

# MinLand: Mineral resources in sustainable land-use planning A H2020 Project

# DELIVERABLE 8.3 Organization of events (Dissemination workshop at Final Meeting)

# WP8 Communication, dissemination and exploitation

Project:	Mineral Resources in Sustainable Land-Use Planning
Acronym:	MINLAND
Grant Agreement:	776679
Funding Scheme:	Horizon 2020
Webpage:	www.minland.eu
Work Package:	Work Package 8
Work Package Leader:	EuroGeoSurveys
Deliverable Title:	Organization of events (Dissemination workshop at Final Meeting)
Deliverable Number:	8.3
Deliverable Leader:	EuroGeoSurveys
Involved beneficiaries:	EGS, SGU
Dissemination level:	PU
Version:	Final
Status:	

Krishnan Subramani Ramakrishnan (EGS), Ronald Arvidsson (SGU), Nikolaos Arvanitidis (SGU), Patrick Wall

(EGS), Erika Maugeri (EGS)

Reviewed by:

Authors:

Approved by:



#### Disclaimer

The contents of this document are the copyright of the MINLAND consortium and shall not be copied in whole, in part, or otherwise reproduced (whether by photographic, reprographic or any other method), and the contents thereof shall not be divulged to any other person or organisation without prior written permission. Such consent is hereby automatically given to all members who have entered into the MINLAND Consortium Agreement, dated 16.01.2018, and to the European Commission to use and disseminate this information.

This information and content of this report is the sole responsibility of the MINLAND consortium members and does not necessarily represent the views expressed by the European Commission or its services. Whilst the information contained in the documents and webpages of the project is believed to be accurate, the author(s) or any other participant in the MINLAND consortium makes no warranty of any kind with regard to this material.

#### **Purpose**

This document presents the organization of the final conference for the MINLAND project and the dissemination activities that both preceded and followed the event. It serves as guidelines for communication, dissemination and exploitation activities. The deliverable defines the actions and implementation measures envisioned to efficiently communicate about the final conference. The deliverable also presents the objectives and activities to disseminate project outputs in order to ensure the best exploitation of its results. It also ensures to have maximum visibility of the project.

The document is intended for both internal and external readers. Its dissemination level is Public. This document is under the responsibility of Work Package 8 (WP8). Amendments, comments and suggestions should be sent to the WP8 leader: Krishnan Subramani Ramakrishnan: krishnan.subramani@eurogeosurveys.org.



# Table of Contents

Executive Summary	
Introduction	
Organisation of Final Event – Dissemination Actions	
News Articles	
Agendas	6
Video	8
Webex live video conference	10
Photos	10
Newsletter	11
Social Media Platforms	11
Anney: Minutes of the Final Conference	17



# **Executive Summary**

The present document is a deliverable of the Mineral Resources in Sustainable Land-Use Planning (MINLAND) project, which is funded by the European Union's Horizon 2020 Programme under Grant Agreement 776679.

The document presents the dissemination activities related to the organization of the final event and dissemination workshop held in Brussels. Thereby defining the communication perspectives, dissemination activities, exploitation and implementation measures envisioned to efficiently communicate about the event. Also, along with the illustration of project objectives, activities and outputs in order to ensure the best organization and exploitation of its results, as part of Work Package 8 – "Communication, Dissemination and Exploitation".

This document outlines the activities, key discussions, events, news promotion, social media activities which are to be considered in all communications issued by all partners.

The project was active for 24 months from 1st December 2017, and communication activities were planned and implemented throughout this period.

This Project's Communication Strategy (Deliverable 8.1) sets out communication activities designed to ensure that all relevant and interested stakeholders are involved and/or reached, and properly, correctly and regularly informed and kept updated. In this regard, WP8 was designed to:

- Create awareness about the MINLAND project and encourage involvement;
- Create and maintain a vivid interest ensuring participation and contribution of key players;
- Support all planned events with appropriate dissemination mean and ensure that the results are properly presented;
- Set a plan for the dissemination activities;
- Disseminate the accumulated knowledge to the relevant stakeholders.



# Introduction

The MINLAND project has been designed to meet the challenges of competing for land use from many different needs. Therefore, securing access to land for exploration and extraction of minerals, including critical raw materials in an integrated optimized process is of great importance.

