

---

**Annual report on national thematic  
workshops (D2.3.)**

---

**Version 1.0**  
**12|2019**

**DOCUMENT CHANGE LOG**

Document Issue.	Date	Reasons for change
Version 1.0	20.12.2019	Initial version of the document

## List of Content

<b>1. Introduction.....</b>	<b>2</b>
<b>2. National thematic workshop: Mineral potential of the Federation of Bosnia and Herzegovina .....</b>	<b>3</b>
<b>2.1. Topic of interest .....</b>	<b>3</b>
<b>2.2. Agenda .....</b>	<b>3</b>
<b>2.3. Attendies .....</b>	<b>4</b>
<b>2.4. Implementation of the workshop .....</b>	<b>5</b>
<b>3. National thematic workshop: Mineral potential of Croatia .....</b>	<b>9</b>
<b>3.1. Topic of interest .....</b>	<b>9</b>
<b>3.2. Agenda .....</b>	<b>9</b>
<b>3.3. Attendies .....</b>	<b>10</b>
<b>3.4. Implementation of the workshop .....</b>	<b>11</b>
<b>4. Final remarks .....</b>	<b>15</b>
<b>A. Annexes .....</b>	<b>15</b>

## 1. Introduction

Under a WP2 - Community buildings RESEERVE consortium aim to facilitate an open dialogue with identified stakeholders associated with the RM sector in all involved ESEE countries. For that purpose, seven national thematic workshops are being organised during four years of the project within each of the participating West Balkan country, focused on most important national resource (critical elements, metallic raw materials or industrial minerals) according to the United States Geological Survey Mineral yearbook containing countries production rates (data for 2015). Participation of the relevant national raw materials value chain stakeholders are ensuring national task partners. Official language of the thematic workshops is mother tongue of the host country, simultaneously translation is being ensured for English lectures when needed.

In the year 2019 two national thematic workshops were organised:

1) **Mineral potential of Bosnia and Herzegovina (main topic: lead and zinc; and industrial waste)**

Venue: Hotel Hollywood, Dr. Mustafe Pintola 23, Ilidža, Sarajevo, Bosnia and Herzegovina

Date: 18th of June 2019

2) **Mineral potential of Croatia (main topic: cement industry)**

Venue: Inter-University Centre, Dubrovnik, Ul. don Frana Bulića 4, Dubrovnik, Croatia

Date: 18th of October 2019

Several target groups for all RESEERVE workshops are detected and reached: experts in mining, geology, mineral and metallic raw materials, circular economy; raw materials industry stakeholders; policy and decision-makers in the field of mineral prospection and mining industry; and stakeholders in the field of raw materials education.

It must be emphasised that we implemented improvement strategy which we proposed in D2.3. for year 2018 for both organised workshops. Hence, we separated participants in small working groups during the workshop in order to facilitate individual discussions and we increase discussion time for group tasks and joint tasks. In addition, we prepared working materials which were used to facilitate group work at both workshops (**Annex 1 a, b, c**).

Results and conclusion from these two workshops will serve as an input to WP6 -- SWOT//GAP analysis and businesses opportunities in the ESSEE region for the Federation part of Bosnia and Herzegovina and another for Croatia.

## 2. National thematic workshop: Mineral potential of the Federation of Bosnia and Herzegovina

National thematic workshop in the Federation of Bosnia and Herzegovina was merged with RESEERVE project meeting which was held in Sarajevo from 18<sup>th</sup> to 19<sup>th</sup> of June. Project meeting followed National thematic workshop. Merging these two events resulted in lowering of travel costs and opening opportunities for project members from other countries to better understand mineral potential and current situation in Bosnia and Herzegovina.

