and Vibration n.e.c.....	77
Sub-class 06019900 Others for protection against noise and vibration n.e.c.	77
Group 0602 PROTECTION AGAINST RADIATION	77
Class 060201 Protection of Ambient Media Against Radiation	78
Sub-class 06020101 Goods for protection of ambient media against radiation	78
Sub-class 06020102 Services for protection of ambient media against radiation	79
Class 060202 Transport and Treatment of High-Level Radioactive Waste	79
Sub-class 06020200 Transport and treatment of high-level radioactive waste	79
Class 060203 Monitoring and Measurement of Radioactivity	80
Sub-class 06020301 Goods for monitoring and measurement of radioactivity	80
Sub-class 06020302 Services for monitoring and measurement of radioactivity	80
Class 060299 Others for Protection Against Radiation n.e.c.	81
Sub-class 06029900 Others for protection against radiation n.e.c.....	81
Division 07 RESEARCH AND DEVELOPMENT	82
Group 0701 R&D FOR REDUCTION AND CONTROL OF AIR EMISSIONS	82
Class 070101 R&D for Reduction and Control of Greenhouse Gases	83
Sub-class 07010100 R&D for reduction and control of greenhouse gases.....	83
Class 070102 R&D for Reduction and Control of Other Air Pollutants	83
Sub-class 07010200 R&D for reduction and control of other air pollutants	83
Group 0702 R&D FOR ENERGY.....	84
Class 070201 R&D for Renewables	84
Sub-class 07020100 R&D for renewables	84

Class 070202 R&D for Energy Savings.....	84
Sub-class 07020200 R&D for energy savings	85
Group 0703 R&D FOR WASTEWATER MANAGEMENT	85
Class 070300 R&D for Wastewater Management	85
Sub-class 07030000 R&D for wastewater management	85
Group 0704 R&D FOR WATER RESOURCES	86
Class 070400 R&D for Water Resources	86
Sub-class 07040000 R&D for water resources.....	86
Group 0705 R&D FOR WASTE MANAGEMENT	86
Class 070500 R&D for Waste Management.....	86
Sub-class 07050000 R&D for waste management.....	87
Group 0706 R&D FOR MATERIALS RECOVERY AND SAVINGS	87
Class 070600 R&D for Materials Recovery and Savings.....	87
Sub-class 07060000 R&D for materials recovery and savings	87
Group 0707 R&D FOR SOIL, SURFACE AND GROUNDWATER, AND BIODIVERSITY	87
Class 070701 R&D for Soil, Surface and Groundwater	88
Sub-class 07070100 R&D for soil, surface and groundwater.....	88
Class 070702 R&D for Biodiversity.....	88
Sub-class 07070200 R&D for biodiversity	88
Group 0708 R&D FOR FOREST MANAGEMENT	89
Class 070800 R&D for Forest Management.....	89
Sub-class 07080000 R&D for forest management.....	89
Group 0709 R&D FOR NOISE AND RADIATION	89
Class 070901 R&D for Noise and Vibration.....	89
Sub-class 07090100 R&D for noise and vibration.....	90
Class 070902 R&D for Radiation	90
Sub-class 07090200 R&D for radiation	90
Group 0710 R&D FOR TRANSPORT	90
Class 071000 R&D for Transport	90

Sub-class 07100000 R&D for transport.....	91
Group 0711 R&D FOR FINANCE AND CARBON TRADING	91
Class 071100 R&D for Finance and Carbon Trading.....	91
Sub-class 07110000 R&D for finance and carbon trading	91
Division 08 CROSS-CUTTING AND OTHER ENVIRONMENTAL PURPOSES	92
Group 0801 ENVIRONMENTAL EDUCATION AND TRAINING	92
Class 080100 Environmental Education and Training	92
Sub-class 08010000 Environmental education and training	92
Group 0802 GENERAL ENVIRONMENTAL ADMINISTRATION, MANAGEMENT, REGULATION, DISSEMINATION AND CONSULTANCY	93
Class 080200 General Environmental Administration, Management, Regulation, Dissemination and Consultancy	93
Sub-class 08020000 General environmental administration, management, regulation, dissemination and consultancy.....	93
Group 0803 OTHER ENVIRONMENTAL PURPOSES.....	93
Class 080300 Other Environmental Purposes.....	94
Sub-class 08030000 Other environmental purposes.....	94
Division 09 TRANSPORT	95
Group 0901 PRODUCTION OF CLEANER-ENERGY VEHICLES AND RELATED COMPONENTS.....	95
Class 090101 Production of Cleaner-Energy Vehicles.....	95
Sub-class 09010101 Cleaner-energy land transport vehicles	96
Sub-class 09010102 Cleaner-energy ships and boats	96
Sub-class 09010103 Cleaner-energy aircrafts	97
Class 090102 Production of Components of Cleaner-Energy Vehicles	97
Sub-class 09010201 Components of cleaner-energy land transport vehicles.....	98
Sub-class 09010202 Components of cleaner-energy ships and boats	98
Sub-class 09010203 Components of cleaner-energy aircrafts	98
Class 090199 Others for Production of Cleaner-Energy Vehicles and Related Components n.e.c.....	99

Sub-class 09019900 Others for production of cleaner-energy vehicles and related components n.e.c.....	99
Group 0902 INFRASTRUCTURE AND SUPPORTING SERVICES FOR CLEANER-ENERGY TRANSPORT	99
Class 090201 Infrastructure and Supporting Services for Cleaner-Energy Land Transport Vehicles	100
Sub-class 09020101 Infrastructure for cleaner-energy land transport vehicles.....	100
Sub-class 09020102 Supporting services for cleaner-energy land transport vehicles ...	100
Class 090202 Infrastructure and Supporting Services for Cleaner-Energy Ships and Boats	101
Sub-class 09020201 Infrastructure for cleaner-energy ships and boats	101
Sub-class 09020202 Supporting services for cleaner-energy ships and boats	101
Class 090203 Infrastructure and Supporting Services for Cleaner-Energy Aircrafts.....	102
Sub-class 09020301 Infrastructure for cleaner-energy aircrafts.....	102
Sub-class 09020302 Supporting services for cleaner-energy aircrafts	102
Class 090299 Others for Infrastructure and Supporting Services for Cleaner-Energy Transport n.e.c.	102
Sub-class 09029900 Others for infrastructure and supporting services for cleaner-energy transport n.e.c.....	103
Group 0903 CLEANER-ENERGY TRANSPORT SERVICES	103
Class 090301 Transport Services Using Cleaner-Energy Land Transport Vehicles	103
Sub-class 09030101 Passenger transport services using cleaner-energy land transport vehicles.....	104
Sub-class 09030102 Freight transport services using cleaner-energy land transport vehicles.....	104
Class 090302 Transport Services Using Cleaner-Energy Ships and Boats.....	105
Sub-class 09030201 Passenger transport services using cleaner-energy ships and boats	105
Sub-class 09030202 Freight transport services using cleaner-energy ships and boats..	105
Class 090303 Transport Services Using Cleaner-Energy Aircrafts.....	106
Sub-class 09030301 Passenger transport services using cleaner-energy aircrafts.....	106
Sub-class 09030302 Freight transport services using cleaner-energy aircrafts.....	106

Class 090399 Others for Cleaner-Energy Transport Services n.e.c.	106
Sub-class 09039900 Others for cleaner-energy transport services n.e.c.	107
Division 10 FINANCE AND CARBON TRADING	108
Group 1001 GREEN FINANCIAL INSTRUMENTS	108
Class 100101 Provision of Financial Intermediary Services on Green Loans.....	108
Sub-class 10010100 Provision of financial intermediary services on green loans	109
Class 100102 Green Debt and Equity Financing Services	109
Sub-class 10010200 Green debt and equity financing services	109
Class 100103 Consultancy, Monitoring, Reporting and Verification Activities Related to Green Financial Instruments.....	109
Sub-class 10010300 Consultancy, monitoring, reporting and verification activities related to green financial instruments.....	110
Class 100199 Others for Green Financial Instruments n.e.c.....	110
Sub-class 10019900 Others for green financial instruments n.e.c.	110
Group 1002 CARBON TRADING.....	110
Class 100201 Carbon Trading Services.....	111
Sub-class 10020100 Carbon trading services	111
Class 100202 Consultancy, Monitoring, Reporting and Verification Activities Related to Carbon Trading.....	111
Sub-class 10020200 Consultancy, monitoring, reporting and verification activities related to carbon trading	111
Class 100299 Others for Carbon Trading n.e.c.....	112
Sub-class 10029900 Others for carbon trading n.e.c.....	112

Division 01 AIR AND CLIMATE

Activities, measures and products aimed at reducing air emissions and/or concentration of air pollutants.

The scope excludes improving levels of air quality in the areas in which the economic activity takes place whilst minimising any adverse impact on human health.

This division includes the following group(s):

- 0101 REDUCTION AND CONTROL OF GREENHOUSE GASES
- 0102 REDUCTION AND CONTROL OF OTHER AIR POLLUTANTS

Group 0101 REDUCTION AND CONTROL OF GREENHOUSE GASES

Activities, measures and products aimed at reducing greenhouse gas emissions into the ambient air or reducing their concentrations.

According to the Kyoto Protocol (1997) and the Doha Amendment (2012), the seven main greenhouse gases are:

- carbon dioxide (CO₂)
- methane (CH₄)
- nitrous oxide (N₂O)
- hydrofluorocarbons (HFCs)
- perfluorocarbons (PFCs)
- sulphur hexafluoride (SF₆)
- nitrogen trifluoride (NF₃)

This group includes the following class(es):

- 010101 Prevention of Greenhouse Gas Emissions
- 010102 Treatment of Greenhouse Gases
- 010103 Monitoring and Measurement of Greenhouse Gases
- 010199 Others for Reduction and Control of Greenhouse Gases n.e.c.

Class 010101 Prevention of Greenhouse Gas Emissions

Activities, measures and products aiming to eliminate or reduce greenhouse gas emissions through in-process modifications (IPMs):

- cleaner production processes and other technologies (cleaner technologies)

- cleaner (adapted) products

This class includes the following sub-class(es):

- 01010100 Prevention of greenhouse gas emissions

Sub-class 01010100 Prevention of greenhouse gas emissions

This sub-class includes production, installation, or maintenance of:

- processes that reduce the generation of greenhouse gases during production or storage
 - o fuel combustion improvements
 - o recovery of solvents
 - o improvements to air-tightness of equipment

This sub-class also includes services related to:

- modifications to the production process to enable the use of less air-polluting inputs in terms of greenhouse gas emissions
- environmental engineering design and consultancy on less air-polluting products associated with greenhouse gas emissions

This sub-class excludes:

- prevention of other air pollutant emissions, see 01020100
- renewable energy and related equipment, technologies and supporting services, see 0201
- in-process modifications, energy-efficient buildings and other technologies to reduce energy demand, see 0202
- protection of air from radiation, see 060201
- cleaner-energy vehicles and related components, see 0901
- infrastructure and supporting services for cleaner-energy transport, see 0902
- cleaner-energy transport services that are more energy efficient than individual transport, see 0903
- carbon credits to offset greenhouse gas emissions, see 1002

Class 010102 Treatment of Greenhouse Gases

Activities, measures and products involving the installation, maintenance and operation of end-of-pipe equipment for the removal and/or reduction of greenhouse gas emissions either from the combustion of fuels or from other processes.

Exhaust gases are emissions into the air, usually through exhaust pipes, stacks or chimneys. Ventilation air refers to the exhaust from air conditioning systems of industrial facilities.

This class includes the following sub-class(es):

- 01010201 Exhaust gas and air treatment of greenhouse gases
- 01010202 Carbon capture and storage (CCS)
- 01010203 Carbon capture and utilisation (CCU)

Sub-class 01010201 Exhaust gas and air treatment of greenhouse gases

This sub-class includes operation, installation, or maintenance of:

- exhaust gas and air treatment for gaseous and vaporous materials from greenhouse gases
 - o condensation, absorption or adsorption processes (e.g. bed adsorbers)
 - o catalytic exhaust purification (e.g. industrial catalytic converters)
 - o biological exhaust gas cleaning (e.g. biowashers)
 - o post-combustion processes (e.g. gas incinerators)
- industrial ventilation systems to reduce concentrations of greenhouse gases

This sub-class excludes:

- carbon capture processes that involve subsequent storage, see 01010202
- carbon capture processes that involve subsequent utilisation to produce useful materials, see 01010203
- treatment of other air pollutants, see 01020200
- off-gas drainage networks and treatment of soil vapour for site remediation, see 050102
- protection of air from radiation, see 060201
- components of cleaner-energy vehicles for exhaust emission control, see 090102

Sub-class 01010202 Carbon capture and storage (CCS)

According to the EU Taxonomy (2020):

- All activities pertaining to the direct capture of CO₂ from the atmosphere to lower global atmospheric CO₂ concentration levels are currently eligible, subject to regular review.
- The operation of a permanent CO₂ storage facility is eligible if the facility complies with ISO 27914:2017 for geological storage of CO₂. These requirements are subject to periodical review.

This sub-class includes operation, installation, or maintenance of:

- infrastructure for carbon capture and sequestration
 - o geological, biological or ocean storage
 - o carbon mineralisation

This sub-class excludes:

- carbon capture and utilisation (CCU), see 01010203
- protection of air from radiation, see 060201

Sub-class 01010203 Carbon capture and utilisation (CCU)

According to the EU Taxonomy (2020), all activities pertaining to the direct capture of CO₂ from the atmosphere to lower global atmospheric CO₂ concentration levels are currently eligible, subject to regular review.

This sub-class includes operation, installation, or maintenance of:

- infrastructure for carbon capture and utilisation to produce useful materials
 - o mineralisation for landfill applications, producing building materials (e.g. sand and cement) as by-products
 - o carbon reforming to produce syngas and hydrogen
 - o carbon fixation of microalgae to produce biodiesel

This sub-class excludes:

- carbon capture and storage (CCS), see 01010202
- protection of air from radiation, see 060201

Class 010103 Monitoring and Measurement of Greenhouse Gases

Activities, measures and products aimed at monitoring greenhouse gas emissions and their concentrations.

The scope excludes activities of weather stations.

This class includes the following sub-class(es):

- 01010301 Goods for monitoring and measurement of greenhouse gases
- 01010302 Services for monitoring and measurement of greenhouse gases

Sub-class 01010301 Goods for monitoring and measurement of greenhouse gases

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring greenhouse gases
 - o gas or smoke analysis apparatus
 - o emission monitoring systems

This sub-class excludes:

- services for monitoring and measurement of greenhouse gases, see 01010302
- goods for monitoring and measurement of other air pollutants, see 01020301
- goods for monitoring landfill gas and soil vapour, see 05010501

Sub-class 01010302 Services for monitoring and measurement of greenhouse gases

This sub-class includes services related to:

- measurement services for air quality and exhaust gases with specific reference to greenhouse gases
- operation of monitoring stations for ozone-depleting substances and greenhouse gases

This sub-class excludes:

- goods for monitoring and measurement of greenhouse gases, see 01010301
- services for monitoring and measurement of other air pollutants, see 01020302
- services for monitoring landfill gas and soil vapour, see 05010502
- supporting services for cleaner-energy transport, see 0902

Class 010199 Others for Reduction and Control of Greenhouse Gases n.e.c.

All other activities, measures and products aimed at reducing emissions and/or concentration of greenhouse gases.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0101 should be included here when they can be separated from other activities belonging to S-CEP 0101 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 01019900 Others for reduction and control of greenhouse gases n.e.c.

Sub-class 01019900 Others for reduction and control of greenhouse gases n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on reduction and control of greenhouse gases

Group 0102 REDUCTION AND CONTROL OF OTHER AIR POLLUTANTS

Activities, measures and products aimed at reducing emissions of pollutants other than greenhouse gases into the ambient air or reducing their concentrations.

This group includes the following class(es):

- 010201 Prevention of Other Air Pollutant Emissions
- 010202 Treatment of Other Air Pollutants
- 010203 Monitoring and Measurement of Other Air Pollutants
- 010299 Others for Reduction and Control of Other Air Pollutants n.e.c.

Class 010201 Prevention of Other Air Pollutant Emissions

Activities, measures and products aiming to eliminate or reduce emissions of pollutants other than greenhouse gases through in-process modifications (IPMs):

- cleaner production processes and other technologies (cleaner technologies)
- cleaner (adapted) products

This class includes the following sub-class(es):

- 01020100 Prevention of other air pollutant emissions

Sub-class 01020100 Prevention of other air pollutant emissions

This sub-class includes production, installation, or maintenance of:

- processes that reduce the generation of pollutants other than greenhouse gases during production or storage
 - o fuel combustion improvements
 - o recovery of solvents
 - o improvements to air-tightness of equipment

This sub-class also includes services related to:

- modifications to the production process to enable the use of less air-polluting inputs in terms of emissions of pollutants other than greenhouse gases
- environmental engineering design and consultancy on less air-polluting products associated with emissions of pollutants other than greenhouse gases

This sub-class excludes:

- prevention of greenhouse gas emissions, see 01010100
- renewable energy and related equipment, technologies and supporting services, see 0201
- in-process modifications, energy-efficient buildings and other technologies to reduce energy demand, see 0202
- protection of air from radiation, see 060201
- cleaner-energy vehicles and related components, see 0901
- infrastructure and supporting services for cleaner-energy transport, see 0902
- cleaner-energy transport services that are more energy efficient than individual transport, see 0903

Class 010202 Treatment of Other Air Pollutants

Activities, measures and products involving the installation, maintenance and operation of end-of-pipe equipment for the removal and/or reduction of emissions of pollutants other than greenhouse gases either from the combustion of fuels or from other processes.

Exhaust gases are emissions into the air, usually through exhaust pipes, stacks or chimneys. Ventilation air refers to the exhaust from air conditioning systems of industrial facilities.

