



EUROPEAN COMMISSION  
EUROSTAT

Directorate E: Sectoral and regional statistics

**DIMESA written  
consultation 2021/1-ESEA**

# **European Strategy for Environmental Accounts – mid-term review**

*(Final version 1/03/2021)*

# European Strategy for Environmental Accounts – Mid-term review

## 1. INTRODUCTION

The European Strategy for Environmental Accounts 2019-2023 (ESEA) foresees a mid-term review. The purpose is to re-assess the policy context, user needs, advancement of methodology and feasibility of new mandatory modules.

DIMESA discussed a draft mid-term review in its October 2020 meeting<sup>1</sup>. Based on the results of the discussion in the DIMESA meeting Eurostat has prepared this revised version of the mid-term review for written approval by DIMESA.

The mid-term review is based on two broad types of considerations, namely (1) progress in the implementation of the ESEA since it was adopted; (2) the adequacy of environmental accounts to serve new EU policies and new national needs.

## 2. MID-TERM REVIEW OF THE ESEA

### 2.1. Progress in the implementation of the ESEA until end 2020

The working groups Environmental accounts and Monetary environment statistics and accounts discussed implementation progress in their 2019 meeting and during the May 2020 exchange of views. The following is a summary of the corresponding documents,<sup>2</sup> updated as necessary, and structured along the ESEA objectives.

**Objective 1 ‘Continue improving quality’** – Quality is a top priority for data producers and for some users. Overall, there is good progress. Country data are transmitted in advance of the legal deadline, validation by Eurostat is faster and fewer iterations with Member States are required, there are clearer validation rules and these were approved by the working groups. Quality reports under the ESS metadata handler (SDMX for metadata) are more robust. Eurostat had IT difficulties to deploy SDMX compliant transmission of data as fast as planned, but SDMX work continues. Eurostat is producing early estimates for an increasing number of modules; several countries transmit data for some modules 12 months early but several other countries do not support the work on early estimates. On the other hand, there is no significant improvement of the reporting of voluntary variables in the mandatory data collections and DIMESA asked in 2019 to give them lower priority.

**Objective 2 ‘Communicate better’** – There is good progress but there is ample room to do more and better. Eurostat improved Statistics Explained articles and created new ones, e.g. for energy accounts. A new Eurostat interactive visualisation tool ‘Sankey diagram

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<sup>1</sup> See minutes of the meeting <https://circabc.europa.eu/ui/group/c4687299-277c-42f8-8747-dee3f17341de/library/b1a44c91-b296-4f2c-b3d8-1b4345d36a0c/details>

<sup>2</sup> Documents ENV\_EA-MESA\_WG\_2019\_03.1\_rev 1.1 and ENV\_EA-MESA\_WG\_2020\_02.1 (Annex)

of material flows’ is a user-friendly overview of the circular economy. Indicators based on environmental accounts are gradually making their way into EU policymaking e.g. as SDG indicators in an EU context and as environmental information in the European Semester. Statistical publications improve steadily and become more user-friendly, including more infographics. Europe is a lead contributor to establish global SEEA databases.

**Objective 3 ‘Produce further extensions, applications and indicators, including footprints’** – Circular economy was identified as an area for application of the accounts and a new indicator was produced (circular material use rate, also an EU SDG indicator<sup>3</sup>). Footprint measures were increased and improved (raw material equivalent indicators were included as voluntary extension of the EW-MFA questionnaires, more countries reporting it, Eurostat disseminates carbon and air emissions footprints for more than five years and started to produce energy footprints in 2019; work about land footprints started with JRC). New applications of environmental accounts are getting clearer, see below in this section about policy applications.

**Objective 4 ‘New environmental accounts areas’** – The voluntary data collections of forest accounts and environmental subsidies continue every year. As regards ecosystem accounts, the INCA project and the revision of SEEA EEA handbook are progressing as scheduled. More countries are using grants for ecosystem accounts and there is a flourishing community of statisticians engaged in this area. Work on extending the legal basis has started.

**Objective 5: ‘Support activities’** – These activities delivered support to other ESEA objectives, i.e. they were fit for purpose. The Eurostat budget for grants increased, ESTP training courses take place every year (some of them exceptionally postponed in 2020 because of COVID-19), Eurostat compilation tools were updated and new handbooks issued. There is regular maintenance of classifications e.g. PRODCOM, CEPA & CREMA, NACE Rev. 2. Europe remains a major contributor to international SEEA and global initiatives e.g. ecosystem accounts, circular economy, fossil fuel subsidies, support of the SNA review.

## 2.2. Adequacy of ESEA for new policy needs

The second aspect considered for this mid-term review is the adequacy of the European environmental accounts for policy needs, in particular new needs since ESEA was adopted. It was known at the time of ESEA approval that the policy context would shift in 2019-2020; this was indeed one main reason to plan a mid-term review.

DIMESA discussed the situation in its October 2020 meeting, both regarding EU needs and national needs.

