

The European Commission's science and knowledge service

Joint Research Centre

Raw Materials Information System **RMIS**

Towards version 2.0

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Brussels





DG JRC's Vision:

"To play a central role in creating, managing and making sense of the collective scientific knowledge for better EU policy."

DG JRC's Mission:

"As the science and knowledge service of the Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle."



DG JRC.D Sustainable Resources Vision

Creating, managing and making sense of the scientific knowledge for EU policies related to the sustainable use of resources, encompassing **environmental**, **economic** and **social** dimensions.

DG JRC Role: facts & figures



Established in

1957



Around

3000

Staff



10

Directorates



>1000

Publications
per year



6

Locations in
5 Member
States



42

Large scale
facilities

Towards RMIS 2.0: Policy Drivers & Mandate

2008: EU Raw Materials Initiative (RMI)

2013: Strategic Implementation Plan (SIP) of
European Innovation Partnership (EIP) on RM

Commission is examining other barriers to the smooth circulation of waste in the EU. To improve the availability of data on secondary raw materials the Commission will further develop the recently initiated Raw Materials Information System and support EU-wide research on raw materials flows. It will also support the improvement of data reporting on

03/2015: JRC launches the **RMIS 1.0**

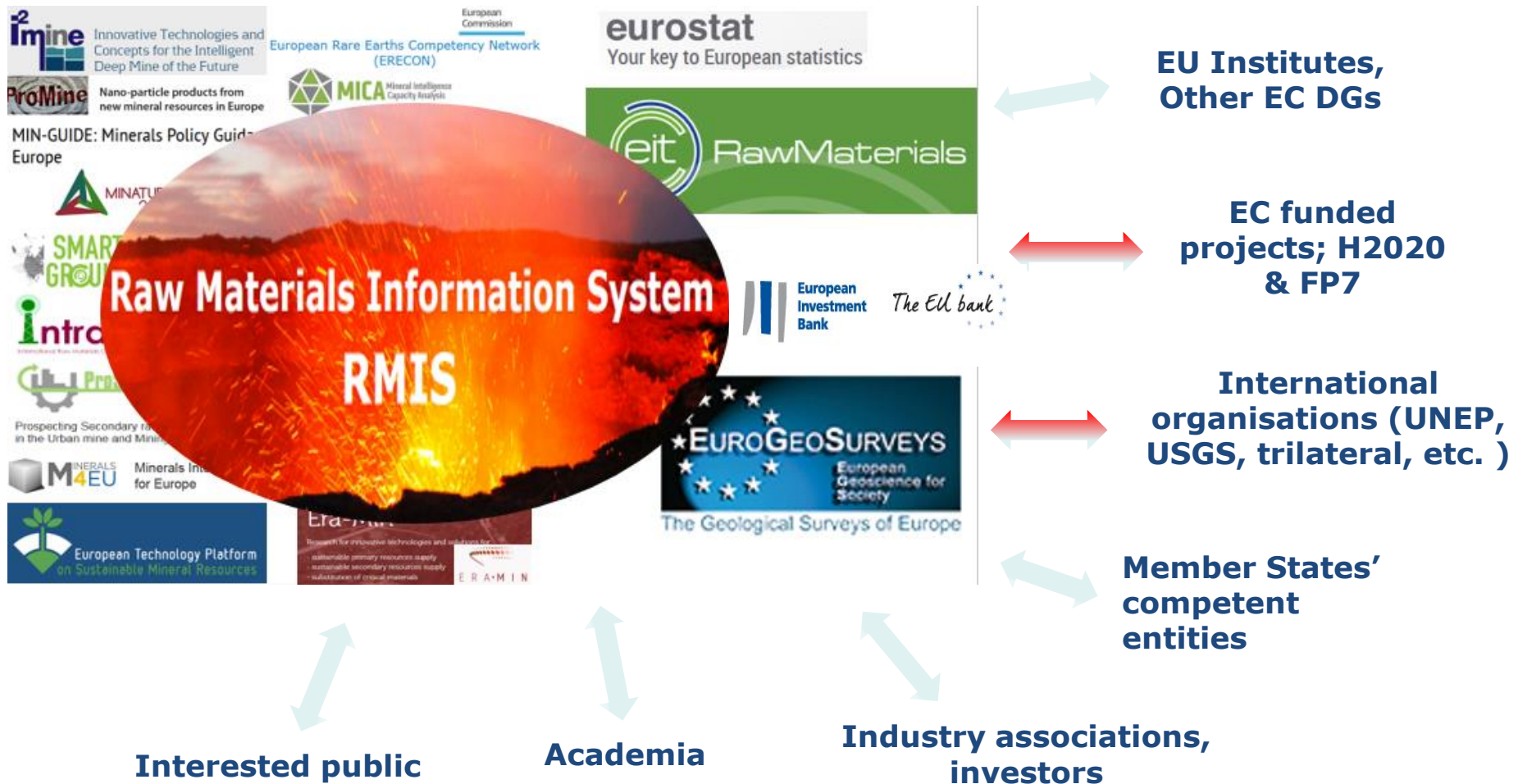
12/2015: specific action in Circular Economy COM
focuses on the key role of the RMIS

