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Using EGSS data for measuring circular economy

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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE

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Different definitions for circular economy

Ministry of Ecological Transition	The circular economy consists in producing goods and services in a durable way by limiting the consumption and waste of resources and the generation of waste. The objective is to move from a throwaway society to a more circular economic model.
ADEME	The circular economy can be defined as an economic system of exchange and production which, at all stages of the life cycle of products (goods and services), aims to increase the efficiency of the use of resources and to reduce the impact on the environment.
National Institute for Circular Economy (INEC)	The circular economy consists in producing goods and services in a durable way by limiting the consumption and waste of resources and the generation of waste.
Eurostat	The circular economy goods and services sector is a sub-set of the whole economy. Economic goods and services of the circular economy sector are those that maintain the value of products and materials as long as possible and minimise waste and resource use, thereby, closing or narrowing the [raw] material cycle.

Basis of French perimeter on circular economy

Circular economy 3 areas, 7 pillars



Alternative: 9 purposes framework → refuse, rethink, reduce, reuse, repair, refurbish, remanufacture, repurpose, recycle, recover

Source: ADEME

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General approach and results

Reflexions and participation to working groups led to define a new EC perimeter in 2023

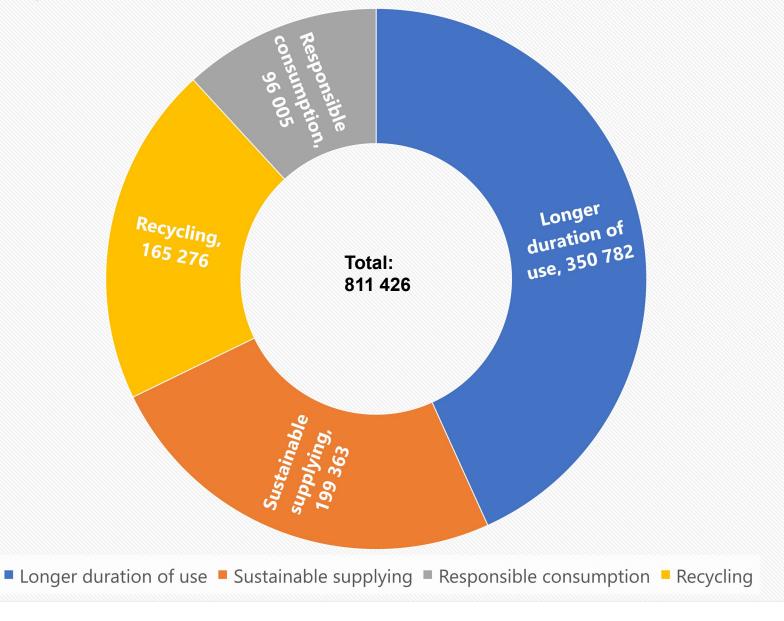
Following principles followed:

- Only one perimeter considered, no connected pillar (or activities)
- To consider the main purpose of activities rather than their impact
- Main purpose of CE activities to be in phase with one of ADEME pillars (selection criterion)
- As a consequence, public transports, renewable energy and energy saving are excluded

A specific CE database implemented, separately from the one used for EGSS

- Observations from 2008 to 2021
- 4 pillars out of 7 are covered

Employment in the circular economy in 2021 by pillars (Full time equivalents)



