



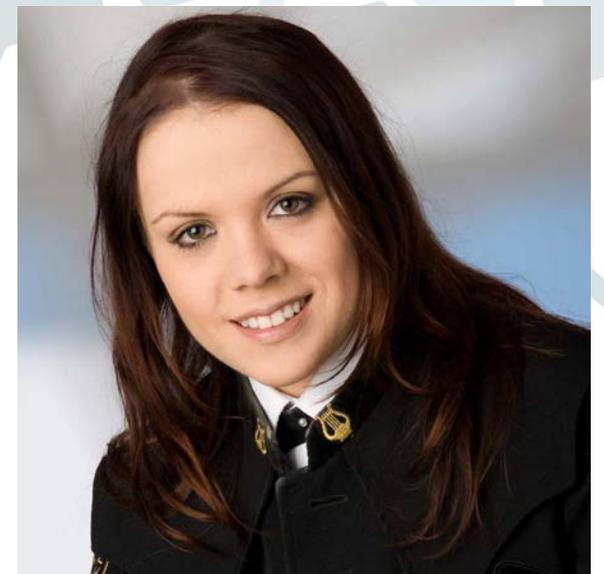
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Renewable Energy Roadmap Workshop

Mining

Copper, REE, Silicon

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Agenda

- Housekeeping
- Feedback D4.1
- Development of Roadmap

1

Housekeeping



Housekeeping

- Please mute your microphone
- Write COMMENT or QUESTION in chat
- 30 min Feedback D4.1
- 50 min Development of Roadmap