06/2017: RMIS 2.0 Roadmap

Q4 2017: launch of RMIS 2.0

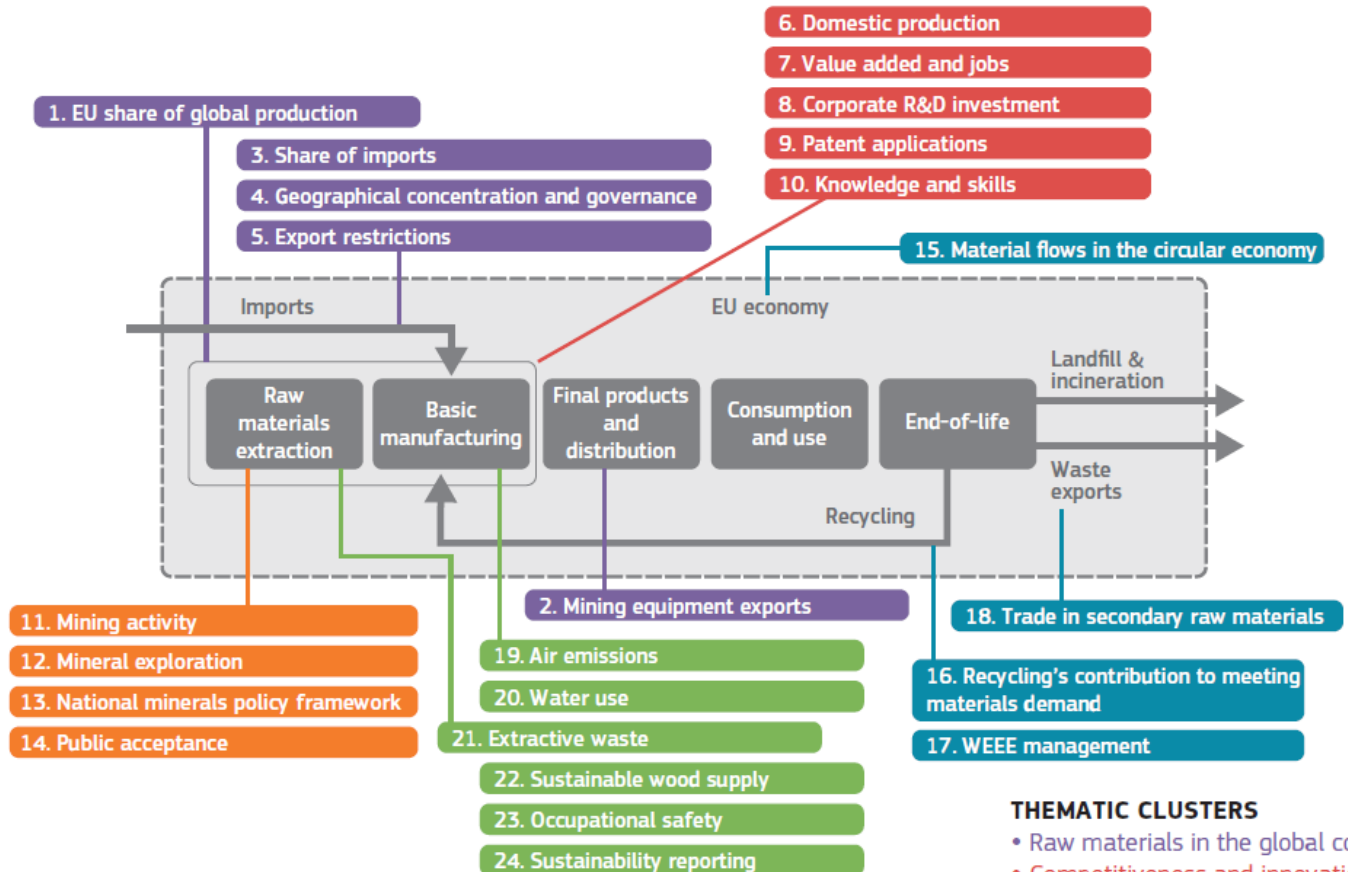


Towards RMIS 2.0: Relationships between RMIS & EURMKB

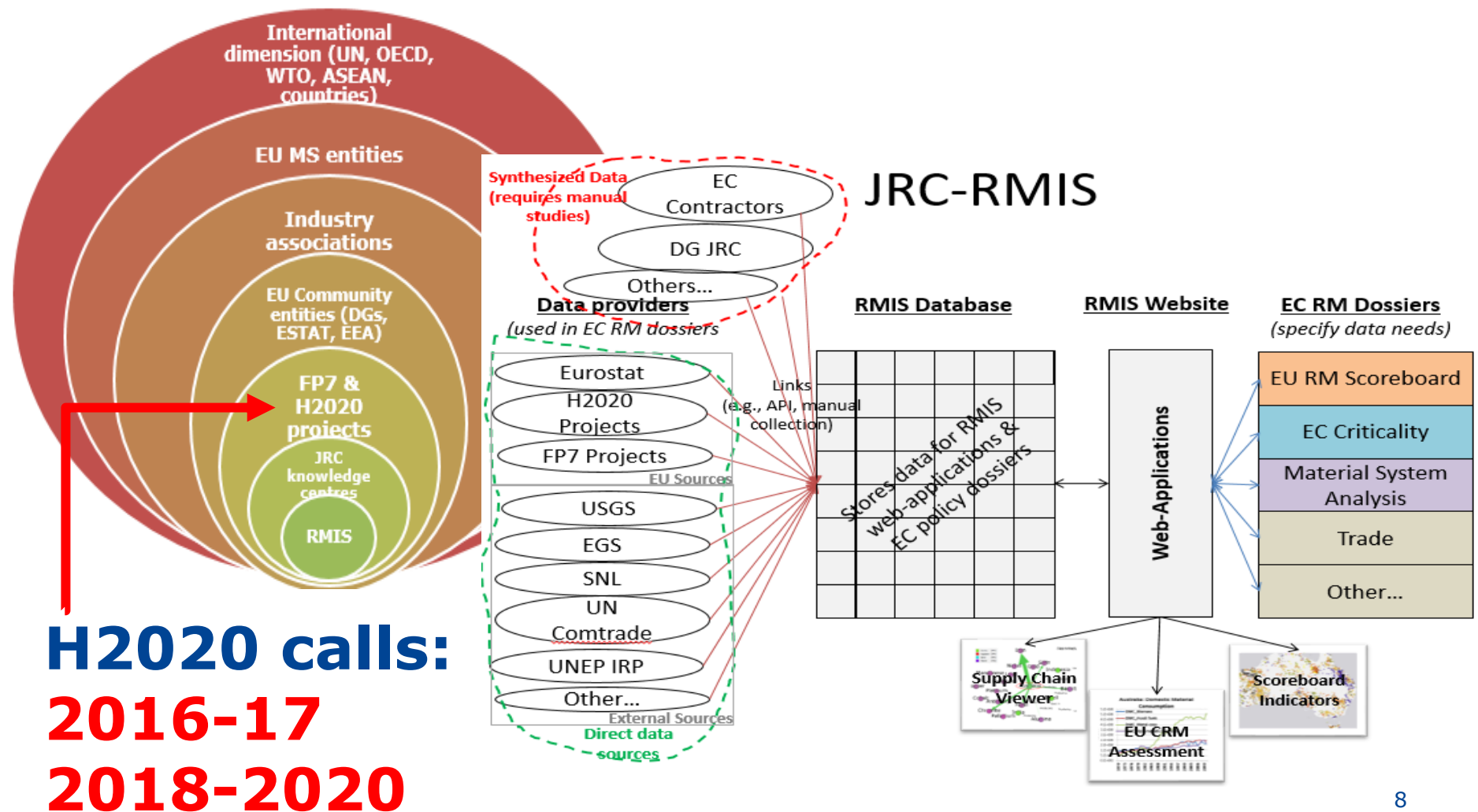


Towards RMIS 2.0: Knowledge Needs

- *The Raw Materials Scoreboard: included in the RMIS 2.0 -*



Towards RMIS 2.0: Information sources & needs



Towards RMIS 2.0: **Concept & Architecture**

draft

1 OVERVIEW

2 POLICY &
LEGISLATION

3 TERMINOLOGY
& LIBRARY

4 CRITICAL RAW
MATERIALS

5 SUPPLY CHAIN
(incl. STOCKS &
FLOWS)

6 RM SCOREBOARD
& OTHER
INDICATORS

7 ENVIRONMENTAL &
SOCIAL
SUSTAINABILITY

8 ECONOMICS &
TRADE

9 SECONDARY RAW
MATERIALS AND
CIRCULAR ECONOMY

**10 RAW MATERIALS'
PROFILES**

11 INDUSTRY &
