

# Single Integrated Metadata Structure (SIMS v2.0)

**Country: Greece**

**Domain name: Environmental protection  
expenditure accounts**

## Elstat metadata

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### 1. Contact

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| <b>1.1. Contact organisation</b>      | HELLENIC STATISTICAL AUTHORITY (ELSTAT)   |
| <b>1.2. Contact organisation unit</b> | Directorate General of Statistics/Agriculture,<br>Livestock, Fisheries and Environmental Statistics<br>Division (B2)<br>Energy & Environment Statistics Section (B24) |
| <b>1.5. Contact mail address</b>      | 46 Pireos str. & Eponiton str. 185 10, Piraeus  |

### 2. Metadata update

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| <b>2.1. Metadata last certified</b> | 01/08/2023 |
| <b>2.2. Metadata last posted</b>    | 01/08/2023 |
| <b>2.3. Metadata last update</b>    | 01/08/2023 |

### 3. Statistical presentation

#### 3.1. Data description

Environmental protection expenditure accounts (EPEA) describe, in a way consistent with the European System of Accounts (ESA), transactions related to prevention, reduction and elimination of pollution and of any other degradation of the environment.

The key aggregate produced based on the EPEA data is national expenditure on environmental protection ('NEEP'). It measures the resources devoted by resident units to protecting the natural environment. It is calculated as a sum of uses of environmental protection (EP) services by resident units, gross fixed capital formation (GFCF) for EP activities, and net transfers to the rest of the world for EP.

Under European [Regulation \(EU\) 691/2011](#)(Annex IV), the reporting of EPEA data is mandatory from 2017-onwards. EPEA data are compiled on an annual basis.

#### 3.2. Classification system

The datasets use the following dimensions:

1) Environmental economic characteristics: see section 3.4 below.

2) Classification of environmental protection activities (CEPA). The following categories exist:

CEPA 1 — Protection of ambient air and climate

CEPA 2 — Wastewater management

CEPA 3 — Waste management

CEPA 4 — Protection and remediation of soil, groundwater and surface water

CEPA 5 — Noise and vibration abatement

CEPA 6 — Protection of biodiversity and landscapes

CEPA 7 — Protection against radiation

CEPA 8 — Environmental research and development

CEPA 9 — Other environmental protection activities.

CEPA 2000 is a recognized international standard included in the family of international economic and social classifications.

Groupings of categories are also used according to EPEA mandatory data compilation and reporting under [Regulation \(EU\) 691/2011](#)(Annex IV).

3) Classification of economic activities - NACE rev.2 (NACE\_R2): Data are aggregated for publication with special groupings divisions (2-digits of the classification) relevant for EPEA.

4) Sector: Institutional sector as defined in SEEA CF 2012 and ESA2010, with the following groupings: corporations, general government and non-profit institutions serving households, households, rest of the world (as beneficiary, or origin, of transfers for environmental protection).

5) Period of time (TIME): Data are annual.

6) Unit (UNIT): Millions of euros.

#### 3.3. Coverage - sector

The data set covers the entire national economy as defined in National Accounts (ESA 2010, paragraph 2.04). The institutional sectors in ESA 2010 are non-financial corporations (sector S11), financial corporations (sector S12), general government (sector S13), households, NPISH (sector S15), and the rest of the world (sector S2). EPEA further groups these sectors for simplification.

In EPEA the following sectors are used:

- general government and NPISH (S13 and S15) as producers and consumers of EP services;
- corporations (S11 and S12) as producers and consumers of EP services. This sector includes in particular specialist and secondary market producers of EP services (i.e. the units of the corporations sector whose principal activity is the production of EP services, classified primarily to NACE Rev. 2 divisions 37, 38.1, 38.2 and 39, and units for which production of EP services is a secondary activity). EPEA accounts also provide information on the ancillary activities of corporations other than the specialist producers (see 3.4 below);
- households, as consumers of EP services. Households as producers of EP market goods and services or goods and services for exclusively own final use are classified together with corporations;
- the rest of the world as beneficiary, or origin, of transfers for environmental protection. The institutions of the EU and international organizations are included in EPEA as part of the rest of the world sector.

### 3.4. Statistical concepts and definitions

Environmental protection (EP) includes all activities and actions which have as their main purpose the prevention, reduction and elimination of pollution and of any other degradation of the environment. Those activities and actions include all measures taken in order to restore the environment after it has been degraded. Activities which, while beneficial to the environment, primarily satisfy the technical needs or the internal requirements for hygiene or safety and security of an enterprise or other institution are excluded from this definition.

