



Connecting matters



## WP6 | Mapping of available business opportunities in West Balkan



K. Adam | Associate Professor  
St. Giannakopoulou | Researcher


School of Mining and Metallurgical Engineering, NTUA

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1



## WP6 SWOT/GAP analysis and business opportunities in the ESEE region

**Objective: Examine the potential of turning primary (WP4) and secondary (WP5) resources into marketable products and create a roadmap of actions.**

**Key activities:**

- Record of the current status of the mining sector (D6.2), ✓
- Map the prospect business opportunities (D6.1), ✓
- Perform of SWOT/Gap Analysis (D6.3), ✓
- Construction of roadmaps for selected business cases (D6.4). **Ongoing**

**Deliverables:**

- **D6.2** *Current status of the Raw Materials sector in the ESEE region* (Dec 2019)
- **D6.1** *Mapping of the available business opportunities in the ESEE region* (Dec 2020)
- **D6.3** *SWOT and Gap analysis for the ESEE region* (Dec 2020)
- **D6.4** *Roadmap for the exploitation of RM sector in the ESEE region* (June 2021)

Online Final Regional Conference, 26/5/2021

2

2









## D6.1 Business Opportunities for SRMs

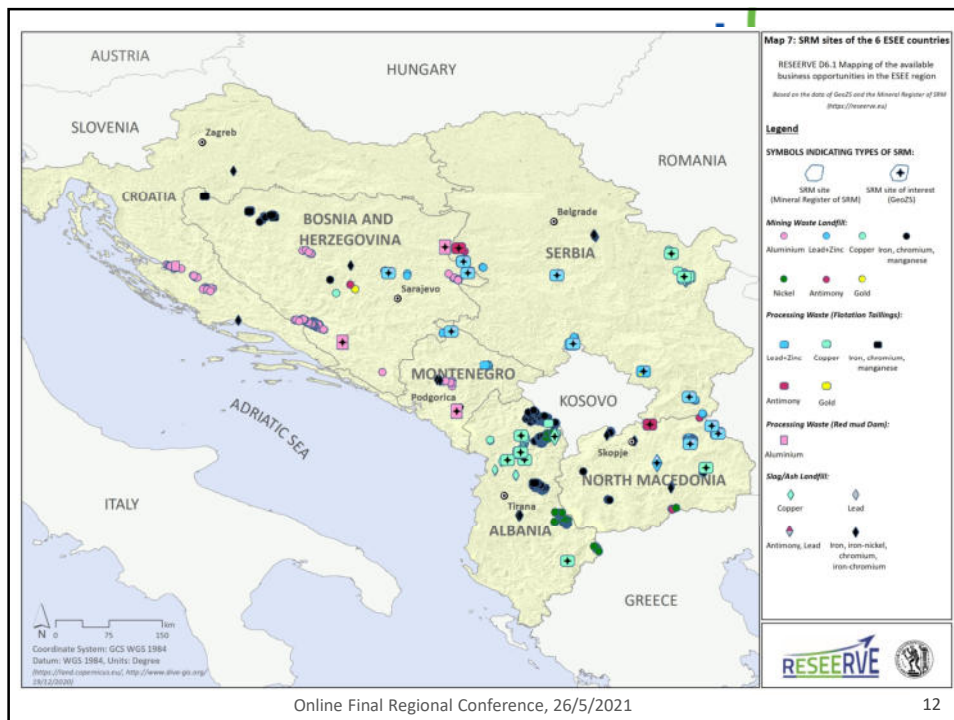


Mining Wastes (MW), Flotation Tailings (FT), Red Mud Dams (RM), Slag/Ash Landfills (S/A)