EU needs are presented first. The European Green Deal is a powerful driver of change in EU policies (see document for agenda item 5 of the October 2020 meeting).<sup>4</sup> The Green Deal announces a set of new transformative policies across the economy and increased efforts to follow-up on current legislation and policies relevant to it. All sectors of the

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<sup>3</sup> [https://ec.europa.eu/eurostat/databrowser/view/sgd\\_12\\_41/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/sgd_12_41/default/table?lang=en)

<sup>4</sup> Commission Communication on the European Green Deal (COM/2019/640 final) (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:640:FIN>)

economy are concerned and the level of ambition is high. The Green Deal is gradually being deployed and developed in a growing number of initiatives. Some of them require information to support decisions or to monitor progress. Eurostat is actively engaged in Commission discussions of these initiatives and is actively transposing the data needs as expressed by users into a list of statistical products.

The following is a short overview of the possible use of the environmental accounts (current modules and new areas) for Green Deal purposes:

<b>Current modules</b>	<b>Green Deal information need</b>
Air emissions accounts	Climate change targets, EU Industrial strategy, zero pollution action plan, circular economy (links material use and air emissions)
Environmental taxes	Climate change targets, green budgeting practices, mainstreaming sustainability in all EU policies
Material flow accounts	Circular economy (resource efficiency, material footprints)
Environmental protection expenditure accounts	Sustainable investment plan, renewed sustainable finance strategy, green budgeting practices, Just transition mechanism, mainstreaming sustainability in all EU policies
Environmental goods and services sector	Circular economy, mainstreaming sustainability in all EU policies
Physical energy flow accounts	EU Industrial strategy, mainstreaming sustainability in all EU policies
<b>New areas</b>	<b>Green Deal information need</b>
Forest accounts	Climate change targets, 'Farm to Fork' strategy, biodiversity, new EU forest strategy
Water accounts	Circular economy (water efficiency, water footprints)
Environmental subsidies	Climate change targets, green budgeting practices, mainstreaming sustainability in all EU policies
Ecosystem accounts	Climate change targets, land use and agricultural production, 'Farm to Fork' strategy, biodiversity, zero-pollution
<b>Other</b>	<b>Green Deal information need</b>
Geographical detail	Georeferenced statistics about energy use, land use, soil & air pollution, investments, etc.
Environmental footprints	Environmental footprints at national level, more footprints (water), coherence with LCA-based environmental footprints for individual products and organisations;
Synergies and trade-offs across topics (climate change, circular economy, biodiversity, pollution, etc.)	Use of several modules combined

This table shows there are many initiatives that environmental accounts are well placed to serve. In some cases the environmental accounts are ready to use, in other cases quality improvements are needed e.g. more data from more countries, in other cases development of applications is needed, e.g. environmental footprints, interlinks across modules, etc.

The Green Deal is not the only policy initiative requiring new data. More in general, the Commission is seeking mainstreaming sustainability in all EU policies, i.e. that sustainability permeates in and mobilises all the EU economy through a range of instruments and enablers: sustainable finance, green investments, environmental taxation and monitoring through the European Semester. The contents of the Semester about environmental sustainability will probably change in the next years. Eurostat liaises with other Commission DGs leading the Semester work about the statistical indicators included in the Semester country reports, in particular: (a) a short assessment in chapter 1 ‘economic situation and outlook’ about the situation in each country compared to the EU average, based on the EU SDG indicator set; (b) in the chapter on environmental sustainability; and (c) the annex. The latest editions of country reports were published in February 2020.<sup>5</sup>

There are ongoing discussions in the Council Economic Policy Committee and in the Commission about economically relevant indicators for the climate, energy and environmental transition. The following environmental accounts indicators are examples of the information sought:

- Fiscal indicators: environmental taxation (as a percentage of GDP and of total taxation) and Government expenditure on environmental protection. Data on environmental subsidies would fit here but are not currently available.
- Investment needs: investments in environmental protection. Resource management expenditure (investments in renewable energy & resource saving) would fit here but data are not currently available.
- Environmental impacts: material intensity (i.e. the inverse of resource productivity), greenhouse gas intensity and smog-precursor emission intensity, water efficiency. For the latter, water accounts would be the ideal source, but they are not currently available.
- Social impacts: employment and gross value added in the EGSS in relation to the corresponding macroeconomic totals.

The European Semester requires data to be available for all the Member States. The European environmental accounts (with legal basis) are well placed in this respect. Long time series and data as recent as possible are very important. Environmental accounts are not yet at the level of macro-economic statistics used in the Semester in those respects and can improve. There are frequent calls for sustainable development indicators with regional and sub-national detail, in particular in the domain of energy and environment.

Another aspect is the use of the environmental accounts for monitoring progress towards the SDGs in an EU context. The following indicators based on environmental accounts were used in the 2020 Eurostat SDG monitoring report: resource productivity and domestic material consumption, circular material use rate, value added in EGSS and environmental taxes as share of total tax revenues. Areas where environmental accounts could fill gaps or improve information in future SDG reports are: biodiversity (related to ecosystem accounts), forest area (forest accounts), water exploitation (water accounts), energy productivity/intensity, material footprint, air emissions intensity, ecological status

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<sup>5</sup> The 2020 Semester country reports can be found here: [https://ec.europa.eu/info/publications/2020-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2020-european-semester-country-reports_en)

of surface waters (related to ecosystem condition accounts), green urban areas (related to ecosystem extent accounts).