The mandatory reporting covers the following characteristics which are defined in accordance with ESA:

- output of environmental protection services. Market output, non-market output and output of ancillary activities are distinguished,
- intermediate consumption of environmental protection services: Total and for production of environmental services,
- imports and exports of environmental protection services,
- valued added tax (VAT) and other taxes less subsidies on products on environmental protection services,
- gross fixed capital formation and acquisitions less disposals of non-financial non-produced assets for the production of environmental protection services,
- final consumption of environmental protection services,
- environmental protection transfers (received/paid).

A comprehensive methodological guidance is provided in the Eurostat's EPEA handbook as well as in [ESA2010](#) and [SEEA CF 2012](#) (chapter 4).

### 3.5. Statistical unit

EPEA uses the same statistical units as national accounts.

The building block is the institutional unit which is defined as “an economic entity characterized by decision-making autonomy (ESA 2010, paragraph 2.12). Institutional units are grouped in institutional sectors.

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| <b>3.6. Statistical population</b>  |
| Environmental protection expenditure encompasses the economic resources devoted by resident units to environmental protection. Resident units are defined as in ESA 2010.   |
| <b>3.7. Reference area</b>  |
| At national level data refer to Greece total.   |
| <b>3.8. Coverage - Time</b>   |
| <p>The aggregate figure for national expenditure on environmental protection (NEEP) therefore also covers the period 2018-2020 due to the new variable of Intermediate Consumption of environmental protection services (commission delegated regulation <a href="#">(EU) no. 2022/125</a>) that also covers the period 2018 -2020.</p> <p>The data for the remaining variables of the Environmental Protection Expenditure Accounts as reported in section 3.4 cover the period 2014-2020.</p> |
| <b>3.9. Base period</b>   |
| Not applicable  |

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| <b>4. Unit of measure</b> |
| Millions of euros         |

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| <b>5. Reference Period</b>                               |
| The reference period for EPEA data is the calendar year. |

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| <b>6. Institutional Mandate</b>  |
| <b>6.1. Institutional Mandate - legal acts and other agreements</b>  |
| <p>The legal framework concerning the organization and operation of ELSTAT is available at the following link: <a href="https://www.statistics.gr/en/legal-framework">https://www.statistics.gr/en/legal-framework</a></p> <p>EPEA are legally covered by <a href="#">Regulation (EC) No. 691/2011</a> on European environmental economic accounts (EEEA) as amended by Regulation <a href="#">(EU) No. 538/2014</a> and commission delegated regulation <a href="#">(EU) no. 2022/125</a>. EEEA currently include six modules (air emissions accounts, environmentally related taxes by economic activity, economy-wide material flow accounts, environmental protection expenditure accounts, environmental goods and services sector accounts, and physical energy flow accounts).</p> <p>The EEEA are fully in accordance with internationally agreed concepts and definitions set out in the system of environmental economic accounting 2012 – central framework (SEEA CF 2012, see annex). The SEEA CF is a multi-purpose conceptual framework to report the interactions between the environment and the economy. EEEA present environmental information in a way that is fully compatible with National Accounts.</p> |
| <b>6.2. Institutional Mandate - data sharing</b>   |
| Not applicable   |

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| <b>7. Confidentiality</b> |
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### 7.1. Confidentiality - policy

The issues concerning the observance of statistical confidentiality by the Hellenic Statistical Authority (ELSTAT) are arranged by articles 7, 8 and 9 of the Law 3832/2010 as in force, by Articles 8, 10 and 11(2) of the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System and by Articles 10 and 15 of the Regulation on the Operation and Administration of ELSTAT.

Furthermore, ELSTAT disseminates the statistics in compliance with the statistical principles of the European Statistics Code of Practice and in particular with the principle of statistical confidentiality.