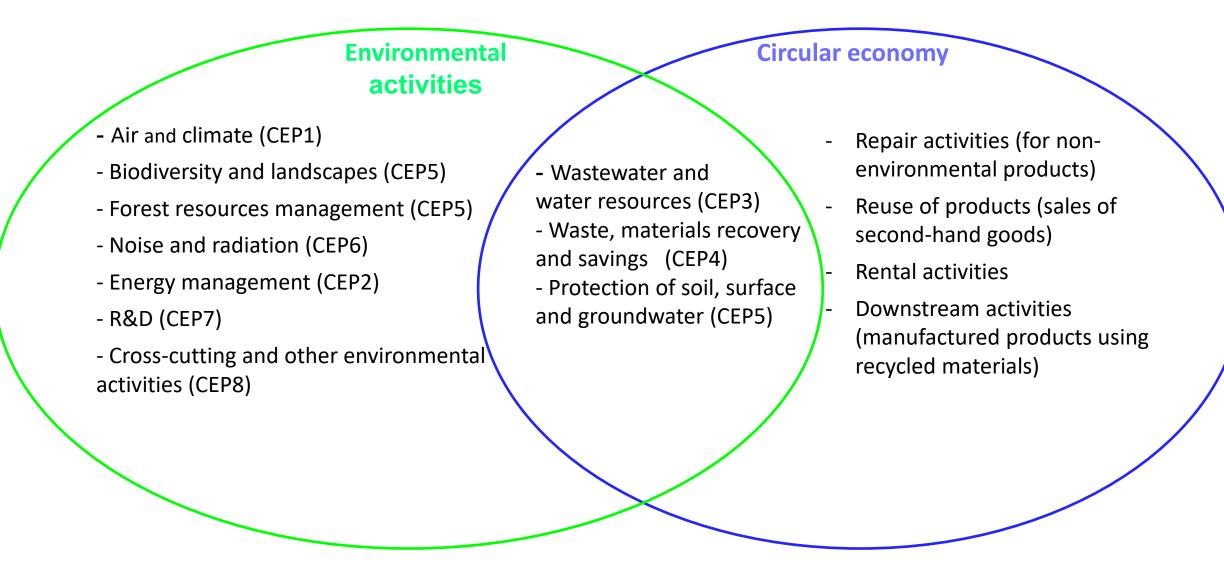
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Comparison with EGSS and classification of environmental purposes

- Classification of environmental purposes (CEP) developed in international taskforces (Eurostat, UNSD)
- Question: which parts of CEP can be directly used for compiling CE, using EGSS data?
- In French CE framework 3 CEP divisions contribute to CE: 3, 4 & 5
- CEP3: Wastewater and water resources: fully included
- CEP4: Waste, materials recovery and savings: fully included except landfilling and streets cleaning
- CEP5: Soil, surface and groundwater, biodiversity and forest: only remediation of soils (incl. organic farming) and water bodies included

Relationship between EGSS and CE



Sources used for compiling

1) EGSS data: 30% of employment

Use in Recycling and Sustainable supplying pillars However EGSS data is a secondary source, elaborated with a lot of (primary) information. Primary sources for compiling EGSS: Insee, ADEME, Agence Bio, EPEA, Ministries...

2) Insee data: 70% of employment

Use in Longer Duration of Use, Sustainable supplying and Responsible consumption pillars 2 kinds of use:

- As a source for output of different products, employment being estimated with ratios
- As a direct source of employment (NA, Insee social databases) when industry fully included into CE Case of e.g. repair activities

Strengths with using EGSS

- Availability of a comprehensive and coherent annual dataset covering well some purposes of CE (wastewater sewage, waste management and recovery)
- EGSS framework offers different variables: output, value added, employment, foreign trade in the format of national accounts
- Possible replication of EGSS estimation methods (e.g. for employment or value added) for CE activities not covered by EGSS
- > Data sources used for EGSS can be extended to CE
- > In conclusion: synergy and consistency expected when compiling CE in complementarity with EGSS

Weaknesses or limitations

Strong dependence of CE to the perimeter adopted (harmonisation needed)

- if strictly based on circularity and resources saving, EGSS value added is quite low
- if perimeter enlarged to all environmental issues, EGSS VA is optimal

> EGSS not helpful for solving tricky issues as compiling CE data for:

- Industrial and territorial ecology
- Service economy
- Approach based on purposes or pillars (ADEME) difficult to comprehensively combine with monetary accounts classifications (CEP or CEPA/CReMA). Space left to interpretations

> In terms of organisation, distance between EGSS and CE to be reduced

Often working groups are separated (different staff implied) as well as objectives and plans on indicators. Need of sharing information on a larger scale.



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Thank you for your attention