INNOVATION

**12 COUNTRY
PROFILES**

13 RAW MATERIALS KNOWLEDGE BASE



**78 candidate CRMs
in view of the 2017 list of CRMs**

→ 73 Raw Materials Profiles (*ready*)

Raw Materials Profiles: Copper

Copper

Key facts and figures

Material name and Element symbol/ formula	Copper, Cu	World/ EU production (tonnes)¹	17,145,448/816,101
Parent group (where applicable)	-	EU import reliance¹	82%
Life cycle stage/material assessed	Extraction/ ores	Substitution index for supply risk [SI (SR)]¹	0.97
Economic importance score (EI) (2017)	4.7	Substitution Index for economic importance [SI(EI)]¹	0.95
Supply risk (SR) (2017)	0.2	End of life recycling input rate	55%
Abiotic or biotic	Abiotic	Major end uses in the EU¹	Electrical equipment (22%), Metal products (21%) Electronics (14%)
Main product, co-product or by-product	Main product	Major world producers¹	Chili (32%), China (9%), Peru (8%)
Criticality results	2011 Not critical	2014 Not critical	2017 Not critical

¹ average for 2010-2014, unless otherwise stated;

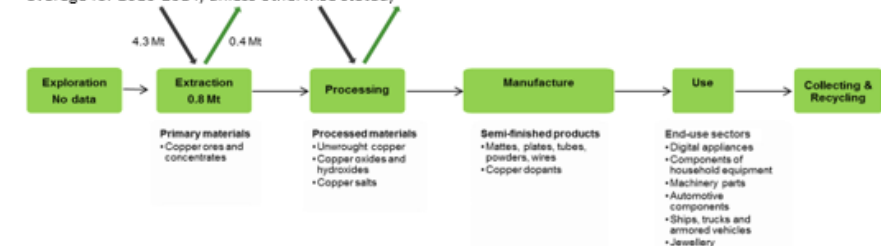


Figure 1: Simplified value chain for copper. The green boxes of the production and processing stages suggest that activities are undertaken within the EU. The black arrows pointing towards the Extraction and Processing stages represent imports of material to the EU and the green arrows represent exports. EU reserves are displayed in the exploration box.