<https://www.statistics.gr/en/statistical-confidentiality>

### 7.2. Confidentiality - data treatment

- ELSTAT protects and does not disseminate data it has obtained, or it has access to, which enable the direct or indirect identification of the statistical units that have provided them by the disclosure of individual information directly received for statistical purposes or indirectly supplied from administrative or other sources. ELSTAT takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means that might reasonably be used by a third party. Statistical data that could potentially enable the identification of the statistical unit are disseminated by ELSTAT if and only if:
  - a) these data have been treated, as it is specifically set out in the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System (ELSS), in such a way that their dissemination does not prejudice statistical confidentiality or
  - b) the statistical unit has given its consent, without any reservations, for the disclosure of data.
- The confidential data that are transmitted by ELSS agencies to ELSTAT are used exclusively for statistical purposes and the only persons who have the right to have access to these data are the personnel engaged in this task and appointed by an act of the President of ELSTAT.
- ELSTAT may grant researchers conducting statistical analyses for scientific purposes access to data that enable the indirect identification of the statistical units concerned. The access is granted provided the following conditions are satisfied:
  - a) an appropriate request together with a detailed research proposal in conformity with current scientific standards have been submitted;
  - b) the research proposal indicates in sufficient detail the set of data to be accessed, the methods of analyzing them, and the time needed for the research;
  - c) a contract specifying the conditions for access, the obligations of the researchers, the measures for respecting the confidentiality of statistical data and the sanctions in case of breach of these obligations has been signed by the individual researcher, by his/her institution, or by the organization commissioning the research, as the case may be, and by ELSTAT.
- Issues referring to the observance of statistical confidentiality are examined by the Statistical Confidentiality Committee (SCC) operating in ELSTAT. The responsibilities of this Committee are to make recommendations to the President of ELSTAT on:
  - the level of detail at which statistical data can be disseminated, so as the identification, either directly or indirectly, of the surveyed statistical unit is not

- possible;
- the anonymization criteria for the microdata provided to users;
  - the granting to researchers access to confidential data for scientific purposes.
- The staff of ELSTAT, under any employment status, as well as the temporary survey workers who are employed for the collection of statistical data in statistical surveys conducted by ELSTAT, who acquire access by any means to confidential data, are bound by the principle of confidentiality and must use these data exclusively for the statistical purposes of ELSTAT. After the termination of their term of office, they are not allowed to use these data for any purpose.
  - Violation of data confidentiality and/or statistical confidentiality by any civil servant or employee of ELSTAT constitutes the disciplinary offence of violation of duty and may be punished with the penalty of final dismissal.
  - ELSTAT, by its decision, may impose a penalty amounting from ten thousand (10,000) up to two hundred thousand (200,000) euros to anyone who violates the confidentiality of data and/or statistical confidentiality. The penalty is always imposed after the hearing of the defense of the person liable for the breach, depending on the gravity and the repercussions of the violation. Any relapse constitutes an aggravating factor for the assessment of the administrative sanction.

## **8. Release policy**

### **8.1. Release calendar**

EPEA data are disseminated through ELSTAT website according to Annual Statistical Work Program (<https://www.statistics.gr/en/programmes-and-reports>). There are no scheduled Press Releases.

### **8.2. Release calendar access**

Press Release Calendar is available on ELSTAT website (<https://www.statistics.gr/en/calendar>)

### **8.3. Release policy - user access**

In compliance with Community legislation and the European Statistics Code of Practice, ELSTAT releases all national statistical data on its webpage, fully observing professional independence and with a view to ensuring the simultaneous, equal, and timely access of all users to statistical data.

## **9. Frequency of dissemination**

Data are disseminated annually.

## **10. Accessibility and clarity**

### **10.1. Dissemination format - News release**

Not applicable.

### **10.2. Dissemination format - Publications**

EPEA data are available at ELSTAT's website (<https://www.statistics.gr/en/statistics/-/publication/SOP15/-> )

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| <b>10.3. Dissemination format - online database</b>  |
| <p>EPEA data are disseminated with data files at ELSTAT's website (<a href="https://www.statistics.gr/en/statistics/-/publication/SOP15/-">https://www.statistics.gr/en/statistics/-/publication/SOP15/-</a>)</p> <p>Data are also disseminated on the Eurostat database at the following link: <a href="https://ec.europa.eu/eurostat/web/main/data/database">https://ec.europa.eu/eurostat/web/main/data/database</a></p>  |
| <b>10.4. Dissemination format - microdata access</b>   |
| Not applicable   |
| <b>10.5. Dissemination format - other</b>  |
| <p>Data can be provided to users (given that restrictions on statistical confidentiality are fully met) usually by e-mail, by submitting a relevant data request. Users have to submit their request, describing in detail the requested data, to the Division of Statistical Information and Publications. The requests must be submitted electronically to the following e-mail address: <a href="mailto:data.dissem@statistics.gr">data.dissem@statistics.gr</a>.</p> |
| <b>10.6. Documentation on methodology</b>  |
| <p>The EPEA manual and other methodological information can be downloaded from <a href="#">Eurostat's website</a>.</p>   |
| <b>10.7. Quality management - documentation</b>  |
| <p>European Member States are obliged to provide quality reports, according to EU <a href="#">Regulation 691/2011</a>, article 7.</p>  |

