

Science, technology and innovation for sustainable development

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Annex

Table A1 Revised fields of science and technology

1. Natural sciences
 - 1.1 *Mathematics*
 - 1.2 *Computer and information sciences*
 - 1.3 *Physical sciences*
 - 1.4 *Chemical sciences*
 - 1.5 *Earth and related Environmental sciences*
 - 1.6 *Biological sciences*
 - 1.7 *Other natural sciences*
2. Engineering and technology
 - 2.1 *Civil engineering*
 - 2.2 *Electrical engineering, Electronic engineering, Information engineering*
 - 2.3 *Mechanical engineering*
 - 2.4 *Chemical engineering*
 - 2.5 *Materials engineering*
 - 2.6 *Medical engineering*
 - 2.7 *Environmental engineering*
 - 2.8 *Environmental biotechnology*
 - 2.9 *Industrial biotechnology*
 - 2.10 *Nano-technology*
 - 2.11 *Other engineering and technologies*
3. Medical and Health sciences
 - 3.1 *Basic medicine*
 - 3.2 *Clinical medicine*
 - 3.3 *Health sciences*
 - 3.4 *Medical biotechnology*
 - 3.5 *Other medical sciences*
4. Agricultural sciences
 - 4.1 *Agriculture, Forestry, and Fisheries*
 - 4.2 *Animal and Dairy science*
 - 4.3 *Veterinary science*
 - 4.4 *Agricultural biotechnology*
 - 4.5 *Other agricultural sciences*
5. Social sciences
 - 5.1 *Psychology*
 - 5.2 *Economics and Business*
 - 5.3 *Educational sciences*
 - 5.4 *Sociology*
 - 5.5 *Law*
 - 5.6 *Political science*
 - 5.7 *Social and economic geography*
 - 5.8 *Media and communications*
 - 5.9 *Other social sciences*
6. Humanities
 - 6.1 *History and Archaeology*
 - 6.2 *Languages and Literature*
 - 6.3 *Philosophy, Ethics and Religion*
 - 6.4 *Arts (arts, history of arts, performing arts, music)*
 - 6.5 *Other humanities*

Source: OECD, 2006.

Table A2 Environmental goods and services

Environmental goods

1. **Air pollution control systems or equipment** – catalytic converters, chemical recovery systems, dust collectors, separators, precipitators, scrubbers, odour control equipment.
2. **Water supply and conservation systems or equipment** – equipment or technology used for fresh water supply and delivery, water purification equipment, water handling equipment parts (pumps, pipes and valves).
3. **Wastewater management and sewage treatment systems or equipment** – chemical recovery systems, aeration systems, biological recovery systems, gravity sediment systems, oil/water separation systems, wastewater reuse equipment, wastewater treatment chemicals, water pollution control equipment, screens, strainers, clarifiers, filters, filter media and storage and transport containers.
4. **Hazardous and non-hazardous waste management systems or equipment** – hazardous waste storage/treatment equipment, waste collection equipment, waste disposal machinery and equipment, waste handling equipment, waste separation equipment, recycling equipment, incineration equipment and storage and transport containers.
5. **Systems or equipment for remediation/treatment of soil, surface water, seawater and groundwater** – absorbents, bioremediation equipment, soil vapour extraction equipment, spill equipment, containment systems, chemicals and bioremediators.
6. **Noise/Vibration abatement systems or equipment** – mufflers/silencers, noise deadening equipment, noise and vibration control systems, highway barriers.
7. **Environmental monitoring, analysis and assessment systems or equipment** – measuring and monitoring equipment, sampling systems, data acquisition equipment, environment information systems and analytical software such as laboratory, remote sensing and GIS management software.
8. **Solar energy systems or equipment** – active and passive solar systems, photovoltaics, solar-thermal generators, solar water and space heating systems.
9. **Waste-to-energy systems or equipment** – systems and equipment (turbines, boilers, process equipment) that use organic matter such as forest and agricultural residues to produce electricity or heat.
10. **Wind energy systems or equipment** – horizontal or vertical axis turbines, and other types of windmills used to generate energy or electricity.
11. **Small, mini and micro hydro systems or equipment** – microhydro (less than 100 kW), mini-hydro (100 kW to 1000 kW) and small hydro (1 MW to 25 MW).
12. **Fuel cells (transportation and stationary source)** – fuel cell technologies, hydrogen systems (production, storage, distribution and use, infrastructure) used in transportation systems or as a stationary source.
13. **Alternative fuel technologies (other than fuel cells)** – process equipment for the production of biofuels (ethanol, biodiesel), clean fuel systems (reformulated fuels and oxygenated fuels), advanced batteries; also included are industrial equipment and engine systems that use alternative fuels.
14. **Cogeneration** – systems and equipment (turbines, boilers, process equipment) used to produce heat and electricity from biomass (organic matter from forest and agriculture sources), waste and industrial residues, and other fuel sources.
15. **Equipment for methane capture and use from landfill sites or agricultural sources** – landfill gas collection systems, methane gas recovery equipment (vertical recovery wells, horizontal trenches, collection header systems, motor/blower vacuum units), flaring equipment (open flare combustors, enclosed combustors), methane utilisation equipment (electric power generation or gas delivery systems), other methane capture, conversion, treatment, storage or use equipment.
16. **Clean technologies and related components** – integrated process technology, materials recovery technology.
17. **Other renewable energy systems or equipment** – wave, tidal, and ocean thermal energy conversion systems, geothermal electricity or heating.
18. **Any other system or equipment for energy conservation and efficiency** – any other system or equipment not listed in the preceding categories. For example, energy management equipment, energy recovery equipment, energy conservation equipment, more efficient process equipment (energy efficient boilers, turbines or furnaces) and process control equipment.
19. **Other, specify** – please specify your goods if they are not listed in the preceding categories.

