EUROPEAN COMMISSION
EUROSTAT

Directorate E: Sectoral and regional statistics
Unit E-2: Environmental statistics and accounts; sustainable development

Progress on the classification of environmental activities

UN Committee of Experts on Environmental-Economic Accounting
Seventeenth Meeting

Room document

27-28 June 2022

1. Purpose and structure of the document

This document informs the Committee and seeks written comments on the progress on the development of a classification of environmental activities ('CEA'). This work is led by Eurostat. The work is moved forward mostly in Europe, with discussions in the Eurostat Working Group on Monetary Environmental Statistics and Accounts ('*MESA WG*') and a dedicated Eurostat task force on the classification of environmental activities (hereinafter referred to as Task Force or TF). The advancement of this work has been discussed since 2018 in the London Group of experts on environmental accounting and were presented at SEEA CF Technical Committee (9 June 2022 meeting).

The current state of advancement is as follows: there is a fully developed version of the structure of a new integrated, resulting from analyses and discussions in the groups named above, plus a work-in-progress version of the explanatory notes.

The classification CEA is based on the pre-existing classifications CEPA and CReMA, the former covering environmental protection and the latter resource management. Only CEPA has the status of international classification. CEPA is annexed to the SEEA CF. Both CEPA and CReMA are in use in Europe for circa 10 years. Once adopted, CEA will overrule CEPA and CReMA.

Section 2 provides some background information; Section 3 presents the basic rules governing the design of the classification; Section 4 presents next steps in the process.

The **Annex** includes the updated proposal for the structure of the integrated classification of environmental activities as presented to the last Eurostat MESA WG in May 2022.

The Committee members are welcome to send written commensts and views on the structure of the classification, as presented in Annex 1, **by 8 of July**. Please send your feedback via e-mail to the following addresses: Arturo.De-La-Fuente@ec.europa.eu and Carolina.ARDI@ec.europa.eu . For next steps see section 4.

2. Background information

The purpose of the review was to update a classification used in Europe in several environmental accounts data collections, clarifying descriptions of the concepts and providing operational rules on the recording of specific transactions, raise the status of the classification, or part of the classification, on resource management (CReMA) to the status of CEPA. In the long run, the purpose of the revision was to integrate environmental protection and resource management into an integrated classification of environmental activities, with up-to-date explanatory notes and guidance for the data compilers, to propose a comprehensive integrated functional classification for monetary environmental accounts, and also to move forward the items on classifications of environmental activities and development of resource management expenditure accounts of the System of Environmental Economic Accounting Central Framework research agenda, for which Eurostat has been the lead agency.

Eurostat established a task force of European countries to assist in the review of the classification of environmental activities (CEA) in 2017. In June 2018 meeting, the Task Force[1] discussed alternative versions of an integrated classification of environmental activities: several proposals disregarded the environmental protection ('EP') and resource management ('RM') as a key distinguishing criterion in environmental classification activities, and one proposal retained the split into environmental protection and resource management and envisaged only changes to resource management classification. In May 2020, Eurostat on behalf of the CEA TF presented to the MESA WG two alternative versions of a possible new classification structure, seeking advice on which proposal should be further developed[2].

Eurostat presented progress to the London Group expert and discussed in meetings since 2018. In 2018 (Dublin meeting) the LG discussed strategic decisions for the review. In 2019 (Melbourne meeting) there were discussions about two possible structures and borderline cases (energy storage, construction of energy-efficient buildings). In the 2020 online meeting the LG provided input for two alternative structures and provided input on specific decisions about recording of management of energy resources, 'greening of brown activities' and measurement of green investments. In the 2021 online meeting, the LG provided comments on the draft structure of CEA and contribute to the process of the review of the list of environmental economic activities and environmental products.

Resulting from this body of input, it was decided to establish a classification structure disregarding the split between EP and RM at the first level. This approach better satisfies the needs of:

- users, more and more oriented towards environmental theme in their whole aspect without making reference to a strict distinction between environmental protection and resource management;
- and compilers, given that in some cases it could be very difficult to establish clear borders between environmental protection and resource management.

