



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](mailto: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](mailto: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](mailto:seea@un.org)

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

Comments on the introduction

1. Name of the classification. – Classification of Environment Functions is very confusing especially in the environmental field where environmental functions/ecosystem functions have a very specific connotation. It may be useful to use similar name as for example or COPNI: Classification of the Purposes of Non-Profit Institutions Serving Households or COPPP: Classification of Outlays of Producers by Purpose. As a general comment, the names of these classifications should be aligned as COFOG, which is also a classification by purpose: Classification of the Functions of Government does not have "purpose" in its name. Further discussion is recommended to come up with a more appropriate title.
2. From the description in the Introduction of the classification, it seems that the *classification of environmental functions* is a classification by purpose or a "classification of environmental purposes". It would be good to make it clearer in the introduction
3. In the first para of the introduction, it is mentioned that the CEF is for classifying (1) activities, (2) products, and (3) expenditures and (4?) other transactions, but the text only describes activities, products and expenditures. Should "other transactions" be a separate category? Or are they part of expenditures?
4. It would be helpful to understand the rationale of the organization of the classes. These organization not very policy relevant, considering that there are international initiatives to measure expenditures current and capital on climate mitigation and adaptation as well as on biodiversity. This classification will only partially meet the upcoming policy demands, which will have to be addressed in the context of COFOG. Incidentally, biodiversity seems to be used as a diversity of species and not as diversity of ecosystems and genetic diversity. Further thoughts are needed in this space.
5. What is the classification unit for this classification? It would seem that this classification has different classification units depending on its use: when applied to activities, then the unit would likely be the establishment; when applied to products, the classification unit is a product; and when applied to expenditures, the classification unit is a transaction. Is this a correct understanding of the classification? This should be made a bit clearer
6. It would be useful to define the concept of "environmental activities" in the classification since they are mentioned in several places without

being clearly introduced/defined. From the second para in the introduction, “environmental activities” seem to include “environmental protection” and “environmental management”. It seems to imply that environmental activities deal with degradation and resource management activities deal with depletion. I think we are moving away from this distinction of depletion/degradation so it may not be useful to maintain this distinction here. Also because we no longer need this distinction if we bring together environmental protection and resource management into a single classification. The scope of environmental activities, products, expenditures and other transactions needs to be clearly defined.

7. Note on terminology – the terms and definitions used should be consistent with the SNA and the SEEA terminology (e.g. investment is not a term used in the SNA, but we should use capital formation). The definition from SEEA is recommended to be applied to the greatest extent possible.
8. The link and relation of CEF to SEEA is missing in the document. It would be useful to have a short description in the introduction to place CEF in the context of SEEA.
9. It would be useful to clearly state if CEF will replace Crema and CEPA.
10. It would be useful to look at this classification in relation to other classifications by purpose in order to maximize their consistency when possible. Also, the links with ISIC/NACE and CPC/CPA should be developed in the future. In this regard, having a short description in the introduction to explore linkage with other international classification including ISIC, CPC, COFOG and SIEC would be useful.

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

General comments on the structure and explanatory notes

1. Definition of “measures”. All the categories are defined as “Activities, measures and products...” it is not clear however what “measures” are. Should the text be replaced with “Activities, **expenditures** and products...” instead?
2. Duplicate titles  
There are often duplicate titles in the classification at the lower level. For example, “Prevention of pollution” is under different divisions and therefore has different codes 1.1.1, 2.1.1, and 3.1.1. Similarly, “Other activities” appear in different Groups and has several codes (i.e. 1.1.4, 1.2.5, 1.3.4., ...). We wonder

if it would be better to make the titles more specific to the Division/Group they relate to.