2

Feedback D4.1

Challenges

Standards

Vision

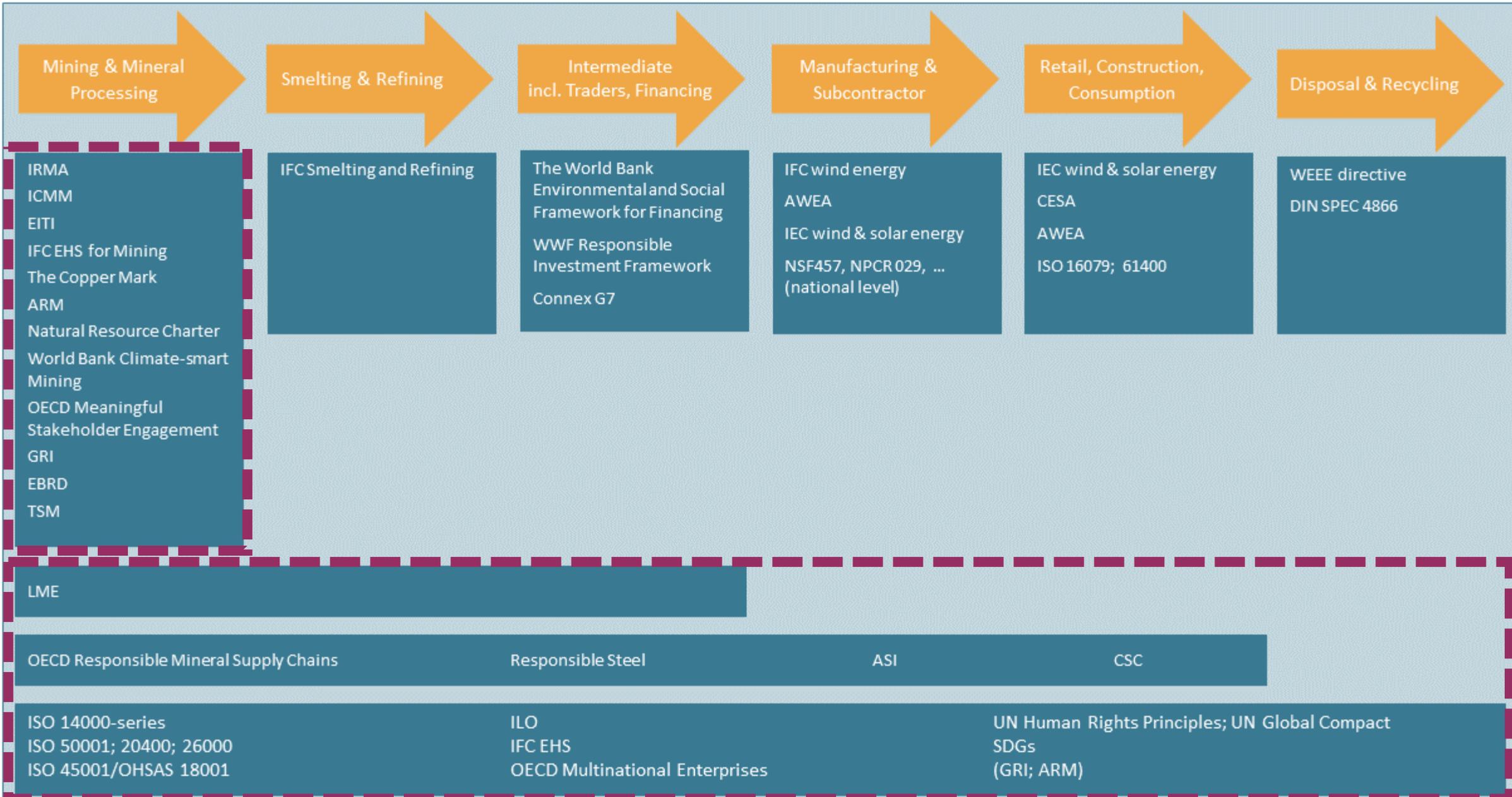
Gap Analysis



Challenges – Mining & Processing

- Copper, Rare Earth Elements, Silicon
- Human Rights Violations
 - Conflict with local communities/
Indigenous people rights
 - ASM vs LSM
 - Land rights, etc.
- Environmental Impact
 - Waste
 - Energy use
 - Reclamation
- Transparency, Traceability
 - Corruption, Tax evasion
- Health & Safety



