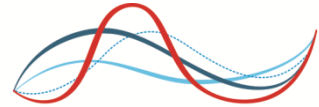REPUBLIC OF CROATIA

CROATIAN BUREAU OF STATISTICS

# QUALITY REPORT FOR STATISTICAL SURVEY

## Economic Material Flow Accounts

## For 2018

Organisational unit: Environment and Energy Statistics and Sustainable Development
Indicators Department
Environment Statistics Unit
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July, 2020

## 0. Basic information

- Purpose, goal, and subject of the survey

Domestic extraction of materials; import and export of raw materials, semi-finished products and finished products for intra and extra EU trade; domestic processed output

- Reference period

Calendar year.

- Legal acts and other agreements

Decision on the National Classification of Activities – NKD 2007. (OG, Nos 58/07 and 72/07); Customs Service Act (OG, Nos 68/13, 30/14 and 115/16)
Regulation (EU) No 691/2011 of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts

- Classification system

The economy-wide material flow accounts (EW-MFA) record physical flows of materials broken down by type of flow and by type of material.

The type of flow dimension corresponds to the EW-MFA questionnaire reporting tables and derived indicators, namely:
- domestic extraction (Table A)
- physical imports (Table B)
- physical exports (Table D)
- domestic processed output (Table F)
- balancing items (Table G)
- direct material input (indicator)
- domestic material consumption (indicator)
- physical trade balance (indicator).

The breakdown by type of material employs a classification of materials. This EW-MFA classification of materials is hierarchical with main material flow categories (one-digit level). Each main category is further broken down, maximal down to the four-digit-level:
- one-digit level: material category;
- two-digit level: material class;
- three-digit level: material class;
- four-digit level: material class;

- Concepts and definitions

The economic material flow accounts are one of several physical modules of the Eurostat's programme of environmental economic accounts. They are covered in the Regulation (EU) No 691/2011 of the European Parliament and the Council of 6 July 2011 on the environmental economic accounts.

Economy-wide material flow accounts (EW-MFA) record flows of natural inputs (domestic extraction of materials) and products (imports, exports) in a detailed breakdown by some 50 material categories. Trade data presented in this statistics employ the following main material categories:

- Biomass and biomass products: crops and products thereof, crop residues and fodder crops
- Metal ores and concentrates and products thereof
- Non-metallic minerals and products thereof: sand and gravel, non-metallic minerals and products thereof (excluding sand and gravel)
- Fossil energy material/carriers and products thereof (coal, oil, gas etc.)
- Other products and waste.

Domestic extraction used (DEU) is the input from the natural environment to be used in the economy. This is the annual amount of raw material (except for water and air) extracted from the natural environment.

Domestic material consumption (DMC) is defined as the total amount of material directly used in the economy.

Physical trade balance (PTB) is calculated by taking amount of imports in physical units minus export in physical units, as follows:

Physical trade balance (PTB) = imports – exports.

Domestic material consumption (DMC) = domestic extraction + imports – export

Direct material input (DMI) = domestic extraction + imports

- Statistical units

Statistical units differ, depending on different data sources. Economic material flow accounts are compiled from data of various statistics of the Croatian Bureau of Statistics (e.g. agriculture, forestry and fishery statistics, foreign trade in goods statistics etc.) and from data taken over from administrative sources.

- Statistical population

Data sources for economic material flow accounts are data of the Croatian Bureau of Statistics and the Croatian Agency for the Environment and Nature. EW-MFA refer to the entire national economy.
EW-MFA include all materials (excluding water and air) crossing the system boundary (between the environment and the economy) on the input side or on the output side. Material inputs to the economy cover extractions of natural resources (excluding water and air) from the natural environment and imports of material products (goods) from the rest of the world (RoW) economy.
Material outputs are disposals of materials to the natural environment and exports of material products and waste to the RoW.

## 1. Relevance

### 1.1. Data users

External users: scientists, students.

#### 1.1.1 User needs

Users are looking for information for the following reasons:
Scientists – for research purposes; students – for writing academic papers

#### 1.1.2 User satisfaction

The Croatian Bureau of Statistics conducted a User Satisfaction Survey in 2013 and 2015. The results of the User Satisfaction Survey 2015 are available at:
https://www.dzs.hr/Eng/international/Quality_Report/Quality_Report_Documents/Quality_ Report_Satisfaction_Survey.pdf.