Environmental services

20. **Air pollution control services and monitoring** – emissions monitoring, assessment/evaluation and planning, related consulting engineering and analytical services.

21. **Water supply and conservation services** – services related to water purification, water delivery and water handling systems, including maintenance, repair, related consulting engineering and analytical services.
22. **Wastewater management and sewage treatment services** – operation of water treatment facilities, storm water management, water and wastewater system assessment, planning and design management, related consulting engineering and analytical services.
23. **Hazardous and non-hazardous waste management services** – waste handling, collection, transport, and disposal, operation of sites, ownership or management of sites, recycling (sorting, baling, cleaning), operation of materials recovery facilities, hazardous waste management services, including related consulting engineering and analytical services.
24. **Services for remediation/treatment of soil, surface water, seawater and groundwater** – cleaning of facilities and tanks, emergency response and spills clean-up systems, site reclamation and remedial action services, maintenance and repair of remediation or treatment systems, including related consulting engineering and analytical services.
25. **Noise/Vibration abatement services** – design and management services for acoustic and soundproof screens and street covering, related consulting engineering and analytical services.
26. **Environmental research and development services** – development, evaluation and implementation of clean process technologies and/or end-of-pipe pollution abatement control technologies, including related consulting engineering and analytical services, and related research to improve knowledge on ecosystems and the impact of human activities on the environment.
27. **Energy efficiency and renewable energy services** – installation, maintenance, repair and related consulting and analytical services for alternative energy systems or renewable energy production (solar, biomass, wind, other), energy audit, energy resource management related consulting engineering and analytical services.
28. **Environmental education, training and information** – environmental education, training, and information management for the general public and specific environmental workplace education, environmental information searching services, environmental emergency response planning, conservation and resource management.
29. **Management consulting and legal services (including environmental impact assessments)** – general environmental impact assessment, resource management planning, environmental risk management, environmental law and legal services, other environment-related general consulting and legal services not listed in any other categories.
30. **Environmental management systems (EMS)** – development, evaluation or implementation of environmental management systems, ISO 14000 support services, including related consulting engineering and analytical services.
31. **Other consulting engineering, analytical services, data collection and analysis** – other environmental advisory and/or design services including environmental consulting engineering services not listed in the preceding categories.
32. **Other, specify** – please specify your environmental services if they are not listed in the preceding categories.

Environment-related construction

Activities for the construction and installation of facilities for:

33. **Air pollution control**
34. **Water supply and conservation**
35. **Wastewater management and sewage treatment** – sewer systems, water treatment plants
36. **Hazardous and non-hazardous waste management**
37. **Remediation/Treatment of soil, surface water, seawater and groundwater**
38. **Noise/Vibration abatement**
39. **Renewable energy production facilities** – construction services for renewable energy production facilities such as wind farms, solar energy systems, small, mini or micro hydro systems.
40. **Other, specify** – please specify your environment-related construction services if they are not listed in the preceding categories.