This class includes the following sub-class(es):

- 01020200 Treatment of other air pollutants

Sub-class 01020200 Treatment of other air pollutants

This sub-class includes operation, installation, or maintenance of:

- exhaust gas and air treatment for particulate solids and liquids
 - o dry processes (e.g. fabric filters, separators and precipitators)
 - o wet processes (e.g. scrubbers and washing towers)
- exhaust gas and air treatment for gaseous and vaporous materials from pollutants other than greenhouse gases
 - o condensation, absorption or adsorption processes (e.g. bed adsorbers)
 - o catalytic exhaust purification (e.g. industrial catalytic converters)
 - o biological exhaust gas cleaning (e.g. biowashers)
 - o post-combustion processes (e.g. gas incinerators)
- industrial ventilation systems to reduce concentrations of pollutants other than greenhouse gases

This sub-class excludes:

- exhaust gas and air treatment of greenhouse gases, see 01010201
- off-gas drainage networks and treatment of soil vapour for site remediation, see 050102
- protection of air from radiation, see 060201
- components of cleaner-energy vehicles for exhaust emission control, see 090102

Class 010203 Monitoring and Measurement of Other Air Pollutants

Activities, measures and products aimed at monitoring emissions of pollutants other than greenhouse gases and their concentrations.

The scope excludes activities of weather stations.

This class includes the following sub-class(es):

- 01020301 Goods for monitoring and measurement of other air pollutants
- 01020302 Services for monitoring and measurement of other air pollutants

Sub-class 01020301 Goods for monitoring and measurement of other air pollutants

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring pollutants other than greenhouse gases

- o gas or smoke analysis apparatus

- o dust monitors

- o emission monitoring systems

This sub-class excludes:

- goods for monitoring and measurement of greenhouse gases, see 01010301
- services for monitoring and measurement of other air pollutants, see 01020302
- goods for monitoring landfill gas and soil vapour, see 05010501

Sub-class 01020302 Services for monitoring and measurement of other air pollutants

This sub-class includes services related to:

- measurement services for air quality and exhaust gases with specific reference to pollutants other than greenhouse gases
- operation of monitoring stations for pollutants other than greenhouse gases

This sub-class excludes:

- services for monitoring and measurement of greenhouse gases, see 01010302
- goods for monitoring and measurement of other air pollutants, see 01020301
- services for monitoring landfill gas and soil vapour, see 05010502
- supporting services for cleaner-energy transport, see 0902

Class 010299 Others for Reduction and Control of Other Air Pollutants n.e.c.

All other activities, measures and products aimed at reducing emissions of pollutants other than greenhouse gases and their concentrations.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0102 should be included here when they can be separated from other activities belonging to S-CEP 0102 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 01029900 Others for reduction and control of other air pollutants n.e.c.

Sub-class 01029900 Others for reduction and control of other air pollutants n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on reduction and control of pollutants other than greenhouse gases

Division 02 ENERGY

Activities, measures and products aimed at production of renewable energy and at energy savings.

Production of biogas and biofuels from waste is reported under S-CEP 0201. When different data sources and consequently different classifications are used, issues of double counting may arise. In this specific case, double counting occurs if: (i) waste management output is estimated based on the Nomenclature of Economic Activities (NACE) classification (38.1+38.2 NACE rev.2 groups) and (ii) production of biogas and biofuels from waste is estimated based on the Classification of Products by Activity (CPA). Double counting occurs because NACE 38.2 rev.2 already covers production of biogas from waste. To avoid double counting, production of biogas and biofuels must be deducted from total waste management output in S-CEP 0401.

Production of energy through incineration of biodegradable and non-biodegradable waste is reported under S-CEP 0201 and S-CEP 0202 respectively. When different data sources and consequently different classifications are used issues of double counting may arise. In this specific case, double counting occurs if: (i) waste management output is estimated based on NACE classification (38.1+38.2 NACE rev.2 groups) and (ii) production of energy from incineration of waste is estimated based on CPA. Double counting occurs because NACE 38.2 rev. 2 covers incineration of waste regardless of whether energy is produced. To avoid double counting, production of energy from waste (biodegradable and non-biodegradable) must be deducted from total waste management output in S-CEP 0401.

The scope excludes the transmission and distribution of renewable energy (e.g. electricity distribution or switching equipment, and electricity network expansion for renewable energy including cable poles and towers).

This division includes the following group(s):

- 0201 ENERGY FROM RENEWABLE SOURCES
- 0202 ENERGY SAVINGS AND MANAGEMENT

Group 0201 ENERGY FROM RENEWABLE SOURCES

Activities, measures and products related to renewable energy.

Sources for the production of renewable energy are:

- Wind
- Solar
- Aero-thermal
- Geothermal
- Hydrothermal and ocean energy

- Hydropower, excluding pumped-storage hydropower (PSH) stations under S-CEP 020201
- Biomass (including biogas and biofuels)
- Landfill gas
- Sewage treatment plant gas and biogas

Biomass is defined as the biodegradable fraction of products, waste and residues of biological origin from nature, agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste. Biomass includes biofuel and biogas.

Renewables include the primary energy equivalent of hydro (excluding pumped storage), geothermal, solar, wind, tide and wave sources. Energy derived from solid biofuels, bio gasoline, biodiesels, other liquid biofuels, biogases and the renewable fraction of municipal waste are also included.

This group includes the following class(es):

- 020101 Production of Energy From Renewable Sources
- 020102 Equipment and Technologies for Renewable Energy
- 020103 Supporting Services for Renewable Energy
- 020104 Monitoring and Measurement of Energy From Renewable Sources
- 020199 Others for Energy From Renewable Sources n.e.c.

Class 020101 Production of Energy From Renewable Sources

Activities, measures and products related to the production of energy from renewable sources.

The production of energy from renewable sources can be further detailed at 4th level by type of renewable energy or split into three categories (renewable with and without CO2 emissions and non-carbon based fuels) to have coherence with air emissions accounts.

The scope includes the production of renewable energy as non-market output for own use by households and as secondary output by producers classified in other industries.

This class includes the following sub-class(es):

- 02010101 Energy from solar
- 02010102 Energy from biomass (including biogas and biofuels)
- 02010103 Energy from other renewable sources (including cogeneration)
- 02010104 Low-carbon hydrogen and ammonia used as feedstock
- 02010105 Biomass from sustainable resources

Sub-class 02010101 Energy from solar

According to the Singapore-Asia Taxonomy for Sustainable Finance (2023), all energy generation activities from solar photovoltaic (PV) and concentrated solar power (CSP) are directly eligible under the Taxonomy.

This sub-class includes production of:

- electricity and heat from all solar deployment types (e.g. rooftop, ground-mounted, inland floating and offshore)

This sub-class excludes:

- energy from biomass (including biogas and biofuels), see 02010102
- energy from other renewable sources (including cogeneration), see 02010103
- non-renewable energy from efficient plants (e.g. cogeneration), see 02020103

Sub-class 02010102 Energy from biomass (including biogas and biofuels)

According to the Singapore-Asia Taxonomy for Sustainable Finance (2023), bioenergy power generation that complies with all of the criteria is eligible:

- Emission intensity measured during the lifecycle of the power plant is less than 100gCO₂e/kWh, and
- Bioenergy produced from waste (e.g., agriculture, municipal sources) are eligible, or
- Feedstock used for production of bioenergy should comply with one of the following standards:
 - o Forest Stewardship Council (FSC)
 - o Biomass Biofuels voluntary scheme (2BSvs)
 - o Bonsucro (Better Sugarcane Initiative)
 - o Roundtable of Sustainable Biomaterials (RSB)
 - o Round Table on Responsible Soy (RTRS)
 - o International Sustainability and Carbon Certification (ISCC and/or ISCC plus)

This sub-class includes production of:

- electricity and heat from all biomass types (e.g. biogas and biofuels)

This sub-class excludes:

- energy from solar, see 02010101
- energy from other renewable sources (including cogeneration), see 02010103

- biomass from sustainable resources, see 02010105
- non-renewable energy from efficient plants (e.g. cogeneration), see 02020103

Sub-class 02010103 Energy from other renewable sources (including cogeneration)

According to the EU Taxonomy (2020), any cogeneration technology can be included in the Taxonomy if it can be demonstrated, using an ISO 14067 or a GHG Protocol Product Lifecycle Standard-compliant Product Carbon Footprint (PCF) assessment, that the life cycle impacts for producing 1 kWh of heat/cool and power are below the declining threshold.

Declining threshold: The Cogeneration Threshold is the combined heat/cool and power threshold of 100 gCO₂e/kWh.

- This threshold will be reduced every 5 years in line with a net-zero CO₂e in 2050 trajectory.
- The threshold must be met at the point in time when taxonomy approval is sought for the first time.
- For activities which go beyond 2050, it must be technically feasible to reach net-zero emissions.

This sub-class includes production of:

- electricity and heat from incineration of biodegradable waste
- energy from cogeneration and trigeneration plants using renewable fuels
 - o electricity and heat from cogeneration plants using renewable fuels
 - o electricity, heat and cold from trigeneration plants using renewable fuels
- energy from other renewable sources
 - o electricity from wind and hydropower sources
 - o heat from aerothermal, hydrothermal and geothermal sources

This sub-class excludes:

- energy from solar, see 02010101
- energy from biomass (including biogas and biofuels), see 02010102
- non-renewable energy from efficient plants (e.g. cogeneration), see 02020103
- pumped-storage hydropower (PSH) stations, see 02020104
- incineration of sewage sludge with energy recovery, see 03010300

- incineration of waste without energy recovery, see 04010302 and 04010402

Sub-class 02010104 Low-carbon hydrogen and ammonia used as feedstock

According to the EU Taxonomy (2020):

- Manufacturing of hydrogen is eligible if the following thresholds are met:
 - o Direct CO₂ emissions from manufacturing of hydrogen: 5.8 tCO₂e/t Hydrogen in alignment with energy thresholds in the Taxonomy.
 - o Electricity use for hydrogen produced by electrolysis is at or lower than 58 MWh/t Hydrogen.
 - o Average carbon intensity of the electricity produced that is used for hydrogen manufacturing is at or below 100 gCO₂e/kWh (taxonomy threshold for electricity production, subject to periodical update).
- Manufacturing of ammonia is eligible if the two following thresholds are met:
 - o Scope 1 emissions are lower than 1 tCO₂/t Ammonia, and
 - o Combined CO₂ emissions (scope 1 emissions and scope 2 emissions, from electricity consumed) are lower than 1,3 tCO₂/t Ammonia.

This sub-class includes production of:

- low-carbon hydrogen and ammonia used as feedstock

This sub-class excludes:

- fuels from carbon capture and utilisation (CCU) processes, see 01010203
- biomass from sustainable resources, see 02010105

Sub-class 02010105 Biomass from sustainable resources

According to the Singapore-Asia Taxonomy for Sustainable Finance (2023), feedstock used for production of bioenergy should comply with one of the following standards:

- Forest Stewardship Council (FSC)
- Biomass Biofuels voluntary scheme (2BSvs)
- Bonsucro (Better Sugarcane Initiative)
- Roundtable of Sustainable Biomaterials (RSB)
- Round Table on Responsible Soy (RTRS)
- International Sustainability and Carbon Certification (ISCC and/or ISCC plus)

The scope excludes the cultivation and harvest of energy crops (e.g. corn, grain and rapeseed) for biofuels, electricity and heat.

This sub-class includes production of:

- biomass from waste, recycled materials and other sustainable resources
 - o biogas (e.g. from landfill gas recovery)
 - o biofuels
 - o fuel wood, wood pellets and other wood or vegetal-based energy products
 - o hydro-processed esters and fatty acids (HEFA) for use in sustainable aviation fuel (SAF)

This sub-class excludes:

- fuels from carbon capture and utilisation (CCU) processes, see 01010203
- low-carbon hydrogen and ammonia used as feedstock, see 02010104
- biogas from sewage sludge, see 03010300

Class 020102 Equipment and Technologies for Renewable Energy

Specific equipment for the production of energy from renewable sources.

This class includes the following sub-class(es):

- 02010201 Solar panels, cells and wafers
- 02010202 Other equipment for generation of renewable energy
- 02010203 Equipment for renewable energy storage

Sub-class 02010201 Solar panels, cells and wafers

This sub-class includes production of:

- solar panels, photovoltaic cells and solar wafers
- metallisation pastes for solar cell

This sub-class excludes:

- other equipment for generation of renewable energy, see 02010202
- equipment for renewable energy storage, see 02010203
- supporting services for solar modules and panels, see 02010301

Sub-class 02010202 Other equipment for generation of renewable energy

This sub-class includes production of:

- other equipment for producing energy from renewable sources
 - o hydraulic and wind turbines
 - o fire wood and other biomass boilers
 - o other components of renewable power plants

This sub-class excludes:

- solar panels, cells and wafers, see 02010201
- equipment for renewable energy storage, see 02010203
- supporting services for other renewable energy production sites, see 02010302
- equipment for energy savings from non-renewables sources, see 02020104

Sub-class 02010203 Equipment for renewable energy storage

According to the EU Taxonomy (2020), the construction of hydrogen storage assets is eligible under the Taxonomy, subject to regular review. Operation of hydrogen storage assets is eligible under the Taxonomy if the infrastructure is used to store taxonomy-eligible hydrogen. Infrastructure that is required for zero direct emissions transport (e.g. hydrogen fuelling stations) is eligible under the transport section.

This sub-class includes production of:

- equipment for energy storage technology associated with renewable energy sources
 - o compressed air storage power stations
 - o sensitive heat storage systems
 - o latent heat storage systems
 - o hydrogen storage
 - o power-to-gas systems (i.e. storage of wind power in the form of hydrogen/methane)

This sub-class excludes:

- supporting services for renewable energy storage, see 02010302
- equipment for non-renewable energy storage (including pumped-storage hydropower (PSH) stations), see 02020104

Class 020103 Supporting Services for Renewable Energy

Activities, measures and products related to the construction, installation or maintenance of renewable energy production sites.

This class includes the following sub-class(es):

- 02010301 Supporting services for solar modules and panels
- 02010302 Supporting services for other renewable energy production sites and associated energy storage

Sub-class 02010301 Supporting services for solar modules and panels

According to the EU Taxonomy (2020), the installation of solar photovoltaic systems (and the ancillary technical equipment) is eligible if installed on-site as building services.

This sub-class includes installation or maintenance of:

- solar modules and panels in solar farms, on rooftops, etc.

This sub-class excludes:

- solar panels, cells and wafers, see 02010201
- supporting services for other renewable energy production sites and associated energy storage, see 02010302

Sub-class 02010302 Supporting services for other renewable energy production sites and associated energy storage

This sub-class includes construction, engineering, or architectural services related to:

- other renewable power plants
 - o waste-to-energy plants for biodegradable waste
 - o cogeneration and trigeneration plants using renewable fuels
 - o offshore wind farms (e.g. offshore substations, specialised vessels and floating platforms)
- energy storage systems for renewable sources

This sub-class excludes:

- other equipment for generation of renewable energy, see 02010202
- equipment for renewable energy storage, see 02010203
- supporting services for solar modules and panels, see 02010301

- supporting services for energy savings from non-renewables sources, see 02020104

Class 020104 Monitoring and Measurement of Energy From Renewable Sources

Activities, measures and products aimed at monitoring renewable energy.

This class includes the following sub-class(es):

- 02010401 Goods for monitoring and measurement of energy from renewable sources
- 02010402 Services for monitoring and measurement of energy from renewable sources

Sub-class 02010401 Goods for monitoring and measurement of energy from renewable sources

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring renewable energy
 - o solar irradiance meters
 - o weather stations

This sub-class excludes:

- services for monitoring and measurement of energy from renewable sources, see 02010402

Sub-class 02010402 Services for monitoring and measurement of energy from renewable sources

This sub-class includes services related to:

- inventories of renewable energy
- assessments of the potential for renewable energy production

This sub-class excludes:

- goods for monitoring and measurement of energy from renewable sources, see 02010401

Class 020199 Others for Energy From Renewable Sources n.e.c.

All other activities, measures and products related to renewable energy.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0201 should be included here when they can be separated from other activities belonging to S-CEP 0201 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 02019900 Others for energy from renewable sources n.e.c.

Sub-class 02019900 Others for energy from renewable sources n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on energy from renewable sources

Group 0202 ENERGY SAVINGS AND MANAGEMENT

Activities, measures and products aimed at reducing energy use such as in-process modifications (IPMs), reduction of losses, etc.

This group includes the following class(es):

- 020201 Energy Savings Through in-Process Modifications
- 020202 Energy-Efficient Buildings; Other Efficient Energy-Demand Technologies
- 020203 Monitoring and Measurement for Energy Savings and Management
- 020299 Others for Energy Savings and Management n.e.c.

Class 020201 Energy Savings Through in-Process Modifications

Activities, measures and products aimed at minimising the consumption of energy through in-process modifications (IPMs). These activities are often carried out as ancillary or own-final-use activities.

This class includes the following sub-class(es):

- 02020101 Equipment for smart grid systems
- 02020102 Supporting services for smart grid systems
- 02020103 Non-renewable energy from efficient plants (e.g. cogeneration)
- 02020104 Equipment and supporting services for energy savings from non-renewables sources

Sub-class 02020101 Equipment for smart grid systems

The requirements from both SP PowerGrid and development owners must be met depending on nature of the smart grid solution.

This sub-class includes production of:

- energy meters for smart grids
 - o smart meters and sensors
 - o phasor measurement units

This sub-class excludes:

- supporting services for smart grid systems, see 02020102

Sub-class 02020102 Supporting services for smart grid systems

This sub-class includes operation, installation, or maintenance of:

- systems and components related to smart grids to reduce losses in energy transportation
 - o specific software for smart grids

This sub-class excludes:

- equipment for smart grid systems, see 02020101

Sub-class 02020103 Non-renewable energy from efficient plants (e.g. cogeneration)

According to the EU Taxonomy (2020), any cogeneration technology can be included in the Taxonomy if it can be demonstrated, using an ISO 14067 or a GHG Protocol Product Lifecycle Standard-compliant Product Carbon Footprint (PCF) assessment, that the life cycle impacts for producing 1 kWh of heat/cool and power are below the declining threshold. Declining threshold: The Cogeneration Threshold is the combined heat/cool and power threshold of 100 gCO₂e/kWh.

- This threshold will be reduced every 5 years in line with a net-zero CO₂e in 2050 trajectory.
- The threshold must be met at the point in time when taxonomy approval is sought for the first time.
- For activities which go beyond 2050, it must be technically feasible to reach net-zero emissions.