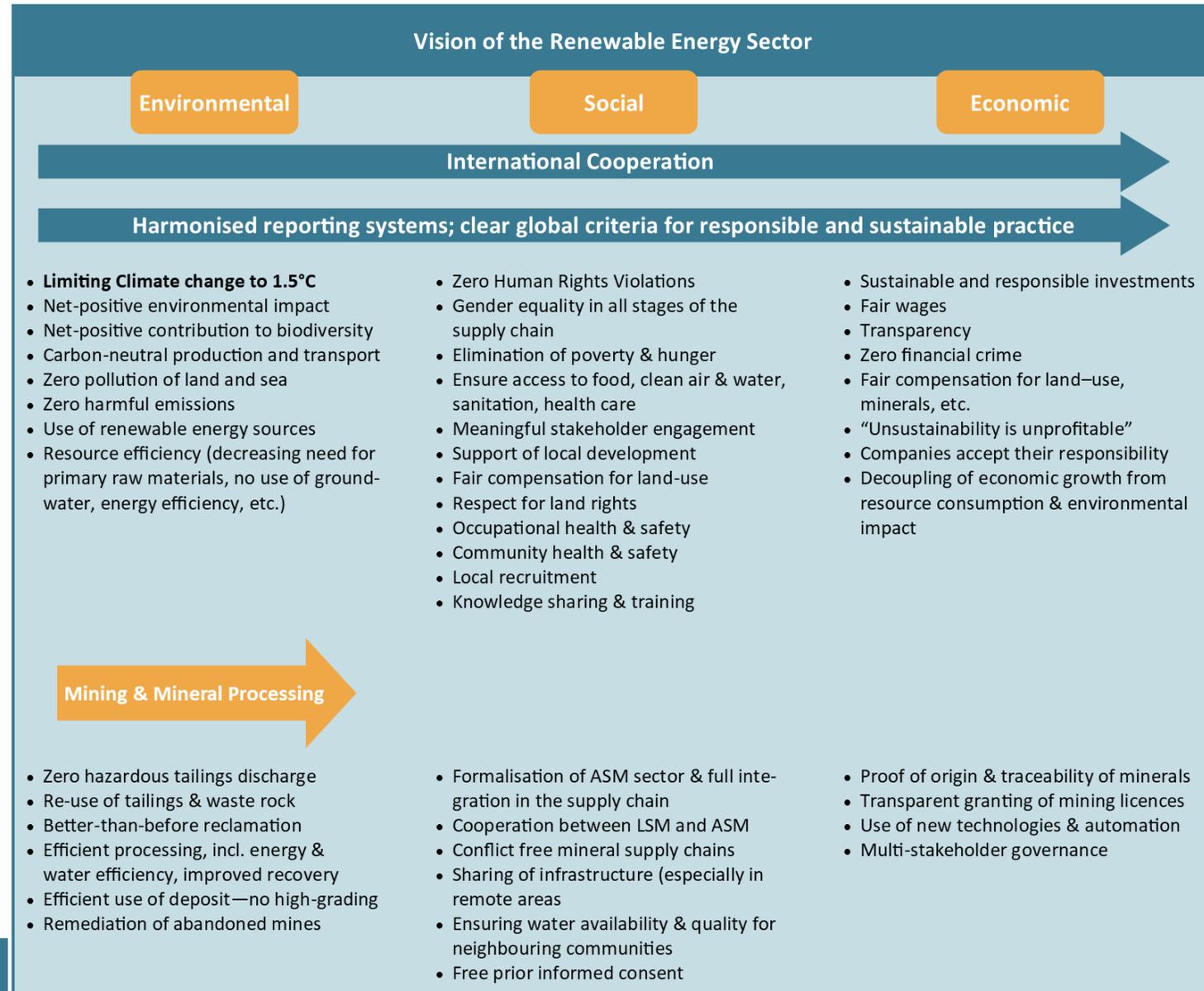




Questions

- Have we included all relevant challenges?
- Have we included all relevant standards?

Vision



Gap Analysis 1

- BGR study of sustainability schemes in mining
 - IRMA, ICMM, IFC, GRI, TSM, Fairmined
 - 108 issues for 5 categories

- IRMA most comprehensive – 65 issues included
- 11 issues not included
 - (i) women rights, (ii) alluvial mining, (iii) conflict with agriculture, (iv) conflict with LSM or indigenous, (v) extortion (vi) money laundering, (vii) mergers and acquisitions, (viii) divestment, (ix) pricing and price premium, (x) production practices, and (xi) responsible person for the standard

Identified five categories and fourteen subordinate issues

1. Human an workers' rights	2. Societal-welfare	3. Use of-natural resources	4. Emissions and land-reclamation	5. Company governance	–
Serious human rights abuses	Community rights	Land use & biodiversity	Closure & land rehabilitation	Business practices	–
Employment conditions	Value added	Water use	Mine wastes & waste water	Management practices	v-ix –
Occupational Health & Safety		Energy use	Air emissions & noise		–
		Material use			

Source: BGR



Gap Analysis 2

- International Frameworks
- Proof of origin & tracking and tracing
- Environmental sustainability
- Resource Efficiency





