

Statistical survey on environmental protection expenditures	
E_ZS.T_A_EN_2024_1	
Reference Metadata in ESMS 2.0 structure	
<b>1</b>	<b>Contact</b>
<b>1.1</b>	<b>Contact organisation</b>
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<b>2</b>	<b>Metadata update</b>
<b>2.1</b>	<b>Metadata last certified</b>
01/09/2024	
<b>2.2</b>	<b>Metadata last posted</b>
01/09/2024	
<b>2.3</b>	<b>Metadata last update</b>
01/09/2024	

<b>3</b>	<b>Statistical presentation</b>
<b>3.1</b>	<b>Data description</b>
<p>Provision and dissemination of data from enterprises, establishments, municipal administrations, scientific institutes, foundations, ministries and other organizations , which have made expenditure on protection and restoration of the environment during the reference year . Included here is the expenditure on acquisition - investments as well as the expenditure on maintenance of the tangible fixed assets with ecological use allocated by domain of ecological use (water, air, waste, etc.).</p>	
<b>3.2</b>	<b>Classification system</b>
<p>National classification of economic activities. NKD Rev. 2 ( <a href="#">NACE Rev.2</a> ) which is harmonized with European NACE Rev. 2 classificitaniot from 01.01.2008.</p> <p>Nomenclature of territorial units for statistics, NTES (by NUTS)</p> <p>Classification of Environmental Protection Activities, KATZZS (CEPA, 2000)</p>	
<b>3.3</b>	<b>Sector coverage</b>
<p>Enterprises with 10 and more employees with economic activity in the sectors from A/A to U/P according to NKD Rev. 2.</p>	
<b>3.4</b>	<b>Statistical concepts and definitions</b>
<p>The conceptual basis for Eurostat's definitions of Environmental Protection Expenditure is the European System for Collection of Economic Information on the Environment (SERIEE) and its Environmental Protection Expenditure Account (EPEA).</p> <p>Definitions:</p> <p><b>Environmental protection expenditure</b> covers money spent on all activities directly aimed at the prevention, reduction and elimination of pollution or nuisances resulting from the production processes or consumption of goods and services.</p> <p><b>Investment expenditure</b> includes all outlays payments for equipment, machinery and land used for environmental protection purposes. Total investments are sum of investments in integrated technologies end of pipe investments in equipment.</p> <p><b>Current expenditure</b> for environmental protection includes internal, i.e. own expenditure of the enterprises, fees, taxes and other current expenditures refering to environmental protection.</p>	
<b>3.5</b>	<b>Statistical unit</b>
<p>Enterprises</p>	
<b>3.6</b>	<b>Statistical population</b>

All enterprises, public section and specialised producers for environmental protection services, that have spent funds for new construction, reconstruction, maintenance and operation of tangible and intangible fixed assets with ecological use and environmental protection activities that belong to the sections defined in the concept 3.3.

### 3.7 Reference area

NTES 1 and 2 (Republic of North Macedonia)

### 3.8 Time coverage

Since 2013 onwards.

### 3.9 Base period

Not applicable

### 4 Unit of measure

Thousand denars.

### 5 Reference period

Calendar year

### 6 Institutional mandate

#### 6.1 Legal acts and other agreements

##### NATIONAL LEGISLATION

Law on State Statistics ("Official Gazette of the Republic of Macedonia" No. 54/1997, 21/2007, 51/2011, 104/2013, 42/2014, 192/2015, 27/16, 83/18, 220/18 and "Official Gazette of the Republic of North Macedonia" No. 31/20) (<https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/>)

Programme of Statistical Surveys 2023-2027 ("Official Gazette of the Republic of North Macedonia" No. 29/23 and 57/25) (<https://www.stat.mk/en/about-us/legal-acts/program-for-statistical-surveys/>)

##### EUROPEAN LEGISLATION

Regulation No. 538/2014 of the European Parliament and of the Council ), amending Regulation No.691/2011 on European environmental economic accounts of the European Parliament.

#### 6.2 Data sharing

Data on Environmental Protection Expenditures are exchanged with the Ministry of Environment and Spatial Planning based on a Memorandum of Cooperation.

Data is shared through eDamis to Eurostat according to the Regulation (EU) No 691/2011 on European environmental economic accounts <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:192:0001:0016:EN:PDF> 2 ; UNECE (Joint questionnaire), UNSD-UNEP (Questionnaire on environmental statistics).