This sub-class includes production of:

- electricity and heat from incineration of non-biodegradable waste
- energy from cogeneration and trigeneration plants using non-renewable fuels
 - o electricity and heat from cogeneration plants using non-renewable fuels
 - o electricity, heat and cold from trigeneration plants using non-renewable fuels

This sub-class excludes:

- energy from renewable sources, see 020101
- incineration of sewage sludge with energy recovery, see 03010300
- incineration of waste without energy recovery, see 04010302 and 04010402

Sub-class 02020104 Equipment and supporting services for energy savings from non-renewables sources

This sub-class includes production of:

- equipment for producing energy from non-renewable sources with increased efficiency
- equipment for energy storage technology associated with non-renewable energy sources
- heat recovery equipment to reduce energy consumption during production

This sub-class also includes construction, engineering, or architectural services related to:

- efficient non-renewable power plants
 - o waste-to-energy plants for non-biodegradable waste
 - o cogeneration and trigeneration plants using non-renewable fuels
- energy storage systems for non-renewable sources (including pumped-storage hydropower (PSH) stations)
- heat recovery systems

This sub-class excludes:

- equipment and technologies for renewable energy, see 020102
- supporting services for renewable energy, see 020103

Class 020202 Energy-Efficient Buildings; Other Efficient Energy-Demand Technologies

Activities, measures and products aimed at minimising the consumption of energy through the renovation of existing buildings and construction of energy-efficient buildings as well as the use of other efficient energy-demand technologies.

This class includes the following sub-class(es):

- 02020201 Energy-efficient buildings
- 02020202 Energy-efficient domestic appliances
- 02020203 Energy-efficient machinery

Sub-class 02020201 Energy-efficient buildings

According to the Singapore-Asia Taxonomy for Sustainable Finance (2023):

- The following criteria must be met for construction of new buildings:
 - o prevailing Green Mark Certification, or
 - o office buildings (or portfolio) in Singapore meeting Climate Bonds Initiative (CBI) certification criteria
 - o eligible international certifications included in the Taxonomy
- The following criteria must be met for renovation of existing buildings:
 - o renovations enable to reach the prevailing Green Mark Certification, or
 - o align with relevant Climate Bonds Buildings Criteria

Building products certified by the Singapore Green Building Council (SGBC) are highly recognised under the Green Mark Certification.

This sub-class includes construction, engineering, or architectural services related to:

- new energy-efficient buildings
 - o insulation of buildings to increase energy efficiency (e.g. insulation materials and triple-glassed windows)
 - o installation of energy-efficient building systems (e.g. lighting systems and vertical transportation systems)
- energetic refurbishment activities on existing buildings

This sub-class excludes:

- efficient cooling systems in buildings (e.g. data centres), see 03020100
- building materials made using substitute materials or recycled materials, see 0402

- soundproofing of buildings, see 060101

Sub-class 02020202 Energy-efficient domestic appliances

The following criteria must be met for energy-efficient domestic appliances:

- administered under NEA's Mandatory Energy Labelling Scheme (MELS)
- eligible for purchase using the Climate Vouchers issued under the Climate Friendly Households Programme (CFHP)

This sub-class includes production of:

- energy-efficient domestic appliances

This sub-class excludes:

- installation of energy-efficient building systems, see 02020201
- energy-efficient machinery, see 02020203
- water-efficient domestic appliances, see 03020201

Sub-class 02020203 Energy-efficient machinery

This sub-class includes production, installation, or maintenance of:

- energy-efficient machinery
 - o energy-efficient boilers

This sub-class excludes:

- installation of energy-efficient building systems, see 02020201
- energy-efficient domestic appliances, see 02020202
- water-efficient machinery, see 03020201

Class 020203 Monitoring and Measurement for Energy Savings and Management

Activities, measures and products aimed at monitoring energy performances with the view of increasing energy efficiency.

This class includes the following sub-class(es):

- 02020301 Goods for monitoring and measurement for energy savings and management
- 02020302 Services for monitoring and measurement for energy savings and management

Sub-class 02020301 Goods for monitoring and measurement for energy savings and management

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring energy performances
 - o measuring devices to monitor energy efficiency
 - o energy management systems

This sub-class excludes:

- equipment for smart grid systems, see 02020101
- services for monitoring and measurement for energy savings and management, see 02020302

Sub-class 02020302 Services for monitoring and measurement for energy savings and management

This sub-class includes services related to:

- energy audits and performance certifications
- assessments of energy savings potentials

This sub-class excludes:

- supporting services for smart grid systems, see 02020102
- goods for monitoring and measurement for energy savings and management, see 02020301

Class 020299 Others for Energy Savings and Management n.e.c.

All other activities, measures and products related to energy savings and management.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0202 should be included here when they can be separated from other activities belonging to S-CEP 0202 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 02029900 Others for energy savings and management n.e.c.

Sub-class 02029900 Others for energy savings and management n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) on energy savings and management

Division 03 WASTEWATER AND WATER RESOURCES

Activities, measures and products aimed at treating wastewater (up to environmental standards or quality norms) and at safeguarding stocks of water.

The scope excludes improving levels of water quality in the areas in which the economic activity takes place whilst minimising any adverse impact on human health.

This division includes the following group(s):

- 0301 WASTEWATER MANAGEMENT
- 0302 WATER SAVINGS AND MANAGEMENT OF WATER RESOURCES

Group 0301 WASTEWATER MANAGEMENT

Activities, measures and products aimed at the prevention of pollution of surface water through the reduction of the release of wastewater into inland surface water and seawater.

According to the System of Environmental-Economic Accounting Central Framework (SEEA-CF, 2012), wastewater is discarded water that is no longer required by the owner or user.

This group includes the following class(es):

- 030101 Prevention of Wastewater Pollution
- 030102 Management of Sewerage Networks
- 030103 Treatment of Wastewater
- 030104 Treatment of Cooling Water
- 030105 Monitoring and Measurement for Wastewater Management
- 030199 Others for Wastewater Management n.e.c.

Class 030101 Prevention of Wastewater Pollution

Activities, measures and products aimed at reducing the generation of wastewater through in-process modifications (IPMs):

- cleaner production processes and other technologies (cleaner technologies)
- cleaner (adapted) products

This class includes the following sub-class(es):

- 03010100 Prevention of wastewater pollution

Sub-class 03010100 Prevention of wastewater pollution

This sub-class includes production, installation, or maintenance of:

- processes that reduce water pollutants or wastewater generated during production
 - o separation of networks and treatment
 - o reuse of water within production processes before discarding

This sub-class also includes services related to:

- modifications to the production process to enable the use of less water-polluting inputs
- environmental engineering design and consultancy on less water-polluting products

This sub-class excludes:

- wastewater reuse systems in production processes or households, see 03020202
- prevention of pollutant infiltration into water bodies, see 050101
- protection of water from radiation, see 060201

Class 030102 Management of Sewerage Networks

Activities, measures and products aimed at the operation, maintenance and repair of sewerage networks.

Sewerage networks are the systems of collectors, pipelines, vehicles, tanks, conduits and pumps used in the process of transporting wastewater (rainwater, domestic and other wastewater) from the points of generation to either a sewage treatment plant or to a point where wastewater is discharged.

This class includes the following sub-class(es):

- 03010200 Management of sewerage networks

Sub-class 03010200 Management of sewerage networks

This sub-class includes operation, installation, or maintenance of:

- sewerage networks (including sewer rehabilitation to restore structural integrity)
 - o collectors, pipelines, vehicles, tanks, conduits and pumps for sewage conveyance

This sub-class excludes:

- management of water supply networks, see 03020300

Class 030103 Treatment of Wastewater

Activities, measures and products aimed at treating wastewater up to environmental standards or quality norms.

According to the EU Taxonomy (2020), emissions to water are to be within the ranges set in the Urban Waste Water Treatment Directive 91/271/EEC.

Septic tanks are tanks through which wastewater is flowing and the suspended matter is decanted as sludge. Organic matter in the water and in the sludge are partly decomposed by anaerobic bacteria and other micro-organisms.

Three broad types of treatment are defined below. Alternative definitions of types of treatment may be used (e.g. based on removal rates for biological oxygen demand).

- Mechanical (or physical) treatment separates wastewater into treated water and sludge. Mechanical treatment includes the use of sedimentation and the use of screens to separate large solids. Sedimentation may be assisted by chemicals or flotation (elimination of sand, oil, part of the sludge, etc.).
- Biological treatment employs aerobic or anaerobic microorganisms to treat wastewater and results in treated wastewater and separate sludge containing microbial mass and pollutants. This activity is designed to eliminate pollution from oxidisable materials through the use of bacteria: activated sludge techniques or anaerobic treatment for specific concentrated wastewater. Biodegradable materials are treated with the addition of bacteria-enriched sludge in open or closed tanks.
- Advanced treatment reduces specific constituents in wastewater not normally achieved by other treatment options. It covers all processes which are not considered to be mechanical or biological. This activity is aimed at eliminating oxidisable non-biodegradable matter at a higher level, as well as metals, nitrate, phosphorous, etc. Special equipment is required for each depollution process.

This class includes the following sub-class(es):

- 03010300 Treatment of wastewater

Sub-class 03010300 Treatment of wastewater

This sub-class includes operation, installation, or maintenance of:

- septic tanks and related products (e.g. biological activators and grease traps)
- sewage treatment plants
 - o mechanical (or physical) treatment (e.g. separating large solids using sedimentation)
 - o biological treatment (i.e. employing aerobic or anaerobic micro-organisms)

- o advanced treatment, covering processes not normally achieved by other treatment options

- o sludge treatment for disposal or other uses (e.g. agriculture, incineration with energy recovery and biogas production)

This sub-class excludes:

- treatment of cooling water, see 03010400
- wastewater reuse systems in production processes or households, see 03020202
- cleaning up of water bodies, see 050102
- protection of water from radiation, see 060201

Class 030104 Treatment of Cooling Water

Activities, measures and products which bring cooling water up to environmental standards before releasing into the environment.

Cooling water is water used to remove heat.

This class includes the following sub-class(es):

- 03010400 Treatment of cooling water

Sub-class 03010400 Treatment of cooling water

This sub-class includes operation, installation, or maintenance of:

- cooling towers (to the extent they are required to reduce pollution, as distinct from technical needs)
- cooling circuits for processing water and for condensing released vapour
- equipment for enhancing the dispersion of cooling water on release

This sub-class excludes:

- heat recovery systems for energy uses, see 02020104
- treatment of wastewater, see 03010300
- processes that reduce the intake of cooling water during production, see 03020100
- wastewater reuse systems in production processes or households, see 03020202
- cleaning up of water bodies, see 050102
- protection of water from radiation, see 060201

Class 030105 Monitoring and Measurement for Wastewater Management

Activities, measures and products aimed at monitoring the concentration of pollutants in wastewater and the quality of inland surface water and marine water at the place wastewater is discharged.

This class includes the following sub-class(es):

- 03010501 Goods for monitoring and measurement for wastewater management
- 03010502 Services for monitoring and measurement for wastewater management

Sub-class 03010501 Goods for monitoring and measurement for wastewater management

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring wastewater quality and water quality at the place wastewater is discharged
 - o laboratory sensors and analysers
 - o flow meters and level sensors

This sub-class excludes:

- services for monitoring and measurement for wastewater management, see 03010502

Sub-class 03010502 Services for monitoring and measurement for wastewater management

This sub-class includes services related to:

- analytical tests to determine wastewater quality and water quality at the place wastewater is discharged
 - o measuring concentrations of organic matter and solids

This sub-class excludes:

- goods for monitoring and measurement for wastewater management, see 03010501

Class 030199 Others for Wastewater Management n.e.c.

All other activities, measures and products aimed at wastewater management.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0301 should be included here when they can be separated from other activities belonging to S-CEP 0301 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 03019900 Others for wastewater management n.e.c.

Sub-class 03019900 Others for wastewater management n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on wastewater management

Group 0302 WATER SAVINGS AND MANAGEMENT OF WATER RESOURCES

Activities, measures and products aiming at the minimisation of intake from inland waters and at increasing stocks of water.

The scope excludes dykes and embankments (e.g. damming activities that regulate water flow for flood protection) as they are related to natural risk management and protection of human property.

This group includes the following class(es):

- 030201 Reduction of Water Intake
- 030202 Water Reuse and Savings, Reduction of Water Losses and Leaks
- 030203 Management of Water Supply Networks
- 030204 Monitoring and Measurement of Water Savings and Water Resources
- 030299 Others for Water Savings and Management of Water Resources n.e.c.

Class 030201 Reduction of Water Intake

Activities, measures and products aimed at reducing the intake of water per unit of output through in-process modifications (IPMs).

This class includes the following sub-class(es):

- 03020100 Reduction of water intake

Sub-class 03020100 Reduction of water intake

This sub-class includes production, installation, or maintenance of:

- processes that reduce the intake of cooling water during production
 - o efficient cooling systems in buildings (e.g. data centres)
 - o air cooling systems
 - o circuits that reuse cooling water for heating applications
 - o closed cooling circuits
- other processes that reduce the intake of water during production
 - o drip irrigation systems
 - o cultivation of plants that use less water for agriculture
 - o hydroponic and aeroponic systems

This sub-class excludes:

- heat recovery systems for energy uses, see 02020104
- aquaponics with organic aquaculture, see 05010301

Class 030202 Water Reuse and Savings, Reduction of Water Losses and Leaks

Activities, measures and products aimed at the reduction of water losses and leaks, water reuse and savings.

This class includes the following sub-class(es):

- 03020201 Water saving systems
- 03020202 Water reuse systems

Sub-class 03020201 Water saving systems

The following criteria must be met for water-efficient domestic appliances:

- administered under PUB's Mandatory Water Efficiency Labelling Scheme (WELS)
- eligible for purchase using the Climate Vouchers issued under the Climate Friendly Households Programme (CFHP)

This sub-class includes production, installation, or maintenance of:

- water saving filters and systems for taps, toilets, etc. (including maintenance and repair of water pipelines)

- o hot water recirculation systems
- o water saving thimbles to regulate water flow
- o flush saver cistern bags
- water-efficient appliances and machinery

This sub-class excludes:

- energy-efficient domestic appliances, see 02020202
- energy-efficient machinery, see 02020203
- water reuse systems, see 03020202

Sub-class 03020202 Water reuse systems

This sub-class includes operation, installation, or maintenance of:

- rainwater harvesting systems on roofs and open spaces
- wastewater reuse systems in production processes or households
 - o greywater recycling systems (e.g. for irrigation and toilet flushing)
 - o water purification plants
- desalination plants for treating water (e.g. seawater)

This sub-class excludes:

- reuse of water within production processes before discarding, see 03010100
- treatment of wastewater to prevent pollution, see 03010300
- treatment of cooling water to prevent pollution, see 03010400
- water saving systems, see 03020201
- cleaning up of water bodies, see 050102
- protection of water from radiation, see 060201

Class 030203 Management of Water Supply Networks

Activities, measures and products aimed at the operation, maintenance and repair of water supply networks.

According to the EU Taxonomy (2020), the front-to-end water collection, treatment and supply system is eligible provided that its performance in terms of energy consumption per cubic meter

of final water supply is high or substantially improved. Eligibility is demonstrated by adherence to one of two optional thresholds:

- Option 1: The front-to-end water supply system has a high degree of energy efficiency characterised by an average energy consumption of the system (including abstraction, treatment and distribution) of 0.5 kwh per cubic meter billed/unbilled authorised water supply or less.

- Option 2: The energy efficiency of the front-to-end water supply system is increased substantially:

- o by decreasing the average energy consumption of the system by at least 20% (including abstraction, treatment and distribution; measured in kwh per cubic meter billed/unbilled authorised water supply), or

- o by closing the gap between the actual leakage of the water supply network and a given target value of low leakage by at least 20%. The unit of measurement is the Infrastructure Leakage Index (ILI) and the target value of low leakage is an ILI of 1.5.

This class includes the following sub-class(es):

- 03020300 Management of water supply networks

Sub-class 03020300 Management of water supply networks

This sub-class includes operation, installation, or maintenance of:

- water supply networks
 - o reservoirs, pipelines and pumping for water distribution

This sub-class excludes:

- management of sewerage networks, see 03010200
- maintenance of the water quality of reservoirs, see 0501
- catchment areas for pollutant run-offs, see 05010102
- restoration of aquatic habitats in reservoirs, see 0502

Class 030204 Monitoring and Measurement of Water Savings and Water Resources

Activities, measures and products aimed at measuring and monitoring the use and the level of water stocks.

This class includes the following sub-class(es):

- 03020401 Goods for monitoring and measurement of water savings and water resources

- 03020402 Services for monitoring and measurement of water savings and water resources

Sub-class 03020401 Goods for monitoring and measurement of water savings and water resources

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring water savings and water resources
 - o electric contact gauges and pressure probes
 - o water meters

This sub-class excludes:

- goods for monitoring water quality at the place wastewater is discharged, see 03010501
- services for monitoring and measurement of water savings and water resources, see 03020402
- goods for monitoring the quality of groundwater and surface water, see 05010501

Sub-class 03020402 Services for monitoring and measurement of water savings and water resources

This sub-class includes services related to:

- water efficiency certifications
- monitoring of water levels in reservoirs

This sub-class excludes:

- services for monitoring water quality at the place wastewater is discharged, see 03010502
- goods for monitoring and measurement of water savings and water resources, see 03020401
- services for monitoring the quality of groundwater and surface water, see 05010502

Class 030299 Others for Water Savings and Management of Water Resources n.e.c.

All other activities, measures and products related to water savings and management of water resources.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0302 should be included here when they can be separated from other activities belonging to S-CEP 0302 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 03029900 Others for water savings and management of water resources n.e.c.

**Sub-class 03029900 Others for water savings and management of water resources
n.e.c.**

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on water savings and management of water resources
 - o information campaigns to encourage water savings
 - o activities of general government units or parts thereof that administer and regulate the use of water resources or are responsible for water saving policies

Division 04 WASTE, MATERIALS RECOVERY AND SAVINGS

Activities, measures and products aimed at managing waste and at reducing the use of materials.