12. Country Profiles

12.1 Material Flows and Stocks

12.2 Macroeconomics

12.3 Financial and Fiscal Regime

12.4 Extraction and Production

12.5 Regulatory Framework

12.6 Legislative Framework

12.7 Permitting Schemes

12.8 Trade

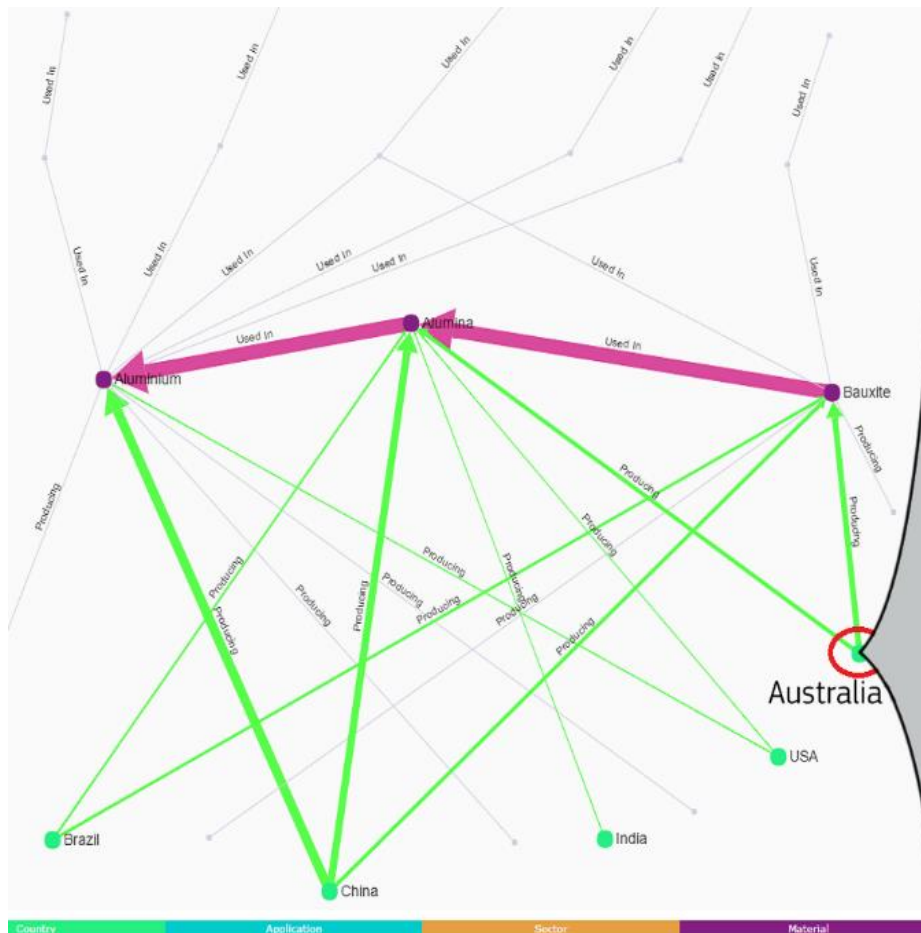
12.9 Environmental Dimension

12.10 Social Dimension

Towards RMIS 2.0: Concept & Architecture

Example of Country-profile: Australia

draft



Country Fiche: Australia

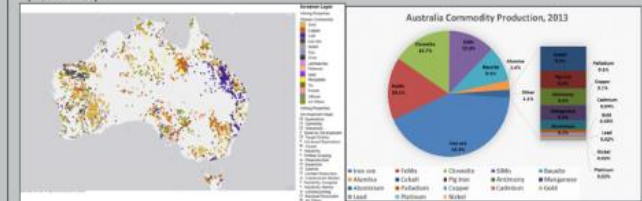
Introduction

Australia is one of the world's leading mineral economies. It is the world's largest producer of iron ore and the fourth largest producer of primary aluminium. It is the largest producer of gas and industrial diamonds, lead and tungsten, and the second largest producer of gold. It is the fifth largest producer of copper and silver. It is the world's largest miner of lithium. Australia has the potential to become among the world's leading mineral nations. The mineral industry is one of the major contributors to the nation's export revenue.



Commodity Production & Resource Wealth

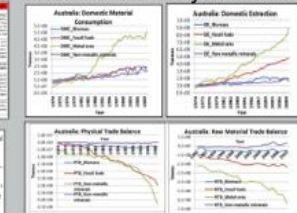
Australia is one of the world's leading mineral economies. It is the world's largest producer of iron ore and the fourth largest producer of primary aluminium. It is the largest producer of gas and industrial diamonds, lead and tungsten, and the second largest producer of gold. It is the fifth largest producer of copper and silver. It is the world's largest miner of lithium. Australia has the potential to become among the world's leading mineral nations. The mineral industry is one of the major contributors to the nation's export revenue.



Country Risk



Material Flow Analysis / Trade



Links

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JRC-RMIS vs STRADE

	RMIS - Country Profiles	STRADE - Country Profiles
12.1	Material Flows and Stocks	
12.2	Macroeconomics	Economic contribution from mining
12.3	Financial and Fiscal Regime	-
12.4	Extraction and Production	Production
12.5	Regulatory Framework	Governance
12.6	Legislative Framework	Governance
12.7	Permitting Schemes	Governance
12.8	Trade	Trade
12.9	Environmental Dimension	Environmental issues
12.10	Social Dimension	Human Rights and social issues
	12.9, 12.10, 12.5 (?)	Initiatives for responsible mining and development

Towards RMIS 2.0:

Synergies with STRADE

Raw Materials profiles:

- high risk of duplication
- synergies on Social / Environmental

Country profiles:

- high potential for synergies

Thank you for your attention!



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