<b>7</b>	<b>Confidentiality</b>
<b>7.1</b>	<b>Confidentiality - policy</b>
<p>1. The protection of individual data is regulated by the Law on State Statistics (<a href="https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/">https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/</a>).</p> <p>2. The basic principles and activities undertaken to ensure data confidentiality are described in the Policy on Statistical Confidentiality (<a href="https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/">https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/</a>).</p>	
<b>7.2</b>	<b>Confidentiality - data treatment</b>
<p>Pursuant to Article 38 of the Law on State Statistics (<a href="https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/">https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/</a>) and the Policy on Statistical Confidentiality (<a href="https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/">https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/</a>), individual data are not published. However, if access is granted to microdata from the relevant survey, then the methods used to prevent data disclosure should be specified.</p>	
<b>8</b>	<b>Release policy</b>
<b>8.1</b>	<b>Release calendar</b>
<p>The date of data publication is determined in the Advance Release Calendar, which is updated quarterly.</p>	
<b>8.2</b>	<b>Release calendar access</b>
<p><a href="https://www.stat.mk/en/publishing-calendar/#/">https://www.stat.mk/en/publishing-calendar/#/</a></p>	
<b>8.3</b>	<b>User access</b>
<p>All users have equal access to statistics at the same time: this means that the publication dates are announced in advance and no user has access to official statistics before they are published. Statistical data are first published in the "News Releases" edition on the website of the State Statistical Office at 12:00.</p>	
<b>9</b>	<b>Frequency of dissemination</b>
<p>Annual.</p>	
<b>10</b>	<b>Accessibility and clarity</b>
<b>10.1</b>	<b>News release</b>
<p>News Releases are published and they are available on the website of the SSO in the section: "News Releases" (<a href="https://www.stat.mk/en/all-new-releases">https://www.stat.mk/en/all-new-releases</a>),</p> <p>News Release "Environmental Protection Expenditures" are published annually is it is available on the website of the SSO in the section: "News Releases" (<a href="https://www.stat.mk/en/stat/industry-energy-and-environment/environment/environmental-protection-expenditures/environmental-protection-expenditures-2023/">https://www.stat.mk/en/stat/industry-energy-and-environment/environment/environmental-protection-expenditures/environmental-protection-expenditures-2023/</a>).</p>	

<b>10.2</b>	<b>Publications</b>
<p>Data on Environmental Protection Expenditures is published in:</p> <p>Statistical yearbook,</p> <p><a href="http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=34&amp;rbrObl=37">http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=34&amp;rbrObl=37</a></p> <p>Environmental statistics</p> <p><a href="http://www.stat.gov.mk/PrikaziPublikacija_1.aspx?rbr=703">http://www.stat.gov.mk/PrikaziPublikacija_1.aspx?rbr=703</a></p>	
<b>10.3</b>	<b>On-line database</b>
<p>MAKStat-database - Environment</p> <p><a href="http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat_ZivotnaSredina/375_ZivSred_i_nv_tros_mk.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef">http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat_ZivotnaSredina/375_ZivSred_i_nv_tros_mk.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef</a></p>	
<b>10.4</b>	<b>Micro-data access</b>
<p>The use of microdata by external users is possible only for research purposes and is done in accordance with the Law on State Statistics (Article 41, Article 42 and Article 43). Access to anonymised microdata is defined by an internal procedure of the State Statistical Office "Access to anonymised microdata for scientific research purposes" ( <a href="https://www.stat.mk/en/about-us/procedures/rules-for-access-to-anonymised-microdata-for-research-purposes/">https://www.stat.mk/en/about-us/procedures/rules-for-access-to-anonymised-microdata-for-research-purposes/</a> ).</p>	
<b>10.5</b>	<b>Other</b>
<p>At the request of users, data are also prepared in a form according to their needs.</p>	
<b>10.6</b>	<b>Documentation on methodology</b>
<p>The Methodological explanation, national</p> <p><a href="http://www.stat.gov.mk/MetodoloskiObjasSoop.aspx?id=125&amp;rbrObl=28">http://www.stat.gov.mk/MetodoloskiObjasSoop.aspx?id=125&amp;rbrObl=28</a></p> <p>Regulation of European Parliament No. 538/2014.</p> <p><a href="https://publications.europa.eu/en/publication-detail/-/publication/8f5dc5e0-e656-11e3-8cd4-01aa75ed71a1">https://publications.europa.eu/en/publication-detail/-/publication/8f5dc5e0-e656-11e3-8cd4-01aa75ed71a1</a></p> <p>Methodology from Eurostat</p>	

<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:192:0001:0016:EN:PDFhttps://publications.europa.eu/en/publication-detail/-/publication/8f5dc5e0-e656-11e3-8cd4-01aa75ed71a1>

## 10.7 Quality documentation

The quality report is published on the SSO web-site ( [http://www.stat.gov.mk/Meta\\_godini\\_v2.aspx](http://www.stat.gov.mk/Meta_godini_v2.aspx) ). The last refers to 2023 година.

The quality report is transmitted to Eurostat via ESS Metadata handler ( <https://webgate.ec.europa.eu/estat/spe/metaconv/home.htm#> ). The last refers to the reference year 2023.

## 11 Quality management

### 11.1 Quality assurance

The quality of the processes and products in the State Statistical Office is ensured by adhering to the European Statistics Code of Practice ( <https://www.stat.mk/en/about-us/quality/code-of-practice/> ) and the Quality Assurance Framework within the European Statistical System (ESS Quality Assurance Framework – <https://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V2.0-final.pdf> ). The quality criteria are also determined in the Law on State Statistics in Article 4b and Article 4c ( <https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/> ).

