



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS



System of
Environmental
Economic
Accounting

Classification of Environmental Functions

Global Consultation

Comments Form

Deadline for responses: 31 December 2022

Send responses to: seea@un.org

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The comment form has been designed to facilitate the analysis of comments. There are three guiding questions in the form, please respond to the questions in the indicated boxes below. To submit responses please save this document and send it as an attachment to the following e-mail address: seea@un.org.

All documents can be also found on the website at: <https://seea.un.org/content/global-consultation-classification-environmental-functions>

In case you have any questions or have issues with accessing the documents, please contact us at seea@un.org

Question 1: Do you have any comments on the proposed structure of the Classification of Environmental Functions?

CEF 1.:

We propose to split CEF 1 into two CEF-groups at level 1 with the following substructure and move the previous CEF 2-CEF 7 to CEF 3-CEF 8 accordingly:

- CEF 1. Reduction and control of air emissions
 - 1.1. Prevention of pollution
 - 1.1.1. Prevention of pollution for the protection of ambient air (non-GHG emissions)
 - 1.1.2. Prevention of pollution for the protection of climate (GHG emissions)
 - 1.2. Treatment
 - 1.2.1. Treatment for the protection of ambient air (non-GHG emissions)
 - 1.2.2. Treatment for the protection of climate (GHG emissions)
 - 1.3. Monitoring, measurement and similar
 - 1.4. Other activities
- CEF 2. Energy
 - 2.1. Energy from renewable sources
 - 2.1.1. Production of energy from non-carbon-based renewable sources
 - 2.1.2. Production of energy from carbon-based renewable sources
 - 2.1.3. Equipment and technologies for renewable energy
 - 2.1.4. Supporting services for renewable energy
 - 2.1.5. Monitoring, measurement and similar
 - 2.2. Energy savings and management
 - 2.2.1. Energy savings through in-process modifications
 - 2.2.2. Energy efficient buildings; other efficient energy-demand systems
 - 2.2.3. Monitoring, measurement and similar
 - 2.2.4. Other activities
- CEF 3. Wastewater and water resources
- ...
- CEF 8. Cross-cutting and other activities

This revised structure of the CEF would have multiple benefits in our opinion. First, it would result in better comparability with SEEA, where energy and emission accounts are separate accounts. Second, the differentiation between protection of ambient air and protection of climate can be incorporated into the CEF-structure at level 3 as shown above. We consider this differentiation to be of utmost relevance as climate change and GHG emissions are crucial topics of the utmost political, societal, and economical importance, now and in the coming decades. We would therefore propose that the CEF is able to illustrate this importance by incorporating this differentiation. Especially, as it is already included in the current CEPA.

Third, splitting up production of energy from renewables into two separate classes – non-carbon-based renewable sources and carbon-based renewable sources – would also

better reflect the importance of climate change and CO2 emissions. CEF 2.1.1. would then include the following renewable sources: Wind, Solar, Aero-thermal, Geothermal, Hydrothermal and ocean energy, Hydropower (excluding pump storage stations). CEF 2.1.2. would include: Biomass (including biogas and biofuels), Landfill gas, Sewage treatment plant gas and biogas.

Question 2. Do you have any comments on the explanatory notes and on the heading reference?

CEF 1.1.1, 2.1.1, 3.1.1:

We support that the cleaner products are assigned to the respective categories. It would be useful if examples of cleaner products were given in each case.

CEF 1.1.3:

Does "measurement services of exhaust gases from vehicles and heating systems" also cover chimney sweep up? Should it be included? Does this category include e.g. annual exhaust analysis of private passenger cars or oil/gas heating? Should it be mentioned under "included"?

CEF 1.2.1:

"it includes: • production of electricity, heat and fuels (including H2) from renewable sources [...]"