This division includes the following group(s):

- 0401 WASTE MANAGEMENT
- 0402 MATERIALS RECOVERY AND SAVINGS

Group 0401 WASTE MANAGEMENT

Activities, measures and products which prevent the generation of waste and reduce the harmful effects of waste on the environment.

Production of biogas and biofuels from waste is reported under S-CEP 0201. When different data sources and consequently different classifications are used, issues of double counting may arise. In this specific case, double counting occurs if: (i) waste management output is estimated based on the Statistical classification of economic activities in the European Community (NACE) classification (38.1+38.2 NACE rev.2 groups) and (ii) production of biogas and biofuels from waste is estimated based on the Classification of Products by Activity (CPA). Double counting occurs because NACE 38.2 rev.2 already covers production of biogas from waste. To avoid double counting, production of biogas and biofuels must be deducted from total waste management output in S-CEP 0401.

Production of energy through incineration of biodegradable and non-biodegradable waste is reported under S-CEP 0201 and S-CEP 0202 respectively. When different data sources and consequently different classifications are used issues of double counting may arise. In this specific case, double counting occurs if: (i) waste management output is estimated based on NACE classification (38.1+38.2 NACE rev.2 groups) and (ii) production of energy from incineration of waste is estimated based on CPA. Double counting occurs because NACE 38.2 rev. 2 covers incineration of waste regardless of whether energy is produced. To avoid double counting, production of energy from waste (biodegradable and non-biodegradable) must be deducted from total waste management output in S-CEP 0401.

According to the System of Environmental-Economic Accounting Central Framework (SEEA-CF, 2012), solid waste covers discarded materials that are no longer required by the owner or user. Solid waste includes materials that are in a solid or liquid state but excludes wastewater and small particulate matter released into the atmosphere. Waste may be generated during the extraction of raw materials, during the processing of raw materials to intermediate and final products, during the consumption of final products, and during any other human activity.

This group includes the following class(es):

- 040101 Prevention of Solid Waste Pollution
- 040102 Collection and Transport of Waste

- 040103 Treatment and Disposal of Hazardous Waste
- 040104 Treatment and Disposal of Non-Hazardous Waste
- 040105 Monitoring and Measurement for Waste Management
- 040199 Others for Waste Management n.e.c.

Class 040101 Prevention of Solid Waste Pollution

Activities, measures and products aimed at eliminating or reducing the generation of solid waste through in-process modifications (IPMs):

- cleaner and more efficient production processes and other technologies (cleaner technologies)
- cleaner (adapted) products

‘Prevention’ means measures taken before a substance, material or product has become waste, that reduce:

- the quantity of waste, including through the reuse of products or the extension of the life span of products
- the adverse impacts of the generated waste on the environment and human health
- the content of hazardous substances in materials and products

This class includes the following sub-class(es):

- 04010100 Prevention of solid waste pollution

Sub-class 04010100 Prevention of solid waste pollution

This sub-class includes production, installation, or maintenance of:

- processes that reduce the toxicity or volume of waste generated during production
 - o separation and reprocessing of materials within production processes before discarding

This sub-class also includes services related to:

- modifications to the production process to enable the use of cleaner inputs whose use produce less waste or less hazardous waste
- environmental engineering design and consultancy on cleaner products whose use produce less waste or less hazardous waste

This sub-class excludes:

- recovery of materials including processing of waste into secondary raw materials, see 0402

Class 040102 Collection and Transport of Waste

Collection of waste, either by municipal services or similar institutions or by public or private corporations, and its transport to the place of treatment or disposal.

‘Collection’ means the gathering of waste, including the preliminary sorting and preliminary storage of waste for the purposes of transport to a waste treatment facility.

‘Separate collection’ means the collection where a waste stream is kept separately by type and nature with a view to facilitate a specific treatment.

This class includes the following sub-class(es):

- 04010201 Goods for collection and transport of waste
- 04010202 Services for collection and transport of waste

Sub-class 04010201 Goods for collection and transport of waste

This sub-class includes production, installation, or maintenance of:

- waste collection vehicles
 - o garbage trucks
 - o specialised garbage trucks for waste separation
- waste collection equipment
 - o bins, waste containers and trash bags
 - o waste sorting bins and containers

This sub-class excludes:

- services for collection and transport of waste, see 04010202
- goods for collection and transport of high-level radioactive waste, see 06020200

Sub-class 04010202 Services for collection and transport of waste

This sub-class includes services related to:

- collection and transport of waste
 - o collection and transport of hazardous waste

- o collection and transport of demolition waste
- o street cleaning (i.e. clearing of litter and collection of garbage)
- separate collection and transport of waste fractions to facilitate recovery

This sub-class excludes:

- goods for collection and transport of waste, see 04010201
- services for collection and transport of high-level radioactive waste, see 06020200

Class 040103 Treatment and Disposal of Hazardous Waste

Activities, measures and products which change the physical, chemical, or biological character or composition of waste to render it non-hazardous, safer for transport, amenable for recovery or storage, or to reduce it in volume as well as operations of final disposal. A particular waste may undergo more than one treatment process.

Hazardous waste is waste which poses a substantial actual or potential hazard to human health or living organisms due to its toxic, infectious, radioactive, flammable or other character.

This class includes the following sub-class(es):

- 04010301 Goods for treatment and disposal of hazardous waste
- 04010302 Services for treatment and disposal of hazardous waste

Sub-class 04010301 Goods for treatment and disposal of hazardous waste

Physical treatment of hazardous waste fixes the waste in an inert, impervious matrix via phase separation and solidification.

Chemical treatment is used both to effect the complete breakdown of hazardous waste into non-toxic gases and, more usually, to modify the chemical properties of the waste, e.g. to reduce water solubility or to neutralise acidity or alkalinity.

Thermal treatment of hazardous waste converts hazardous waste into gases and incombustible solid residues via high-temperature oxidation. The flue gases are released into the atmosphere and any slag or ash produced is deposited in the landfill. The main technologies used in the incineration of hazardous waste are the rotary kiln, liquid injection, incinerator grates, multiple chamber incinerators, and fluidised bed incinerators. Residues from hazardous waste incineration may themselves be regarded as hazardous waste. The resulting thermal energy may or may not be used for producing steam, hot water, or electricity.

This sub-class includes production, installation, or maintenance of:

- compactors, tractors and dozers for handling hazardous waste

- hazardous waste treatment with no energy recovery
 - o physical treatment (e.g. waste compression, phase separation and solidification)
 - o chemical treatment
 - o thermal treatment (e.g. incineration, waste gasification and pyrolysis)
 - o biological treatment
- conditioning processes for hazardous waste

This sub-class excludes:

- services for treatment and disposal of hazardous waste, see 04010302
- goods for treatment and disposal of non-hazardous waste, see 04010401
- goods for treatment and disposal of high-level radioactive waste, see 06020200

Sub-class 04010302 Services for treatment and disposal of hazardous waste

Low-level radioactive waste is waste which does not require shielding during normal handling and transportation due to its low radionuclide content.

Disposal of waste is the final deposition of waste above or underground in controlled or uncontrolled fashion, in accordance with the sanitary, environmental or security requirements.

Landfill refers to final disposal of hazardous waste in or on land in a controlled way, which meets specific geological and technical criteria.

Underground disposal refers to temporary storage or final disposal of hazardous wastes underground that meet specific geological and technical criteria.

The scope excludes dumping at sea.

This sub-class includes construction, engineering, or architectural services related to:

- waste disposal sites for hazardous waste
 - o landfills
 - o underground disposal facilities

This sub-class also includes services related to:

- treatment of hazardous waste (including low-level radioactive waste)
- operation of landfills for disposal of hazardous waste

This sub-class excludes:

- energy from waste-to-energy plants, see 02010103 and 02020103
- biogas and biofuels from waste, see 02010105
- goods for treatment and disposal of hazardous waste, see 04010301
- services for treatment and disposal of non-hazardous waste, see 04010402
- recovery of materials including processing of waste into secondary raw materials, see 0402
- maintenance of soil and groundwater quality of landfills, see 0501
- services for treatment and disposal of high-level radioactive waste, see 06020200

Class 040104 Treatment and Disposal of Non-Hazardous Waste

Activities, measures and products which change the physical, chemical, or biological character or composition of waste to render it amenable for recovery or storage, or to reduce it in volume as well as operations of final disposal.

This class includes the following sub-class(es):

- 04010401 Goods for treatment and disposal of non-hazardous waste
- 04010402 Services for treatment and disposal of non-hazardous waste

Sub-class 04010401 Goods for treatment and disposal of non-hazardous waste

Incineration is the thermal treatment of waste during which chemically fixed energy in matter is transformed into thermal energy. Combustible compounds are transformed into combustion gases leaving the system as flue gases. Incombustible inorganic matters remain in the form of slag and fly ash.

This sub-class includes production, installation, or maintenance of:

- compactors, tractors and dozers for handling non-hazardous waste
- non-hazardous waste treatment with no energy recovery
 - o physical treatment (e.g. waste compression)
 - o chemical treatment
 - o thermal treatment (e.g. incineration)
 - o biological treatment
- composting processes for non-hazardous waste

This sub-class excludes:

- goods for treatment and disposal of hazardous waste, see 04010301
- services for treatment and disposal of non-hazardous waste, see 04010402
- goods for treatment and disposal of high-level radioactive waste, see 06020200

Sub-class 04010402 Services for treatment and disposal of non-hazardous waste

The scope excludes dumping at sea.

This sub-class includes construction, engineering, or architectural services related to:

- waste disposal sites for non-hazardous waste
 - o landfills
 - o underground disposal facilities

This sub-class also includes services related to:

- treatment of non-hazardous waste
- operation of landfills for disposal of non-hazardous waste

This sub-class excludes:

- energy from waste-to-energy plants, see 02010103 and 02020103
- biogas and biofuels from waste, see 02010105
- services for treatment and disposal of hazardous waste, see 04010302
- goods for treatment and disposal of non-hazardous waste, see 04010401
- recovery of materials including processing of waste into secondary raw materials, see 0402
- backfilling using demolition waste, see 04020203
- maintenance of soil and groundwater quality of landfills, see 0501
- services for treatment and disposal of high-level radioactive waste, see 06020200

Class 040105 Monitoring and Measurement for Waste Management

Activities, measures and products aimed at monitoring waste and waste management, for example the generation and storage of waste, their toxicity, etc.

This class includes the following sub-class(es):

- 04010501 Goods for monitoring and measurement for waste management

- 04010502 Services for monitoring and measurement for waste management

Sub-class 04010501 Goods for monitoring and measurement for waste management

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring waste
 - o level and tilt sensors
 - o waste tracking systems (e.g. Radio Frequency Identification (RFID) systems)

This sub-class excludes:

- services for monitoring and measurement for waste management, see 04010502
- goods for monitoring landfill leachate, see 05010501

Sub-class 04010502 Services for monitoring and measurement for waste management

This sub-class includes services related to:

- waste audits and surveys
- analysis of waste generation and composition patterns

This sub-class excludes:

- goods for monitoring and measurement for waste management, see 04010501
- services for monitoring landfill leachate, see 05010502

Class 040199 Others for Waste Management n.e.c.

All other activities, measures and products aimed at waste management.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0401 should be included here when they can be separated from other activities belonging to S-CEP 0401 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 04019900 Others for waste management n.e.c.

Sub-class 04019900 Others for waste management n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on waste management
- o campaigns to inform and encourage waste reduction
- o implementation of guidelines for waste prevention

Group 0402 MATERIALS RECOVERY AND SAVINGS

Activities, measures and products aiming to minimise the intake of natural resources through increased efficiency, substitution, recovery and reuse of materials.

Materials recovery activities can be allocated at the third level split by type of material. If for some “residual” materials recovery activities, no information is available to estimate the split by type of material, they should be distributed by convention according to the shares of recovery activities already allocated. If no materials recovery activities can be assigned to a specific material (wood, plastic, minerals or textiles) and there is no information in available sources for the calculation of relevant shares, the total value of the materials recovery activities must be reported by convention under S-CEP 040205. This rule applies only if no additional information can provide a proxy for a split between the pertinent S-CEP classes.

According to the European Environment Agency (EEA) Glossary, restoration of materials means any material found in the waste stream that can be put to a beneficial use, which may be for purposes other than the original use.

‘Recovery’ includes any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.

‘Material recovery’ means any recovery operation, other than energy recovery and the reprocessing into materials that are to be used as fuels or other means to generate energy.

‘Recycling’ means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material or for backfilling operations, but does not include energy recovery and the reprocessing into materials that are to be used as fuels.

The scope excludes:

- retail sale of second-hand goods in stores
- repair services of machinery, computers and peripheral equipment, consumer electronics, household appliances, home and garden equipment, etc.

This group includes the following class(es):

- 040201 Reduction of the Intake of Wood
- 040202 Reduction of the Intake of Minerals

- 040203 Reduction of the Intake of Fossil Fuels for Non-Energy Uses
- 040204 Reduction of the Intake of Natural Resources for Textiles
- 040205 Reduction of the Intake of Other Materials
- 040206 Monitoring and Measurement for Materials Recovery and Savings
- 040299 Others for Materials Recovery and Savings n.e.c.

Class 040201 Reduction of the Intake of Wood

Activities, measures and products aiming to minimise the intake of wood through increased efficiency, substitution, recovery and reuse of materials.

This class includes the following sub-class(es):

- 04020101 Reduction of the intake of wood through increased efficiency
- 04020102 Reduction of the intake of wood through substitution
- 04020103 Reduction of the intake of wood through recovery and reuse of materials

Sub-class 04020101 Reduction of the intake of wood through increased efficiency

This sub-class includes production, installation, or maintenance of:

- equipment that reduce the intake of timber resources during production
 - o wood-saving saws
 - o more efficient wood stoves and furnaces

This sub-class excludes:

- management of biodiversity and landscapes, see 0502
- management of forest resources, see 0503

Sub-class 04020102 Reduction of the intake of wood through substitution

This sub-class includes production of:

- wood-based products using substitute materials
 - o agricultural residue-based papers

Sub-class 04020103 Reduction of the intake of wood through recovery and reuse of materials

This sub-class includes operation, installation, or maintenance of:

- recycling facilities for recovery and reuse of wood and paper (including cardboard)
 - o processing wood waste into wood chips as secondary raw materials
 - o reuse of timber products (e.g. wooden pallets and crates)

This sub-class excludes:

- energy from waste-to-energy plants, see 02010103 and 02020103
- biogas and biofuels from waste, see 02010105
- collection and transport of waste to facilitate recovery, see 040102

Class 040202 Reduction of the Intake of Minerals

Activities, measures and products aiming to minimise the intake of minerals (metallic and non-metallic) through increased efficiency, substitution, recovery and reuse of materials.

This class includes the following sub-class(es):

- 04020201 Reduction of the intake of minerals through increased efficiency
- 04020202 Reduction of the intake of minerals through substitution
- 04020203 Reduction of the intake of minerals through recovery and reuse of materials

Sub-class 04020201 Reduction of the intake of minerals through increased efficiency

The scope excludes:

- management of mineral resources
 - o exploitation of mineral resource stocks (including exploration and discovery of new reserves)
 - o measures and activities that improve the efficiency of mineral resources extraction

This sub-class includes production, installation, or maintenance of:

- equipment that reduce the intake of minerals during production
 - o metal precision cutting machines
 - o metal additive manufacturing systems

This sub-class excludes:

- management of biodiversity and landscapes, see 0502

Sub-class 04020202 Reduction of the intake of minerals through substitution

This sub-class includes production of:

- mineral-based products using substitute materials
 - o wood-based materials or materials made of other abundant, renewable resource for construction

Sub-class 04020203 Reduction of the intake of minerals through recovery and reuse of materials

This sub-class includes operation, installation, or maintenance of:

- recycling facilities for recovery and reuse of mineral-based materials, scrap and end-of-life products
 - o mechanical demolition, crushing and shredding of metal waste from end-of-life products (e.g. used cars, washing machines, bikes, railway wagons and vessels)
 - o recovery of metals through chemical and thermal processes
 - o crushing, cleaning and sorting of glass or other waste (e.g. demolition waste) to obtain secondary raw materials
 - o backfilling using demolition waste
 - o reclaiming metals out of photographic waste (e.g. fixer solution or photographic films and paper)
 - o recycling of spent batteries and accumulators
 - o reuse of mineral-based products (e.g. metal drums)

This sub-class excludes:

- energy from waste-to-energy plants, see 02010103 and 02020103
- biogas and biofuels from waste, see 02010105
- collection and transport of waste to facilitate recovery, see 040102

Class 040203 Reduction of the Intake of Fossil Fuels for Non-Energy Uses

Activities, measures and products aiming to minimise the intake of fossil fuel resources for non-energy uses through increased efficiency, substitution, recovery and reuse of materials.

This class includes the following sub-class(es):

- 04020301 Reduction of the intake of fossil fuels for non-energy uses through increased efficiency
- 04020302 Reduction of the intake of fossil fuels for non-energy uses through substitution
- 04020303 Reduction of the intake of fossil fuels for non-energy uses through recovery and reuse of materials

Sub-class 04020301 Reduction of the intake of fossil fuels for non-energy uses through increased efficiency

The scope excludes the management of fossil energy resources.

This sub-class includes production, installation, or maintenance of:

- equipment and materials that reduce the intake of fossil fuel resources for non-energy uses (e.g. production of plastics, chemicals and rubber)
 - o additives to improve the production efficiency or product quality
 - o more efficient extrusion and injection moulding machines
 - o continuous flow chemistry systems

This sub-class excludes:

- management of biodiversity and landscapes, see 0502

Sub-class 04020302 Reduction of the intake of fossil fuels for non-energy uses through substitution

This sub-class includes production of:

- fossil fuel-based products using substitute materials
 - o bio-based sacks and bags (including paper bags) for replacing plastic bags
 - o bio-based plastics, composites, lubricants, solvents, detergents, paints, lacquers, varnishes and packaging, etc. which replace comparable and commonly used fossil fuel-based products

Sub-class 04020303 Reduction of the intake of fossil fuels for non-energy uses through recovery and reuse of materials

This sub-class includes operation, installation, or maintenance of:

- recycling facilities for recovery and reuse of fossil fuel-based materials
 - o processing of petrol-based waste into secondary raw materials
 - o recovery of plastic packaging and bottles through mechanical or chemical processes
 - o recovery of textiles from petrochemical materials
 - o recycling of inkjet and toner cartridges for printers
 - o reuse of plastic products (e.g. plastic containers and packaging)

This sub-class excludes:

- energy from waste-to-energy plants, see 02010103 and 02020103
- biogas and biofuels from waste, see 02010105
- collection and transport of waste to facilitate recovery, see 040102

Class 040204 Reduction of the Intake of Natural Resources for Textiles

Activities, measures and products aiming to minimise the intake of natural resources for producing textiles through increased efficiency, substitution, recovery and reuse of materials.