Questions

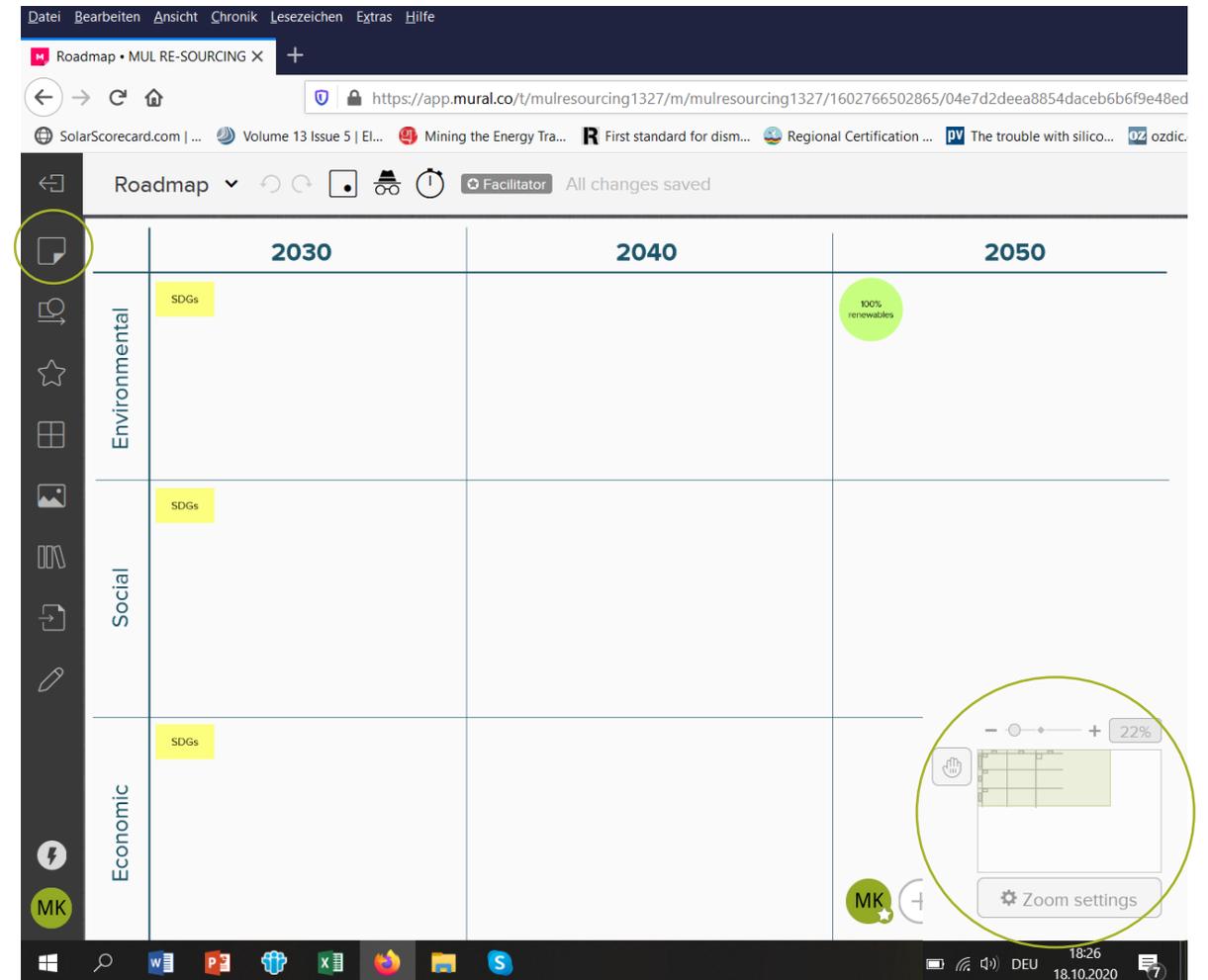
- In your opinion, are there any other shortcomings of available standards?
- Are you aware of any new standards/initiatives currently being developed?
 - E.g. CERA,....?
 - If yes, can they cover some of the gaps?
- What do you think is the most important gap that needs to be addressed?

3

Roadmap Development

Roadmap Development

- Mural, i.e. virtual whiteboard
- Link in chat:
<https://app.mural.co/t/mulresourcing1327/m/mulresourcing1327/1603359240158/82f0301e82bb38e38cdd2e7020679c43ca0309a8>
- Everyone can participate
- Use sticky notes
- Zoom/Navigation using mouse or controls bottom right corner



The screenshot displays a Mural Roadmap interface. The main content is a 3x3 grid with rows labeled 'Environmental', 'Social', and 'Economic', and columns labeled '2030', '2040', and '2050'. Each cell contains a yellow sticky note labeled 'SDGs'. In the 'Environmental' 2050 cell, there is a green circle containing the text '100% renewables'. The interface includes a top navigation bar with 'Roadmap' and 'Facilitator' options, and a bottom toolbar with various icons. A zoom control panel is visible in the bottom right corner, showing a zoom level of 22% and a 'Zoom settings' button. The user's initials 'MK' are visible in the bottom right corner of the grid.



Roadmap Development

- Step 1: Brainstorming
 - What do we need to achieve by 2050?
 - Benchmark 2030 – SDGs, is that enough?
 - What are milestones that need to be implemented by 2050?
 - What is missing from a responsible supply chain?
- Step 2: Setting Priorities
- Step 3: Organising in Timeline
 - Timeline 2030, 2040, 2050
 - Environmental, Social and Economic Milestones
 - Vision 2050
 - Suggestion – 100% Renewables
 - What else?



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THANK YOU
for your attention!



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 869276