Economy-wide Material Flow Accounts (EW-MFA)

Data transmission under Regulation (EU) 691/2011

2017 Quality report

Country: NL   Date: 14-12-2017

Contact person: *Linda de Jongh…………*   *e-mail:* *la.vandepol-dejongh@cbs.nl.*

Please fill in this template and return it to Eurostat by 31 December 2017 together with the completed 2017 EW-MFA questionnaire. Both files have to be sent via eDAMIS. Please ensure that the following information is entered in eDAMIS

> *Domain name: ENVPFLAC*
> *Data set name: ENVPFLAC_MFA_A*
> *End of the (mandatory) reference period: 2015*

Please write in English, limit the length of your report and focus on changes compared to last year's quality report.

Regulation (EU) No 691/2011 in Article 7 requires that "Member States shall provide the Commission with a report on the quality of the data transmitted. The quality criteria as referred to in Article 12(1) of Regulation (EC) No 223/2009 shall be applied." Those quality criteria are: relevance, accuracy, timeliness, punctuality, accessibility and clarity, comparability, and coherence.

1 Relevance

Relevance refers to the degree to which statistics meet current and potential needs of users.

Economy-wide material flow accounts (EW-MFA) provide a rich empirical database for numerous purposes. At international level the European Commission uses EW-MFA and derived indicators for developing and monitoring policies in domains such as circular economy, sustainable development, resource efficiency, sustainable consumption and production, and greening of other policy areas. The derived EW-MFA indicator *domestic material consumption* (DMC) is a headline indicator for the Europe 2020 resource efficiency initiative.

1.a) Please add references to the use and relevance of EW-MFA at <u>national</u> level (e.g. main users, national indicator sets, quantitative policy targets etc.)?

MFA data is used as input for the CBS publications: Material flow monitor, green growth, circular economy and sustainability monitor

2 Accuracy

Accuracy' refers to the closeness of estimates to the unknown true values.

EW-MFA constitute accounts and as such they are compiled from a variety of data sources. The majority of EW-MFA characteristics are based on statistical data sources (see below section 6 and Annex 1). Some characteristics even need to be estimated because adequate statistical data sources do not exist (see below section 6 and Annex 2).

Please assess the accuracy of the reported data.

2.a) Are there general deficiencies in the data?

No

2.b) For which characteristic would you assume that data quality is lower?

Considering extraction: the extraction of bulk minerals such as sand, gravel and clay is less well recorded than more valuable materials like natural gas. It is also less frequently updated

2.c) If applicable, what steps do you plan to remedy the deficiencies?

3 Timeliness

Timeliness refers to the period between the availability of the information and the event or phenomenon it describes.

3.a) By when was the data actually available, nationally?

All trade data for 2016 were available in October 2017. Some 2016 data on extraction, especially non-metal minerals, are not available. For data unavailable at that time estimates were generated. The methods used for these estimations were described in detail in the projects final report 'Compiling early estimate for EW-MFA for the Netherlands' (submitted to Eurostat in 2015).

4 Punctuality

Punctuality refers to the delay between the date of the release of the data and the target date (the date by which the data should have been delivered.

According to Regulation (EU) No. 691/2011 economy-wide material flow accounts shall be transmitted within 24 months of the end of the reference year and in each subsequent data transmission to the Commission, Member States shall provide annual data for the years n-4, n-3, n-2, n-1 and n, where n is the reference year.

4.a) *Netherlands* transmitted the data to Eurostat on *14-12-2017* .

4.b) Data for the following years are reported in the various tables:

Table A: Domestic extraction	*1996 … 2016*
Table B: Imports – Total trade	*1996 … 2016*
Table C: Imports – Extra-EU trade	
Table D: Exports – Total trade	*1996 … 2016*
Table E: Exports – Extra-EU trade	

5 Accessibility and clarity

Accessibility and clarity refer to the conditions and modalities by which users can obtain, use and interpret data.

Data on EW-MFA and derived indicators, including EU totals, will be made available on Eurostat's web site as soon as possible after validation.

5.a) Do you publish this data nationally?