It was recognized by the EU the importance to safeguard the supply of metallic and other mineral raw materials for the European needs by the European Commission in the Raw Materials Initiative. Reasons are that mineral raw materials are instrumental in the development of new green technology, batteries for electric cars, development of cities and access to metals for the European Industry. A consequence of the formed strategy was the launch of the H2020 SC5 call which resulted in the MINLAND consortium winning the project.

The MINLAND project will pursue four main objectives: to produce a database of existing policies, to provide guidelines on how to link land use and mineral policies, to analyze land use case studies of mineral exploration and extraction with respect to mineral- and land-use policies. The aim is to support a more efficient and sustainable permitting process by providing best practice examples and to ensure knowledge exchange among relevant stakeholders.

The MINLAND consortium, coordinated by the Geological Survey of Sweden builds upon participation from all over Europe. The consortium consists of partners and third parties covering such expertise as geological land use information (EuroGeoSurveys — geological surveys umbrella organization), mining authorities, land-use authorities, industry and academy. It is further supported by a broad stakeholder group covering from municipal and regional level land-use authorities to Euromines, World Wildlife Fund, PDAC, UEPG, and land use experts.

However, to be fully successful and ensure the widest possible outreach of the project results, the support of all the Consortium Partners is needed.

# Organisation of Final Event – Dissemination Actions

The MINLAND project Final Conference and Clustering Event was held on 22<sup>nd</sup> November 2019 in Brussels, Belgium at the Hotel Le Plaza situated in Adolphe Maxlaan 118/126. The venue was chosen as the Raw Materials Week (18-21 November 2019) occurred at the same hotel.

There were 41 attendees present at the conference, representing different European countries and the European Commission.

A range of communication and dissemination activities was carried out during and after the final conference (i.e. news articles, agendas, live video, pictures, WebEx video connection and newsletter) with the support of the other Work Packages.

To maximize the outreach of the workshop, dissemination on digital channels was a priority of the MINLAND Final Conference and Clustering Event. The outreach was propelled by the social media platforms (i.e. Twitter, LinkedIn, Facebook, YouTube and Flickr) along with a social media banner. These channels propelled by synergies with partners and the public to maximise the dissemination of information. The posts were then easily shared, messages



further managed, and dialogues were stimulated in social media, thereby making dissemination more efficient.

#### **News Articles**

Two news articles were published in relation to the conference. One before and another after the meeting. The initial news article was comprised of basic information such as the date, timings, registration details, agenda of the conference and venue for the MINLAND Final Conference at the Raw Materials Week 2019.

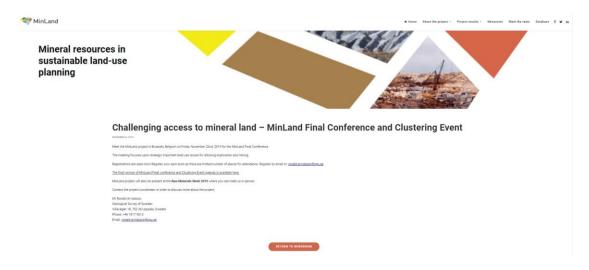


Figure 1. The first MINLAND final conference news article.

The second news article was published after the conference, deliberating about the outline of the conference. The report consisted of the key discussions, involved persons and deliberated topics.

Upon publishing the news articles on the website, the news articles were disseminated on the social media platforms with all the partners tagged in it. More detailed social media activities can be found in the "Social Media Platforms" chapter.

### **Agendas**

Two types of agenda were prepared for the conference.

The initial agenda was prepared in a way targeting the MINLAND partners and online audience. The agenda comprised of the project logo, date, venue, program details, and registration details. The particular agenda was also circulated further within the circle of MINLAND partners.





#### Agenda MinLand Final Conference and Clustering Event,

Date: November 22, 2019

Venue: Hotel Le Plaza, Adolphe Maxiaan 118/126, Brussels

08.30 - 09:00 Registration- Coffee

#### Challenging access to mineral land – chair Nikolaos Arvanitidis

Welcome by the Geological Survey of Sweden (SGU), Nikolaos Arvanitidis, EU-project coordinator

09.00 - 09.10 MinLand Project Overview, Ronald Arvidsson, Coordinator, (SGU)

09:10 - 09.20 Current developments in Mineral Policy in the EU and links to land-use planning, Rodrigo Chanes. DG-Grow

09.20 - 09.30 The JRC functions within mineral raw materials and land use, Simone Manfredi, DG-JRC, ISPRA

09:30 -10.30 Key stakeholders' aspects and position- How critical is the engagement of stakeholders (government, community, companies) to successful land use planning and management? Panel discussion with representatives for industry, authorities and EU moderated by Riika Altonen (Ministry of Economic Affairs of Finland).

