

# **Indicative list of Environmental Goods and Services in Analytical Summary and comparison to other lists**

TESSD Working Group on Environmental Goods and Services  
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# Outline

- Indicative lists of environmental goods and services in TESSD
- Comparison to other lists of environmental goods
- Comparison to other lists of environmental services
- Type of provisions linked to EGS in regional agreements and initiatives

# Indicative lists of environmental goods and services in TESSD (I)

- Living document of TESSD WG on Environmental Goods and Services: Analytical Summary
  - Identification of (i) indicative lists of EGS; (ii) trade barriers and supply chain bottlenecks; (iii) developing country perspectives; and (iv) opportunities and approaches to promote and facilitate trade in EGS
  - At MC13, February 2024: WT/MIN(24)/11/Add.3
  - Latest working document: INF/TE/SSD/W/24/Rev.7
- Focus so far on renewable energy (solar, wind, hydro, geothermal, marine, biofuels, green hydrogen); addition of water management under objective of CC adaptation
- Objective-based approach used for identification of EGS
  - Key goods to develop renewable energy and to allow renewable energy to achieve climate change goals
    - Relevance / related policy aspects is provided for each good
  - Services related to the development, installation, operation and decommissioning of renewable energy projects
    - Example / comment is provided for each service

# Indicative lists of environmental goods and services in TESSD (II)

- Lists of goods and services are understood to be indicative and do not aim to be exhaustive.
  - To be refined and expanded in Working Group
- Tables in body and in Annex (link to HS 2022 codes for goods and CPC 2.1 for services) of Analytical Summary
  - 63 goods – linked to 35 unique HS 6-digits and 13 unique HS 4-digits; 4 goods have no HS code assigned
  - N:N – (i) one good can be linked to more than one HS code; (ii) one HS code can be linked to more than one good

Category	Good	Relevance	HS 2022	Description
Solar	Solar PV cells	Product in the global PV industry chain.	854142	Photovoltaic cells not assembled in modules or made up into panels
Solar	Monitoring and control systems	Optimize the use of solar energy by allowing users to monitor the performance of their solar energy systems and make necessary adjustments.	902830	Electricity supply or production meters, incl. calibrating meters therefor
			903031	Multimeters for voltage, current, resistance or electrical power, without recording device
			903032	Multimeters with recording device
			903082	Instruments and apparatus for measuring or checking semiconductor wafers or devices, incl. integrated circuits
Wind	Rotor	The rotor extracts kinetic energy from the air and converts this into rotational energy in the drive train.	841280	Engines and motors (excl. steam turbines, internal combustion piston engine, hydraulic turbines, water wheels, gas turbines, reaction engines, hydraulic power engines and motors, pneumatic power engines and motors and electric motors)
			841290	Parts of non-electrical engines and motors, n.e.s.
Wind	Blades	Capture the energy in the wind and transfer torque to the drive train in the nacelle.	841290	Parts of non-electrical engines and motors, n.e.s.
Wind	Hubs	Connects the blades to the main shaft.	841290	Parts of non-electrical engines and motors, n.e.s.
			732599	Cast articles of iron or steel, n.e.s. (excl. articles of non-malleable cast iron, and grinding balls and similar articles for mills)

# Overview of selected environmental goods lists

	Year	No. HS 6-digit	Categories (No. of HS subheadings in brackets)
TESSD	2024	35	Renewable energy: Solar (11); Wind (10), Hydropower (1); Green Hydrogen (12); Biofuels (1)
Singapore-Australia Green Economy Agreement (SAGEA)	2022	372	Renewable Energy Production and Storage (103) Clean Transportation (59) Environmental Monitoring, Analysis and Assessment (49) Recycled, Recovered or Remanufactured Goods (37) Energy Efficient Technologies and Products (33) Environmentally Preferable Materials and Products (31) Solid and Hazardous Waste Management (17) Water and Wastewater Treatment (16) Air, Water, Soil Pollution Prevention, Control, and Remediation (16) Natural Resource and Environment Conservation (11)
EU-NZ FTA	2023	48	Energy efficiency (11) Renewable energy (37): geothermal, hydro, solar and wind energy
UK-NZ FTA	2022	293	No categorization
APEC	2012	54	Renewable Energy (15); Environmental Monitoring Analysis and Assessment Equipment (15); Management of Solid and Hazardous Waste and Recycling Systems (12); Air Pollution Control (5); Waste Water Management and Potable Water Treatment (5); Natural risk management (1); Environmentally Preferable Products (1)