### 2.1. Topic of interest

United States Geological survey report Minerals Yearbook for Bosnia and Herzegovina 2015 available at <https://s3-us-west-2.amazonaws.com/prd-wret/assets/palladium/production/mineral-pubs/country/2015/myb3-2015-bk.pdf> under a sub-chapter Commodity Review describes following metals commodities: (1) bauxite, alumina, and aluminium; (2) iron and steel; (3) lead and zinc and (4) silicon. From industrial minerals, the main industrial minerals are those for cement industry. In this report, it is concluded that metals are expected to remain valuable export commodities. Lead-zinc ore production is likely to increase. Cement companies were making investments in modernization of their infrastructure and anticipated Government investments in public infrastructure and utilities could lead to increased demand in the near- to mid-term. Hence, a RESEERVE national thematic workshop topic in Bosnia and Herzegovina had integrated lectures related to general potential of ESEE region and Bosnia and Herzegovina with slight emphasis on lead and zinc ores and secondary raw materials in production of construction materials. Due to the interest of the local industry stakeholders, talk on critical raw materials for the EU was also included.

### 2.2. Agenda

National thematic workshop in Sarajevo had following agenda:

09:30-10:00 *Registration of participants*

10:00-10:10 *Welcome speech (Hazim Hrvatović, director FZZG)*

#### Part 1 Lectures

10:10-10:20 **Mineral resources in the ESEE region – RESEERVE project (GeoZS)**

10:20-10:40 **Transfer of methodology of Public Mining Service (GeoZS)**

- 10:40-11:00 Geological exploration of Pb, Zn and baryte in Vareš (Easter Mining Company)
- 11:00-11:20 Industrial waste materials as secondary raw materials in production of construction materials (Ilhan Bušatlić, Faculty of Metallurgy and Technology, University of Zenica)
- 11:20-11:40 Critical raw materials for the EU (EIT RawMaterials)

### Part 2 Introduction to group work

- 11:40-12:00 SWOT Analysis Federation of Bosnia and Herzegovina (FZZG)

12:00-12:30 *Coffee break*

### Part 3 Group discussion

- 12:30-13:00 Group work – SWOT analysis (UniZG-RGNF, moderators: Sibila Borojević Šošarić & Marta Mileusnić)
- 13:00-14:00 Discussion with final conclusions (UniZG-RGNF)

14:00-15:00 *Lunch*

## 2.3. Attendies

An invitation to the RESEERVE workshop has been sent to the stakeholder databases of the Regional HUB ADRIA and their partners, networks of another project of UNIZG, such as Virtulab. Invitation to the local stakeholders was also distributed by The Federal Institute for Geology of Bosnia and Herzegovina who was together with UNIZG-RGNF co-organiser of national thematic workshop. Simultaneous translation was provided.

Attendees (**Annex 2**) were coming from all three sides of the knowledge triangle: 9 participants from **Industry** (Rudnici boksita d.o.o. Široki Brijeg; BBM d.o.o. Sarajevo, Eastern Mining d.o.o. Sarajevo, Arcellor Mittal Zenica, Aluminij d.d. Mostar; Rudar d.o.o. Tuzla Rudnik magnezita Konjuh; Tvornica cementa Kakanj), 10 participants from **research organization** (Rudarski institute d.o.o. Tuzla, The Federal Institute for Geology of Bosnia and Herzegovina), 3 participants from **education sector** (University of Zenica, University of Tuzla), and 4 participants from **governmental agency** (Ministry of economy of Zenica-Doboj canton; Ministry of economy of Herzegovina-Neretva canton). As the National thematic workshop was merged with RESEERVE project meeting, 20 project members from other countries joined first two parts of the workshop.

## 2.4. Implementation of the workshop

Attendees of workshop were divided into 5 groups with similar working places (eg. University professors; geologist in research institutes etc.). Each group considered SWOT analysis from another point of view (see **Annex 1b**). Two groups had the same questions to answer. Fruitful discussion developed in each of the groups. Later presentations of different groups helped in developing of SWOT drafted by employees of the Federal Institute for Geology of Bosnia and Herzegovina presented by Ismir Hajdarević in part 2 of the workshop (**Annex 3**). Sibila Borojević Šošćarić and Marta Mileusnić from UNIZG-RGNF moderated group work and group presentations.