Participants: Rodrigo Chanes (DG-Grow), Aurela Shtiza (Industrial Mineral Association-IMA), Erika Ingvald (SGU), Paul Gordon (SLR Consulting, Ireland), Johannes Drielsma (Euromines), Dirk Fincke (European Aggregates Association-UEPG), Eihblin Doyle (Department of Communications, Climate Action and Environment, Ireland)

10:30 -11:00 Coffee Break and poster session

#### MinLand methodology, achievements and network clustering – chair Aurela Shtiza

11.00 -11.15 Mineral Land use challenging Societal and Environmental issues – Theo van der Sluis, (Wageningen Environmental Research)

11.15 -11.30 Land-use planning and mineral-based industrial value chains- Irina Sokolova, (Minpol)

11.30 -11.45 Good Practice Elements, Guidelines and Recommendations for mineral land-use – Ronald Arvidsson and Nikolaos Arvanitidis, coordinators of the MinLand project, (SGU)

11.45 -11.55 The Intermin project promoting international networking on Raw Materials - Manuel María Regueiro González-Barros, (Geological Survey of Spain, IGME)

11.55 -12.05 The MIREU project and land-use - Kaisa Turunen, (Geological Survey of Finland-GTK)

12.05 -12.15 The MineFacts project challenging Social License to Operate aspects-Nike Luodes,(GTK)

12.15 -12.25 The X-Mine project and stakeholder interaction – Edine Bakker, (SGU)

12.25 -12.45 Minland Project and interaction with stakeholders through workshops – Chrysanthi Panagiotopoulou, (National Technical University of Athens-NTUA).

#### Plenary and closing session-chair Ronald Arvidsson

12:45-12:55 Discussion and conclusions (Gerry Stanley, MinLand Advisory Group)

12.55-13.00 Raw materials within the scope of H2020 and Horizon Europe – address and closing of the conference, Marcin Sadowski, Head of Sector - Raw Materials at European Commission, (EASME)

 $Registration: \underline{info@euroqeosurveys.orq}; Project\ contact: ronald.arvidsson@sgu.se$ 

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 776679

www.minland.eu



Figure 2. The MINLAND final conference, agenda-1.

The second version of the agenda was more focused towards the Raw Materials Week 2019 attendees. In addition to the particulars present on the initial agenda, the second version had more emphasis on the MINLAND visual identity, the venue and registration part. Whereby indicating that the 'space is limited, and to register soon'. The agenda was placed at the entrance, different meeting rooms and tables.





FRIDAY 22ND NOVEMBER 2019
HOTEL LE PLAZA — MARIE-HENRIETTE ROOM
ADOLPHE MAXLAAN 118/126, BRUSSELS, BELGIUM

08.30 - 09.00 Registration & Coffee		
Challenging acc	ess to mineral land Chair: Nikolaos Arvanitidis (SGU)	
09.00 - 09.10	MinLand Project Overview Ronald Arvidsson, MinLand Project Coordinator (SGU)	
09:10 - 09.20	Current developments in Mineral Policy in the EU and links to land-use planning Rodrigo Chanes, DG GROW	
09.20 - 09.30	The JRC functions within mineral raw materials and land use Simone Manfredi, DG JRC, ISPRA	
09:30 -10.30	Key stakeholders' aspects and positions – How critical is the engagement of stakeholders (government, community, companies) to successful land use planning and management?  Moderated by Riikka Altonen (Ministry of Economic Affairs of Finland) Panel: Rodrigo Chanes (DG GROW), Aurela Shtiza (IMA-Europe), Erika Ingvald (SGU), Johannes Drielsma (Euromines), Dirk Fincke (UEPG), Eibhlin Doyle (Department of Communications, Climate Action and Environment, Ireland), Daniel Oliveira (Laboratório De Geologia e Minas, Portugal)	
10:30 -11:00	Coffee Break and poster session	
MinLand methodology, achievements & network clustering Chair: Erika Ingvald		
11.00 -11.15	Mineral Land use challenging Societal and Environmental issues Theo van der Sluis (Wageningen Environmental Research)	
11.15 -11.30	Land-use planning and mineral-based industrial value chains Irina Sokolova (Minpol)	
11.30 -11.45	Good Practice Elements, Guidelines and Recommendations for mineral land-use Ronald Arvidsson & Nikolaos Arvanitidis, MinLand Project Coordinators (SGU)	
11.45 -11.55	The Intermin project promoting international networking on Raw Materials Manuel María Regueiro González-Barros (Geological Survey of Spain, IGME)	
11.55 -12.05	The MIREU project and land-use Kaisa Turunen (Geological Survey of Finland-GTK)	
12.05 -12.15	The MineFacts project challenging Social License to Operate aspects Nike Luodes (GTK)	
12.15 -12.25	The X-Mine project and stakeholder interaction Edine Bakker (SGU)	
12.25 -12.45	Minland Project and interaction with stakeholders through workshops Chrysanthi Panagiotopoulou (National Technical University of Athens - NTUA)	
Plenary and closing session Chair: Ronald Arvidsson (SGU)		
12.45 -12.55	Discussion and conclusions Gerry Stanley – MinLand Advisory Group	
12.55-13.00	Raw Materials within the scope of H2020 and Horizon Europe Closing keynote speech by Marcin Sadowski, Head of Sector - Raw Materials, European Commission (EASME)	