# Overlap in HS codes between TESSD and recent lists

- Comparison to three Agreements: SAGEA; EU-NZ; and NZ-UK
  - Based on HS 6-digit codes (in a few cases the different lists assign the same HS codes to different EGs)
- 11 goods in TESSD list are included in 3 other agreements
  - Solar: PV modules (854143) and cells (854142), silicon wafers (381800), polysilicon (280461), water heaters (841912), electric generating sets (850239)
  - Wind: Gearbox (848340), generator (850231), rotor (841290), towers (730820)
  - Hydro: Intake gates (730890)
- 13 goods in TESSD list are included in 2 other agreements
  - Solar: Monitoring and control systems (903031 & \*32 & \*82); Smart-grid technologies (903289)
  - Wind: Power converter (850440); Electrical equipment: panels (853710) & meters (902830); meteorological equipment (901580)
- 7 goods in TESSD list are included in 1 other agreements
  - Wind: Rotor (841280)
  - Green hydrogen (280410); hydrogen compressor (841490); steel container (731100); hydrogen fuel cell (850690); On-board hydrogen tank (761300)
- 4 goods in TESSD list are included in 0 other agreements
  - Wind: Hubs (732599)
  - Green hydrogen: Pipelines (730411 & \*19); On-board hydrogen tanks (870899)

HS 2022	Good in TESSD list	Category	SAGEA	EU-NZ	NZ-UK
854143	Solar PV modules / panels	Solar energy	1	1	1
854142	Solar PV cells	Solar energy	1	1	1
381800	Silicon wafers	Solar energy	1	1	1
280461	Polysilicon	Solar energy	1	1	1
841912	Solar water heaters	Solar energy	1	1	1
850239	Solar power electric generating sets	Solar energy	1	1	1
848340	Gearbox	Wind energy	1	1	1
850231	Generator	Wind energy	1	1	1
841290	Rotor	Wind energy	1	1	1
730820	Towers	Wind energy	1	1	1
730890	Intake gates (sluice gates or head gates)	Hydropower	1	1	1
280469	Polysilicon	Solar energy	1		1
903031	Monitoring and control systems	Solar energy	1		1
903032	Monitoring and control systems	Solar energy	1		1
903082	Monitoring and control systems	Solar energy	1		1
903289	Smart-grid technologies	Solar energy	1		1
850440	Power converter	Wind energy	1		1
853710	Electrical equipment: panels	Wind energy	1	1	
902830	Electrical equipment: meters	Wind energy	1		1
901580	Meteorological equipment / sensors	Wind energy	1		1
854330	Electrolysers	Green hydrogen	1		1
841480	Hydrogen compressor	Green hydrogen	1		1
850133	Hydrogen fuel cells	Green hydrogen	1		1
850680	Hydrogen fuel cells	Green hydrogen	1		1
841280	Rotor	Wind energy		1	
280410	Green hydrogen	Green hydrogen	1		
841490	Hydrogen compressor	Green hydrogen	1		
731100	Steel containers / tanks	Green hydrogen	1		
850690	Hydrogen fuel cells	Green hydrogen	1		
761300	On-board hydrogen tanks	Green hydrogen	1		
382600	Renewable diesel	Biofuels	1		
732599	Hubs	Wind energy			
730411	Pipelines	Green hydrogen			
730419	Pipelines	Green hydrogen			
870899	On-board hydrogen tanks	Green hydrogen			

