MONITORING THE PHYSICAL ECONOMY

Invitation to the MinFuture Final Conference Square conference center, Brussels 6 November 2018



Purpose of the final conference

We are looking forward to discussing with raw material and raw material flow experts from academia, businesses, governmental and intergovernmental institutions:

- the findings of the MinFuture Framework for monitoring the physical economy;
- main conclusions and recommendations of the project;
- ideas and ways forward to help implement an improved framework for monitoring the physical economy.

Conference background

In order to solve the complex problems of modern economies, refined maps of the physical economy, namely the stocks and flows of materials and goods, are necessary. The ultimate goal is the development of the equivalent of "Google Maps" to describe the physical economy.

The EUproject **MinFuture** developed a methodological Framework recommendations for future action for mapping and monitoring the physical economy. The MinFuture Framework addresses the lack of a methodology for consistent physical accounting of the economy, based on the mass balance principle. The Framework suggests monitoring the physical economy in four dimensions. These include: the stages of the supply chain, the linkages of different regions through trade flows, the linkages of different materials and substances in goods (layers), and the evolution of the physical economy over time (historic evidence and future scenarios). The MinFuture framework proposes the use of material flow analysis (MFA) to monitor the physical economy and further distinguishes seven components of an MFA: systems, data, models and scenarios, uncertainty analysis, visualization, indicators, and decision and strategy support. The project has developed guidelines for the development of each component.

The **recommendations for future action** address critical areas for action towards the implementation of the MinFuture framework at global level. Reaching such a vision requires cooperation between a wide range of stakeholders across industry sectors and government institutions globally. The recommendations propose the following key steps as a basis for moving towards consistent physical accounting of the economy:

- 1. Monitoring systems/reporting data in a system context: In order to significant contribution to resource efficiency, the physical material stocks and flows will need to be monitored on different scales (facility, company, national, international). This involves a transition from monitoring individual stocks and flows to monitoring systems. This transition can be greatly enhanced by a consistent reporting of data making their system context "coordinates" explicit.
- 2. Facilitate data sharing: Materials and goods move around the globe constantly, hence the monitoring of the physical economy should account for this. Once data are referenced within a system, they can then be integrated into larger systems through data sharing or reporting, and thus provide new insights on higher-level systems efficiencies. For example, the sharing of national data by EU Member States to produce pan-European datasets, or the sharing of national trade data to provide global trade databases fall into this category. The transition towards systemic monitoring would require the development of new technical solution (e.g., database



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structures, implementation protocols), legal frameworks (e.g., an amendment of the INSPIRE Directive in Europe, voluntary commitments), and institutional settings (e.g., the establishment of an International Material Stocks and Flows Group).

3. Establish an international materials agency: The development of robust and consistent international statistics of the physical economy requires cooperation of a large number of institutions. Currently, there is no institution that has the mandate and resources to coordinate this effort. We therefore recommend the establishment of an International Materials Agency (IMA), analogue to the International Energy Agency. In order to ensure consistency, an IMA would need to be closely tied to and in exchange with the IEA, UN Statistics and the International Resource Panel.

The intention of this workshop is to reflect on and refine these initial recommendations, and to propose specific working groups to address critical issues.

The MinFuture project team looks forward to presenting and discussing key results with you during the final conference "Monitoring the physical economy requires putting raw material data in a system context", which will take place on 6 November 2018 in Brussels.

Venue:

Square conference center Entrance: Ravenstein 2, 1000 Brussels Room: studio 311&312 (Level 3)

If you have further questions, please do not hesitate to contact us: minfuture-conference@ecologic.eu

We look forward to seeing you and discussing with you at the event!