#### REGISTER NOW

Space is limited! Please register your participation now by email to info@eurogeosurveys.org
For more information, please contact the MinLand Project Coordinator: ronald.arvidsson@sgu.se

Figure 3. The MINLAND final conference, agenda-2.

# Video

The MINLAND final conference was live-streamed on MINLAND social media platforms (Facebook, LinkedIn & Twitter). The video was initially taken on Facebook Live and the recording was later disseminated in other social media platforms. Furthermore, to have the



live video more easily accessible to the public, the video was later uploaded in YouTube and link was disseminated.

In the weeks leading up to the MINLAND final conference, the MINLAND followers were constantly encouraged to watch the live video. To support this, customized social media posts were done by the two main responsible partners, EGS and SGU, in order to promote the live video and instruct followers how to watch and at what time the live-stream would begin.



Figure 4. Customized MINLAND social media post concerning the live video on Facebook.

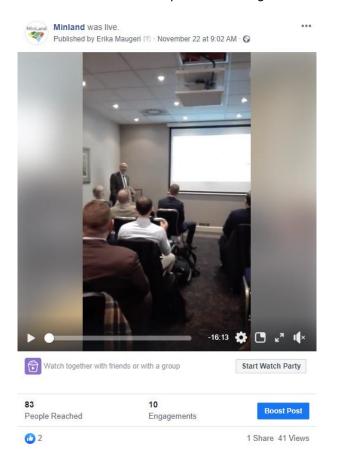


Figure 5. The MINLAND live video post on Facebook.



The Facebook live video received a reach rate of 80+ people and 40+views on the Facebook page itself. Following the event, the post also received 7 clicks.

The official MINLAND animated video, published on <u>YouTube</u> in October 2019, was used to create awareness and interest in the final conference and was also promoted during the conference itself, being played during the coffee break and at the end of the event.

#### Webex live video conference

A web conference link was created to allow those who could not join the MINLAND conference in person to follow the event online via a live video conference. The link to join the Webex video conference was shared on the MINLAND social media platforms. This allowed participants who joined on Webex to listen and clearly view the presentations through the 'share screen' facility as well as listen in to the discussions that followed.



Figure 6. MINLAND social media posts regarding the announcement of WebEx link.

#### **Photos**

The photos of the MINLAND final conference were made available on the MINLAND Flickr account. During the event, the photos were taken and were directly promoted in social media platforms. Furthermore, the photos taken were published along with the news report prepared after the meeting.





Figure 7. The published photos in the MINLAND Flickr account.

# Newsletter

The 4<sup>th</sup> edition of the MINLAND newsletter summarised the main outcomes from the conference and the edition included the list of recommendations collected during the project. Several interviews with the Advisory Board and broader stakeholders were also integrated in the newsletter to provide first hand feedback on the project results.



Figure 8. MINLAND Newsletter 4<sup>th</sup> edition.

### Social Media Platforms

In order to reach wider audiences and maintain an enduring web presence and awareness of the project and its conference, the MINLAND project was active in several social media channels. All of the published posts would be uploaded on the MINLAND website and would be linked to the social media channels. For the twitter (@MINLAND\_project) feed and a #minlandproject hashtag were used thereby encouraging debates and participation, as these are channels which are accessible by all communities.