- There is overlap between the "production of [...] fuels (including H2) from renewable sources" in CEF 1.2.1. and CEF 1.2.2. which includes "power to gas i.e. storage of wind power in the form of hydrogen/methane". These two activities should be specified more distinctly to avoid overlap or combined into a single point under either CEF 1.2.1. or CEF 1.2.2.

"it includes [...] production of electricity from wind [...]"

- We propose to write "production of electricity from wind, solar and hydropower", so that the examples are consistent with the list of sources for the production of renewable energy under CEF 1.2.1.

"it includes [...] production of biofuels [...]"

- We take a critical view of the inclusion of palm oil as an environmental alternative to fossil fuels, as the conventional palm oil production is responsible for devastating damage to rainforests. It is not clear, whether palm oil is included in CEF 1.2.1. In our opinion, it should be excluded or at least be limited to e.g. "palm oil from sustainable oil plantations". In this regard, we would like to take up FR's discussion regarding positive or negative side effects. In our opinion, the negative side effects of palm oil, similar to the case of nuclear energy, should not be ignored.

CEF 1.2.2:

We propose to add the section "it excludes:" with the following points:

- pumped-storage hydropower stations (PSHS) (see CEF 1.3.1);
- reservoir lakes and dams;

- dung heaps

It is still questionable how heat pumps are dealt with. Depending on the intended use, these could be classified under 1.2.2 as equipment related to the production of renewable energy (e.g. geothermal heat with the aid of a heat pump) or under 1.3.1 or 1.3.2 as an increase in energy efficiency (e.g. in the case of a domestic hot water heat pump).

CEF 1.3.2:

We propose to add the guidance note "Reporting of energetic refurbishment and construction of new energy efficient buildings in EGSS accounts"

CEF 2:

The heading should be "Wastewater and water resources" instead of "Wastewater and water resources management" in order to be consistent with the heading in the structure of the CEF (see '1_CEF Introduction & structure', p.6)

CEF 2.1.3:

"It includes: [...] • treatment of sewage sludge for disposal or other uses (e.g. agriculture, incineration with energy recovery and biogas production) [...]"

- This point is redundant as the following point "construction and operation of sewage treatment plants and the treatment of sewage sludge for disposal or other uses (e.g. agriculture, incineration with energy recovery and biogas production)" includes it word-for-word.

CEF 3.1:

"It excludes [...] • collection and treatment of high level radioactive waste (included in CEPA 5.2)"

- Should be CEF 5.2 instead of CEPA 5.2

CEF 3.1.6:

"All other Activities, measures and products aimed at waste management, including ETIGA activities specific to CEF 3.1 when they can be separated from other activities belonging to CEF 3.1 and from similar activities related to other environmental protection classes"

- Should be "other CEF classes" instead of "other environmental protection classes"

CEF 3.2.2:

Minerals are neither defined nor are examples given for relevant metallic and non-metallic minerals. Additionally, we propose examples like "recovery of rare earths (for example from electronic scrap)", "recycling of aluminium, steel, copper, silver, gold and other non-ferrous metals", "recycling of batteries and accumulators (to recover lead, cadmium or zinc)".

"It includes [...] • mechanical crushing or reduction of metal waste from used cars, washing machines, bikes, railway wagons etc."

- In our opinion, this activity has to be directly associated with the actual recovery of materials in order to fall under 3.2.2 and not under 3.1. We therefore propose to add a corresponding clarification like or "if part of a material recovery operation"

“It includes [...] • other method of mechanical treatment as cutting, pressing to reduce volume”

- In our opinion, this activity has to be directly associated with the actual recovery of materials in order to fall under 3.2.2 and not under 3.1. We therefore propose to add a corresponding clarification like “if part of a material recovery operation”

CEF 3.2.3:

It must be made clear for which purpose the bioplastics are produced in order to be able to classify them. The proportion of bioplastics that save fossil resources is very small and in our opinion is not in focus. The main purpose of using bioplastics is to avoid non-biodegradable plastic waste. It should be discussed whether the main purpose is to avoid waste (CEF 3.1.1) or to protect soil, surface and groundwater (CEF 4.1).