It is also clear the need to secure a clear bridge between the integrated classification and the existing structure of classification of environmental protection activities (CEPA) and classification of resource management activities (CReMA), thus ensuring also consistency of data over time. This is particularly important in Europe to preserve data time series built over the last decade, in particular about products and activities of the environmental sector (EGSS account), environmental expenditure (EPEA account) and environmental subsidies (ESST account).

As follow-up of May 2020 MESA WG, October 2020 London Group and TF subsequent discussion in the December 2020 TF meeting, Eurostat presented a very first draft of an

---

[1] The first meeting of the Task Force took place in Luxembourg on 14-15 September 2017. The Task Force has 10 members (Eurostat + National statistical offices from 9 EU Member States) and since October 2019, the European Commission DG Environment participates too

[2] See doc "Integrated CEA classification – TF proposal for the structure of a future classification of environmental activities" available at:
https://circabc.europa.eu/ui/group/922b4700-1c83-4099-b550-763badab3ec0/library/6637bb63-9d87-4af4-9a75-d3f40f3f7dc4/details

integrated classification, which groups together "homogeneous" environmental protection and/or resource management categories at the first level split of the classification (see Section 3 for more details on the structure of the classification).

This first draft was further revised on the basis of subsequent discussions and comments on its structure, the scope of some environmental domains, the proposed labels of selected categories.

The consolidated proposal of integrated classification presented by Eurostat, on behalf of the CEA TF, to the MESA WG in the 2021 meeting received a large support; out of 31 countries providing answers to exchange of views, 24 expressed support and 3 supported the new proposal in principle with some remarks. As follow up of MESA WG feedback, Eurostat run a written consultation within the TF on outstanding questions impacting on the structure of the classification.

As a result, Eurostat drafted a new updated version of CEA (presented in the **Annex**) The general structure of this last version was agreed upon by the TF and presented to May 2022 MESA WG meeting together with a very first draft of related explanatory notes.

Eurostat is currently undertaking a first round of consultation within TF and MESA WG on the explanatory notes for their revisions and update.

3. Integrated CEA design: structure and basic rules

As specified also in Section1, the integrated version of CEA groups together "homogeneous" environmental protection and/or resource management categories at the first level split, i.e. categories that are linked together and represent borderline cases, such as for example in the case of activities related to biodiversity and forest, or air and energy (see Table 1).

Table 1 - First level split of proposed classification

1	**Air, climate and energy**
2	**Wastewater and water resources**
3	**Waste and materials recovery**
4	**Soil, surface and groundwater, biodiversity and forest**
5	**Noise and radiation**
6	**Research and development**
7	**Cross-cutting and other activities**

At the second level split the environmental or resource management categories are singled out (so that a bridge with the current CEPA and CReMA can be relatively easily established) and, at the third and fourth level split, in almost all cases, an extra level of granularity is offered with regard to the activities, actions, expenditures that are object of the classification (an exception is for materials recovery where at the third level split we have the split by material type).

An example of the structure of classification is provided below (see Table 2); please see the Annex for the presentation of the complete classification.**Table 2 –Proposed structure of integrated classification for CEA 1**

I LEVEL SPLIT	II LEVEL SPLIT	III LEVEL SPLIT	
1	**Air, climate and energy**		
	1.1	**Reduction and control of air emissions (excluding energy related measures)**	
		1.1.1	*Prevention of pollution*
		1.1.2	*Treatment*
		1.1.3	*Monitoring, measurement and similar*
		1.1.4	*Other activities*
	1.2	**Energy from renewable sources**	
		1.2.1	*Production of energy from renewable sources*
		1.2.2	*Equipment and technologies for renewable energy*
		1.2.3	*Supporting services for renewable energy*
		1.2.4	*Monitoring, measurement and similar*
		1.2.5	*Other activities*
	1.3	**Energy savings and management**	
		1.3.1	*Energy savings through in-process modifications*
		1.3.2	*Energy efficient buildings; other efficient energy-demand technologies*
		1.3.3	*Monitoring, measurement and similar*
		1.3.4	*Other activities*

When drafting the proposal, Eurostat took into account some principles referred to by country experts on different occasions, particularly relevant for coherence, clarity and robustness of the classification, i.e.:

