What is the Raw Materials Initiative (RMI)?

• Initiative launched by Commission with Communication in November 2008
  ▪ Aim to highlight importance of sustainable access to raw materials for the future of EU
  ▪ Strategy included primary and secondary raw materials and focussed on metals and minerals – Three pillar approach
• WG reports on Land Use & Criticality of Raw Materials (mid-2010)
• Public Consultation (mid-2010)
• Follow-up Communication in February 2011
Main Challenges (RMI Three Pillars)

• EU highly dependent on imports of important raw materials which are increasingly affected by market distortions

• Still potential in Europe, but exploration and extraction face increased competition for different land uses and a highly regulated environment

• Large potential from EU’s “Urban Mines” (e.g. Recycling) not exploited in full; also possibilities for improved material efficiency and substitution
I. Ensuring access to raw materials from International Markets under the same conditions as other industrial competitors

II. Right framework conditions within the EU in order to foster sustainable primary supply from European sources

III. Boosting resource efficiency and recycling to reduce the EU's consumption of primary raw materials
Main scope of RMI

• First Pillar:
  ▪ Trade restrictions, development co-operation, metals markets

• Second Pillar:
  ▪ Land use policies in EU, geological/minerals data, authorisations, administration etc

• Third Pillar:
  ▪ Resource/Material Efficiency, Substitution, Recycling
EU Political developments

- Commission Communication February 2011
- Council Conclusions of March 2011
- EP report on RMs due in September 2011
Cross-cutting Issues

• Criticality of Raw Materials
  ▪ Materials which are of high economic importance and subject to supply risk; also environment risks
  ▪ 14 Materials identified
  ▪ But RMI actions not limited to critical raw materials

• Innovation along the RM Value Chain
  ▪ Possible innovation partnership (decision H2 2011)
List of Critical Raw Materials
Critical Raw Materials – Supply Side

• High supply risks due to:
  ▪ High share of the worldwide production in:
    • China (antimony, fluorspar, gallium, germanium, graphite, indium, magnesium, rare earths, tungsten)
    • Russia (Platinum Group metals)
    • Congo (cobalt, tantalum)
    • Brazil (niobium, tantalum)
  ▪ And low substitutability and recycling rates
Global Average Recycled Content – All metals
Source: UNEP Study on Recycling

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* Lanthanides: 57-66
** Actinides: 89-103
## Pure material recycled under current policy (tonnes)

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<td>55 504 472</td>
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<td>1 701 202</td>
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## Recycling & Precious Metals

Source: UNEP Study

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*no relevant use end use sectors*
Metal Recycling – Issues behind the Rates

- Recycling information problem
  - statistics for many metals missing
- Leakage:
  - Illegal shipments
  - Hoarding/dumping
  - Uneven collection rates
- Administrative Burden & Quality Assurance
- Technological Barriers
- Overall result is low recycling rate for many raw materials
Recommendations of WG Criticality

Two types of recommendations:

- follow-up and further support
- policy-oriented recommendations
  - Covering amongst others:
    - Substitution
    - Material Efficiency
    - Recycling

Report released in June 2010
**WG Criticality**

**Recommendations ex. Recycling**

- Mobilise EoL products with critical raw materials for proper collection
  - instead of stockpiling them in households (hibernating) or discarding them into landfill or incineration;
- Improve overall organisation, logistics and efficiency of recycling chains
  - by focusing on interfaces and system approach;
- Prevent illegal exports of EoL products containing critical raw materials and increasing transparency in flow
- Promote research on system optimisation and recycling of technically-challenging products and substances
Workshop on Recycling/ Secondary Metals
April 2010

• Day conference co-organised with metals industry
• Across-the-board agreement on importance of secondary raw materials for EU needs
• Focused on four areas for improvement:
  ▪ Enforcement of trade related legislation including WSR
  ▪ Level playing field in treatment of secondary raw materials
  ▪ Improved management of secondary raw materials
  ▪ Economic viability of Recycling
• Full industry proposals in Ökoinstitut paper published in June 2010
RMI & Promotion of Recycling (1)

- Recycling key part of RMI
  - Mid-2010 consultation further confirmed this
- Huge potential of EU’s ‘Urban Mines’ but need **level playing field**
- Have clearer definition of **when waste becomes product**
  - New EoW criteria developed (steel, aluminium, copper (soon))
- Have new rules proposed for **export/collection of WEEE**
  - Burden of Proof on exporters
  - Extend these export rules to other streams?
- Need to further implement existing **waste shipment rules** – how could this be done?
  - through better inspection standards for waste and customs procedures
  - via promote research on technologies for detection illegal shipments
  - by re-enforced co-operation between waste enforcers and customs
  - through clearer guidance for ESM treatment?
- Plan to propose draft waste **shipment inspection** rules in late 2011
RMI & Promotion of Recycling (2)

- Need to tackle obstacles to the **functioning of the recycling market** – How?
  - look at which collection and treatment schemes work best/where?
  - how can the use of secondary raw materials in products be promoted (eco-design, Market Based Instruments)?
- Need for **more innovation on recycling**, as well as on extraction, processing, use, substitution etc
- Other proposals:
  - Agreement to work with AU on raw materials – could include secondary raw material issues
  - Recycling Statistics to be improved, where necessary
  - Assessment of how certain aspects of waste legislation could be aligned to improve coherence
- Other issues:
  - Quality of recycling
Resource Efficiency

• Many of these recycling issues also to be dealt with in parallel ‘EU2020’ work on Resource Efficiency (‘waste as a resource’) Flagship

• Flagship one of seven strategic objectives identified for Commission for next ten years

• Overlap with Raw Materials but…
  ▪ RMI development/trade issues not part of RE flagship
  ▪ Resource scope broader than RMI (includes agriculture, fish, energy etc)

• High-level Communication on Resource efficiency published in January

• The Commission plans to adopt more detailed Roadmap on how to move towards a resource efficient Europe in Autumn

• The roadmap will set out specific resource efficiency objectives, and how to meet them, based on actions up to 2020 with a time perspective of up to 2050
Innovation as a Cross-cutting Issue

• Need for innovation along entire value chain (extraction, processing, use, recycling, substitution etc)
• EU2020 launch of Innovation Partnerships
• Possible future Innovation Partnership on raw materials – consultation process launched earlier this year
  ▪ Five workstreams: process technologies, extraction, substitution, recycling and international aspects
  ▪ February workshop followed by public consultation
  ▪ Planned studies on material flows and pilot plants
• Draft Communication under consideration
Thank you for your attention!