



United Nations Environment  
Programme



Statistics Division  
Department of Economic and Social Affairs  
United Nations

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# Global Economy Wide Material Flow Accounting Manual

**Global Consultation Comment Form**

**Deadline for responses: 1 March 2019**

**Please send responses to: [seea@un.org](mailto:seea@un.org)**

Your name:	Lucia Maier
Your country/organization:	Federal Statistical Office, Germany
Contact (e.g. email address):	lucia.maier@destatis.de

To submit responses please save this document and send it as an attachment to the following e-mail address: [seea@un.org](mailto:seea@un.org).

The comment form has been designed to facilitate the analysis of comments. In Part I general comments on the general style, structure, content and coverage of the chapter are sought. In Part II any technical and other comments should be included.

## Relevant documents

Relevant documents are available on the SEEA website at:

<https://seea.un.org/content/global-consultation-global-economy-wide-material-flow-accounting-manual>. The documents provided include:

- A cover note on the global consultation
- Draft manual and accompanying questionnaire
- Copy of comment form

## 1 GENERAL COMMENTS

In this section please provide general comments on the draft. You may like to consider providing comments on the style and tone, the structure and organisation, the content and coverage, and the general accessibility of the material.

Click here and start typing (The length of your response is not limited by this text box.)

## 2 TECHNICAL AND OTHER COMMENTS

In the box below please supply any additional comments including those of a more technical nature. Please reference your responses with the relevant paragraph numbers or section numbers.

Section 1.2: We recommend complementing the enumeration of the six accounting modules with an assessment of their practicability. That is, direct flows are relatively easy to measure; certain indicators (like NAS) can be derived from these direct flows; indirect flows and flows between industries usually require elaborate estimation models; unused extraction data is often less exact than data on used extraction.

Section 1.2 Module 3: Material outflows should include dissipative losses as well. "Landfill" should be replaced by "uncontrolled landfill". Controlled landfills are considered as part of the economic system and thus only flows of waste to uncontrolled landfills are flows between economy and environment.

Section 1.4, 2nd paragraph: "Relatively good data on material flows in physical

units tend to be available where an international agency exists which has been specifically charged with assembling data for that material...". Please modify "where a **statistical institution** or an international agency exists which..."

Even though the manual is intended particularly for developing countries, it should address the global situation. In Europe, good statistical data sources for EW-MFA exist because of national and European statistical obligations, the European Statistical System and coordination by Eurostat.

Section 7: We recommend differentiating more clearly between raw material equivalents (RME) on the one hand and RMC or material footprint as RME-based indicators on the other hand. E.g. in Section 7.2 the phrase "Three types of methods for the calculation of material footprint indicators..." actually refers to calculation methods for RME.

Section 7.1, 3<sup>rd</sup> paragraph: "The indicator Raw Material Consumption (RMC)...". Please add a cross-reference to footnote 3, i.e. the term "consumption" stands for consumption and gross fixed capital formation.

Section 7.3, 2<sup>nd</sup> paragraph: "...no national statistical office can run their own demand-based accounts reliably." This needs to be revised. Any calculation of raw material equivalents is an estimation and thus entails uncertainty to some extent. Simultaneously, any RME estimation model has its strengths, as it is explained above. Furthermore, demand-based accounts run by NSOs have advantages concerning the granularity and plausibility of results on the level of production sectors. This is an aspect that makes them even more reliable than currently available MRIO models (cf. discussion and results of the OECD workshop on demand-based indicators in September 2017). In addition, models run by countries based on national data guarantee coherence with related country figures which are provided nationally.

Moreover, the current wording denies the usefulness of countries' calculations including those based on e.g. the Eurostat country RME tool. At the same time it discourages (developing) countries from engaging in demand-based material flow measurements. For sure this is neither UNEP's nor UNSD's intention.

With regard to SDG indicator reporting, responsibility for data provision is with the respective countries. Besides, for results on global level like "global material footprint", no estimation method for footprints/raw material equivalents is necessary: All imports, exports, indirect effects etc. cancel out on global level and thus "global material footprint" equals "global extraction of raw material".

We strongly recommend revising the paragraph as follows: "However, no global reference method for calculating material footprints exists yet. The strength of estimation models developed by countries is in particular their granularity and plausibility of results on the level of production sectors, their adaptation to aspects which are of particular interest for the country and their coherence with related country data. For the purpose of international comparisons of absolute amounts between countries, an internationally agreed estimation methodology is necessary. This should include the application of an MRIO. This MRIO should be provided by

a trusted international statistical organization and allow national statistical offices to produce internationally comparable RME estimates.”