**Figure 1. Lecture on metallic resources exploration**



**Figure 2. Lecture on industrial waste materials**



**Figure 3. Presentation of mineral potential of the Federation of Bosnia and Herzegovina with draft of SWOT analysis**



**Figure 4. Five groups of attendees at the workshop**



**Figure 5. Group of Representatives of universities with workshop moderators**



**Figure 6. Presentation of group work**



**Figure 7. Presentation of group work.**

### 3. National thematic workshop: Mineral potential of Croatia

National thematic workshop in Croatia was merged with RESEERVE project meeting which was held in Dubrovnik from 17<sup>th</sup> to 19<sup>th</sup> of October. National thematic workshop this time did not precede or follow project meeting but was inserted in the middle of meeting schedule. Merging these two events resulted in lowering of travel costs and opening opportunities for project members from other countries to better understand mineral potential and current situation in Croatia. Both events were merged with “Dubrovnik International ESEE Mining school 2019” (acronym DIM ESEE). Under the 2019 topic Small mining sites – Innovation in mining DIM ESEE project partners discussed future and innovation potential for small and intermediate size deposits, currently representing vast majority of the European and the ESEE mining industry. More about this year topic can be found at <https://dim-ese.eu/dim-ese-2019/>. Reason to merge with the DIM ESEE School is attraction of their participants to National thematic workshop of the RESEERVE project.

#### Invitation:

<https://www.rgn.unizg.hr/hr/radionica-potencijal-hrvatske-s-obzirom-na-mineralne-sirovine-naglasak-na-industriju-cementa-i-vapna>

#### Application form:

<https://www.rgn.unizg.hr/hr/swot-analiza-sektora-mineralnih-sirovina-hrvatske-radionica>

#### 3.1. Topic of interest

United States Geological survey report Minerals Yearbook for Croatia 2015 available at <https://prd-wret.s3-us-west-2.amazonaws.com/assets/palladium/production/atoms/files/myb3-2015-croatia.pdf> under a sub-chapter Commodity Review describes decrease in metal production (aluminum semimanufactures, and iron and steel). The three cement plants located in Croatia had a combined production capacity of 2.4 million metric tons per year (Mt/yr). Hence, a RESEERVE national thematic workshop topic in Croatia had focus on cement/lime industry.

#### 3.2. Agenda

National thematic workshop in Dubrovnik had following agenda:

07:30-08:30 *Breakfast in restaurant Orhan*

08:30-09:00 *Registration of participants*

09:00-09:10 *Welcome speech (Slobodan Miko, HGI and Sibila Borojević Šoštarić, UNIZG-RGNF)*

### **Part 1 Lectures**

**09:10-10:30 Alternative fuels and raw materials in cement industry helping CO2 reduction  
(Igor Podravac, Ekonex d.o.o. for Našicecement d.d.)**

10:30-10:55 *Coffee break*

**10:55-12:25 Doing business in cement industry according to UN Global Goals for Sustainable Development (Mario Zečić, MBA, Holcim Croatia)**

12:25-13:00 *Light lunch*

### **Part 2 Introduction to group work**

**13:00-13:30 Mineral potential and related SWOT analyses of the Croatia (Slobodan Miko, HGI)**

### **Part 3 Group discussion**

**13:30-14:30 Group work – SWOT analysis (UNIZG-RGNF)**

**14:30-15:00 Discussion with final conclusions (UNIZG-RGNF)**

15:00-15:30 *Coffee break*

15:30-19:00 *Informal meetings among workshop participants*

19:00-20:00 *Dinner in restaurant Orhan*

## **3.3. Attendies**

An invitation to the RESEERVE workshop has been sent to the stakeholder databases of the Regional HUB ADRIA and their partners. Invitation to the local stakeholders was also distributed by UNIZG-RGNF using different networks which were provided from other projects, such as Virtulab. The Croatian Employers' Association (CEA) and Croatian Chamber of Economy also helped in distributing invitations.