### 1.2. Completeness

Data are transmitted to Eurostat in accordance with the relevant EU legislation.

#### 1.2.1 Data completeness rate

Indicator for this survey is not applicable.


## 2. Accuracy and reliability

### 2.1. Sampling error

Indicator for this survey is not applicable.

#### 2.1.1 Sampling error indicators

Indicator for this survey is not applicable.

#### 2.1.2 Bias due to sample selection process

Indicator for this survey is not applicable.

### 2.2. Non-sampling error

Indicator for this survey is not applicable.

#### 2.2.1 Coverage error

Indicator for this survey is not applicable.

#### 2.2.2 Over-coverage rate

Indicator for this survey is not applicable.

2.2.3   Measurement errors

Indicator for this survey is not applicable.

2.2.4   Non-response errors

Indicator for this survey is not applicable.

2.2.5   Unit non-response rate

Indicator for this survey is not applicable.

2.2.6   Item non-response-rate

Indicator for this survey is not applicable.

2.2.7   Processing errors

Data are compiled on the basis of data obtained from various sources (secondary and administrative ones) that enter their already verified data online.

2.2.8   Imputation rate

Indicator for this survey is not applicable.

2.2.9   Editing rate

Indicator for this survey is not applicable.

2.2.10  Hit rate

Indicator for this survey is not applicable.

2.2.11  Model assumption error

Indicator for this survey is not applicable.

**2.3.    Data revision**

2.3.1   Data revision – policy

The users of statistical data are informed about revisions (preliminary, final data) on the web site of the Croatian Bureau of Statistics.

2.3.2   Data revision – practice

Provisional figures are not published in this survey and therefore regular revisions are not planned.
Data revisions are carried out only in case of change in methodology or subsequent data that significantly impact the calculation.

2.3.3   Data revision – average size

Indicator for this survey is not applicable.

**2.4. Seasonal adjustment**

Indicator is not applicable.

# 3. Timeliness and Punctuality

## 3.1. Timeliness

3.1.1 Time lag – first results

Indicator for this survey is not applicable.

3.1.2 Time lag – final results:

Timeliness of final results is T + 11.2 months.

## 3.2. Punctuality

3.2.1 Punctuality – delivery and publication

Punctuality is 0.

# 4. Accessibility and clarity

Data are disseminated in paper and electronic format and released on the website of the Croatian Bureau of Statistics in the form of the First Releases.
The First Release contains brief methodological explanations on topics such as sources and methods of data collection and definitions.

## 4.1. News release

20 December 2018 ■ First Release No. 6.1.7. Economic Material Flow Accounts, 2013 – 2017

## 4.2. Other publications

Not applicable.

## 4.3. On-line database

11 January 2018 ■ Databases Economic Material Flow Accounts, web page
https://www.dzs.hr (PC-AXIS database)

## 4.4. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Terms of Using Confidential Data for Scientific Purposes.

## 4.5. Documentation on methodology

The basic methodological explanations are published in the First Release and in databases.

## 5. Comparability

### 5.1. Asymmetry for mirror flows statistics

Indicator is not applicable because physical import and export as recorded in EW-MFA are not specified by origin and/or destination.

### 5.2. Comparability over time

5.2.1   Length of comparable time series

Length of comparable time series is 10.

5.2.2   Reasons for break in time series

There are no breaks in time series.

## 6. Coherence

### 6.1. Coherence – short-term and structural data

Indicator for this survey is not computed.

### 6.2. Coherence – national accounts

Indicator for this survey is not computed.

### 6.3. Coherence – administrative sources

Indicator for this survey is not computed.

## 7. Cost and burden

### 7.1. Cost

Costs are associated with data production through material costs and employees' incomes (earnings etc.)
Costs related to the collection of statistical data are minimal because all data have been obtained from other departments of the Croatian Bureau of Statistics and from administrative sources.

### 7.2. Burden

The workload of administrative and secondary sources is minimal because data are entered online by filling in an electronic form.