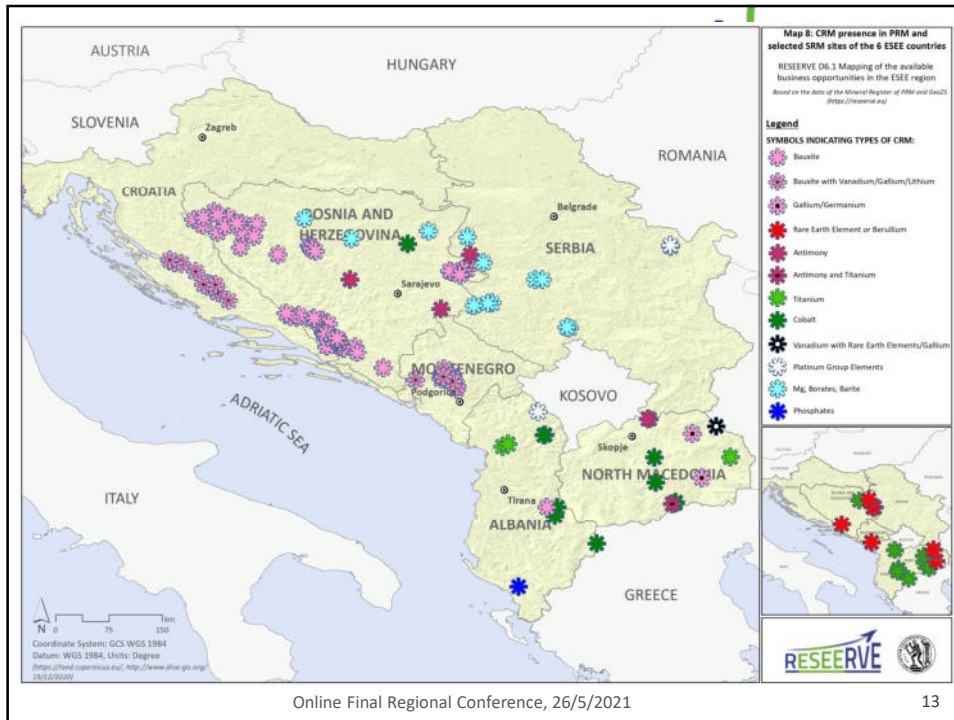
- ✓ 42 facilities presenting higher interest for further examination: 33 FT, 3 RM, 6 S/A.
- ✓ Evaluation based on waste type, waste potential, prevailing legal framework, processing methods e.tc.
- ✓ **ALB, MKD, SRB: Cu** in ~46,5% of OSA (MW: 22%, FT: 22%, S/A: 2,5%).
- ✓ **BiH, HRV, MNE: REEs & rare metals (CRMs)** from RM (4% of OSA) and MW (11% of OSA).
- ✓ **BiH, MNE, SRB** and mainly **MKD: Pb-Zn** in ~9% of OSA (MW: 3,4%, FT: 5,7%). Recovery of **Pb-Zn** or/and precious metals (i.e **Au**) (mainly from FT).
- ✓ **Environmental issues:** The majority of the SRM Important Fields are not reclaimed. Environmental impacts include AMD/quality of surface and ground waters and soils, Air pollution, Loss of Landscape.