This class includes the following sub-class(es):

- 04020401 Reduction of the intake of natural resources for textiles through increased efficiency
- 04020402 Reduction of the intake of natural resources for textiles through substitution
- 04020403 Reduction of the intake of natural resources for textiles through recovery and reuse of materials

Sub-class 04020401 Reduction of the intake of natural resources for textiles through increased efficiency

This sub-class includes production, installation, or maintenance of:

- equipment that reduce the intake of natural resources for producing textiles
 - o pattern nesting systems to optimise material usage
 - o tension control systems to maintain textile quality

This sub-class excludes:

- management of water resources, see 0302
- management of biodiversity and landscapes, see 0502

Sub-class 04020402 Reduction of the intake of natural resources for textiles through substitution

This sub-class includes production of:

- textile products using substitute materials
- o textile products made from sustainable fibres

Sub-class 04020403 Reduction of the intake of natural resources for textiles through recovery and reuse of materials

This sub-class includes operation, installation, or maintenance of:

- recycling facilities for recovery and reuse of textiles
 - o recycling of clothing (made of wool, cotton and similar)
 - o recycling of household textiles (bed linen, towels and similar)
 - o recycling of home textiles (carpets, curtains and similar)
 - o recycling of technical textiles (medical textiles, textiles in vehicle construction and building industry)
 - o reuse of textiles (e.g. protective covers and cushions)

This sub-class excludes:

- energy from waste-to-energy plants, see 02010103 and 02020103
- biogas and biofuels from waste, see 02010105
- collection and transport of waste to facilitate recovery, see 040102

Class 040205 Reduction of the Intake of Other Materials

Activities, measures and products aiming to minimise the intake of other natural resources through increased efficiency, substitution, recovery and reuse of materials.

This class includes the following sub-class(es):

- 04020501 Reduction of the intake of other materials through increased efficiency
- 04020502 Reduction of the intake of other materials through substitution
- 04020503 Reduction of the intake of other materials through recovery and reuse of materials

Sub-class 04020501 Reduction of the intake of other materials through increased efficiency

This sub-class includes production, installation, or maintenance of:

- equipment that reduce the intake of other natural resources during production

This sub-class excludes:

- management of water resources, see 0302
- reduction of the intake of wood through increased efficiency, see 04020101
- reduction of the intake of minerals through increased efficiency, see 04020201
- reduction of the intake of fossil fuels for non-energy uses through increased efficiency, see 04020301
- reduction of the intake of natural resource for textiles through increased efficiency, see 04020401
- management of biodiversity and landscapes, see 0502

Sub-class 04020502 Reduction of the intake of other materials through substitution

This sub-class includes production of:

- other products using substitute materials

This sub-class excludes:

- reduction of the intake of wood through substitution, see 04020102
- reduction of the intake of minerals through substitution, see 04020202
- reduction of the intake of fossil fuels for non-energy uses through substitution, see 04020302
- reduction of the intake of natural resource for textiles through substitution, see 04020402

Sub-class 04020503 Reduction of the intake of other materials through recovery and reuse of materials

This sub-class includes operation, installation, or maintenance of:

- recycling facilities for recovery and reuse of other materials

This sub-class excludes:

- energy from waste-to-energy plants, see 02010103 and 02020103

- biogas and biofuels from waste, see 02010105
- collection and transport of waste to facilitate recovery, see 040102
- reduction of the intake of wood through recovery and reuse of materials, see 04020103
- reduction of the intake of minerals through recovery and reuse of materials, see 04020203
- reduction of the intake of fossil fuels for non-energy uses through recovery and reuse of materials, see 04020303
- reduction of the intake of natural resource for textiles through recovery and reuse of materials, see 04020403

Class 040206 Monitoring and Measurement for Materials Recovery and Savings

Activities, measures and products aimed at measuring and monitoring the reduction of the use of natural resources used as materials.

This class includes the following sub-class(es):

- 04020601 Goods for monitoring and measurement for materials recovery and savings
- 04020602 Services for monitoring and measurement for materials recovery and savings

Sub-class 04020601 Goods for monitoring and measurement for materials recovery and savings

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring materials recovery and savings
 - o material tracking systems
 - o inventory management systems

This sub-class excludes:

- services for monitoring and measurement of materials recovery and savings, see 04020602

Sub-class 04020602 Services for monitoring and measurement for materials recovery and savings

This sub-class includes services related to:

- life-cycle assessments
- material flow analysis

This sub-class excludes:

- goods for monitoring and measurement of materials recovery and savings, see 04020601

Class 040299 Others for Materials Recovery and Savings n.e.c.

All other activities, measures and products related to the reduction of intake of natural resources used as materials.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0402 should be included here when they can be separated from other activities belonging to S-CEP 0402 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 04029900 Others for materials recovery and savings n.e.c.

Sub-class 04029900 Others for materials recovery and savings n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on materials recovery and savings

Division 05 SOIL, SURFACE AND GROUNDWATER, BIODIVERSITY AND FOREST

Activities, measures and products aimed at protection and remediation of soil and water, biodiversity and forests.

The broad definition of the scope of S-CEP 05 can lead to some overlapping at the second level split between S-CEP 0501, S-CEP 0502 and S-CEP 0503, since forest resources and soil, groundwater and surface water are part of the landscapes. Arguably, in a specific area there can occur activities to preserve groundwater, to protect biodiversity or to avoid depletion of forest resources. Depending on the characteristics of the areas, the activities could have one, two or even three different purposes. In such cases the operational rule will be the following:

- allocation to S-CEP 0501 if it can be proved through laws, programmes or any other evidence that the activity has as its main environmental purpose the protecting of soil, groundwater and surface water
- allocation to S-CEP 0502 if it can be proved through laws, programmes or any other evidence that the activity has as its main environmental purpose the protection of biodiversity and landscapes or if there is no clear evidence in favour of the other two environmental domains (i.e. S-CEP 0501 or S-CEP 0503)
- allocation to S-CEP 0503 if it can be proved through laws, programmes or any other evidence that the activity has as its main environmental purpose the managing of forest resources

The scope excludes improving levels of water or soil quality in the areas in which the economic activity takes place whilst minimising any adverse impact on human health.

This division includes the following group(s):

- 0501 PROTECTION OF SOIL, SURFACE AND GROUNDWATER
- 0502 PROTECTION OF BIODIVERSITY AND LANDSCAPE
- 0503 MANAGEMENT OF FOREST RESOURCES

Group 0501 PROTECTION OF SOIL, SURFACE AND GROUNDWATER

Activities, measures and products aimed at the prevention of pollutant infiltration, cleaning up of soils and water bodies and the protection of soil from erosion and other physical degradation including salinisation.

The scope excludes conventional agricultural production.

This group includes the following class(es):

- 050101 Prevention of Pollutant Infiltration Into Soil and Water Bodies
- 050102 Cleaning Up of Soil and Water Bodies
- 050103 Protection From Erosion and Other Physical Degradation of Soil and Water

- 050104 Prevention and Remediation of Soil and Groundwater Salinity
- 050105 Monitoring and Measurement for Soil, Surface and Groundwater Protection
- 050199 Others for Soil, Surface and Groundwater Protection n.e.c.

Class 050101 Prevention of Pollutant Infiltration Into Soil and Water Bodies

Activities, measures and products aimed at reducing or eliminating the penetration of polluting substances into soil and water.

This class includes the following sub-class(es):

- 05010101 Strengthening of storage and handling facilities
- 05010102 Soil sealing and catchment for pollutant run-offs and leaks
- 05010103 Organic farming as well as agricultural and grazing practices

Sub-class 05010101 Strengthening of storage and handling facilities

This sub-class includes production, installation, or maintenance of:

- secondary containment systems for storage or transportation
 - o double-walled storage tanks
 - o spill pallets and containment basins

This sub-class excludes:

- prevention of wastewater pollution, see 03010100
- transport of waste, see 040102
- protection of soil and water from radiation, see 060201

Sub-class 05010102 Soil sealing and catchment for pollutant run-offs and leaks

This sub-class includes construction, engineering, or architectural services related to:

- soil sealing of industrial plants, landfills, etc. to prevent pollutant infiltration
- catchment areas for pollutant run-offs and leaks
 - o retention ponds
 - o infiltration basins

This sub-class excludes:

- prevention of wastewater pollution, see 03010100
- reservoirs for storing water in water supply networks, see 03020300
- protection of soil and water from radiation, see 060201

Sub-class 05010103 Organic farming as well as agricultural and grazing practices

According to Eurostat, organic farming is a way of agricultural production which uses organic production methods and places the highest emphasis on environmental and wildlife protection and, with regard to livestock production, on animal welfare considerations. Organic production involves holistic production management systems for crops and livestock, emphasizing on-farm management practices over off-farm inputs. This is accomplished by avoiding, or largely reducing, the use of synthetic chemicals such as fertilisers, pesticides (fungicides, herbicides, insecticides), additives and veterinary medicinal products, replacing them, wherever possible, with cultural, biological and mechanical methods. Organic producers develop a healthy, fertile soil by growing and rotating a mixture of crops and using clover to fix nitrogen from the atmosphere. The production of genetically-modified (GM) crops and their use in animal feed is avoided.

This sub-class includes growing of:

- crops using organic farming techniques (i.e. avoiding the use of synthetic chemicals)
- crops with managed grazing practices

This sub-class excludes:

- prevention of wastewater pollution, see 03010100
- hydroponics, aeroponics and other processes that reduce the intake of water during crop cultivation, see 03020100
- organic aquaculture, see 05010301
- protection of soil and water from radiation, see 060201

Class 050102 Cleaning Up of Soil and Water Bodies

Activities, measures and products to reduce the quantity of pollutants in soil and water bodies either in situ or in appropriate installations.

The scope excludes civil protection services.

This class includes the following sub-class(es):

- 05010201 Goods for cleaning up of soil and water bodies
- 05010202 Services for cleaning up of soil and water bodies

Sub-class 05010201 Goods for cleaning up of soil and water bodies

This sub-class includes production, installation, or maintenance of:

- grab dredgers
- containment booms and skimmers
- soil treatment systems
 - o biotechnological methods capable of intervening without affecting the site (i.e. use of enzymes, bacteria, etc.)
 - o physical and chemical methods (e.g. pervaporation, supercritical fluid extraction, soil vapour extraction and air sparging)

This sub-class excludes:

- goods for treatment of wastewater to prevent pollution, see 03010300
- goods for waste management, see 0401
- services for cleaning up of soil and water bodies, see 05010202
- goods for protection of soil and water from radiation, see 06020101

Sub-class 05010202 Services for cleaning up of soil and water bodies

This sub-class includes services related to:

- soil decontamination at former industrial sites, landfills, etc.
 - o separating, containing and recovering deposits
 - o extraction of buried casks and containers
 - o decanting and re-storage
 - o off-gas and liquid effluent drainage networks
 - o in situ or ex situ treatment of polluted soil
- decontamination and cleaning up of surface water following accidental pollution
 - o dredging of pollutants
 - o containment and recovery of pollutants
 - o application of chemicals
- cleaning up of oil spills on land, inland surface waters and seas, including coastal areas

This sub-class excludes:

- landfill gas recovery for energy uses, see 02010105
- services for treatment of wastewater to prevent pollution, see 03010300
- services for waste management, see 0401
- goods for cleaning up of soil and water bodies, see 05010201
- restoration of water bodies as aquatic habitats through artificial oxygenation and lime-neutralisation, see 05020102
- services for protection of soil and water from radiation, see 06020102

Class 050103 Protection From Erosion and Other Physical Degradation of Soil and Water

Activities, measures and products aimed at protecting soil from erosion and other physical and chemical degradation of soil and water (compacting, encrusting, marine water contamination, etc.).

Soil erosion is the detachment and movement of topsoil or soil material from the upper part of the profile by the action of wind or running water especially as a result of changes brought about by human activity (such as unsuitable or mismanaged agricultural methods).

The scope excludes the protection of settlements against natural hazards such as landslides.

This class includes the following sub-class(es):

- 05010301 Goods for protection from erosion and other physical degradation of soil and water
- 05010302 Services for protection from erosion and other physical degradation of soil and water

Sub-class 05010301 Goods for protection from erosion and other physical degradation of soil and water

This sub-class includes production, installation, or maintenance of:

- geotextile products for erosion control
 - o geobags
 - o erosion control blankets
- equipment for algae control
 - o ultrasonic algae control devices

This sub-class also includes growing of:

- cover crops for restoration of vegetal cover of soils

- buffer strips to maintain soil quality and reduce nutrient run-offs that enter water bodies
- aquatic organisms using organic aquaculture methods (i.e. natural or organic feed obtained from sustainable sources)

This sub-class excludes:

- services for protection from erosion and other physical degradation of soil and water, see 05010302
- goods for prevention and remediation of soil and groundwater salinity, see 05010401
- goods for soil protection inside forest areas, see 05030101
- goods for protection of soil and water from radiation, see 06020101

Sub-class 05010302 Services for protection from erosion and other physical degradation of soil and water

According to the European Union (EU), organic aquaculture is a system of farming and food production that is based on the organic objectives and principles set out in Regulation (EU) 2018/848. This includes feeding aquatic organisms with feed from sustainably exploited fisheries or with organic feed composed of agricultural ingredients resulting from organic production, and of natural non-agricultural substances.

This sub-class includes construction, engineering, or architectural services related to:

- anti-erosion walls

This sub-class also includes services related to:

- control of eutrophication and growth of green algae
 - o physical algae harvesting
 - o water circulation for destratification
- environmental engineering design and consultancy on sustainable agriculture

This sub-class excludes:

- goods for protection from erosion and other physical degradation of soil and water, see 05010301
- services for prevention and remediation of soil and groundwater salinity, see 05010402
- services for soil protection inside forest areas, see 05030102
- services for protection of soil and water from radiation, see 06020102

Class 050104 Prevention and Remediation of Soil and Groundwater Salinity

Activities, measures and products aimed at preventing salinisation or reducing salinity. Concrete actions will depend on climatic, geological and other country-specific factors.

The scope excludes activities that respond to economic purposes such as the reclamation of land from the sea.

This class includes the following sub-class(es):

- 05010401 Goods for prevention and remediation of soil and groundwater salinity
- 05010402 Services for prevention and remediation of soil and groundwater salinity

Sub-class 05010401 Goods for prevention and remediation of soil and groundwater salinity

This sub-class includes production, installation, or maintenance of:

- fertigation systems to prevent over-fertilisation

This sub-class also includes production of:

- soil amendments for salinity
 - o fertilisers for saline soil
 - o mulch to reduce salt accumulation in the soil

This sub-class excludes:

- drip irrigation systems that reduce the intake of water, see 03020100
- composting of non-hazardous waste, see 040104
- goods for protection from erosion and other physical degradation of soil and water, see 05010301
- services for prevention and remediation of soil and groundwater salinity, see 05010402
- goods for protection of soil and water from radiation, see 06020101

Sub-class 05010402 Services for prevention and remediation of soil and groundwater salinity

This sub-class includes services related to:

- management of groundwater tables

- o increased freshwater infiltration to avoid infiltration of seawater into groundwater bodies
- o lowering of groundwater tables when groundwater contains high levels of salts (e.g. long-term re-vegetation programmes and fertilisation planning)
- reclamation of saline soil
- o physical methods (e.g. scraping, flushing, deep ploughing and subsoiling)
- o applying organic amendments (e.g. green manure)
- management and protection of native vegetation to stop further loss and improve soil health (i.e. pH, fertility and structure)

This sub-class excludes:

- services for protection from erosion and other physical degradation of soil and water, see 05010302
- goods for prevention and remediation of soil and groundwater salinity, see 05010401
- services for protection of soil and water from radiation, see 06020102

Class 050105 Monitoring and Measurement for Soil, Surface and Groundwater Protection

Activities, measures and products aimed at monitoring the quality and pollution of soils, groundwater and surface water, measuring the extent of soil erosion and salinisation etc.

This class includes the following sub-class(es):

- 05010501 Goods for monitoring and measurement for soil, surface and groundwater protection
- 05010502 Services for monitoring and measurement for soil, surface and groundwater protection

Sub-class 05010501 Goods for monitoring and measurement for soil, surface and groundwater protection

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring soil, surface and groundwater
 - o agriculture sensors
 - o soil meters and landfill gas monitors
 - o autonomous drones

This sub-class excludes:

- services for monitoring and measurement for soil, surface and groundwater, see 05010502

Sub-class 05010502 Services for monitoring and measurement for soil, surface and groundwater protection

This sub-class includes services related to:

- soil and water contamination tests
- maps and databases of groundwater and surface water quality, soil pollution, erosion and salinity, etc.

This sub-class excludes:

- goods for monitoring and measurement for soil, surface and groundwater, see 05010501

Class 050199 Others for Soil, Surface and Groundwater Protection n.e.c.

All other activities, measures and products aimed at protecting and remediating soil, groundwater, surface water and marine waters.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0501 should be included here when they can be separated from other activities belonging to S-CEP 0501 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 05019900 Others for soil, surface and groundwater n.e.c.

Sub-class 05019900 Others for soil, surface and groundwater n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on protection of soil, surface and groundwater

Group 0502 PROTECTION OF BIODIVERSITY AND LANDSCAPE

Activities, measures and products aimed at protecting and replenishment of wild fauna and flora, safeguarding and restoring their habitats, ecosystems of which they are part, natural or semi-natural terrestrial, marine and other aquatic ecosystems.

Activities, measures and products are included in this class regardless of the type of areas involved (terrestrial, aquatic including wetlands, and marine areas) and whether they occur in areas which are classified as protected areas.