Another initiative is the Environmental Implementation Review, which is a tool to improve implementation of EU environmental law and policy. Key indicators are needed to monitor progress. There is an ongoing debate. The following environmental accounts indicators are relevant:

1. Environmental sustainability: in discussion is a composite headline indicator environmental footprint based on ecological, material and pollution aspects (air, water, land);
2. Circular economy and waste management: environmental accounts related indicators are based on EW-MFA (environmental footprints and resource productivity), circular material use rate, water efficiency from water accounts;
3. Zero pollution: water, air and soil (air pollutants emissions, pollutants footprints, land use, land footprint, water exploitation);
4. Biodiversity and nature (land use, biodiversity metrics from ecosystem accounts);
5. Market-based instruments (environmental taxes, EPEA, environmentally harmful subsidies).

The bottom line is that the Commission is increasing the use of environmental accounts for policy making but the accounts can be further used if certain quality aspects were improved, such as timeliness and long time series, and the environmental accounts covered new areas. Progress based on voluntary engagement of Member States is asymmetrical as some countries advance much faster than others, and it does not ensure sufficiently fast progress to cope with the growing number of requests.

So much regarding new EU data needs. As regards new national needs, the following ones were expressed in the October 2020 meeting of DIMESA: material footprints for circular economy (Finland, Portugal, Latvia, Malta, Switzerland, Denmark); households data for socio-economic analysis associated to Just Transition (Ireland); drivers of changes in air and water quality (Ireland); regional environmental accounts data (Portugal); better quality of energy and emission accounts and consistency with national accounts (Denmark); potentially damaging environmental subsidies (Austria, Ireland, Sweden); data at T+12m to be relevant for national policymakers (Estonia); quarterly emissions (Sweden).

### **2.3. Conclusions for the mid-term review**

Based on the previous analysis, the conclusions for the mid-term review are the following:

There is a vast new wave of information needs for policy users that can be served with environmental accounts. The five objectives established in the ESEA 2019-2023 remain relevant. Priorities and specific actions are adapted as proposed below.

As regards **objective 1 ‘Data quality’**, priority is increased for:

- Quality aspects such as data validation and quality reports;
- Ensure sufficiently long time series;

- Streamline reporting deadlines across modules and improve timeliness of key indicators whenever possible;

Important voluntary variables can become mandatory variables with the next update.

As regards **objective 2 ‘Better communication’**:

- Develop communication products/solutions further exploiting the interlinkages between accounts;
- Use analytical solutions, combined presentations and online articles reporting the modules together.

Experiences and best practices will be exchanged in the working group.

Such communication solutions will be applied in priority areas identified such as European Green Deal (including circular economy, biodiversity, etc.), SDGs, and European Semester.

As regards **objective 3 ‘New applications and footprints’**:

- Continue developing ad-hoc applications/solutions of the current environmental accounts for priority areas such as the circular economy. Possible approaches are combining several modules, or combining modules with other data sources (following the example of the indicator CMU rate for the circular economy) or exploiting the modules individually. Continue developing new indicators;
- Member States to continue reporting footprints estimates on a voluntary basis, and working on harmonised international methodologies. For material footprints, Eurostat will ensure data availability for all countries, if necessary producing and publishing estimates for missing countries (and flagging them correspondingly);
- Investigate developing indicators at regional/local level based on geo-spatial information;
- Consider links to social indicators such as energy poverty, health, household consumption of water and energy, recycling rates.

As regards **objective 4 ‘New areas’**:

- Discuss the technical aspects of the following accounts with a view to expanding the legal base: water accounts, forest accounts, ecosystem accounts (including land use), environmental subsidies and similar transfers;
- Assist Eurostat to prepare an amendment of Regulation (EU) 691/2011 aiming for faster progress in ESEA objective 4 ‘new areas’ in particular, but not only, for applications in the European Green Deal (including circular economy, pollution, biodiversity, etc.), SDGs and European Semester. The legal process will take years. Eurostat and the Member States have time to build capacity and technical expertise.

As regards **objective 5 ‘Support activities’**: maintain and continue current activities (training, handbooks, grants, etc.).

### 3. NEXT STEPS

After approval of the mid-term review, the next step is developing an action plan aligned to it. This will fulfil a recommendation of the European Court of Auditors in its Special

Report SN2019/16 ‘European Environmental Economic Accounts: usefulness for policymakers can be improved’, namely recommendation 1– Improve the strategic framework for EEEA data, sub-recommendation (c) ‘prepare a comprehensive action plan (with milestones and budget estimations) for implementation of the EEEA strategy’.

In parallel, The European Green Deal is unfolding and the ESS Committee requested in October 2020 an action plan for statistics for the Green Deal. This includes both environmental accounts and other official statistics. In view of the overlap between those two action plans, Eurostat proposes that the action plan for ESEA is a subset – possibly with more details - of the action plan for the European Green Deal, i.e. they are aligned as concerns environmental accounts. Both action plans will be developed in parallel and coordinated.