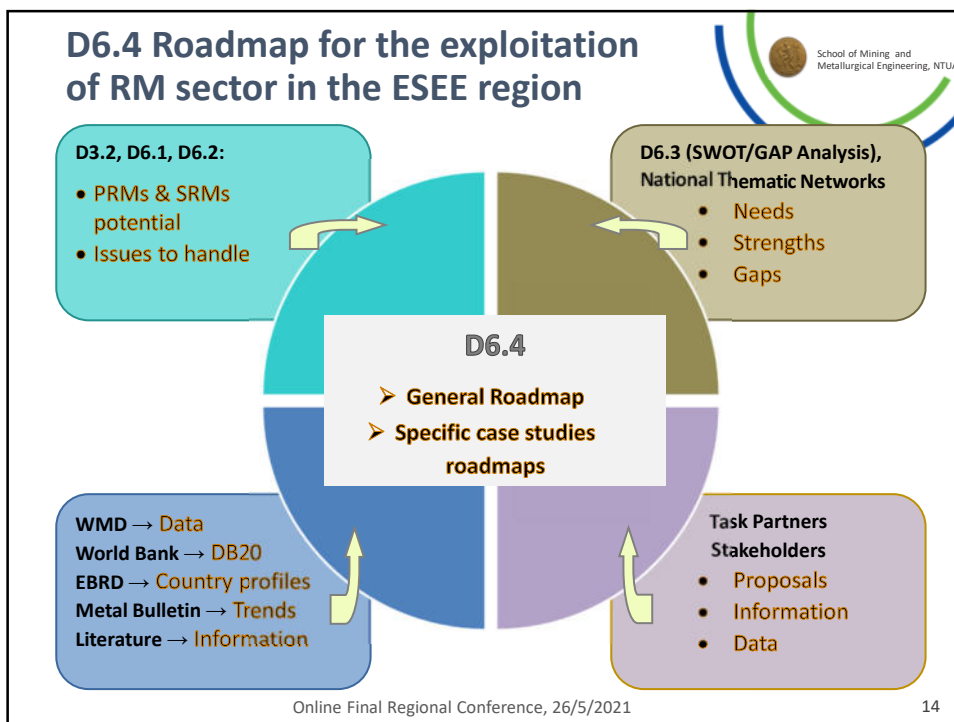
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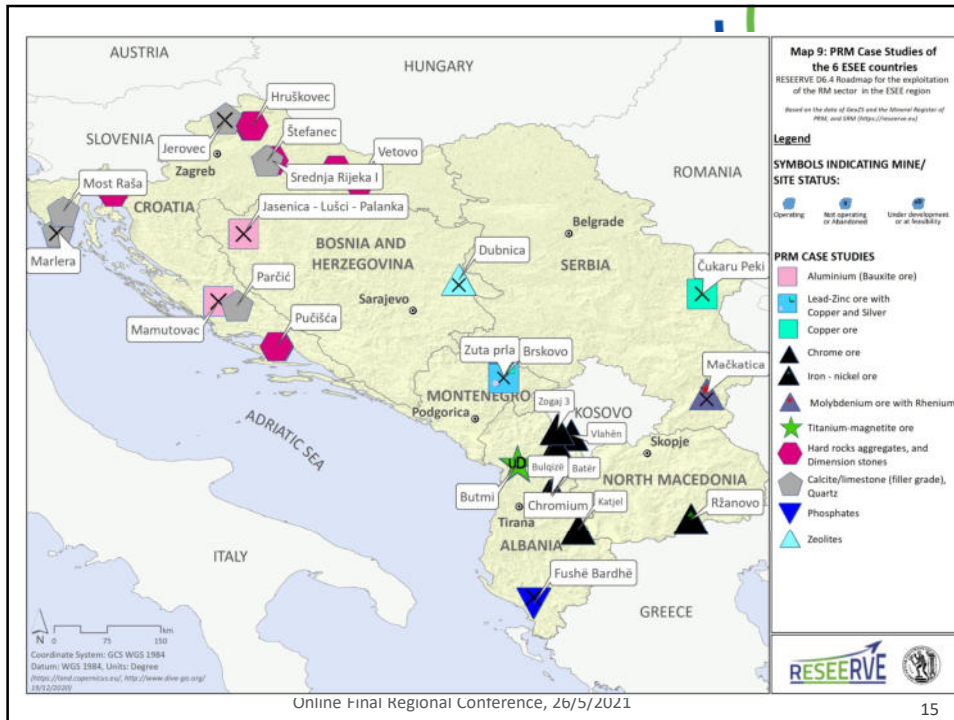
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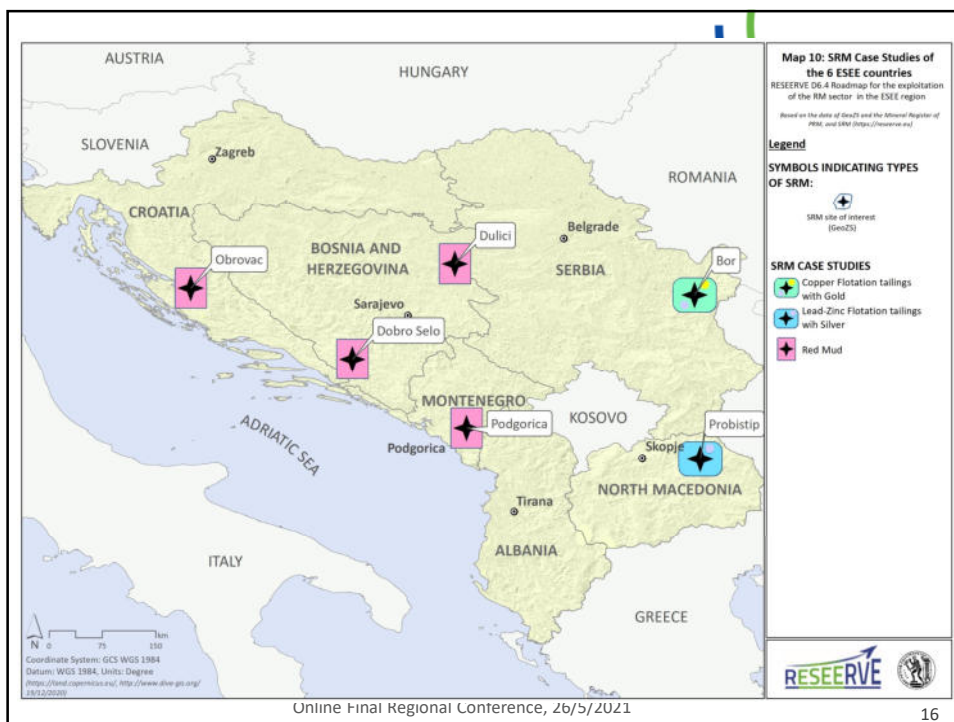
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14