- the classification should be an instrument to allow policy makers and users to organise the information according to their needs in the short, medium and long-term.
  It should be flexible enough to accommodate policy and user needs of different international settings (i.e. not only of the European countries), and to be used over time. These are prerequisite for a robust classification that could be recognised and adopted at the international level;
- the first level of classification should be informative and clear for the users about the specific environmental activities included, and ideally also their primary environmental purpose (commonly directly linking with one or a number of environmental policies). For this reason, e.g. the task force disagreed on a proposal to group together more environmental domains at the first classification level under the label "Pollution", it was considered too aggregated for dissemination and informative purpose;

- the breakdown at all levels (first, second and third) should ensure (as much as possible) symmetry across categories of a given classification detail in the availability of information, e.g. it should be avoided that for similar type of activities (from the functional point of view, e.g. in-process modification) in one category we have to look at the third level split while in the other categories the same information is already relatively well defined at the second level breakdown.

4. Next steps

Eurostat and the Task Force made substantial progress on the integrated classification and we are currently working on the associated explanatory notes. In particular, there is currently a written consultation with the Eurostat MESA WG with deadline end of May.

On the basis of the feedback of the MESA WG and the ones already provided by the Task Force in March, Eurostat will fine-tune the proposal of integrated classification (if needed) and will prepare an updated version draft of the explanatory notes.

In the view of including in the discussion non-EU countries and the global community of environmental accountants, Eurostat intends to present this work in the next London Group meeting to present the progress and collect comments.

The discussions are also extending now to reach the SEEA CF technical committee and the UN Committee of Experts on International Statistical Classifications. The latter must adopt the classification for it to get the status of international classification.

The next steps are as follows:

- June 2022: inform UNCEEA
- Summer 2022: continue development of explanatory notes, in particular with input from the European Task Force
- September 2022: Report progress to the London Group. This version will already include an introduction about the principles and use of the classification, the draft structure and draft explanatory notes
- October 2022: first discussion in the UN Committee of Experts on International Statistical Classifications
- November 2022: global consultation run by UNSD Environmental Economic Accounting Section as Secretariat of the UNCEEA
- Winter 2022-2023: summary of the results of the global consultation are presented at the TC CF and UN Committee on Classifications (or the Bureau)
- January/February 2023: submission to the UN Statistical Commission

ANNEX – Proposal for the structure of the integrated classification of environmental activities

LEVEL I	LEVEL II	LEVEL III		Correspondence with current version of CEPA CReMA classifications	Environmental protection (EP) or resource management (RM)
1	**Air, climate and energy**			CEPA1, CReMA13A, CReMA13B	EP, RM
	1.1	**Reduction and control of air emissions (excluding energy related measures)**		CEPA 1	EP
		1.1.1	*Prevention of pollution*		
		1.1.2	*Treatment*		
		1.1.3	*Monitoring, measurement and similar*		
		1.1.4	*Other activities*		
	1.2	**Energy from renewable sources**		CReMA13A	RM
		1.2.1	*Production of energy from renewable sources*		
		1.2.2	*Equipment and technologies for renewable energy*		
		1.2.3	*Supporting services for renewable energy*		
		1.2.4	*Monitoring, measurement and similar*		
		1.2.5	*Other activities*		
	1.3	**Energy savings and management**		CReMA13B	RM
		1.3.1	*Energy savings through in-process modifications*		
		1.3.2	*Energy efficient buildings; other efficient energy-demand technologies*		
		1.3.3	*Monitoring, measurement and similar*		
		1.3.4	*Other activities*		
2	**Wastewater and water resources**			[Σ – sum of below]	EP, RM
	2.1	**Wastewater management**		CEPA2	EP
		2.1.1	*Prevention of pollution*		
		2.1.2	*Sewerage networks*		
		2.1.3	*Wastewater treatment*		
		2.1.4	*Treatment of cooling water*		
		2.1.5	*Monitoring, measurement and similar*		
		2.1.6	*Other activities*		
	2.2	**Water savings and management of natural water resources**		CReMA10	RM
		2.2.1	*Reduction of the intake*		
		2.2.2	*Water reuse and savings, reduction of water losses and leaks*		
		2.2.3	*Replenishment of water resources*		
		2.2.4	*Monitoring, measurement and similar*		