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| <b>11. Quality management</b>   |
| <b>11.1. Quality assurance</b>  |
| <p>Quality of the data is ensured with the following procedures:</p> <ul style="list-style-type: none"> <li>- Implementation of methodological guidelines provided by the Eurostat with the EPEA handbook (2017) and additional guideline documents</li> <li>- Extensive validation procedure of the data by Eurostat. The validation tools checks for inappropriate symbols, consistency and plausibility (e.g. changes in time series, extreme values, revisions, internal consistency of variables)</li> </ul> |
| <b>11.2. Quality management – assessment</b>  |
| <p>The overall quality of the data is considered satisfactory at the current stage of EPEA development. EPEA compilation has started recently (mandatory reporting from 2017) and the length of available data is still relatively short (2014 – 2020). The quality and coverage in terms of mandatory variables are expected to improve in the next few years. ELSTAT continues to improve data compilation following guidance from Eurostat.</p>  |

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| <b>12. Relevance</b>  |
| <b>12.1. Relevance - User Needs</b>   |
| <p>No identification of the users of EPEA at national level is currently performed.</p> <p>Main potential users for the EPEA could be: the Ministry of Environment &amp; Energy, the Ministry of Development and Investments, Researchers, Corporations and non-profit institutions, press and media.</p> <p>There are also foreign institutional users (Eurostat, OECD, United Nations, etc.).</p> |

## **12.2. Relevance - User Satisfaction**

The Statistical Information and Publications Division of ELSTAT conducts a survey on user satisfaction, the results of which are available at the link:

<http://www.statistics.gr/en/user-satisfaction-survey>.

However, as EPEA data have been recently published for the first time, there is currently no feedback from users yet.

## **12.3. Completeness**

The requirements of the Regulation 691/2011 for mandatory reporting are fully met.

## **13. Accuracy**

### **13.1. Accuracy - overall**

The overall accuracy is considered to be satisfactory. Accuracy of national data is also systematically assessed through Eurostat's validation checks to all EPEA data reported.

### **13.2. Sampling error**

Not applicable to statistical accounts

### **13.3. Non-sampling error**

Not applicable to statistical accounts

## **14. Timeliness and punctuality**

### **14.1. Timeliness**

The data are submitted to Eurostat 24 months after the end of the reference year. After validation data are published by the third quarter of the following year according to the release schedule of the Statistical Program of ELSTAT.

### **14.2. Punctuality**

EPEA are transmitted within the deadlines set out by the European Regulation.

## **15. Coherence and comparability**

### **15.1. Comparability - geographical**

EPEA are compiled according to harmonised guidelines provided by Eurostat and hence are comparable across European member states that report EPEA. The adoption of common statistical concepts and definitions, as defined in the Eurostat handbook, and the validation checks applied by Eurostat enhance the comparability between countries.

### **15.2. Comparability - over time**

EPEA data are available and comparable from 2014. The data refer to the mandatory data as reported in the regulation 691/2011.

### **15.3. Coherence - cross domain**

Data are coherent with principles, definitions and concepts in National Accounts (ESA - European System of Accounts), and Environmental Accounting (SEEA - System of



Environmental-Economic Accounting). This ensures a high level of coherence with the core national accounts.

#### **15.4. Coherence - internal**

The internal coherence is very high, ensured by the accounting framework and reporting tables (totals are consistent with the sum of the breakdowns). Validation procedures also ensure internal consistency.

#### **16. Cost and Burden**

Approximately, 4 months of full-time equivalents (FTE) were used for this data compilation (2022) of EPEA.

#### **17. Data revision**

##### **17.1. Data revision - policy**

EPEA data should comply with the revision policy of the underlying data sets used, meaning mainly National Accounts and Structural Business statistics data. EPEA data is reported as provisional only for 2020.

##### **17.2. Data revision - practice**

Previously transmitted data to Eurostat have been revised mainly due to a) National Accounts revision only for the years 2018 and 2019 and b) revised data on Transfers for the whole period 2014 – 2019.