3. From the explanatory notes, it would seem that all the categories are applicable to activities, products and transactions. However, the notes seem to refer almost exclusively to activities and even the titles seem to suggest the same. For example, the title of the categories such as “Other activities” (codes 1.1.4, 1.2.5, 1.3.4, etc.) seems to imply that they only apply to activities. Similar is the case of 1.2.1 “production of energy from renewable resources”, which seems to refer to an activity, but it covers “activities, measures and products ....”.
4. Internal consistency of the explanatory notes  
Generally, the explanatory notes start with “Activities, measures and products related to....” However, for some categories the explanatory notes only describe “activities”. See, for example, category 1.2.1 “Production of energy from renewable source”: the explanatory note starts with “Activities, measures and products related to renewable energy.” However, the rest of the description only refers to activities. What type of products would be included here (if at all)? Products used in the production of renewable energy? Or the output of the production of renewable energy. All the explanatory notes should be reviewed for internal consistency.
5. Reference to EU Directives should be removed from international classifications. Rather reference to other international classifications or other standards should be included.
6. Title of Division 6 (and Division 7)  
It would be good to have the titles a bit more specific to the classification, such as “R&D for environmental purposes” or “Environment R&D” since the scope of this Division 6, for example, is not all Research and Development. Also, with regard to Division 6, what is the scope of this Division? From the explanatory notes it would seem that it only covers “activities”; are expenditures and products out of scope?
7. Division 7 seems to be embedded in all other division as Education and training is a class in all other divisions. This cannot happen in a classification.
8. In the introduction to the explanatory notes, it is not clear if the classification only includes those activities/products and expenditures that have a primary environmental purpose or not. Since the classification includes things like “cleaner” goods, it does not seem that it only includes activities/products/expenditures with a primary environmental purpose, but this should be made clearer and said upfront. This should be clarified in the beginning of section 3. Classification criteria.

9. The concept of “in-process modification” has applied multiple times across division/group, such as 1.1.1, 1.3.1, 2.2.1, 3.1.1, 3.2, etc. Suggest to provide a short description to elaborate the concept

Detailed comments on each division.

I- Air, climate and energy

11. On climate change mitigation and adaptation

- a. Definition on climate change mitigation and adaptation should be explicitly specified in the explanatory notes.
- b. Policy responses to climate change can be broadly categories into three areas, namely 1) mitigation; 2) adaptation and 3) response to catastrophic loss <sup>1</sup>.
  - **Mitigation** consists of reducing emission of greenhouse gases by changes to the economy or protecting and restoring sinks that store carbon emission.
  - **Adaptation** is the process of adjusting to a changing climate. It seeks to moderate or avoid harm to humans and help natural system adjust.
  - **Recovery and emergency** involve addressing loss and damage from climate change impacts due to extreme events, such as hurricanes, or gradual changes, such as rising sea levels.
- c. The explanation note indicates that activities related to climate change adaption are excluded. It would be useful to indicate whether such activities will be classified under other division (and specify which division) or be excluded all together in CEF.
- d. While there are justification that part of the climate change adaptation activities on disaster prevention activities to extreme weather events such as storms, heat waves, droughts, floods, etc. be excluded, other climate change adaption activities such as afforestation are clearly fall within the scope of CEF.
- e. Suggest to include the definition of “cleaner products” in the note—i.e. *non-specific environmental products which serve a **secondary** environmental purpose because they e they prevent pollution or environmental degradation because they are less polluting at the time of their consumption and/or scrapping, compared with equivalent 'normal' products (otherwise said: their secondary purpose is environmental protection)* . The distinction of secondary purpose currently does not come across, but is rather important. In addition, it would be good to include the explicit definition since this is a new definition that is not in

<sup>1</sup> United Nations (2020) Natural Capital Accounting for Integrated Climate Change Policies  
[https://seea.un.org/sites/seea.un.org/files/seea\\_-\\_climate\\_change\\_-\\_web\\_ready.pdf](https://seea.un.org/sites/seea.un.org/files/seea_-_climate_change_-_web_ready.pdf)

the current SEEA CF, but has been introduced through a methodological paper adopted by the SEEA CF TC. In addition, it is our understanding that cleaner products are similar but not identical to adapted goods in the SEEA CF and other manuals. (see [https://seea.un.org/sites/seea.un.org/files/seea\\_paper\\_integrated\\_framework\\_estat\\_v5.pdf](https://seea.un.org/sites/seea.un.org/files/seea_paper_integrated_framework_estat_v5.pdf))

