





W. Eberhard Falck WP5 Workshop – MICA Consortium Meeting 13.06.2017



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#### WP5 - OBJECTIVES



- Planning and policy making tool not only needs to describe the status quo, but also to take into account possible futures.
- WP5 attempts to deconvolute the complex minerals policymaking context
- WP5 will develop strategies to address the dimension of time for the assessment of supply of and demand for (mineral) raw materials in the EU
- WP5 aims to integrate mineral (and related) policy aspects and development scenarios on world-wide scale.
- Within the wider context of sustainable development policies WP5 will take an appropriate long-term view when developing foresight scenarios.
- The outputs will inform WP2, WP4, and WP6.



# WP5 - STRUCTURE



- WP5 is subdivided into three tasks:
- Task 5.1: Assessment of elements of RMI and their relevance for mineral policy development *Task Leader* MinPol, *Contributors* BGS, FG-ISI, GEUS, LPRC, NTNU, UCL *Deliverables*: D5.1 (completed) and D5.2 (under development)
- Task 5.2: Development of strategic raw materials intelligence approaches *Task Leader* LPRC, *Contributors* BGS, FG-ISI, GEUS, UCL *Deliverables*: D5.3 (completed), D5.4, and D5.5 (under development)
- Task 5.3: Implementation of RMI in Europe and its wider context Task Leader MinPol, Contributors BGS, FG-ISI, UCL *Deliverables*: D5.6 (forthcoming)



# **D5.1 - SCOPING**



- Deliverable D5.1 was completed 12/17
- It discussed the following issues:
- Scoping of RMI and its relevance for minerals policy development
  - Minerals policy a cross-cutting topic
- Circular Economy Paradigms and Resource Efficiency Scenarios
  - Implications and limitations of the Circular Economy Paradigm
- Models for a minerals policy framework
  - Conceptual framework strategies and instruments
- Tools and methods in the context of minerals policies
  - Models of mineral consumption versus policies
  - System dynamics approach



#### D5.1 – DYNAMIC MODEL



- A RMI policy framework based on the System Dynamics model
  - Example of SDM for copper at global level





#### D5.1 - CONCLUSIONS



- The EU should pursue an active minerals policy
- Policies will render a cost-optimal contribution to the GDP
- The EU Raw Material Initiative provides a general framework, but is not based on systematic EU raw materials intelligence (RMI)
- Such knowledge base still is lacking, thus no realistic EU (or national) mineral strategy can be developed
- The absence of reliable and detailed longer-term mineral consumption data is particularly problematic
- A comprehensive and a harmonised/standardised approach to data collection is needed – MICA RMI
- This will need to be an activity beyond MICA
- A dynamic modelling approach will help the EU to adjust to changing World conditions more timely than semi-quantitative approches (e.g. scenario analyses)







- A RMI-Matrix is being built on the basis of the D5.1 and insights from other projects and studies
- The purpose is to study the cross-linkage of various policymaking arenas in MSs and to understand policies development
- The EU-28 minerals policies systems will be screened on the basis of the RMI-Matrix and compared to a set of scenarios
- A set of reference scenarios of policy-making will be developed:
  - worst case: no minerals policy and no co-ordination between arenas
  - medium case: ....
  - best case: co-ordinated forward-looking minerals and other policies based on realistic consumption and production data
- Recommendation for further policy development will be made



## TASK 5.2 - AIMS



- Aim is to develop recommendations for European raw materials foresight approaches
- Outputs will provide tools to support RMI for longer-term policy making and emerging scenarios
- The purposes and the methods to be reviewed will be largely qualitative.
- Recommendations for dedicated raw materials foresight approaches will address longer time-frames (2030/2050) and potentially emerging scenarios.
- The implementation tools will be reviewed, and guidelines will be worked out for conducting and evaluating the foresight



## TASK 5.2 - STATUS



- Foresight Logframe definition, benchmark & best practices;
  - Deliverable 5.3 (01/2017)
- Foresight Methodology Workshop;
  - Deliverable 5.4 (07/2017), Status: Drafted
- Detailed Methodology Assessment and Recommendations;
  - Deliverable 5.5 (07/2017), Status: In Progress





- A review of foresight methods was undertaken and a catalogue of methods was developed
- A pool of raw materials related foresicht studies was collected and screened for the most relevant ones
- Foresight methods workshop in Las Palmas de Gran Canaria, 10<sup>th</sup> & 11<sup>th</sup> May, 2017:
  - LPRC, MinPol, BGS-NERC, F-ISI, GEUS + External experts.
- Discussions on foresight methodologies relevant to raw materials and the MICA Platform (EU-RMICP);
- Informing deliverable 5.5 (Raw Materials Foresight Guide), Task 5.3 and WP6



## TASK 5.3 - OUTLOOK



- Based D5.1 to 5.4 methods for correlating and transposing information from countries will be developed for each MSs
- Task 5.3 will analyse the feedback of the contextualisation by WTO, WB, etc. on EU policy development.
- Task 5.3 will map out for MSs
  - which functions (foresight, regulatory, supervisory, research, etc.) are assigned to which authority;
  - how the interactions between the different authorities are played out;
  - whether these interactions are synergistic or antagonistic
  - the impact of governance and SLO paradigmae







- Task 5.1:
  - D5.1: RMI tools and methods (delivered)
  - D5.2: Development and application of the RMI-MATRIX (09/17)
- Task 5.2:
  - D5.3 Foresight Logframe (delivered)
  - D5.4 Pilot Foresight (end 07/17)
  - D5.5 Raw materials Foresight Guide (end 07/17)
- Task 5.3:
  - D5.6 RMI implementation status quo and needs in EU-28 (12/17)





# THANK YOU VERY MUCH FOR YOUR ATTENTION !



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