The MINLAND Project final conference activities have also been advertised through Facebook and LinkedIn in order to maintain an 'open and social' project and to serve as a platform for formal discussions, interaction, collection of information, and communication of the project



outputs, to experts. The obtained materials were also disseminated in the MINLAND video platform (YouTube) and photo-sharing platform (Flickr).

#### LinkedIn

In the MINLAND project LinkedIn page a total of 15 Final Conference related posts were published/shared. The first post related to this on the LinkedIn account had 1067 followers by the close of the project, along with the additional visibility provided through those that shared the post, in particular via the coordinating organisations' accounts. Furthermore, the page on average receives 500+ views for each post and corresponding hits for the two coordinating contacts were at least 1000 hits each.

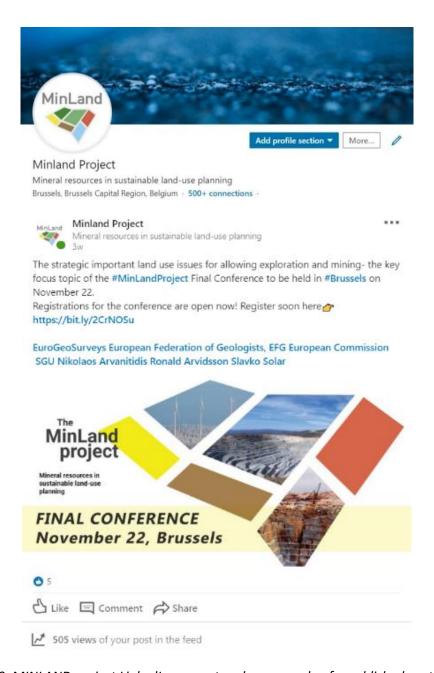


Figure 9. MINLAND project LinkedIn account and an example of a published post (right).



Post-event activities: Upon completion of the event a group photo with the MINLAND team was uploaded. The post received a high response rate with 1200+ views thereby adding 27 likes and 4 re-shares to it.



Figure 10. MINLAND project LinkedIn account – final conference group picture post.

#### Twitter

At the end of the project, the MINLAND twitter account had 272 followers.

13 tweets were posted in relation to the MINLAND final conference. The tweets between the 1<sup>st</sup> November to 30<sup>th</sup> November earned 25.1K impressions.

The average tweet impression for the MINLAND final conference tweets ranged between 1500+ (number of times users saw the tweet on twitter).



# Your Tweets earned 25.1K impressions over this 30 day period ets Top Tweets Tweets and replies Promoted Impressions Engagements Engagement rate Minland Project @minlandproject · Nov 22 1.531 67 4.4% ♦ Congratulations to all #Minlandproject consortium members for successful completion of the project!!! #finalconference #rawmaterialsweek @EU\_ScienceHub @sguSverige @UEPG\_Aggregates @euromines pic.twitter.com/Gn83iMQJYN View Tweet activity 2.7% Minland Project @minlandproject · Nov 22 1,181 On-going #MinLand Project panel discussion on key stakeholders' aspects and positions- How critical is the engagement of stakeholders to successful land use plan planning and management #Finalconference

Figure 11. Statistical analysis of the tweets published during the MINLAND final conference.

#### Facebook

The MINLAND Facebook page consists of 121 likes and 130 followers. The key activities of the Final Conference are posted on this page. 10 related posts on MINLAND Project Final Conference was posted on Facebook.

The MINLAND final conference and clustering event session was live-streamed through Facebook. The video was later shared in other MINLAND social media platforms as well as by other organisations.

For the post published on November 13th, it had a reach rate of 1580 (number of people saw the post on their timeline). Several followers of the page had liked, commented and shared which in turn resulted with 80 post clicks and 112 engagements rate.



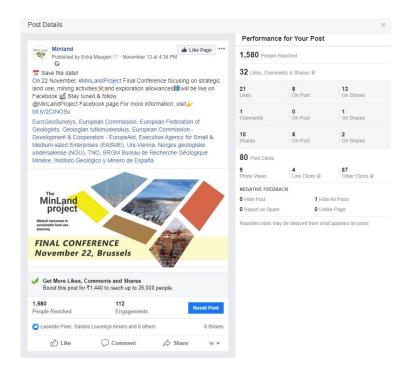


Figure 12. Facebook post on Final Conference - save the date.

