REPUBLIC OF CROATIA
CROATIAN BUREAU OF STATISTICS

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QUALITY REPORT FOR STATISTICAL SURVEY

Air Emission Accounts for 2024

Organisational unit: Environment Statistics Unit

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0. Basic information

- Purpose and subject matter

Air emission accounts present the emissions of greenhouse gases and air pollutants for the Republic of Croatia. They are one of the several physical modules of Eurostat's programme of environmental economic accounts. Air emission accounts are covered by Regulation (EU) No. 691/2011 of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts. They are harmonised with economic statistics and the European System of National Accounts (ESA). These characteristics make them appropriate for integrated ecological and economic analyses and modelling, e.g. calculation of carbon footprints and climate change indicators.

- Reference period

Several calendar years

- Legal acts and other agreements

Regulation (EC) No 691/2011 of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts

Decision on the National Classification of Activities – NKD 2007 (NN, br. 58/07. i 72/07.)

Official Statistics Act (NN, Nos 25/20. and 155/23.)

- Classification system

A basis for air emissions accounting according to economic activities is the National Classification of Activities, 2007 version

Economic activities include: 64 production activities (A*64 classified according to NACE Rev. 2) and households (three subclasses)

European System of National Accounts (ESA)

- Concepts and definitions

Air emission accounts record physical flows of gaseous or particulate materials ("air emissions"), which occur as a result of economic activity (production activities of business entities and activities of private households), as explained in the European System of National Accounts (ESA). They are based on the residence principle.

Air emissions are physical flows of gaseous or particulate materials from economy (production or consumption processes) that pollute the atmosphere. Air emissions include emissions of greenhouse gases CO_2, N_2O, CH_4, HFC, PFC and SF_6 NF_3, as well as emissions of air pollutants NO_X, SO_X, NH_3, NMHOS, CO, $PM_{2.5}$ and PM_{10}.

A basis for air emissions accounting according to economic activities according to the residence principle, are data obtained from:

1. Reports on greenhouse gas emissions inventory on the territory of the Republic of Croatia according to the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol,

2. Informational report on air pollutants inventory on the territory of the Republic of Croatia according to the Convention on Long-Range Transboundary Air Pollution (CLRTAP) and the Directive on the reduction of national emissions of certain atmospheric pollutants,

3. Physical energy flow accounts (PEFA questionnaire).

Differences between air emission accounts and data from official national air emission inventories are reported through bridging items. The difference is caused by implementation of two methodological concepts: residence principle and territorial principle. In accordance with the definition of system boundaries within economy based on the residence principle, air emission accounts at the national level exclude emissions produced by non-residents (e.g., tourists and international carriers), but include emissions produced by resident units abroad. The main source for the calculation of bridging items is the physical energy flow account.

Emissions by economic activities are calculated by using certain national data (data on activities and emissions of direct and indirect greenhouse gases, data from the Environmental Pollution Register, data from the energy balance, data on fluorinated greenhouse gases (F-gases) and data taken over from reports on air emissions of pollutants), which help in linking the source data categories and standard economic classifications.

- Statistical units

Data relate to emissions of resident economic units in terms of System of Environmental-Economic Accounting (SEEA CF 2012) and national accounts (ESA), including households.

- Statistical population

The target population are all production sectors according to the NACE Rev.2 (economic entities) and private households.

1. Relevance

1.1. Data users

Users from the Croatian Bureau of Statistics, other users: scientists, students

1.1.1. User needs
Users are looking for information for the following reasons:
Users from the Croatian Bureau of Statistics - for comparison of calculations
Scientists – for research purposes
Students – for writing academic papers

1.1.2. User satisfaction
The first user satisfaction survey of the Croatian Bureau of Statistics was conducted in 2013, the second one in 2015, and the last one at the end of 2022. The results of the survey are available on the website of the Croatian Bureau of Statistics – User satisfaction surveys.

1.2. Completeness

Data are submitted to Eurostat pursuant to Regulation (EC) No 691/2011 of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts.

1.2.1. Data completeness rate
Data completeness rate is 100%.

2. Accuracy and reliability

2.1. Sampling error

Not applicable.

2.1.1. Sampling error indicators
The indicator is not applicable.

2.2. Non-sampling error

Not applicable.

2.2.1. Coverage error
Not applicable.

2.2.2. Overcoverage rate
The indicator is not applicable.

2.2.3. Measurement errors
Not applicable.

2.2.4. Non-response errors
Not applicable.

2.2.5. Unit non-response rate
The indicator is not applicable.

2.2.6. Item non-response rate
The indicator is not applicable.

2.2.7. Processing errors
Not applicable.

2.2.8. Imputation rate
The indicator is not applicable.

2.2.9. Model assumption error
Not applicable.

2.3. Data revision

2.3.1. Data revision – policy
The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics - General revision policy of the CBS.

2.3.2. Data revision – practice
The First Release presents provisional data, whereas final data are released in the database.

2.3.3. Data revision – average size
The indicator is not computed.

2.4. Seasonal adjustment

Not applicable.

3. Timeliness and punctuality

3.1. Timeliness

T + 2

3.1.1. Timeliness – first results

Timeliness of first results is T + 1.

3.1.2. Timeliness – final results

Timeliness of final results is T + 11 months.

3.2. Punctuality

100%

3.2.1. Punctuality − delivery and publication

Punctuality is 0 months.

4. Accessibility and clarity

Data are disseminated in printed and in electronic format released on the website of the Croatian Bureau of Statistics in the form of the First Releases and PC-AXIS databases. The First Release contains brief methodological explanations, such as data sources and methods for the data collection, coverage and comparability, definitions etc. Metadata are also available in the database.

4.1. News release

OEN-2024-1-5 Air Emission Accounts, 2022 – Provisional Data

Release date: 27 September 2024

4.2. Online database

PC-Axes Database (area: Environment, Environmental economic accounts)

Release date: 06 December 2024

4.3. Microdata access

Conditions under which certain users can have access to microdata are regulated by the Ordinance on the Conditions and Manner of Use of Statistical Data for Scientific Purposes of the Croatian Bureau of Statistics.

4.4. Documentation on methodology

Manual "Air Emissions Accounts", 2015 edition, Eurostat

The basic methodological explanations are published in the First Release and in the PC-Axis database (metadata).

All relevant information is also available on the Eurostat's website (http://epp.eurostat.ec.europa.eu).

5. Coherence and comparability

5.1. Asymmetry for mirror flows statistics

Not applicable.

5.2. Comparability over time

Comparable data series refer to the period from 2008 to 2022.

5.2.1. Length of comparable time series
Length of comparable time series is 15.

5.2.2. Reasons for break in time series
Not applicable.

5.3. Coherence – short-term and structural data

The indicator is not computed.

5.4. Coherence – national accounts

The indicator is not computed.

5.5. Coherence – administrative sources

The indicator is not computed.

6. Cost and burden

6.1. Cost

Costs are connected to data production via material costs and employees' wages.

6.2. Burden

The indicator for this survey is not computed.