The scope excludes:

- farming and gardening activities, which is outside the scope of S-CEP classification except organic farming included under S-CEP 0501
 - o public gardens
- 'extraction' activities such as 'hunting' or 'fishing'

This group includes the following class(es):

- 050201 Protection and Rehabilitation of Species and Habitats
- 050202 Protection of Natural and Semi-Natural Landscapes
- 050203 Monitoring and Measurement for Protection of Biodiversity and Landscape
- 050299 Others for Protection of Biodiversity and Landscape n.e.c.

Class 050201 Protection and Rehabilitation of Species and Habitats

Activities, measures and products aimed at the conservation, reintroduction or recovery of wild fauna and flora (irrespective of whether threatened by extinction), the maintenance of their habitats, and the restoration, rehabilitation and reshaping of damaged habitats for the purpose of strengthening their natural functions. Activities aimed at the minimisation of the intake of wild flora and fauna for production purposes, through in-process modifications (IPMs), are also covered.

The scope excludes:

- management of zoos, oceanarium and aquarium
- control of weed to improve crop yield in agricultural production

This class includes the following sub-class(es):

- 05020101 Goods for protection and rehabilitation of species and habitats
- 05020102 Services for protection and rehabilitation of species and habitats

Sub-class 05020101 Goods for protection and rehabilitation of species and habitats

This sub-class includes production, installation, or maintenance of:

- equipment that reduce the impact on wild flora and fauna during production

- o wind turbine control systems to protect birds
- o warning sound systems to protect bats
- o fishing gear which reduce by-catch (e.g. lighted fishing nets)
- o pesticides with lower impact on wild flora

This sub-class excludes:

- goods for protection of soil, see 0501
- services for protection and rehabilitation of species and habitats, see 05020102
- goods for minimisation of the intake of wild growing forest products, see 05030101

Sub-class 05020102 Services for protection and rehabilitation of species and habitats

The special natural reserves include nature reserves conserved under the Parks and Trees Act 2006:

- Bukit Timah Nature Reserve
- Central Catchment Nature Reserve
- Sungei Buloh Wetland Reserve
- Labrador Nature Reserve

This sub-class includes construction, engineering, or architectural services related to:

- green bridges and tunnels for wildlife crossing

This sub-class also includes services related to:

- habitat restoration and enhancement
 - o restoration of water bodies as aquatic habitats through artificial oxygenation and lime-neutralisation
 - o re-naturalisation of river banks
 - o restoration of orchards and hedges
 - o artificial nesting structures
 - o tree guards and fencings to protect trees or plants from mechanical or chemical damage
- conservation of genetic heritage and diversity
 - o monitoring and restricting (placing bans on) exploitation, trade, etc. of specific animal and plant species

- o operation of gene reserves or banks (e.g. seed banks to store and conserve seeds of plant species)

- wildlife rescue and rehabilitation

- o feeding of the young

- o provision of veterinary care

- species management and conservation

- o control of native species impacted by human development (e.g. boar and deer)

- o control of invasive alien species that pose a threat to native fauna, flora and habitats

- o re-introduction of locally extinct species and species repopulation

- management of special natural reserves

- o botanical conservation areas

- humane pest control

- o bee relocation

This sub-class excludes:

- services for protection of soil, see 0501

- goods for protection and rehabilitation of species and habitats, see 05020101

- services for minimisation of the intake of wild growing forest products, see 05030102

Class 050202 Protection of Natural and Semi-Natural Landscapes

Activities, measures and products aimed at protecting natural and semi-natural landscapes to maintain and increase their ecological value.

The scope excludes:

- protection and rehabilitation of historic monuments

- increase of aesthetic values for economic purposes

- o re-landscaping to increase the value of real estates

- protection of predominantly built-up landscapes

- o maintenance of recreational structures and spaces such as urban parks and gardens, golf courses and other sports facilities

- o management of city greenery and green spaces along roads

This class includes the following sub-class(es):

- 05020200 Protection of natural and semi-natural landscapes

Sub-class 05020200 Protection of natural and semi-natural landscapes

This sub-class includes construction, engineering, or architectural services related to:

- burying electricity lines

This sub-class also includes services related to:

- protection of degraded landscapes
 - o environmental rehabilitation of abandoned mining and quarrying sites
 - o renaturation of artificial lakes and bogs
- preservation of legally protected natural objects
- biodiversity and landscape protection related to agriculture
 - o maintenance of traditional agricultural landscapes that are threatened by prevailing economic conditions

This sub-class excludes:

- protection of soil, surface and groundwater, see 0501
- reforestation, afforestation and forest-related land management, see 050301

Class 050203 Monitoring and Measurement for Protection of Biodiversity and Landscape

Monitoring, analysis and inspection activities, measures and products which are not classified under the preceding items.

This class includes the following sub-class(es):

- 05020301 Goods for monitoring and measurement for protection of biodiversity and landscape
- 05020302 Services for monitoring and measurement for protection of biodiversity and landscape

Sub-class 05020301 Goods for monitoring and measurement for protection of biodiversity and landscape

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring biodiversity and landscape

- o camera traps
- o tracking collars
- o bioacoustic recorders

This sub-class excludes:

- services for monitoring and measurement for biodiversity and landscape, see 05020302

Sub-class 05020302 Services for monitoring and measurement for protection of biodiversity and landscape

This sub-class includes services related to:

- censuses, inventories and databases of flora and fauna

This sub-class excludes:

- goods for monitoring and measurement for biodiversity and landscape, see 05020301

Class 050299 Others for Protection of Biodiversity and Landscape n.e.c.

All other activities, measures and products aimed at protecting species and habitats and landscapes.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0502 should be included here when they can be separated from other activities belonging to S-CEP 0502 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 05029900 Others for protection of biodiversity and landscape n.e.c.

Sub-class 05029900 Others for protection of biodiversity and landscape n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on protection of biodiversity and landscape
 - o general government activities for preserving stocks through the enforcement of quotas, regulation, monitoring, control and police functions (e.g. for fishing activities)

Group 0503 MANAGEMENT OF FOREST RESOURCES

Activities, measures and products related to the conservation and replenishment of timber stocks and sustainable management of forests.

The management of forest resources concerns all types of forests (planted, natural or naturally regenerated according to System of Environmental Economic Accounting (SEEA) classification) in both forests available for wood supply and forests not available for wood supply, but excluding the management of protected areas and nature conservation activities (S-CEP 0502).

This group includes the following class(es):

- 050301 Reforestation, Afforestation and Forest-Related Land Management
- 050302 Protection Against Forest Fires
- 050303 Monitoring and Measurement of Forest Resources
- 050399 Others for Management of Forest Resources n.e.c.

Class 050301 Reforestation, Afforestation and Forest-Related Land Management

Activities, measures and products aimed at restoration, maintenance, replenishment or development of new forest areas.

The scope excludes:

- roundwood production (both industrial roundwood and fuelwood)
- extraction of non-wood forest products (mushrooms, truffles, berries, nuts, balata and other rubber-like gums, cork, lac and resins, balsams, vegetable hair, eelgrass, acorns, horse chestnuts, mosses and lichens)
- reforestation, afforestation and management of invasive alien tree species for timber production
- machinery associated with timber extraction
- pest control using chemical agents (of non-biological origin)
- construction of buildings, unless serving exclusively forest-related environmental purposes

This class includes the following sub-class(es):

- 05030101 Goods for reforestation, afforestation and forest-related land management
- 05030102 Services for reforestation, afforestation and forest-related land management

Sub-class 05030101 Goods for reforestation, afforestation and forest-related land management

This sub-class includes production, installation, or maintenance of:

- equipment dedicated to silviculture

This sub-class also includes growing of:

- coppice, pulpwood and fire wood
- standing timber (i.e. planting, replanting, transplanting, thinning and conserving of forests and timber tracts)

This sub-class excludes:

- goods for protection of soil outside forest areas, see 0501
- goods for protection of biodiversity in forest areas and control of invasive alien tree species, see 05020101
- services for reforestation, afforestation and forest-related land management, see 05030102

Sub-class 05030102 Services for reforestation, afforestation and forest-related land management

This sub-class includes services related to:

- operation of forest tree nurseries
- forest-related land improvements
 - o soil conservation, fertilisation and liming to improve soil properties
 - o terracing works to reduce erosion
 - o reclamation of unproductive land and land from sea for forestry
- biological and mechanical control of pests

This sub-class excludes:

- services for protection of soil outside forest areas, see 0501
- services for protection of biodiversity in forest areas and control of invasive alien tree species, see 05020102
- goods for reforestation, afforestation and forest-related land management, see 05030101

Class 050302 Protection Against Forest Fires

Activities, measures and products aimed at the prevention and control of forest fires.

The scope excludes machinery associated with fire protection, unless serving exclusively to fight forest fire.

This class includes the following sub-class(es):

- 05030200 Protection against forest fires

Sub-class 05030200 Protection against forest fires

This sub-class includes services related to:

- creation of firebreaks

Class 050303 Monitoring and Measurement of Forest Resources

Activities, measures and products aimed at monitoring the management of the forest resources.

This class includes the following sub-class(es):

- 05030301 Goods for monitoring and measurement of forest resources
- 05030302 Services for monitoring and measurement of forest resources

Sub-class 05030301 Goods for monitoring and measurement of forest resources

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring forest resources
 - o dendrometers and biomass estimation tools
 - o thermal imaging cameras
 - o remote sensing systems (e.g. geographic information systems (GIS) and satellite imagery)

This sub-class excludes:

- services for monitoring and measurement of forest resources, see 05030302

Sub-class 05030302 Services for monitoring and measurement of forest resources

This sub-class includes services related to:

- management of forestry inventories

- monitoring of forest health for disease and pest damages
 - o timber evaluation
 - o tracking of forest pest populations
- forest fire risk assessments
- forest certifications

This sub-class excludes:

- goods for monitoring and measurement of forest resources, see 05030301

Class 050399 Others for Management of Forest Resources n.e.c.

All other activities, measures and products aimed at sustainable management of forest resources.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0503 should be included here when they can be separated from other activities belonging to S-CEP 0503 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 05039900 Others for management of forest resources n.e.c.

Sub-class 05039900 Others for management of forest resources n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on management of forest resources

Division 06 NOISE AND RADIATION

Activities, measures and products aimed at the control, reduction and abatement of industrial and transport noise and the reduction or elimination of the negative consequences of particle radiation emitted from any source.

This division includes the following group(s):

- 0601 PROTECTION AGAINST NOISE AND VIBRATION
- 0602 PROTECTION AGAINST RADIATION

Group 0601 PROTECTION AGAINST NOISE AND VIBRATION

Activities, measures and products aimed at the control, reduction and abatement of industrial and transport noise.

Noise abatement measures and activities are often also related to insulation and therefore energy savings. As an operational rule, activities are classified in S-CEP 0601 only if the laws or programs (public or private) governing these activities mention noise (or vibration) abatement as their single main objective. In all other cases, they should be classified under S-CEP 0202.

The scope excludes the abatement of noise and vibration for purposes of protection for employees in the workplace.

This group includes the following class(es):

- 060101 Prevention and Reduction of Noise and Vibration
- 060102 Monitoring and Measurement for Protection Against Noise and Vibration
- 060199 Others for Protection Against Noise and Vibration n.e.c.

Class 060101 Prevention and Reduction of Noise and Vibration

Activities, measures and products aimed at reducing noise and vibration from industrial equipment, vehicle motors, aircraft and ships engines, exhaust systems and brakes, or noise level due to tyre/road or wheel/rail surface contact and activities and measures aimed at installing and managing anti-noise/anti-vibration facilities.

This class includes the following sub-class(es):

- 06010101 Goods for prevention and reduction of noise and vibration
- 06010102 Services for prevention and reduction of noise and vibration

Sub-class 06010101 Goods for prevention and reduction of noise and vibration

This sub-class includes production, installation, or maintenance of:

- equipment and materials that reduce noise and vibration
 - o noise barriers and noise protective windows
 - o acoustic panels and curtain walls
 - o anti-vibration mounts
 - o damping materials
 - o silent asphalt and multi-layered surfaces
 - o screens, embankments or hedges
 - o low noise level flares and burners

This sub-class excludes:

- services for prevention and reduction of noise and vibration, see 06010102
- goods for protection of ambient media against radiation, see 06020101

Sub-class 06010102 Services for prevention and reduction of noise and vibration

This sub-class includes construction, engineering, or architectural services related to:

- adaptation of railways, roads and vehicles to limit transport noise
 - o soundproofing of hoods, brakes, exhaust systems, silencers, etc.
 - o soundproofing of railways and highways
- adaptation of buildings and facilities to limit industrial and vicinity noise
 - o soundproofing of buildings (e.g. dancing halls)
 - o plant modifications and add-on facilities (e.g. covering and soundproofing of machines and piping, and fuel regulation systems)
 - o specially conceived foundations to absorb vibrations
 - o regrouping of buildings and facilities in the interest of noise abatement
 - o special facilities in building construction or reconstruction

This sub-class excludes:

- insulation of buildings to improve energy efficiency, see 02020201
- goods for prevention and reduction of noise and vibration, see 06010101

- services for protection of ambient media against radiation, see 06020102

Class 060102 Monitoring and Measurement for Protection Against Noise and Vibration

Activities, measures and products aimed at monitoring the level of noise and vibration.

This class includes the following sub-class(es):

- 06010201 Goods for monitoring and measurement for protection against noise and vibration
- 06010202 Services for monitoring and measurement for protection against noise and vibration

Sub-class 06010201 Goods for monitoring and measurement for protection against noise and vibration

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring level of noise and vibration
 - o sound level meters
 - o mobile equipment in urban areas, observation networks, etc.

This sub-class excludes:

- services for monitoring and measurement for protection against noise and vibration, see 06010202
- goods for monitoring and measurement of radioactivity, see 06020301

Sub-class 06010202 Services for monitoring and measurement for protection against noise and vibration

This sub-class includes services related to:

- assessments of noise and vibration impacts
- noise monitoring and mapping
- operation of stationary measurement and monitoring sites for noise and vibration

This sub-class excludes:

- goods for monitoring and measurement for protection against noise and vibration, see 06010201
- services for monitoring and measurement of radioactivity, see 06020302

Class 060199 Others for Protection Against Noise and Vibration n.e.c.

All other activities, measures and products aimed at noise and vibration abatement.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0601 should be included here when they can be separated from other activities belonging to S-CEP 0601 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 06019900 Others for protection against noise and vibration n.e.c.

Sub-class 06019900 Others for protection against noise and vibration n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on protection against noise and vibration
 - o trainings or campaigns to raise awareness of noise issues
- development of noise reduction action plans when relevant measures can be traced as a distinct activity
 - o financial incentives for the production and use of low-noise vehicles
 - o labelling or information programmes for consumers which encourage the use of low-noise vehicles and low-noise driving
- traffic management
 - o introduction of time and geographical restrictions for noisy vehicles
 - o bypass roads which divert traffic from residential areas
 - o creation of pedestrian areas
 - o creation of construction-free buffer zones

Group 0602 PROTECTION AGAINST RADIATION

Activities, measures and products aimed at the reduction or elimination of the negative consequences of particle radiation emitted from any source.

Radioactive waste is defined as any material that contains or is contaminated with radionuclides at concentrations or radioactivity levels greater than the "exempt quantities" established by the competent authorities, and for which no use is foreseen. Radioactive wastes are produced at nuclear power plants and at associated nuclear fuel cycle facilities as well as through other uses of radioactive material, for example, the use of radionuclides in hospitals and research

establishments. Other important wastes are those from mining and milling of uranium and from the reprocessing of spent fuel.

The scope excludes:

- activities and measures related to the prevention of technological hazards (e.g. external safety of nuclear power plants)
- protection activities taken at workplaces
- activities and measures relating to electromagnetic and acoustic radiation

This group includes the following class(es):

- 060201 Protection of Ambient Media Against Radiation
- 060202 Transport and Treatment of High-Level Radioactive Waste
- 060203 Monitoring and Measurement of Radioactivity
- 060299 Others for Protection Against Radiation n.e.c.

Class 060201 Protection of Ambient Media Against Radiation

Activities, measures and products for the protection of soil, air and water and other ambient media from radiation.

This class includes the following sub-class(es):

- 06020101 Goods for protection of ambient media against radiation
- 06020102 Services for protection of ambient media against radiation

Sub-class 06020101 Goods for protection of ambient media against radiation

This sub-class includes production, installation, or maintenance of:

- radiation shielding materials made from lead and concrete
- air purifiers with high-efficiency particulate air filters or active carbon filters for removing radioactive particles

This sub-class excludes:

- goods for reducing greenhouse gas emissions into the ambient air, see 0101
- goods for reducing emissions of pollutants other than greenhouse gases into the ambient air, see 0102
- goods for protection of soil and water, see 0501

- services for protection of ambient media against radiation, see 06020102
- goods for transport and treatment of high-level radioactive waste, see 06020200

Sub-class 06020102 Services for protection of ambient media against radiation

This sub-class includes services related to:

- adaptation of water treatment technologies to protect ambient media from radiation
 - o carbon filtration
 - o ion exchange water softening
- other protection activities such as screening and creation of buffer zones

This sub-class excludes:

- services for reducing greenhouse gas emissions into the ambient air, see 0101
- services for reducing emissions of pollutants other than greenhouse gases into the ambient air, see 0102
- services for protection of soil and water, see 0501
- goods for protection of ambient media against radiation, see 06020101
- services for transport and treatment of high-level radioactive waste, see 06020200

Class 060202 Transport and Treatment of High-Level Radioactive Waste

Activities, measures and products related to any process designed for the transport, conditioning, containment or underground disposal, recovery and use of high-level radioactive waste.

High-level radioactive waste is waste that requires shielding during normal handling and transportation because of its high radionuclide content.

This class includes the following sub-class(es):

- 06020200 Transport and treatment of high-level radioactive waste

Sub-class 06020200 Transport and treatment of high-level radioactive waste

This sub-class includes services related to:

- collection, conditioning, handling, transport and treatment of high-level radioactive waste for disposal or recovery

- underground disposal of high-level radioactive waste (including the construction of burial sites for radioactive waste and the manufacturing and installation of relating equipment)

This sub-class excludes:

- collection, transport, treatment and disposal of low-level radioactive waste, see 0401
- recovery of low-level radioactive waste, see 0402
- protection of ambient media against radiation, see 060201

Class 060203 Monitoring and Measurement of Radioactivity

Activities, measures and products aimed at monitoring ambient radioactivity and radioactivity due to high-level radioactive waste by means of specific equipment, instruments and installations.