“It includes [...] • recovery of materials made from fossil energy resources, for example: processing of petro-based waste into secondary raw materials (plastic recovery/through mechanical/chemical processes) [...]”

- We propose to include further, more explicit examples like “recycling of plastic packaging”, “recycling of PET bottles” and examples of relevant types of plastics (e.g. PET, HDPE, PVC, LDPE, PP, PS).

CEF 3.2.7:

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

- We propose to add “in the case that they cannot be classified under CEF 3.2.1 to 3.2.5”

“It includes: • ETIGA activities linked to recovery of other materials”

- This point is redundant as it is included word-for-word under CEF 3.2.5

CEF 4:

It is misleading, or at least not very reader-friendly that only groundwater is mentioned in the title of CEF 4. The subcategories talk about different water types, e.g. groundwater, surface water, marine environments. Proposal: “4. Soil, surface water and groundwater, biodiversity and forest”. A similar remark applies to CEF 4.1.

CEF 4.1.1:

“It includes [...] • transportation of pollutant products”

- We propose to add further explanations and examples to differentiate this activity from activities falling under CEF 3.1.2 and 2.1.2.

CEF 4.1.6:

“All other activities, measures and products aimed at protecting and remediating soil, groundwater, surface water and marine waters. It includes ETIGA activities specific to the CEF 4.1, when they can be separated from other activities belonging to CEF 4.1 and from similar activities related to other environmental protection classes.”

- Should be “other CEF classes” instead of “other environmental protection classes”

CEF 4.2.4:

“All other activities, measures and products aimed at protecting species and habitats and landscapes. It includes ETIGA activities specific to CEPA 6, when they can be separated from other activities belonging to CEPA 6 and from similar activities related to other environmental protection classes.”

- Should be CEF 4.2 instead of CEPA 6
- Should be “other CEF classes” instead of “other environmental protection classes”

CEF 5.2.3:

“It includes: • audits, production of energy performance certificates and assessments of energy savings potentials”

- It is doubtful whether this point makes sense in the context of protection against radiation. There is also no corresponding point in the current CEPA/CREMA explanatory notes for CEPA 7. The sentence is however found word-for-word under CEF 1.3.3., where its inclusion is valid. Thus, this point should either be revised to fit the context of CEF 5.2. or be removed.

CEF 6:

We propose to rename the headings at level 2 from “R&D for [...]” to “R&D related to [...]”. This would be consistent with the phrasing in the explanations.

CEF 7.:

“All ETIGA activities, measures and products related to environmental protection and resource management in the case that they cannot be classified in CEF 1-5.”

- We propose to add the phrase “When possible, such activities should be allocated to other classes”. (This phrase is included for CEPA 9 and CREMA 16 in the current CEPA/CREMA explanatory notes).

8. Borderline cases:

1.1.4:

“ETIGA activities should be reported here when they can be separated from other activities belonging to CEF 1.2 and from similar activities related to other CEF-domains”

- It should be “belonging to CEF 1.1”

3.1.4:

“Production of energy through incineration of waste is reported under CEF 1.2 (from bio-degradable waste) and CREMA 1.3 [...]”

- Should be CEF 1.3 instead of CREMA 1.3

After the heading “3.1.4 Waste management; Treatment (incl. preparatory) and disposal of non-hazardous waste”, we propose to add the following section:

“Production of biogas and biofuels from waste is reported under CEF 1.2. When different data sources and consequently different classifications are used, issues of double counting may arise.

In this specific case double counting occurs if:

- waste management output is estimated based on NACE classification (38.1+38.2 NACE rev.2 groups) and
- production of biogas and biofuels from waste is estimated based on CPA. Double counting occurs because NACE 38.2 already covers production of biogas from waste. To avoid double counting, production of biogas and biofuels has to be deducted from total waste management output in CEF 3.1”

Question 3. Do you have any other comments on the Classification of Environmental Functions?