### 11.2 Quality assessment

The State Statistical Office carries out statistical activities in accordance with the Statistical Business Process Model, which is based on the international model - Generic Statistical Business Process Model (GSBPM). The application of this model and international standards in statistical production ensures a high level of accuracy and comparability of data.

## 12 Relevance

### 12.1 User needs

Data are used by the government institutions for calculation of indicators for measuring of environmental protection expenditures by usage, the share of environmental protection expenditures by sections and investments for environmental protection by types of equipment. Data are used by Department of Sustainable Development for calculations of SDG indicators.

### 12.2 User satisfaction

Starting from 2009, the State Statistical Office conducts a User Satisfaction Survey every three years.	
<b>12.3</b>	<b>Completeness</b>
Time series from 2013-2021.	
<b>13</b>	<b>Accuracy and reliability</b>
<b>13.1</b>	<b>Overall accuracy</b>
The survey methodology and the data collection method ensure good coverage and accuracy of the data.	
<b>13.2</b>	<b>Sampling error</b>
Coefficient of variation calculated through the number of employees is 5.5%.	
<b>13.3</b>	<b>Non-sampling error</b>
Measuring errors: Reporting units are informed about ongoing survey by sending a notification letter. Collected data are controlled into the Central Office. Errors in data processing: Data entry is done through prepared application with manual data entry device. During the process of data entry were applied automatically controls, also an additional control was performed after the compilation of data entry. If some irregularities were noted, then the reporting units were contacted and for some items was done data imputation using the method of expert imputation. Non-response errors: Non-response rate per unit is 62.2%.	
<b>14</b>	<b>Timeliness and punctuality</b>
<b>14.1</b>	<b>Timeliness</b>
T+720 days.	
<b>14.2</b>	<b>Punctuality</b>
Data are published on the day announced in the Advance Release Calendar.	
<b>15</b>	<b>Coherence and comparability</b>
<b>15.1</b>	<b>Comparability - geographical</b>
<p>There is geographic comparability of the data disseminated at the national and regional level.</p> <p>Due to the unity of principles, variables, definitions and classifications used there is a high degree of comparability with EU Member States with regard to the survey's results.</p> <p>Geographical comparability is also enhanced due to the relevant Manual of Eurostat and the relevant checks conducted by Eurostat.</p>	
<b>15.2</b>	<b>Comparability - over time</b>
Data from 2013 onwards are calculated according to NKD Rev. 2 and the comparability of time series is ensured.	

<b>15.3</b>	<b>Coherence - cross domain</b>
Coherence between fields is not ensured.	
<b>15.4</b>	<b>Coherence - internal</b>
Internal coherence of data is ensured, data are compared with other surveys from the sector.	
<b>16</b>	<b>Cost and burden</b>
Average time for fill in the questionnaire is between 15 and 20 minutes.	
<b>17</b>	<b>Data revision</b>
<b>17.1</b>	<b>Data revision - policy</b>
Data revision is made in accordance with the Statistical Data Revision Policy of the SSO: ( <a href="https://www.stat.mk/en/about-us/policies-and-strategies/data-revision/">https://www.stat.mk/en/about-us/policies-and-strategies/data-revision/</a> ).	
<b>17.2</b>	<b>Data revision - practice</b>
<b>18</b>	<b>Statistical processing</b>
<b>18.1</b>	<b>Source data</b>
<p>Source of data: Statistical survey on Environmental Protection Expenditures.</p> <p>Frame on which the selection is based the random sample selection is Statistical business register.</p> <p>Method used for data collection is combination of full coverage and sample survey and includes business entities distributed in the following divisions 10 - 12, 13 - 15, 25 - 33 and 41 - 96, excluding division 84. Other sections and divisions are fully covered.</p> <p>In the sample for 2022, 2600 business entities are covered.</p>	
<b>18.2</b>	<b>Frequency of data collection</b>
Annual.	
<b>18.3</b>	<b>Data collection</b>
<p>Data validation is made according to the defined criteria for control. Data validation is performing before and after data entry. For deviations reporting units are contacted. Data check is performed on the final results before their publication.</p> <p>Upon receipt of the questionnaire (by mail or Excel by email) it is archived, recorded, controlled and entered with the application (in Blaze).</p>	



The application performs the mandatory controls according to the defined validation rules. In case of errors the data providers are contacted.

The coverage is controlled which should be 100%.

Output data validation:

Output data are analyzed and verified, compared to the previous year (years).

<b>18.4</b>	<b>Data validation</b>
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Data validation is done through the entire process, starting from the phase of collecting to the phase of preparing aggregated data. Data validation is also performed before their publication. A comparison with previous year is made.

<b>18.5</b>	<b>Data compilation</b>
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Editing: The data received from businesses entities, after verification and correction in consultation with the reporting units, are entered in an electronic application with integrated on-line controls. Imputation: Imputation is done using the data from the previous period. Weights: Aggregated data are calculated by weighting the sample data. The lowest level of data aggregation is NTES 2 level. Variable used for data weighting is number of employees in stratum.

<b>18.6</b>	<b>Adjustment</b>
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Not applicable.

<b>19</b>	<b>Comment</b>
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<b>A.1</b>	<b>Annexes</b>
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