This class includes the following sub-class(es):

- 06020301 Goods for monitoring and measurement of radioactivity
- 06020302 Services for monitoring and measurement of radioactivity

Sub-class 06020301 Goods for monitoring and measurement of radioactivity

This sub-class includes production, installation, or maintenance of:

- equipment and technologies for monitoring and measuring radioactivity
 - o radioactive level measurement apparatus
 - o nuclear level sensors
 - o nuclear densometers

This sub-class excludes:

- goods for monitoring and measurement for protection against noise and vibration, see 06010201
- services for monitoring and measurement of radioactivity, see 06020302

Sub-class 06020302 Services for monitoring and measurement of radioactivity

Technical measures must comply with the Radiation Protection (Ionising Radiation) Regulations under the National Environmental Agency (NEA).

This sub-class includes services related to:

- technical testing of radiation levels
 - o dosimetry services
 - o radiation survey meter calibration services
 - o radio frequency radiation and electromagnetic field measurement services
- operation of stationary measurement and monitoring sites for radioactivity

This sub-class excludes:

- services for monitoring and measurement for protection against noise and vibration, see 06010202
- goods for monitoring and measurement of radioactivity, see 06020301

Class 060299 Others for Protection Against Radiation n.e.c.

All other activities, measures and products related to protecting ambient media against radiation.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0602 should be included here when they can be separated from other activities belonging to S-CEP 0602 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 06029900 Others for protection against radiation n.e.c.

Sub-class 06029900 Others for protection against radiation n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on protection against radiation
 - o application of licence or permit related to treatment and transportation of radioactive waste

Division 07 RESEARCH AND DEVELOPMENT

R&D for developing the stock of knowledge related to the prevention and elimination of all forms of pollution and the preservation of natural resources stocks. This includes the conception of new applications of available knowledge in the field of environmental protection and resource management.

Research and development (R&D) comprises “creative and systematic work undertaken in order to increase the stock of knowledge...and to devise new applications of available knowledge” (see Frascati manual, OECD 2015) in the field of environmental protection. Environmental R&D is classified in accordance with the 2007 NABS (Nomenclature for the Analysis and Comparison of Scientific Programmes and Budgets).

The scope includes:

- identification and analysis of sources of pollution (including climate change), mechanisms of dispersion of pollutants in the environment as well as their effects on human beings and the biosphere
- resource management oriented R&D
- R&D oriented towards equipment and instruments for pollution/resource use (including treatment, abatement, measurement and analysis)

This division includes the following group(s):

- 0701 R&D FOR REDUCTION AND CONTROL OF AIR EMISSIONS
- 0702 R&D FOR ENERGY
- 0703 R&D FOR WASTEWATER MANAGEMENT
- 0704 R&D FOR WATER RESOURCES
- 0705 R&D FOR WASTE MANAGEMENT
- 0706 R&D FOR MATERIALS RECOVERY AND SAVINGS
- 0707 R&D FOR SOIL, SURFACE AND GROUNDWATER, AND BIODIVERSITY
- 0708 R&D FOR FOREST MANAGEMENT
- 0709 R&D FOR NOISE AND RADIATION
- 0710 R&D FOR TRANSPORT
- 0711 R&D FOR FINANCE AND CARBON TRADING

Group 0701 R&D FOR REDUCTION AND CONTROL OF AIR EMISSIONS

R&D related to the reduction of air emissions and/or concentration of air pollutants.

This group includes the following class(es):

- 070101 R&D for Reduction and Control of Greenhouse Gases
- 070102 R&D for Reduction and Control of Other Air Pollutants

Class 070101 R&D for Reduction and Control of Greenhouse Gases

R&D related to the reduction and/or concentration of greenhouse gases.

This class includes the following sub-class(es):

- 07010100 R&D for reduction and control of greenhouse gases

Sub-class 07010100 R&D for reduction and control of greenhouse gases

This sub-class includes research and development for:

- products and services that reduce or control greenhouse gases
 - o monitoring and reporting of greenhouse gases
- carbon capture, utilisation and storage (CCUS) processes
 - o sequestration of CO₂
 - o converting CO₂ to methanol
 - o methanation and hydrogen upgrading processes using renewable energy

This sub-class excludes:

- R&D for reduction and control of other air pollutants, see 07010200
- R&D for transport, see 07100000

Class 070102 R&D for Reduction and Control of Other Air Pollutants

R&D related to the reduction and/or concentration of other air pollutants.

This class includes the following sub-class(es):

- 07010200 R&D for reduction and control of other air pollutants

Sub-class 07010200 R&D for reduction and control of other air pollutants

This sub-class includes research and development for:

- products and services that reduce or control other air pollutants

- o monitoring and reporting of pollutants other than greenhouse gases

This sub-class excludes:

- R&D for reduction and control of greenhouse gases, see 07010100
- R&D for transport, see 07100000

Group 0702 R&D FOR ENERGY

R&D related to renewable energy and energy savings and management.

This group includes the following class(es):

- 070201 R&D for Renewables
- 070202 R&D for Energy Savings

Class 070201 R&D for Renewables

R&D related to renewable energy.

This class includes the following sub-class(es):

- 07020100 R&D for renewables

Sub-class 07020100 R&D for renewables

This sub-class includes research and development for:

- renewable energy sources
 - o hydrogen derivatives
 - o waste-to-energy conversion using renewable fraction of waste

This sub-class excludes:

- R&D for energy savings, see 07020200
- R&D for waste management, see 07050000
- R&D for transport, see 07100000

Class 070202 R&D for Energy Savings

R&D related to energy savings and management.

This class includes the following sub-class(es):

- 07020200 R&D for energy savings

Sub-class 07020200 R&D for energy savings

This sub-class includes research and development for:

- energy savings and management
 - o energy efficient buildings
- smart grid technologies
 - o advanced meters and sensors

This sub-class excludes:

- R&D for renewables, see 07020100
- R&D for transport, see 07100000

Group 0703 R&D FOR WASTEWATER MANAGEMENT

R&D related to treating wastewater (up to environmental standards or quality norms).

This group includes the following class(es):

- 070300 R&D for Wastewater Management

Class 070300 R&D for Wastewater Management

R&D related to treating wastewater (up to environmental standards or quality norms).

This class includes the following sub-class(es):

- 07030000 R&D for wastewater management

Sub-class 07030000 R&D for wastewater management

This sub-class includes research and development for:

- membrane technologies for wastewater treatment
- upcycling wastewater for industrial use

This sub-class excludes:

- R&D for water resources, see 07040000

Group 0704 R&D FOR WATER RESOURCES

R&D related to safeguarding stocks of water.

This group includes the following class(es):

- 070400 R&D for Water Resources

Class 070400 R&D for Water Resources

R&D related to safeguarding stocks of water.

This class includes the following sub-class(es):

- 07040000 R&D for water resources

Sub-class 07040000 R&D for water resources

This sub-class includes research and development for:

- smart water management solutions
- desalination with renewable energy

This sub-class excludes:

- R&D for wastewater management, see 07030000
- R&D for soil, surface and groundwater, see 07070100

Group 0705 R&D FOR WASTE MANAGEMENT

R&D related to waste management.

This group includes the following class(es):

- 070500 R&D for Waste Management

Class 070500 R&D for Waste Management

R&D related to waste management.

This class includes the following sub-class(es):

- 07050000 R&D for waste management

Sub-class 07050000 R&D for waste management

This sub-class includes research and development for:

- synthetic biology on waste management
- smart waste management technologies

This sub-class excludes:

- R&D for waste-to-energy conversion using renewable fraction of waste, see 07020100
- R&D for materials recovery and savings, see 07060000
- R&D for radiation, see 07090200

Group 0706 R&D FOR MATERIALS RECOVERY AND SAVINGS

R&D related to materials recovery.

This group includes the following class(es):

- 070600 R&D for Materials Recovery and Savings

Class 070600 R&D for Materials Recovery and Savings

R&D related to materials recovery.

This class includes the following sub-class(es):

- 07060000 R&D for materials recovery and savings

Sub-class 07060000 R&D for materials recovery and savings

This sub-class includes research and development for:

- biodegradable materials
- recovery of metals

This sub-class excludes:

- R&D for waste management, see 07050000

Group 0707 R&D FOR SOIL, SURFACE AND GROUNDWATER, AND BIODIVERSITY

R&D related to the protection and remediation of soil, water surface, groundwater and biodiversity.

This group includes the following class(es):

- 070701 R&D for Soil, Surface and Groundwater
- 070702 R&D for Biodiversity

Class 070701 R&D for Soil, Surface and Groundwater

R&D related to the protection and remediation of soil, water surface and groundwater.

This class includes the following sub-class(es):

- 07070100 R&D for soil, surface and groundwater

Sub-class 07070100 R&D for soil, surface and groundwater

This sub-class includes research and development for:

- biosensors for monitoring soil and water quality
- agriculture biotechnologies

This sub-class excludes:

- R&D for biodiversity, see 07070200
- R&D for forest management, see 07080000

Class 070702 R&D for Biodiversity

R&D related to the protection of biodiversity.

This class includes the following sub-class(es):

- 07070200 R&D for biodiversity

Sub-class 07070200 R&D for biodiversity

This sub-class includes research and development for:

- biodiversity conservation strategies
 - o ecological corridors

This sub-class excludes:

- R&D for soil, surface and groundwater, see 07070100
- R&D for forest management, see 07080000

Group 0708 R&D FOR FOREST MANAGEMENT

R&D related to forest management.

This group includes the following class(es):

- 070800 R&D for Forest Management

Class 070800 R&D for Forest Management

R&D related to forest management.

This class includes the following sub-class(es):

- 07080000 R&D for forest management

Sub-class 07080000 R&D for forest management

This sub-class includes research and development for:

- forest inventory technologies
- rainforest ecology

This sub-class excludes:

- R&D for soil, surface and groundwater, see 07070100
- R&D for biodiversity, see 07070200

Group 0709 R&D FOR NOISE AND RADIATION

R&D related to the reduction and abatement of industrial and transport noise and the reduction or elimination of the negative consequences of particle radiation emitted from any source.

This group includes the following class(es):

- 070901 R&D for Noise and Vibration
- 070902 R&D for Radiation

Class 070901 R&D for Noise and Vibration

R&D related to the reduction and abatement of industrial and transport noise.

This class includes the following sub-class(es):

- 07090100 R&D for noise and vibration

Sub-class 07090100 R&D for noise and vibration

This sub-class includes research and development for:

- noise monitoring technologies
- noise mitigation and cancellation technologies

This sub-class excludes:

- R&D for radiation, see 07090200

Class 070902 R&D for Radiation

R&D related to the reduction or elimination of the negative consequences of particle radiation emitted from any source.

This class includes the following sub-class(es):

- 07090200 R&D for radiation

Sub-class 07090200 R&D for radiation

This sub-class includes research and development for:

- radiation monitoring technologies
- radiation shielding materials

This sub-class excludes:

- R&D for noise and vibration, see 07090100

Group 0710 R&D FOR TRANSPORT

R&D related to cleaner-energy vehicles and supporting services or infrastructure.

This group includes the following class(es):

- 071000 R&D for Transport

Class 071000 R&D for Transport

R&D related to cleaner-energy vehicles and supporting services or infrastructure.

This class includes the following sub-class(es):

- 07100000 R&D for transport

Sub-class 07100000 R&D for transport

This sub-class includes research and development for:

- battery technologies
- smart charging infrastructure
- life-cycle assessments of electric vehicle batteries

This sub-class excludes:

- R&D for reduction and control of greenhouse gases, see 07010100
- R&D for reduction and control of other air pollutants, see 07010200
- R&D for renewables, see 07020100
- R&D for energy savings, see 07020200

Group 0711 R&D FOR FINANCE AND CARBON TRADING

R&D related to green financial instruments and carbon trading.

This group includes the following class(es):

- 071100 R&D for Finance and Carbon Trading

Class 071100 R&D for Finance and Carbon Trading

R&D related to green financial instruments and carbon trading.

This class includes the following sub-class(es):

- 07110000 R&D for finance and carbon trading

Sub-class 07110000 R&D for finance and carbon trading

This sub-class includes research and development for:

- new financial products, services, or technologies that support environmental objectives
- carbon pricing mechanisms

Division 08 CROSS-CUTTING AND OTHER ENVIRONMENTAL PURPOSES

All education, training, information provision and general administration (ETIGA) activities, measures and products related to environmental protection and resource management in the case that they cannot be classified in other S-CEP classes.

This division includes the following group(s):

- 0801 ENVIRONMENTAL EDUCATION AND TRAINING
- 0802 GENERAL ENVIRONMENTAL ADMINISTRATION, MANAGEMENT, REGULATION, DISSEMINATION AND CONSULTANCY
- 0803 OTHER ENVIRONMENTAL PURPOSES

Group 0801 ENVIRONMENTAL EDUCATION AND TRAINING

Activities, measures and products aimed at providing general environmental education or training and disseminating environmental information not elsewhere classified.

This group includes the following class(es):

- 080100 Environmental Education and Training

Class 080100 Environmental Education and Training

Activities, measures and products aimed at providing general environmental education or training and disseminating environmental information not elsewhere classified.

This class includes the following sub-class(es):

- 08010000 Environmental education and training

Sub-class 08010000 Environmental education and training

This sub-class includes education, training, information provision and general administration (ETIGA) activities related to:

- pre-university programs, university degrees or special courses specifically aimed at training for environmental protection and resource management
- continuing education programmes aimed at training for environmental protection and resource management
- environmental reports, environmental training tools (including web sites or platforms)

Group 0802 GENERAL ENVIRONMENTAL ADMINISTRATION, MANAGEMENT, REGULATION, DISSEMINATION AND CONSULTANCY

Administration, management and support to decisions regarding environmental protection and resource management by government and non-government bodies.

This group includes the following class(es):

- 080200 General Environmental Administration, Management, Regulation, Dissemination and Consultancy

Class 080200 General Environmental Administration, Management, Regulation, Dissemination and Consultancy

Administration, management and support to decisions regarding environmental protection and resource management by government and non-government bodies.

This class includes the following sub-class(es):

- 08020000 General environmental administration, management, regulation, dissemination and consultancy

Sub-class 08020000 General environmental administration, management, regulation, dissemination and consultancy

This sub-class includes services related to:

- environmental regulations by the government
- preparation of declarations or permission requests for environmental purposes
- internal environmental management
- environmental certification processes (ISO 14000, environmental management)
- activities of units specialised in environmental consultancy, supervision and analysis

Group 0803 OTHER ENVIRONMENTAL PURPOSES

This position groups together all environmental protection and resource management activities, measures and products that cannot be classified under other S-CEP classes.

This group includes the following class(es):

- 080300 Other Environmental Purposes

Class 080300 Other Environmental Purposes

This position groups together all environmental protection and resource management activities, measures and products that cannot be classified under other S-CEP classes.

This class includes the following sub-class(es):

- 08030000 Other environmental purposes

Sub-class 08030000 Other environmental purposes

This sub-class includes services related to:

- international financial aid for environmental protection or resource management (due to difficulties in attributing international aid to individual S-CEP classes)

Division 09 TRANSPORT

Activities, measures and products aimed at the production of cleaner-energy vehicles and related components, infrastructure and supporting services for cleaner-energy transport, and cleaner-energy transport services.

Cleaner-energy vehicles include electric land transport vehicles (except hybrids), electric or hybrid water transport vehicles, and electric or hybrid air transport vehicles. Hybrid land transport vehicles are outside the scope of S-CEP classification as electric land transport vehicles are already commercially viable while electric water and air transport vehicles are still in development.

The scope excludes conventional land transport vehicles that are equipped with an internal combustion engine only, that run on compressed natural gas, liquefied petroleum gas, biofuel or other combustible fuel.

This division includes the following group(s):

- 0901 PRODUCTION OF CLEANER-ENERGY VEHICLES AND RELATED COMPONENTS
- 0902 INFRASTRUCTURE AND SUPPORTING SERVICES FOR CLEANER-ENERGY TRANSPORT
- 0903 CLEANER-ENERGY TRANSPORT SERVICES

Group 0901 PRODUCTION OF CLEANER-ENERGY VEHICLES AND RELATED COMPONENTS

Activities, measures and products aimed at the production of cleaner-energy vehicles and related components.

This group includes the following class(es):

- 090101 Production of Cleaner-Energy Vehicles
- 090102 Production of Components of Cleaner-Energy Vehicles
- 090199 Others for Production of Cleaner-Energy Vehicles and Related Components n.e.c.

Class 090101 Production of Cleaner-Energy Vehicles

Activities, measures and products aimed at the production of cleaner-energy vehicles.

This class includes the following sub-class(es):

- 09010101 Cleaner-energy land transport vehicles
- 09010102 Cleaner-energy ships and boats
- 09010103 Cleaner-energy aircrafts

Sub-class 09010101 Cleaner-energy land transport vehicles

Electric or hydrogen fuel cell cars have to qualify for Band A1 in the Vehicular Emissions Scheme (VES) under the National Environment Agency (NEA) and Land Transport Authority (LTA).

The scope excludes:

- autonomous or self-driving motor vehicles that are non-electric, hybrid, or do not use hydrogen fuel cells as fuel is not included
- hybrid or mild-hybrid cars (i.e. cars equipped with a small electric motor for dynamic start and stop of the combustion engine during driving that enables prolonged coasting)

This sub-class includes production of:

- electric or hydrogen fuel cell land transport vehicles
 - o electric or hydrogen fuel cell motor vehicles
 - o electric trains
 - o electric personal mobility devices or personal mobility aids
 - o electric bicycles and power-assisted bicycles
 - o electric airside fleets

This sub-class excludes:

- cleaner-energy garbage trucks, see 04010201
- cleaner-energy ships and boats, see 09010102
- cleaner-energy aircrafts, see 09010103

Sub-class 09010102 Cleaner-energy ships and boats

Cleaner-energy ships and boats must meet the requirements of the Green Ship Programme (or Green Craft Programme for licenced harbour craft) under the Maritime and Port Authority (MPA). Details of the Green Ship Programme can be found on MPA's website.