LEVEL I	LEVEL II	LEVEL III		Correspondence with current version of CEPA CReMA classifications	Environmental protection (EP) or resource management (RM)
		2.2.5	*Other activities*		
3			**Waste and materials recovery**	[Σ – sum of below]	EP, RM
	3.1		**Waste management**	CEPA3	EP
		3.1.1	*Prevention of pollution*		
		3.1.2	*Collection and transport*		
		3.1.3	*Treatment and disposal of hazardous waste*		
		3.1.4	*Treatment and disposal of non-hazardous waste*		
		3.1.5	*Monitoring, measurement and similar*		
		3.1.6	*Other activities*		
	3.2		**Materials recovery**	[Σ – sum of below]	RM
		3.2.1	*Wood and paper*	CReMA11B	RM
		3.2.2	*Mineral (metal, stone, glass, ceramics, other)*	CReMA14	RM
		3.2.3	*Plastic*	CReMA13C	RM
		3.2.4	*Textiles*	No direct correspondent	RM
		3.2.5	*Other materials*	No direct correspondent	RM
		3.2.6	*Monitoring, measurement and similar*	CReMA11B, 13C, 14	RM
		3.2.7	*Other activities (related to the recovery of materials)*	CReMA11B, 13C, 14	RM
4			**Soil, surface and groundwater, biodiversity and forest**	CEPA6+CReMA12, CReMA 11A	EP, RM
	4.1		**Protection of soil, surface and groundwater**	CEPA4	EP
		4.1.1	*Prevention of pollutant infiltration*		
		4.1.2	*Cleaning up of soil and water bodies*		
		4.1.3	*Protection from erosion and other physical degradation of soil and water*		
		4.1.4	*Prevention and remediation of soil and groundwater salinity*		
		4.1.5	*Monitoring, measurement and similar*		
		4.1.6	*Other activities*		
	4.2		**Protection of biodiversity and landscape**	CEPA6 + CReMA12 (consolidated in the current version of CEPA & CReMA)	EP (after consolidation of CEPA6 and CReMA12)
		4.2.1	*Protection and rehabilitation of species and habitats*		
		4.2.2	*Protection of natural and semi-natural landscapes*		
		4.2.3	*Monitoring, measurement and similar*		
		4.2.4	*Other activities*		

LEVEL I	LEVEL II	LEVEL III		Correspondence with current version of CEPA CReMA classifications	Environmental protection (EP) or resource management (RM)
	4.3	**Sustainable management of forest resources**		CReMA 11A	RM
		4.3.1	*Reduction of the intake of timber resources*		
		4.3.2	*Reforestation and afforestation*		
		4.3.3	*Protection against forest fires*		
		4.3.4	*Monitoring, measurement and similar*		
		4.3.5	*Others activities*		
5	**Noise and radiation**			CEPA5 CEPA7	EP
	5.1	**Protection against noise and vibration**		CEPA5	EP
		5.1.1	*Prevention and reduction of noise and vibration*		
		5.1.2	*Monitoring, measurement and similar*		
		5.1.3	*Other activities*		
	5.2	**Protection against radiation**		CEPA 7	EP
		5.2.1	*Protection of ambient media*		
		5.2.2	*Transport and treatment of high level radioactive waste*		
		5.2.3	*Monitoring, measurement and similar*		
		5.2.4	*Other activities*		
6	**Research and development**			[Σ – sum of below]	EP, RM
	6.1	**R&D for air, climate and energy**		CEPA8.1, CReMA15	EP/RM
	6.2	**R&D for waste and materials recovery**		CEPA8.3, CReMA15	EP/RM
	6.3	**R&D for wastewater and water resources**		CEPA8.2, CReMA15	EP/RM
	6.4	**R&D for soil, surface and groundwater, biodiversity and forest**		CEPA8.4, 8.6, CReMA15	EP/RM
	6.5	**R&D for noise and radiation**		CEPA8.5, 8.7, CReMA15	EP/RM
7	**Cross-cutting and other activities**			[Σ – sum of below]	EP, RM
	7.1	**Environmental education and training**		CEPA9.1, CReMA16	EP/RM
	7.2	**General environmental administration, management, regulation, dissemination and consultancy**		CEPA9.2, CReMA16	EP/RM
	7.3	**Environmental activities not elsewhere classified**		CEPA9.4, CReMA16	EP/RM