#### **18. Statistical processing**

##### **18.1. Source data**

The main data sources used for the compilation of EPEA data by each table in detailed EPEA data by institutional sector are the following:

- Table 1) General Government and NPISH  
COFOG Statistics from table «General government expenditure by function» of the National Accounts (ESA 2010) transmission program. CEPA categories are derived from the direct correspondence of the sub items of division 05 - Environmental Protection of COFOG statistics. Certain variables not available in COFOG statistics table have been complemented by detailed General Government data provided by the respective National Accounts section.
- Table 2) Corporations as specialist and secondary producers of market EP services:
  - Supply and use tables (SUT) data at current prices compiled by National Accounts, where data are aggregated for NACE sectors and CPA products 37-39 “Sewerage; waste collection, treatment and disposal activities; materials recovery; remediation activities and other waste management services”.
  - CEPA categories are calculated by using detailed respective Nace rev.2 4-digit data.
- Table 3) Corporations other  
SBS data are used for Corporations' mandatory items.  
Gross Fixed Capital Formation (GFCF) is based on SBS variables:
  - Investments for the purchase of environmental equipment and installations for the management, treatment, measurement of emissions and waste, which do not entail any change in the production process (separate equipment)

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| <p>- Investments for the purchase of environmental equipment and facilities, which bring about a change in the production process (integrated equipment).<br/> <u>Ancillary Output</u> is calculated using SBS variable for “Total current expenditure on environmental protection”.</p> <p>SBS figures are available with subcategories that correspond directly to CEPA categories and to Nace rev.2 -digit breakdown.</p> <ul style="list-style-type: none"> <li>• Table 4) Households final consumption<br/> Detailed final consumption data for CEPA categories “Wastewater management” (CEPA 2) and “Waste management” (CEPA 3) are provided by the respective section of National Accounts which compile respective data for the ESA Transmission Program.</li> <li>• Table 5) Transfers: <ul style="list-style-type: none"> <li>- Subsidies data from General Government expenditure available in COFOG statistics for division 05 - Environmental Protection are mainly used</li> <li>- Concerning Transfers from the institutional sector “Rest of the World” EU transfers data from the EU Financial Transparency System (FTS) as proposed in the EPEA handbook are used.</li> </ul> </li> <li>• Table: Total supply of environmental protection services<br/> NA Supply and Use table data are utilized for Imports, exports and taxes concerning product 37-39 (“Sewerage; waste collection, treatment and disposal activities; materials recovery; remediation activities and other waste management services”). CEPA categories figures are calculated on information available in international trade statistics.</li> </ul> |
| <b>18.2. Frequency of data collection</b>  |
| Data are collected annually.   |
| <b>18.3. Data collection</b>   |
| <p>The data collection for compiling EPEA is performed by the following data providers:</p> <ol style="list-style-type: none"> <li>1) National Accounts Division from ELSTAT which provide economic variables for: <ul style="list-style-type: none"> <li>• General Government (COFOG Statistics),</li> <li>• Detailed Supply and Use tables (SUT),</li> <li>• Households’ final consumption data.</li> </ul> </li> <li>2) Business Statistics Division of ELSTAT for Structural Business Survey data at Nace Rev.2 classification for Output (market and ancillary) and Gross fixed Capital Formation data for the institutional sector of Corporations</li> <li>3) Other administrative like EU transfers data from the Financial Transparency System (FTS) for the institutional sector “Rest of the World”</li> </ol>  |
| <b>18.4. Data validation</b>   |
| Data are extensively validated by Eurostat using IT tools and validation reports. Before finalizing, data also undergo a series of logical and consistency checks as regards the change of variables over time, revisions, extreme values and cross domain consistency.  |
| <b>18.5. Data compilation</b>  |
| Based on the aforementioned data sources the following tables are compiled and published for the economic aggregates related to Environmental Expenditure:   |

- Detailed EPEA economic aggregates (Output, Intermediate Consumption, Final consumption, GFCF, Transfers) by Institutional Sector:
  - Table 1) General Government and NPISH
  - Table 2) Corporations as specialist and secondary producers of market EP services
  - Table 3) Corporations other for ancillary Output and GFCF
  - Table 4) Households final consumption
  - Table 5) Transfers
  - Total supply of environmental protection services
  
- National Expenditure on Environmental Protection. The final key aggregate produced based on the EPEA data is national expenditure on environmental protection ('NEEP') which measures the total resources devoted by resident units to protecting the natural environment. It is calculated as a sum of the above detailed data on uses of environmental protection (EP) services by resident units, gross fixed capital formation (GFCF) for EP activities, and net transfers to the rest of the world for EP.

#### 18.6. Adjustment

Not applicable.

#### 19. Comment