☑ *Yes, please specify where:*

These data are published on the Statistics Netherlands database Statline:

http://statline.cbs.nl/Statweb/publication/?VW=T&DM=SLEN&PA=83180ENG&D1=a&D2=a&HD=151218-1015&LA=EN&HDR=G1&STB=T

http://statline.cbs.nl/Statweb/publication/?VW=T&DM=SLEN&PA=83177ENG&D1=0-6,12,18,24-25,31,37,43-44,50,56,62-63,69,75,81-82,88,94,100-101,107,113,119-121,127,133,139-140,146,152,158-159,165,171,177-178,184,190,196-197,203,209,215-216,222,228&D2=a&HD=161214-1303&LA=EN&HDR=G1&STB=T

☐ *No, please specify why not:*

. . . .

6 Comparability

Comparability refers to differences in applied statistical concepts, methods, tools and procedures that may impact comparisons between geographical areas or over time.

Here the focus lies on any assessment of the comparability of data across countries and over time. The comparability is mainly affected by the data sources used and by the compilation/estimation methods applied. Switching the data sources and/or estimation methods may cause breaks in time series.

6.a) Please specify the <u>data sources</u> for <u>Table A 'Domestic extraction'</u> by different material categories?

See Annex 1 *Annex 1*

6.b) Please explain briefly the <u>estimation approaches</u> for those characteristics in <u>Table A 'Domestic extraction'</u> which cannot be derived directly from statistical sources (e.g. sand and gravel, grazed biomass)?

See Annex 2 *Annex 2*

6.c) Please specify the data sources for <u>trade (Tables B to E)</u>?

☑ *National foreign trade statistics and/or databases (please specify):*

National foreign trade data is used after some adjustments have been made to improve the physical data. These adjustments consist of a) integrating the foreign trade data with statistics on transport of goods and b) applying a routine to discard outliers in the source data (see Boonstra, de Blois and

Linders (2010) "Macro-integration with inequality constraints – an application to the integration of transport and trade statistics", CBS).

☐ *National accounts and/or balance of payments (please specify):*

. . . .

☐ *Sectoral statistics, such as e.g. energy, agriculture etc. (please specify):*

. . . .

Data on energy carriers are taken from the energy accounts.

Data on waste is taken from the waste accounts.

6.d) Do you employ Eurostat's correspondence table, provided in Annex 3 of the questionnaire, to assign _traded goods_ to material categories?

☐ *Yes, we employ Annex 3 to assign traded goods to material categories*

☐ *No, we don't employ Annex 3, please specify why not:*

. . . .

6.e) Do you use conversion factors to convert _traded goods_ into tonnes (e.g. from pieces, cubic metres etc.)?

☑ *No, it is not necessary to convert into tonnes.*

☐ *Yes, please specify (e.g. did you use factors from Eurostat's EW-MFA compilation guide?):*

. . . .

6.f) Fuel trade, residence adjustment: Please describe how do you make adjustments to the trade characteristics B-E.4.2.3 for fuel purchases by residents abroad? This relates e.g.to international air and maritime transport as well as to road vehicle journeys abroad.

Trade of energy carriers are taken from the energy accounts. The energy accounts are already adjusted for residence principle. Energy accounts are currently not available and trends from international trade statistics are used.

. . . .

☐ *No, we don't undertake residence adjustments for the following reasons (please specify): not:*

. . . .

6.g) Are there any discontinuities in time series resulting from changes in methodology, data sources etc.? If data was revised compared to a previous data transmission to Eurostat what was the size of the revisions and what principally caused them?

The time series has been revised. For Tables B and D, this mainly results in different figures on stage of manufacturing as the new classifications from Eurostat (Annex 5) are used for the entire time series. For Table A changes results of new or updated source data. Besides, both in tables A, B and D there are some revisions as a result of improved calculation techniques and data linkages, these are only minor individual changes.

6.h) Did you encounter significant problems in adapting basic statistics to the concepts of the accounts?

☐ *Basic statistical data is missing (please specify):*

. . . .

☐ *Basic data sources are insufficient, e.g. PRDCOM for A.3.8 Sand and gravel (please specify):*

. . . .

☐ *Mapping the classification of basic data source to the EW-MFA classification (please specify):*

. . . .

☐ *Other problems (please specify):*

. . . .

