



Earth Observation for Monitoring and
Observing Environmental and Societal
Impacts of Mineral Resources
Exploration and Exploitation

Macro-Indicators for a Resource Efficient Europe: Earth Observation of Material Flows in Mineral Resource Exploration and Exploitation

Workshop Programme, Draft Mai 2011

Venue: Brussels
Proposed Date: November 2011



Policy Context

Within the framework of the Europe 2020 Strategy for a smart, sustainable and inclusive economy the European Commission has launched a flagship initiative for a resource efficient Europe. The President of the European Commission, Manuel Barroso stated in the accompanying press release¹: "Continuing our current patterns of resource use is not an option. They put too much pressure on our planet and make our economy more dependent on external supplies. A smarter use of scarce resources is therefore a strategic necessity, but also an economic opportunity."

Sustainable Minerals

With the flagship initiative the European Commission intends to create a common vision to support a long-term perspective for an efficient use of natural resources. In this context the mining sector is one of the key economic sectors, because it directly influences the extent and quality of raw material use of the European economy. It is therefore essential for the success of the European Commission's flagship initiative to define impacts of mining activities and indicators which can be used on EU level to guide policy-making and help to evaluate policy-effectiveness. Furthermore, cost-efficient methods should be developed to collect in an appropriate temporal and spatial resolution of the necessary data. The FP7 research project EO-MINERS will support these aims. More specifically, EO-MINERS scientific and technical objectives are to:

- i) assess policy requirements and define environmental, socio-economic, societal and sustainable development criteria and indicators to be possibly dealt using Earth Observation (EO);
- ii) use existing EO knowledge and demonstrate the capabilities of integrated EO-based methods and tools in monitoring, managing and contributing reducing the footprints of the extractive industry and
- iii) contribute making available reliable and objective information about affected ecosystems, populations and societies, to serve as a basis for a sound "dialogue" between industrialists, governmental organisations and other stakeholder

Indicators

So far, the European Commission has used the indicator Domestic Material Consumption (DMC) as headline indicator in the area of Sustainable Consumption and Production. The DMC will remain to be an important indicator to assess the extent of use of natural resources within the European Union. Yet, it will not be sufficient to indicate the full extent of resource use of the European Union. Especially, the quantity of resource extraction abroad and the so-called hidden material flows, which are connected to it, need to be quantified.

Workshop Objectives

The aim of the workshop is:

- To assess the state of the art in accounting for used and unused extraction to support public policy-making with regard to resource efficiency and sustainable resource extraction
- To discuss the use of Earth Observation to quantify used and unused extraction induced by mining activities.
- To assess option for further collaboration on EO and MFA in the context of GEOSS and the flagship initiative for a Resource Efficient Europe

¹ IP/11/63

Stakeholders to be invited

- UNEP
- UN Resource Panel
- OECD
- European Commission
- Eurostat
- National Statistical Services
- National Ministries dealing with MFA
- Geological Services
- EEA
- National Environmental Agencies
- Technology Platform Sustainable Mineral Resources
- Raw Materials Initiative
- Data Centres?
- ETC SCP?

Number of participants: 25

Venue: Brussels

Time: November 2011

Attachment: Leaflet Kathy Beys

Programme

- 9:30 Coffee & Registration
- 10:00-10:15 Welcome on behalf of EO-MINERS
Stephane Chevrel, Bureau de Recherches Géologiques et Minières, BRGM
- 10:15-10:30 Welcome on behalf of DG Research
n.n., DG Research
- 10:30-11:00 Economy-wide MFA Indicators for Monitoring Global Resource Extraction
Stefan Bringezu, Wuppertal Institute for Climate, Environment, Energy, International Resource Panel
Consideration of used and unused extraction for sustainable resource management. This presentation gives a general introduction in the current rationale of economy-wide material flow accounting of used and unused extraction.
- 11:30-12:00 Resource efficient Europe: Macro Indicators on Sustainable Resource Extraction for the Flagship Initiative Resource Efficient Europe
Slavko Solar, Geological Survey Slovenia
Macro indicators on sustainable minerals in the context of the flagship initiative for a Resource Efficient Europe before the background of EO-MINERS results.
- 12:00-12:30 Discussion
- 12:30-13:45 LUNCH
- 13:45-14:15 National Resource Efficiency Policies: Information Requirements for Used and Unused Extraction
Aldo Femia, Italian National Institute of Statistics, ISTAT
Introduction to national resource policies and demand of quantification of used and unused extraction. Practice of quantifying used and unused extraction at national statistical services with the example of Italy.
- 14:15-14:45 State of the Art in Monitoring Used and Unused Extraction of European Mining Industries
n.n., Mining Industry
Overview on exiting methods to quantify used and unused extractions – examples from the European mining industries.
- 14:45-15:00 Coffee
- 15:00-15:30 The Potential of Remote Sensing for Quantifying Used and Unused Extraction:
Christian Fischer, German Aerospace Center, DLR
Stuart Marsh, British Geological Survey, BGS
Introduction to airborne and spaceborne earth observation technologies for topographic surface change monitoring.
- 15:30-17:30 Panel Discussion and conclusions
EO-MINERS (Stuart Marsh),
DG ENT, DG RESEARCH (via Stephane), DG ENV (via WI), ETPSMR (Henryk Karras), GEO (Hunbulani Mudau)
Discussion on pros and cons of using Remote Sensing in Economy-wide Material Flow Accounting,

Potential for collaboration in the context of the flagship initiative Resource Efficient Europe and GEOSS