15



16



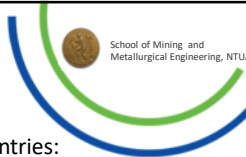
## Conclusions & Proposals - PRMs

- ✓ **Significant number** of business opportunities in the PRM in 6 ESEE Countries.
- ✓ West Balkan Mineral Register: **a major step** in mapping the availability of businesses opportunities.
- ✓ **ALB, BiH, MNE, MKD, SRB**: Very High and High Potential associated with **Metallic Commodities**.
- ✓ **HRV**: Exploration and Development of **Non Metallic Commodities**, emphasis on the development of **added value products**.
- ✓ **BiH, MNE, HRV**: Evaluation of **bauxite deposits** important for the potential recovery of **Bauxite** (CRM) and the other contained **CRMs**.
- ✓ **ALB, MKD**: Deposits of **CRM** such as **Co, Sb and Ti**





Online Final Regional Conference, 26/5/2021 17

17



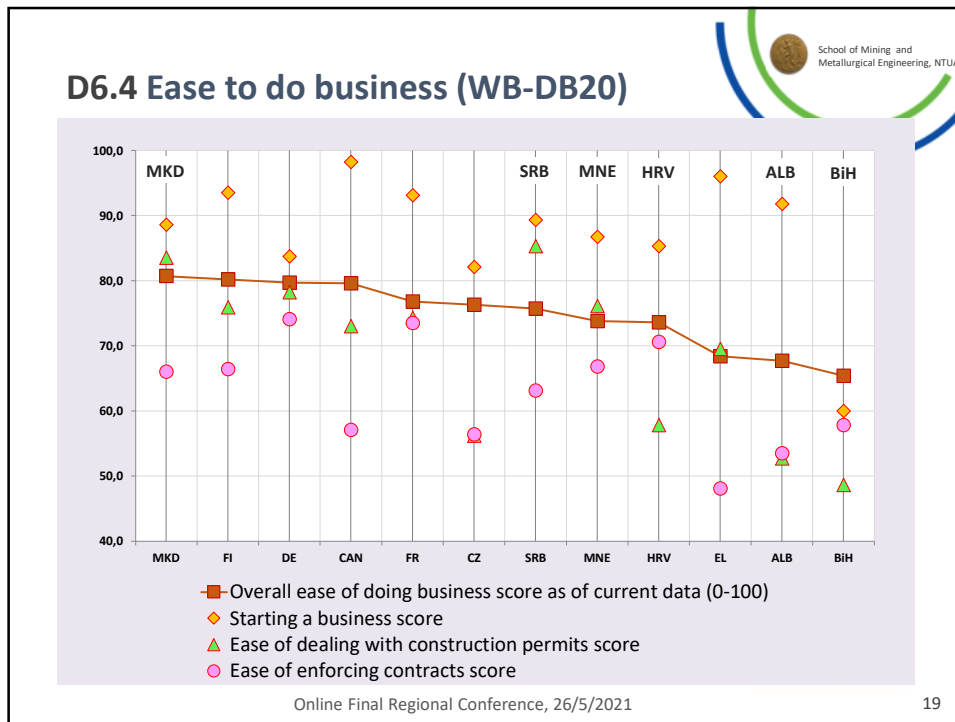
## Conclusions & Proposals - SRMs

- ✓ **Overall Surface Area (OSA)** of the waste sites in the 6 ESEE countries: **5.892 Ha** (West Balkan Mineral Register).
- ✓ **Mining Wastes (MW)**: 94% of sites are MW landfills with area >50% of OSA (3.308 Ha). Beneficially used, if **inert or alkaline**, to **backfill mining voids**, as construction material for **restoration of old mining sites**, aggregates in embankment.
- ✓ **Processing Wastes (FT: 1.866,37Ha, RM: 240,44Ha and S/A: 337,74Ha)**. Reprocessed to **recover the contained metallic values**, consisting potential business opportunities. Recovery of **CRM, Rare Earths from Red Mud** constitute an opportunity.