. . . .

7   Coherence

Coherence refers to the adequacy of the data to be reliably combined in different ways and for various uses.

The accounting framework of EW-MFA is consistent with the System of Environmental-Economic Accounting (SEEA-CF) adopted by the United Nations Statistical Commission as a world-level statistical standard in March 2012. EW-MFA are consistent with the European system of accounts (ESA) and hence suited to be combined with ESA aggregates.

7.a) Are there any consistency issues you would like to mention here?

EW-MFA is not consistent with the SUT of SEEA with regard to the harvest of crops. See chapter 3.283 of the SEEA.

EW-MFA is not consistent with ESA with regard to the recording of goods sent for processing, merchanting and production abroad.

DMC is consistent with a consumption indicator as defined in ESA. In ESA consumption is defined as the use by all final demand categories except export.

8   Other assessments and quality reports:

8.a) Do you have national descriptions of the methodology you use? If so please provide them.

The final report for the EUROSTAT grant 'Compiling early estimates for EW-MFA for the Netherlands' describes the methodologies used to assess values for material categories for which no data were available.

8.b) Do you have national quality reports already available? If so please provide them.

no

9   Voluntary MFA in RME data collection:

9.a) In case you have reported data in Table I, have you used Eurostat's country RME tool to compile the MFA in RME?

☑ *Yes. Please specify if you have made country specific alterations:*

The following adjustments to the model have been made: re-exports are excluded, confidential (PRODCOM) data is added and some negative (trade balance) values are removed.

☐ *No.*

If No, please briefly state why you prefer your methodology:

......

If No, do you have a description of the methodology you have used for compiling the MFA in RME? If so please provide it.

......

Annex 1: Sources of data for Table A 'Domestic extraction' by material categories

Characteristics Table A		Data sources			
Code	label	Please specify the exact data source (add URL or hyperlink if possible)	Is it a national data source? (yes/no)	Is it an inter-national data source? (yes/no)	Please explain which positions in your national data source classification were grouped and assigned to the respective MF category (in particular for biomass and non-metallic minerals)
1.1.1	Cereals	CBS stats on agriculture	y	N	
1.1.2	Roots, tuber	CBS stats on agriculture	Y	N	
1.1.3	Sugar crops	CBS stats on agriculture	Y	N	
1.1.4	Pulses	CBS stats on agriculture	Y	N	
1.1.5	Nuts	Na (not applicable)			
1.1.6	Oil-bearing crops	CBS stats on agriculture	Y	N	
1.1.7	Vegetables	CBS stats on agriculture	Y	N	
1.1.8	Fruits	CBS stats on agriculture	Y	N	
1.1.9	Fibres	CBS stats on agriculture	Y	N	
1.1.10	Other crops n.e.c.	CBS stats on agriculture	Y	N	
1.2.1.1	Straw	CBS stats on agriculture	Y	N	
1.2.1.2	Other crop residues	CBS stats on agriculture	Y	N	
1.2.2.1	Fodder crops	CBS stats on agriculture	Y	N	
1.2.2.2	Grazed biomass	CBS stats on manure	Y	N	
1.3.1	Timber (roundwood)	FAOSTAT	N	y	
1.3.2	Wood fuel	FAOSTAT	N	Y	
1.4.1	Wild fish catch	Wageningen University	Y	n	
1.4.2	Other aquatic	Wageningen University	Y	N	
1.4.3	Hunting and gathering	Estimate on basis shot animals	N	N	
2.1	Iron	Na			
2.2.1	Copper	Na			
2.2.2	Nickel	Na			
2.2.3	Lead	Na			
2.2.4	Zinc	Na			
2.2.5	Tin	Na			