Attendees (Annex 4) were coming from all three sides of the knowledge triangle: 11 participants from **industry** (NEXE grupa; Fassa d.o.o., Holcim Hrvatska d.o.o., Draga-sadra d.o.o., Kamen Psunj d.o.o., Fabrika

cementa BIH), 3 participants from **research organization** (Croatian Geological Survey) and 5 participants from **education sector** (University of Zagreb). As the National thematic workshop was merged with RESEERVE project meeting, 27 project members from other countries joined first two parts of the workshop.

### 3.4. Implementation of the workshop

Attendees of workshop were divided into 4 groups which members came from different type of institution. Each group considered SWOT analysis from another point of view (see **Annex 1b**). Fruitful discussion developed in each of the groups. Later presentations of different groups helped in developing of SWOT drafted by employees of the Croatian Geological Survey and presented by Slobodan Miko and Željko Dedić in part 2 of the workshop (**Annex 5**). Sibila Borojević Šošćarić and Marta Mileusnić from UNIZG-RGNF moderated group work and group presentations.



Figure 8. Opening speech (Sibila Borojević Šošćarić) of National thematic workshop.



Figure 9. Lecture in the frame of National thematic workshop



**Figure 10. Part 2 – Presentation of mineral potential of Croatia (Slobodan Miko) as an introduction to the group work.**



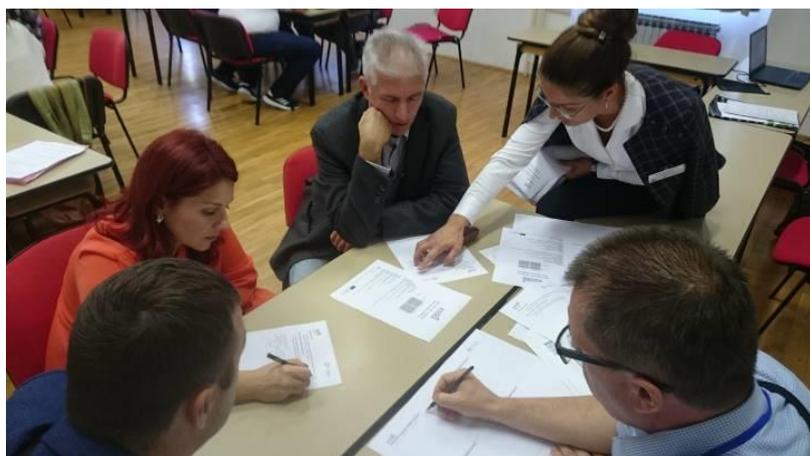
**Figure 11. Attendees at introduction to group work.**



**Figure 12. Working materials for the part 3 – group discussions**



**Figure 13. Group discussion**



**Figure 14. Group discussion with help of moderator**



**Figure 15. Group discussion**



**Figure 16. Group discussion**



**Figure 17. Group presentation**



**Figure 18. Group presentation**



**Figure 19: Group presentation**

## 4. Final remarks

Thematic topics for both National thematic workshops were correctly selected. Participants were very satisfied with lectures and their presenters. Presentations were straightforward, opening new business possibilities/options for stakeholder in the Federation of Bosnia and Herzegovina and in Croatia. Drafted SWOT analyses of the RM sector in the Federation of Bosnia and Herzegovina and in Croatia supplemented with participants feedback will serve as one of the starting points for WP6 - SWOT/GAP analysis and businesses opportunities in the ESSEE region for the Federation of Bosnia and Herzegovina and Croatia.

### A. Annexes

Annex 1a: Working material for workshop – definition of SWOT analysis

Annex 1b: Working material for workshop – Topics with ancillary questions for group work

Annex 1c: Working material for workshop – Empty SWOT table for group work

Annex 2: Attendance list of National thematic workshop in Sarajevo

Annex 3: Presentation of mineral potential and SWOT analysis draft for the Federation of Bosnia and Herzegovina

Annex 4: Attendance list of National thematic workshop in Dubrovnik

Annex 5: Presentation of mineral potential and SWOT analysis draft for Croatia