Online Final Regional Conference, 26/5/2021 18

18



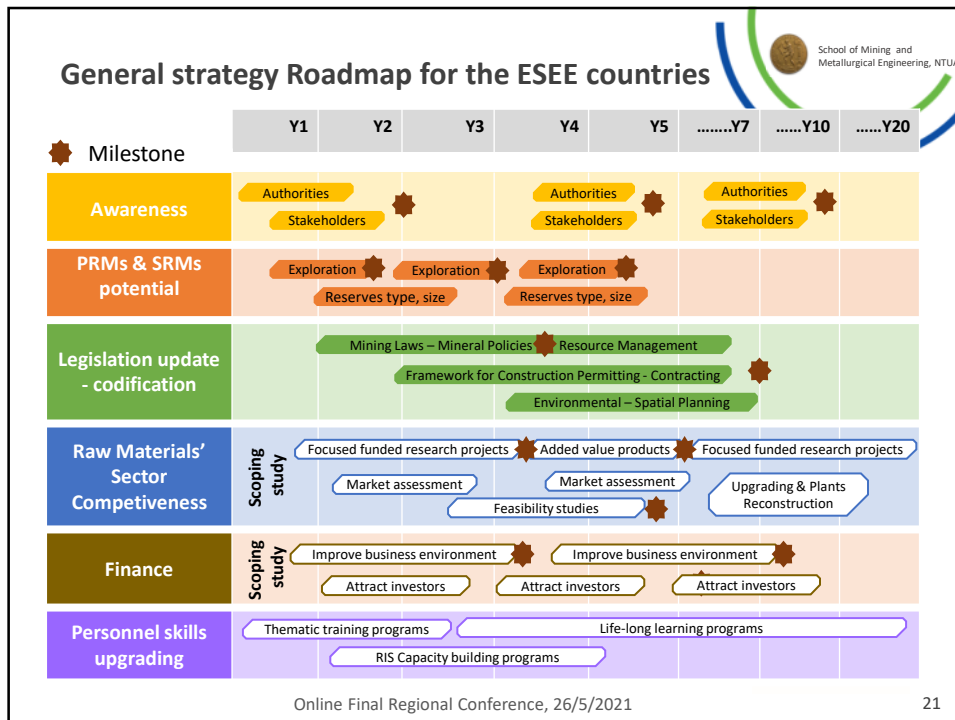
19

### Proposed improvements

| Description   | Action                              |
|---|-------------------------------------|
| Inform authorities and stake holders on the significance of the raw materials' sector and the need / steps for improvements.  | Awareness                           |
| <b>Exploration activities</b> in order to increase the level of confidence and reserves. <b>Quality control of data</b> (type and size of resources/reserves).  | PRMs & SRMs potential               |
| Improvement of lengthy and multi staged <b>Permitting procedures</b> - updating of <b>Land planning provisions</b> . Delineation and <b>sustainable management of Nature</b> protected areas. <b>Reclamation of historic and/or abandoned sites</b> . Development of long-term strategies for the sustainable management of PRMs. Improvement of <b>business regulation areas</b> | Legislation update - codification   |
| <b>R&amp;D investments</b> for exploration, mining, processing and recovery of PRM. Market assessment and feasibility studies for the <b>Development</b> of Mines or Green Field areas, <b>Upgrading Processing</b> capacity.   | Raw Materials' Sector Competiveness |
| Need to improve the overall <b>business environment to attract investors</b> .  | Finance                             |
| Need for <b>skilled</b> professional and technical <b>personnel</b> .   | Personnel skills upgrading          |

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20



21

## Conclusions & Proposals

- ✓ Significant number of potential business opportunities in the 6 ESEE Countries for the development of the Mining Sector in the region.
- ✓ The RESEERVE project is a major step towards registering and further developing PRMs and SRMs in the ESEE region.
- ✓ Actions foreseen in the Roadmap aim to improve current status of the RM sector in the 6 ESEE Countries.

Online Final Regional Conference, 26/5/2021 22

22