12. It is suggested have distinct sub-category to separate activities aim at reducing greenhouse gases from activities aim at reducing air pollutants in CEF

- f. From the ecosystem accounting perspective, global climate regulation services (i.e carbon retention and sequestration) and air filtration services are two distinction ecosystem services. The technical nature of these are activities are different.
- g. From the policy perspective, policy aim at reducing GHG are different from policy aim at reducing air pollutants. Having distinct category on these two activities could improve the relevance and usefulness of the classification

13. Suggest to rename 1.1.1 “Prevention of pollution” to “prevention of air pollution”

14. 1.2. Energy from renewable sources

- h. Suggest to define renewable energy in CEF. In this regard, linking CEF with SIEC and ISIC rev.5 which has explicit definition on renewable energy would improve the alignment of international classification
- i. Production of nuclear energy – will it be covered within the scope of CEF? While it is excluded from 1.2.1 as nuclear energy are non-renewable, it may fall under 1.1.1 (prevent of pollution) as nuclear energy nuclear reactors do not produce air pollution or carbon dioxide while operating. Clarification on the treatment of nuclear energy in CEF would be useful

15. 1.1.1, 1.3.1 – Suggest to provide description/definition on what is meant by in-process modifications, and the clarification on the difference between 1.1.1 and 1.3.1. For example, what is the reason for classifying electric and hybrid cars in 1.1.1 but not 1.3.1, since it can argue that hybrid/electric vehicles aim at minimising the consumption of energy (similar to energy efficient building)

II – Wastewater and water resources management

16. SEEA Central Framework defined wastewater as “discarded water that is no longer required by the owner or user). Suggest this definition could also be inserted and reference in the explanatory note

17. The scope of 2.1 only cover the prevention of pollution of surface water, where the prevention of pollution of groundwater is classified under CEF 4.1. Suggest to mention it upfront in the introductory note in Division 2.

18. Does activity that regulate water flow for flood protection (similar to water flow regulation services) fall within scope of “2.2 Water savings and management of natural water resources” or “2.2.3 Replenishment of water resources” . Example of activities: operation of reservoir

19. Suggest to make reference to ISIC rev.5 Division 36 and 37 to improve the alignment of CEF and ISIC

### III. Waste, materials recovery and savings

20. SEEA Central Framework described solid waste as “... cover discarded materials that are no longer required by the owner or users. Solid waste includes materials that are in a solid or liquid state but excludes wastewater and small particulate matter released into the atmosphere.” Suggest also to place a reference to SEEA Central Framework when defining solid waste.

21. Suggest to make reference to ISIC rev.5 Division 38 to improve the alignment of CEF and ISIC

22. Suggest also to make reference to CPC and the relevant waste classification (such as the European waste classification) on the definition/list of waste product that fall within the scope of CEF.

### IV. Soil, surface and groundwater, biodiversity and forest

23. Suggest to define the term “remediation”

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

### 1. Coding system

Just for info, there has been a discussion on the coding system in the UNCEISC and also on the use of the “.” as a separator. Maybe this will be reviewed at a later stage by the UNCEISC. However, there are two conventions usually used for classifications:

- a. The use of a “0” when a category is not further disaggregated  
This would mean that if Division 6 is not further disaggregated at class level, there would still be a code at class level, such as 6.1.0, 6.2.0 etc... Similar is the case for Division 7.
- b. Generally, for the residual categories (e.g. “Other...”) the convention in classification is to use code “9” at the end (see for example, ISIC, NACE, CPC etc.).