

**International Expert Meeting on Material Flow Accounts and Resource Productivity  
25-26 November 2003, Tokyo, Japan  
Chairs' Summary**

**Co-chairs:**

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1. Japan proposed launching an international joint research project on Material Flow Accounts (MFA) and Resource Productivity (RP) at the G8 Environment Ministers' Meeting in Paris in April 2003. The ministers, recognizing that it was essential to improve RP, noted Japan's proposal with interest. Also, at the Evian Summit in June, G8 leaders announced in the G8 Action Plan on Science and Technology for Sustainable Development that they would enhance their understanding of resource material flows and continue work on RP indices, notably in the Organisation for Economic Co-operation and Development.
2. In line with this, the Ministry of the Environment (MOE) of Japan organized an International Expert Meeting on Material Flow Accounts and Resource Productivity, convened in Tokyo on 25 and 26 November 2003. The meeting was attended by experts (administrators, statisticians, and researchers) from G8 countries, other OECD member countries, China, international organizations, a local authority, business, and non-governmental research institutions.
3. The objectives of the meeting were to: i) review international, regional, and national activities on MFA and RP; ii) identify international focal points and topics of joint research; iii) set forth a proposal for future work.

**Review of Related Activities**

4. On the first day, various activities related to MFA and RP were presented by the participants.
5. The international and regional activities reviewed included the development and application of environmental performance indicators and sustainable development indicators (OECD), use during the establishment of a thematic strategy regarding sustainable resource management (European Commission), the development of a methodological guide on MFA and its applications (EUROSTAT, EEA/ETCWMF), networking of institutions working on MFA (ConAccount), and the promotion of RP concepts and the role of technologies in improving RP (UNEP).
6. The national and local activities reviewed included demonstrations of national level MFA (Australia, Canada, China, EU member states, other European countries, Japan, USA), including their links with SEEA (Canada, France, Korea), development of physical input-output tables (PIOT) (Austria, Italy), application of MFA to sustainable development indicators (UK) and other environmental policies, quantitative target setting of RP and other material flow indicators (Germany, Italy, Japan, and Aichi Prefecture [Japan]). Current research on MFA in Latin American and South East Asian countries, application to business sectors such as Toyota Motor Corporation, and other research on assessment tools for sustainable consumption based on life-cycle thinking were also presented. Position of MFA in environmental accounts and the theoretical and practical history of MFA and economics were included in several presentations. Some participants suggested that over time, the aim should be to create MFA at least as good as our economic/national accounts.
7. MFA practices and policy applications have made considerable progress in recent years. At the same time, some issues held in common by countries and in need of further address were pointed out.
8. For example, the issues of data availability, consistency of national statistics among different countries, and problems of international comparisons were identified. International translocation of problems was an important aspect to be addressed in both international comparison and domestic actions. The potential significance of measuring material flows, hidden flows, and physical input and output were also discussed, and the relationship between relative indicators such as RP and decoupling and absolute environmental targets to be achieved was pointed out. In addition, the development of indicators useful to micro-level activities, organizational problems in assembling and capturing information on material flows, and the promotion of MFA were identified as topics of importance.

## Identification of Research Topics

9. On the second day, research topics were discussed from the viewpoint of both policy application and methodology.

10. Prior to the discussion, practical problems identified in the application of MFA to policymaking in Japan were presented, including selection of proper indicators for waste management policy, problems such as impact of international trade, summing up the weight of materials, quantification of 3R activities (reduction, reuse, recycling), methodology employed during the setting of targets, the definition of RP, and difficulties arising during international comparisons.

11. From the viewpoint of policy application (i.e., the demand side), the issues of differentiation and prioritization of the materials to be accounted for were the lead-off topics of the discussion. Many issues, including what insights or implications MFA provides, what advantages and disadvantages MFA entails, and who potential users are, were addressed by the participants, and the following key issues were identified:

- Better grasp of the international translocation of problems (environmental problems hidden behind the upstream and the downstream of international trade)
- Review of countries' performance regarding resource (material) management policy;
- Better communication with potential users (both environmental policy makers and other policy makers, industry and citizens);
- Linkage among concepts (such as "decoupling," "life-cycle-thinking"), policy assessment, and day-to-day actions.

12. From the viewpoint of methodology (i.e., the supply side), the following key issues were identified:

- Consistent and harmonized terminology and system boundaries (parallelism with economic accounts);
- (Ideal) MFA frameworks (Macro-meso-micro links/PIOT/better links with economic accounts);
- Better linkages among MFA, MFA-derived indicators, other existing indicators and models;
- Better dataset on hidden flows and better dataset on physical trade flows for better understanding of trade-related issues;
- Grouping of materials (better linkages with impact-based environmental issues when appropriate);
- Data availability and accessibility, data confidentiality pertaining to individual entities.

## Next Steps

13. Finally, the participants proposed that the following products be developed over the next two to five years, working jointly with appropriate organizations.

- A survey and report on MFA achievements/ongoing activities and policy makers' understanding/expectations in different countries;
- A bold vision (mission statement) regarding the ideal framework of MFA;
- A booklet on MFA for policy makers, business, and citizens (including good practices, and successful applications, visions of MFA applications, illustrations of the relationship between MFA and other tools such as LCA and emissions inventories);
- Technical guidance for harmonized MFA at the national level (including consistent terminology/glossary);
- New case studies on specific MFA topics, to be done jointly (in parallel) by interested countries.

14. Some practical proposals on institutions and mechanisms for the promotion of future actions were provided by EEA, OECD, and UNEP. Some participants recommended OECD as a coordinator, and some remarked on the expected role of other international organizations in capacity building in developing countries.

15. The Chair is preparing a collection of the materials presented at the meeting to be available to interested persons. The outcome of the meeting will be reported to the OECD Working Group on Environmental Information and Outlooks at their meeting in Paris in mid-December 2003.