Characteristics Table A		Data sources			
Code	label	Please specify the exact data source (add URL or hyperlink if possible)	Is it a national data source? (yes/no)	Is it an inter-national data source? (yes/no)	Please explain which positions in your national data source classification were grouped and assigned to the respective MF category (in particular for biomass and non-metallic minerals)
2.2.6	Gold, silver, platinum, other precious metals	Na			
2.2.7	Bauxite, aluminium	Na			
2.2.8	Uranium, thorium	Na			
2.2.9	Other non-ferrous n.e.c	Na			
3.1	Marble, granite, sandstone, etc.	Na			
3.2	Chalk and dolomite	Na			
3.3	Slate	Na			
3.4	Chemical and fertiliser minerals	Na			
3.5	Salt	NL Oil and gas portal	y	n	
3.6	Limestone and gypsum	Limburg Province	n	n	
3.7	Clay and kaolin	RWS, MWH, H2H advies	Y	N	
3.8	Sand and gravel	RWS, MWH, H2H advies	Y	N	
3.9	Other non-metallic n.e.c	Na			
3.10	Excavated earth used (optional)	RWS, MWH, H2H advies	y	n	
4.1.1	Lignite	Na			
4.1.2	Hard coal	Na			
4.1.3	Oil shale, tar sands	Na			
4.1.4	Peat	Na			
4.2.1	Crude oil, NGL	Energy statistics	Y	N	
4.2.2	Natural gas	Energy statistics	Y	n	

Annex 2: Estimation methods for data of Table A 'Domestic Extraction' for which no statistical data sources exist

Characteristics Table A		Estimation methods			
Code	Label	Do you use the Eurostat estimation approach recommended in the EW-MFA compilation guide? (yes/no)	Have you developed your own estimation approach? (yes/no)	Please explain briefly the estimation approach including possible data sources for auxiliary data?	Please specify coefficients used (if not Eurostat coefficients)?
1.1.1	Cereals				
1.1.2	Roots, tuber				
1.1.3	Sugar crops				
1.1.4	Pulses				
1.1.5	Nuts				
1.1.6	Oil-bearing crops				
1.1.7	Vegetables				
1.1.8	Fruits				
1.1.9	Fibres				
1.1.10	Other crops n.e.c.	no	yes	Weighted linear extrapolation of major groups in this category	
1.2.1.1	Straw				
1.2.1.2	Other crop residues			Weighted linear extrapolation of major groups in this category	
1.2.2.1	Fodder crops				
1.2.2.2	Grazed biomass				
1.3.1	Timber (roundwood)				
1.3.2	Wood fuel				
1.4.1	Wild fish catch			Linear extrapolation of continuous downward trend	
1.4.2	Other aquatic				
1.4.3	Hunting and gathering				

Characteristics Table A		Estimation methods			
Code	Label	Do you use the Eurostat estimation approach recommended in the EW-MFA compilation guide? (yes/no)	Have you developed your own estimation approach? (yes/no)	Please explain briefly the estimation approach including possible data sources for auxiliary data?	Please specify coefficients used (if not Eurostat coefficients)?
2.1	Iron				
2.2.1	Copper				
2.2.2	Nickel				
2.2.3	Lead				
2.2.4	Zinc				
2.2.5	Tin				
2.2.6	Gold, silver, platinum, other precious metals				
2.2.7	Bauxite, aluminium				
2.2.8	Uranium, thorium				
2.2.9	Other non-ferrous n.e.c				
3.1	Marble, granite, sandstone, etc.				
3.2	Chalk and dolomite				
3.3	Slate				
3.4	Chemical and fertiliser minerals				
3.5	Salt				
3.6	Limestone and gypsum				
3.7	Clay and kaolin	yes	no	Trend results from recommended approach	
3.8	Sand and gravel	no	yes	Trend results from Prodcom	
3.9	Other non-metallic n.e.c				
3.10	Excavated earth used (optional)			Excavated earth for known mega-infrastructure projects subtracted from development → baseline excav..earth assumed to represent 'regular'construction of houses and roads →trends in housing construction imposed on baseline excav. earth data for 2015 and 2016	

Characteristics Table A		Estimation methods			
Code	Label	Do you use the Eurostat estimation approach recommended in the EW-MFA compilation guide? (yes/no)	Have you developed your own estimation approach? (yes/no)	Please explain briefly the estimation approach including possible data sources for auxiliary data?	Please specify coefficients used (if not Eurostat coefficients)?
4.1.1	Lignite				
4.1.2	Hard coal				
4.1.3	Oil shale, tar sands				
4.1.4	Peat				
4.2.1	Crude oil, NGL				
4.2.2	Natural gas				