The scope excludes autonomous/self-driving ships and boats that are non-electric or do not use zero/near-zero emissions fuel.

This sub-class includes production of:

- electric, zero/near-zero emissions fuel, or 100% biofuel powered ships and boats
 - o electric ships and boats

- o hybrid ships and boats
- o zero/near-zero emissions fuel powered ships and boats (e.g. methanol, ammonia, hydrogen)

This sub-class excludes:

- cleaner-energy land transport vehicles, see 09010101
- cleaner-energy aircrafts, see 09010103

Sub-class 09010103 Cleaner-energy aircrafts

The scope excludes:

- autonomous or self-driving airplanes that are non-electric or do not use low-carbon fuel
- unmanned aerial vehicles or drones

This sub-class includes production of:

- electric or low-carbon fuel powered aircrafts
 - o electric aircrafts
 - o hydrogen-powered aircrafts
 - o hybrid-electric aircrafts

This sub-class excludes:

- cleaner-energy land transport vehicles, see 09010101
- cleaner-energy ships and boats, see 09010102

Class 090102 Production of Components of Cleaner-Energy Vehicles

Activities, measures and products aimed at the production of components of cleaner-energy vehicles.

This class includes the following sub-class(es):

- 09010201 Components of cleaner-energy land transport vehicles
- 09010202 Components of cleaner-energy ships and boats
- 09010203 Components of cleaner-energy aircrafts

Sub-class 09010201 Components of cleaner-energy land transport vehicles

The scope excludes:

- technical and electric equipment not installed in electric land transport vehicles
- other non-technical components

This sub-class includes production, installation, or maintenance of:

- technical components for electric land transport vehicles
 - o batteries, fuel cells and electric motors

This sub-class excludes:

- components of cleaner-energy ships and boats, see 09010202
- components of cleaner-energy aircrafts, see 09010203

Sub-class 09010202 Components of cleaner-energy ships and boats

The scope excludes:

- technical and electric equipment not installed in electric, zero/near-zero emissions fuel, or 100% biofuel powered ships and boats
- other non-technical components

This sub-class includes production, installation, or maintenance of:

- technical components for electric, zero/near-zero emissions fuel, or 100% biofuel powered ships and boats
 - o batteries, fuel cells and electric motors
 - o marine scrubbers
 - o engines capable of utilising or compatible with zero/near-zero emissions fuel or 100% biofuel

This sub-class excludes:

- components of cleaner-energy land transport vehicles, see 09010201
- components of cleaner-energy aircrafts, see 09010203

Sub-class 09010203 Components of cleaner-energy aircrafts

The scope excludes:

- technical and electric equipment not installed in electric or low-carbon fuel powered aircrafts
- other non-technical components

This sub-class includes production, installation, or maintenance of:

- technical components for electric or low-carbon fuel powered aircrafts
 - o batteries, fuel cells and electric motors

This sub-class excludes:

- components of cleaner-energy land transport vehicles, see 09010201
- components of cleaner-energy ships and boats, see 09010202

Class 090199 Others for Production of Cleaner-Energy Vehicles and Related Components n.e.c.

All other activities, measures and products related to the production of cleaner-energy vehicles and related components.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0901 should be included here when they can be separated from other activities belonging to S-CEP 0901 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 09019900 Others for production of cleaner-energy vehicles and related components n.e.c.

Sub-class 09019900 Others for production of cleaner-energy vehicles and related components n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on cleaner-energy vehicles and related components

Group 0902 INFRASTRUCTURE AND SUPPORTING SERVICES FOR CLEANER-ENERGY TRANSPORT

Activities, measures and products aimed at infrastructure and supporting services for cleaner-energy vehicles.

This group includes the following class(es):

- 090201 Infrastructure and Supporting Services for Cleaner-Energy Land Transport Vehicles

- 090202 Infrastructure and Supporting Services for Cleaner-Energy Ships and Boats
- 090203 Infrastructure and Supporting Services for Cleaner-Energy Aircrafts
- 090299 Others for Infrastructure and Supporting Services for Cleaner-Energy Transport n.e.c.

Class 090201 Infrastructure and Supporting Services for Cleaner-Energy Land Transport Vehicles

Activities, measures and products aimed at infrastructure and supporting services for cleaner-energy land transport vehicles.

This class includes the following sub-class(es):

- 09020101 Infrastructure for cleaner-energy land transport vehicles
- 09020102 Supporting services for cleaner-energy land transport vehicles

Sub-class 09020101 Infrastructure for cleaner-energy land transport vehicles

The scope excludes:

- construction of bypass roads which divert traffic from residential areas and creation of pedestrian areas
- construction of Park Connector Network and parking spaces

This sub-class includes operation, installation, or maintenance of:

- infrastructure supporting cleaner-energy land transport vehicles
 - o electric vehicles charging points
 - o hydrogen fuelling stations
 - o battery swapping stations

This sub-class excludes:

- supporting services for cleaner-energy land transport vehicles, see 09020102

Sub-class 09020102 Supporting services for cleaner-energy land transport vehicles

The scope excludes inspection, repair and maintenance services for conventional land transport vehicles.

This sub-class includes services related to:

- repair and maintenance of cleaner-energy land transport vehicles

- inspection of cleaner-energy land transport vehicles

This sub-class excludes:

- infrastructure for cleaner-energy land transport vehicles, see 09020101

Class 090202 Infrastructure and Supporting Services for Cleaner-Energy Ships and Boats

Activities, measures and products aimed at transport infrastructure and supporting services for cleaner-energy ships and boats.

This class includes the following sub-class(es):

- 09020201 Infrastructure for cleaner-energy ships and boats
- 09020202 Supporting services for cleaner-energy ships and boats

Sub-class 09020201 Infrastructure for cleaner-energy ships and boats

The scope excludes conventional bunkering infrastructure.

This sub-class includes operation, installation, or maintenance of:

- infrastructure supporting cleaner-energy ships and boats
 - o shore-to-ship power or alternative maritime power (cold ironing)
 - o alternative gaseous maritime fuel bunkering such as hydrogen

This sub-class excludes:

- supporting services for cleaner-energy ships and boats, see 09020202

Sub-class 09020202 Supporting services for cleaner-energy ships and boats

The scope excludes inspection, repair and maintenance services for conventional ships and boats.

This sub-class includes services related to:

- repair and maintenance of cleaner-energy ships and boats
- inspection of cleaner-energy ships and boats

This sub-class excludes:

- infrastructure for cleaner-energy ships and boats, see 09020201

Class 090203 Infrastructure and Supporting Services for Cleaner-Energy Aircrafts

Activities, measures and products aimed at transport infrastructure and supporting services for cleaner-energy aircrafts.

This class includes the following sub-class(es):

- 09020301 Infrastructure for cleaner-energy aircrafts
- 09020302 Supporting services for cleaner-energy aircrafts

Sub-class 09020301 Infrastructure for cleaner-energy aircrafts

This sub-class includes operation, installation, or maintenance of:

- infrastructure supporting cleaner-energy aircrafts
 - o electrical ground power and preconditioned air for stationary aircrafts
- air traffic management systems to reduce aviation emissions

This sub-class excludes:

- electric airside fleets, see 09010101
- supporting services for cleaner-energy aircrafts, see 09020302

Sub-class 09020302 Supporting services for cleaner-energy aircrafts

The scope excludes inspection, repair and maintenance services for conventional aircrafts.

This sub-class includes services related to:

- repair and maintenance of cleaner-energy aircrafts
- inspection of cleaner-energy aircrafts

This sub-class excludes:

- electric airside fleets, see 09010101
- infrastructure for cleaner-energy aircrafts, see 09020301

Class 090299 Others for Infrastructure and Supporting Services for Cleaner-Energy Transport n.e.c.

All other activities, measures and products related to infrastructure and supporting services for cleaner-energy vehicles.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0902 should be included here when they can be separated from other activities belonging to S-CEP 0902 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 09029900 Others for infrastructure and supporting services for cleaner-energy transport n.e.c.

Sub-class 09029900 Others for infrastructure and supporting services for cleaner-energy transport n.e.c.

The scope excludes traffic management.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on infrastructure and supporting services for cleaner-energy transport
 - o exhibitions on sustainable transport planning (e.g. SG Mobility Gallery under the Land Transport Authority (LTA))

Group 0903 CLEANER-ENERGY TRANSPORT SERVICES

Activities, measures and products aimed at cleaner-energy transport services.

This group includes the following class(es):

- 090301 Transport Services Using Cleaner-Energy Land Transport Vehicles
- 090302 Transport Services Using Cleaner-Energy Ships and Boats
- 090303 Transport Services Using Cleaner-Energy Aircrafts
- 090399 Others for Cleaner-Energy Transport Services n.e.c.

Class 090301 Transport Services Using Cleaner-Energy Land Transport Vehicles

Activities, measures and products aimed at passenger and freight transport services using cleaner-energy land transport vehicles.

This class includes the following sub-class(es):

- 09030101 Passenger transport services using cleaner-energy land transport vehicles
- 09030102 Freight transport services using cleaner-energy land transport vehicles

Sub-class 09030101 Passenger transport services using cleaner-energy land transport vehicles

The scope excludes the provision of public transport services using conventional and hybrid land transport vehicles.

This sub-class includes services related to:

- passenger land transport using electric or hydrogen fuel cell vehicles
 - o public transportation
 - o street-hails and ride-hails
- sharing and leasing of passenger vehicles
 - o electric cars
 - o electric personal mobility devices
 - o electric bicycles and power-assisted bicycles

This sub-class excludes:

- cleaner-energy land transport vehicles, see 09010101
- freight transport services using cleaner-energy land transport vehicles, see 09030102

Sub-class 09030102 Freight transport services using cleaner-energy land transport vehicles

This sub-class includes services related to:

- freight land transport using electric or hydrogen fuel cell vehicles
 - o last-mile deliveries
- sharing and leasing of freight vehicles
 - o electric vans and lorries

This sub-class excludes:

- cleaner-energy land transport vehicles, see 09010101
- passenger transport services using cleaner-energy land transport vehicles, see 09030101

Class 090302 Transport Services Using Cleaner-Energy Ships and Boats

Activities, measures and products aimed at passenger and freight transport services using cleaner-energy ships and boats.

This class includes the following sub-class(es):

- 09030201 Passenger transport services using cleaner-energy ships and boats
- 09030202 Freight transport services using cleaner-energy ships and boats

Sub-class 09030201 Passenger transport services using cleaner-energy ships and boats

The scope excludes the provision of public transport services using conventional ships and boats.

This sub-class includes services related to:

- passenger water transport using electric, zero/near-zero emissions fuel, or 100% biofuel powered ships and boats
- sharing and chartering of passenger ships and boats
 - o electric boats, yachts, ferries and harbour craft

This sub-class excludes:

- cleaner-energy ships and boats, see 09010102
- freight transport services using cleaner-energy ships and boats, see 09030202

Sub-class 09030202 Freight transport services using cleaner-energy ships and boats

This sub-class includes services related to:

- freight water transport using electric, zero/near-zero emissions fuel, or 100% biofuel powered ships and boats
- sharing and chartering of freight ships and boats
 - o electric cargo vessels

This sub-class excludes:

- cleaner-energy ships and boats, see 09010102
- passenger transport services using cleaner-energy ships and boats, see 09030201

Class 090303 Transport Services Using Cleaner-Energy Aircrafts

Activities, measures and products aimed at passenger and freight transport services using cleaner-energy aircrafts.

This class includes the following sub-class(es):

- 09030301 Passenger transport services using cleaner-energy aircrafts
- 09030302 Freight transport services using cleaner-energy aircrafts

Sub-class 09030301 Passenger transport services using cleaner-energy aircrafts

The scope excludes the provision of public transport services using conventional aircrafts.

This sub-class includes services related to:

- passenger air transport using electric or hydrogen-powered aircrafts
- sharing and chartering of passenger aircrafts

This sub-class excludes:

- cleaner-energy aircrafts, see 09010103
- freight transport services using cleaner-energy aircrafts, see 09030302

Sub-class 09030302 Freight transport services using cleaner-energy aircrafts

This sub-class includes services related to:

- freight air transport using electric or hydrogen-powered aircrafts
- sharing and chartering of freight aircrafts

This sub-class excludes:

- cleaner-energy aircrafts, see 09010103
- passenger transport services using cleaner-energy aircrafts, see 09030301

Class 090399 Others for Cleaner-Energy Transport Services n.e.c.

All other activities, measures and products related to cleaner-energy transport services.

Education, training, information provision and general administration (ETIGA) activities specific to S-CEP 0903 should be included here when they can be separated from other activities belonging to S-CEP 0903 and from similar activities related to other S-CEP classes.

This class includes the following sub-class(es):

- 09039900 Others for cleaner-energy transport services n.e.c.

Sub-class 09039900 Others for cleaner-energy transport services n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on cleaner-energy transport services

Division 10 FINANCE AND CARBON TRADING

Activities, measures and products aimed at channelling financial flows towards environmental protection or resource management through financial instruments, and trading of carbon credits.

Activities have to meet the requirements of the Green category definition outlined under the Singapore-Asia Taxonomy for Sustainable Finance (2023). The Green category definition for the Taxonomy is activities that contribute substantially to climate change mitigation by operating at near zero emissions, or are on a 1.5°C-aligned pathway. This encompasses both activities that are already near zero and those that are not near zero but are aligned with the 1.5°C pathway.

The scope includes activities, measures and products of finance and carbon trading that contribute to environmental objectives.

This division includes the following group(s):

- 1001 GREEN FINANCIAL INSTRUMENTS
- 1002 CARBON TRADING

Group 1001 GREEN FINANCIAL INSTRUMENTS

Activities, measures and products aimed at channelling financial flows towards environmental protection or resource management through financial instruments.

This group includes the following class(es):

- 100101 Provision of Financial Intermediary Services on Green Loans
- 100102 Green Debt and Equity Financing Services
- 100103 Consultancy, Monitoring, Reporting and Verification Activities Related to Green Financial Instruments
- 100199 Others for Green Financial Instruments n.e.c.

Class 100101 Provision of Financial Intermediary Services on Green Loans

Activities, measures and products aimed at the provision of financial intermediary services on green loans.

This class includes the following sub-class(es):

- 10010100 Provision of financial intermediary services on green loans

Sub-class 10010100 Provision of financial intermediary services on green loans

This sub-class includes services related to:

- provision of financial intermediary services on green loans
 - o green loans under the Green and Sustainability-Linked Loan Grant Scheme by the Monetary Authority of Singapore (MAS)
 - o Enterprise Financing Scheme - Green under EnterpriseSG
 - o issuance of green loans
- provision of brokerage activities on green loans

Class 100102 Green Debt and Equity Financing Services

Activities, measures and products aimed at green debt and equity financing services.

This class includes the following sub-class(es):

- 10010200 Green debt and equity financing services

Sub-class 10010200 Green debt and equity financing services

This sub-class includes services related to:

- underwriting and issuance of green bonds
 - o sovereign green bonds
 - o statutory boards' green bonds
- provision of equity financing on green solutions
 - o private equity and venture capital financing services
- provision of portfolio management services
 - o asset allocation and risk management services

Class 100103 Consultancy, Monitoring, Reporting and Verification Activities Related to Green Financial Instruments

Activities, measures and products aimed at the provision of consultancy, monitoring, verification services and disclosure obligations on green financial instruments.

This class includes the following sub-class(es):

- 10010300 Consultancy, monitoring, reporting and verification activities related to green financial instruments

Sub-class 10010300 Consultancy, monitoring, reporting and verification activities related to green financial instruments

Climate reporting must comply with the requirements of the sustainability reporting regime under the Singapore Exchange Regulation (SGX RegCo).

This sub-class includes services related to:

- emissions-based financial assessments
 - o reporting of carbon emissions
- reporting of climate-related financial risks and opportunities
- verification of green finance disclosure obligations

Class 100199 Others for Green Financial Instruments n.e.c.

All other activities, measures and products related to green financial instruments.

This class includes the following sub-class(es):

- 10019900 Others for green financial instruments n.e.c.

Sub-class 10019900 Others for green financial instruments n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on green financial instruments

Group 1002 CARBON TRADING

Activities, measures and products aimed at the trading and sale of carbon credits.

Carbon credits have to meet the Eligibility Criteria under the International Carbon Credit (ICC) Framework. The Eligibility Criteria requires ICCs to represent emissions reductions or removals that occur within the timeframe specified under Article 6 of the Paris Agreement, and meet seven principles to demonstrate high environmental integrity.

This group includes the following class(es):

- 100201 Carbon Trading Services

- 100202 Consultancy, Monitoring, Reporting and Verification Activities Related to Carbon Trading
- 100299 Others for Carbon Trading n.e.c.

Class 100201 Carbon Trading Services

Activities, measures and products aimed at the provision of carbon trading services.

This class includes the following sub-class(es):

- 10020100 Carbon trading services

Sub-class 10020100 Carbon trading services

This sub-class includes services related to:

- carbon credit trading and setting up of carbon market exchange
 - o exchange platform management service
 - o carbon credit sourcing

This sub-class excludes:

- issuance of carbon credits, see 10020200

Class 100202 Consultancy, Monitoring, Reporting and Verification Activities Related to Carbon Trading

Activities, measures and products aimed at the provision of consultancy, monitoring, verification services and disclosure obligations on issuance of carbon credits and emissions certificates.

This class includes the following sub-class(es):

- 10020200 Consultancy, monitoring, reporting and verification activities related to carbon trading

Sub-class 10020200 Consultancy, monitoring, reporting and verification activities related to carbon trading

This sub-class includes services related to:

- management of registry on carbon credits and certificates
 - o certifications

o issuance of carbon credits

Class 100299 Others for Carbon Trading n.e.c.

All other activities, measures and products related to carbon trading.

This class includes the following sub-class(es):

- 10029900 Others for carbon trading n.e.c.

Sub-class 10029900 Others for carbon trading n.e.c.

This sub-class includes other activities related to:

- education, training, information provision and general administration (ETIGA) activities on carbon trading