Overlap in HS codes between TESSD and recent lists

# Overview of selected environmental services lists

TESSD – Analytical Summary (Rev. 6)	APEC 2021 - Reference List of Environmental and Environmentally Related Services - CPC 2.1 & prov	Singapore-Australia Green Economy Agreement (SAGEA) - CPC 2.1 & prov	EU-NZ Free Trade Agreement – CPC prov.
<p>• <b>28</b> Services (<b>40</b> CPC 2.1 codes) related to the development, installation, operation and decommissioning of renewable energy projects</p> <p>Latest revision of analytical summary (Rev.7) added services and examples/comments related to climate adaptation (water management).</p>	<p>• <b>44</b> services that directly relate to environmental conditions (incl. core environmental services CPC 94);</p> <p>• <b>20</b> services that directly contribute to the design, construction and operation of facilities or equipment determined to improve environmental conditions</p> <p>Professional services in the list are considered environmentally related when they require specific training or knowledge reg. the env. impact of such facilities</p> <p>Categories:</p> <ul style="list-style-type: none"> <li>• Air pollution control or avoidance,</li> <li>• Environmental monitoring, analysis or assessment;</li> <li>• Environmental remediation or clean-up;</li> <li>• Improvement of energy efficiency;</li> <li>• Natural risk management;</li> <li>• Noise or vibration abatement;</li> <li>• Production of cleaner or renewable energy;</li> <li>• Protection of biodiversity or landscape (incl. natural resources protection);</li> <li>• Solid or hazardous waste management;</li> <li>• Wastewater management;</li> <li>• Water supply or treatment</li> <li>• <i>Recycling (update 2023)</i></li> <li>• <i>Support forest ecosystem functioning (update 2023)</i></li> </ul>	<p>• <b>37</b> services which are environmental in and of themselves;</p> <p>• <b>118</b> services (<i>use of ex-outs</i>) which may be environmental when done in support of an environmental outcome, which may include:</p> <ul style="list-style-type: none"> <li>○ services used for the design, construction and operation of facilities intended to protect or improve environmental conditions;</li> <li>○ services that support financing of projects with clear environmental benefits;</li> <li>○ services that improve resource efficiency and sustainable waste management; or</li> <li>○ services related to the manufacturing, sale, delivery and installation of the environmental goods</li> </ul> <p>• Services related to the manufacturing, sale, delivery and installation of the environmental goods</p>	<p>• <b>7</b> Environmental services covered by CPC prov. 94;</p> <p>• <b>11</b> Circular economy related services;</p> <p>• <b>20</b> Environmentally-related services that support the use of the environmental goods;</p> <p>• Manufacturing activities (of environmental goods)</p>



# What type of provisions are linked to the EGS lists?

- **Review Mechanism**

- Providing for periodic review of environmental goods list (SAGEA; UK-NZ), including the consideration of technological advances affecting environmental goods.

- **Cooperation**

- Strengthening cooperation at bilateral and international levels, including on initiatives to encourage trade and investment in EGS, including by addressing related tariff and NTBs (EU-NZ)

- **Tariff Reduction**

- Reduce or eliminating tariffs on either a preferential basis (UK-NZ; EU-NZL) or MFN basis (APEC; ACCTS)

- **Non-Tariff Barriers (NTMs)**

- Establishing institutional mechanisms to identify and address NTMs related to EGS (UK-NZ; SAGEA)
- Promoting cooperation on standards, technical regulations and conformity assessment procedures related to EGs (SAGEA)

- **Services**

- Facilitating trade and investment in environmental services in line with commitments related to investment liberalisation and trade in services (EU-NZ)
- Encouraging development of mutually acceptable standards for licensing and certification of professional services suppliers; facilitating development of mutual reconciliation agreements; fostering regulatory coordination; exchanging information and data on policies and practices (SAGEA)

Thank you

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