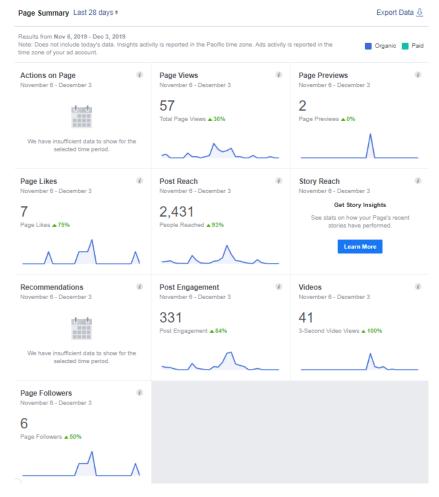


Figure 13. Summary of the Facebook activities from November 6 to December 3, 2019.



#### YouTube

In the MINLAND project YouTube account the video related to the MINLAND Project Final Conference and Clustering Event was uploaded. The live video was shot during the opening speech of Mr. Nikolaos Arvanitidis and the presentation of the MINLAND project by the Project coordinator Mr. Ronald Arvidsson.

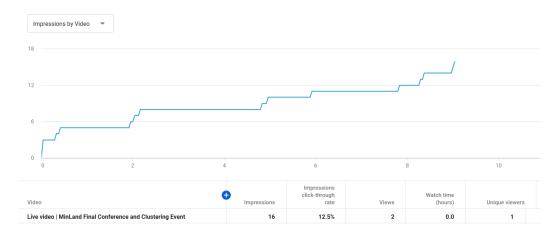


Figure 14. Overview of reach from MINLAND YouTube account

#### Flickr

All the pictures from the events are uploaded and shared on Flickr. The pictures from the MINLAND final conference were published on Flickr. In total, the Flickr account gained 300+ views.

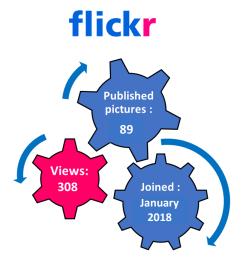


Figure 15. Overview of MINLAND Flickr account



# Annex: Minutes of the Final Conference



# MinLand: Mineral resources in sustainable land-use planning

A H2020 Project

**H2020 Grant Agreement:** GA 776679

**Topic:** SC5-15d-2017 - Linking land use planning policies to

national mineral policies

# **MinLand Final Conference Minutes**

22 November 2019, 09.00-13.15, Hotel Le Plaza, Brussels

Presentations will be published on the MinLand website www.minland.eu

Session 1. Challenging access to mineral land

Chair: Nikolaos Arvanitidis (SGU)

### Opening of the conference - Nikolaos Arvanitidis (SGU)

The Conference was opened by a welcome by the chair for the first session Nikolaos Arvanitidis representing the coordinator organisation giving historical views upon land use planning and EU stand point.

MinLand Project Overview - Ronald Arvidsson, MinLand project coordinator (SGU)

The project was presented as a back drop for the panel discussions. Some points were:

About 2.5% of all exploration efforts globally are being spent within the EU; only two European Countries among the top 25 when it comes to exploration investments.



Only about 5% of metals consumed within Europe are being mined in Europe – leads to increased environmental and climate footprint.

In order to evaluate mineral resource extractive projects, the value chain options must be considered – full value chain leads to larger acceptance locally/regionally.

Projects covers all land use aspects from data, exploration, extraction to remediation and after use.

The base of the project is the data base, at <a href="www.minland.eu">www.minland.eu</a> and the MinLand case studies (MinLand D3.2).

Mineral land use in two parts:

- 1. Land use planning (strategic or detailed) based upon available detailed geological information regarding mineral deposits of economical and strategic value
- 2. Land use during permitting and extraction including after use.

Linking of mineral and land use policies -examples are for the mineral land use:

- Well defined and assessed mineral deposit
- Area large enough to include industrial facilities
- Equally assessed with other land use
- Need high quality information
- Exploration can take place parallel with existing land use

Example of mineral land use from Norway

- Well known deposits
- Known deposits
- Potential areas for minerals

The MinLand Network workshops of professionals proved to be a strong concept for exchange of and pointing out pathways for improvement in current systems.

**Current developments in Mineral Policy in the EU and links to land-use planning - Rodrigo Chanes, DG GROW** 

Mining and quarrying. Including energy minerals, cover 0,27% of total EU land use. From report Main land use types (2015).

As a background to the MinLand project the EU has developed the concepts if Mineral deposits of public importance and Access to Mineral Potential in the EU European Green Deal.

The MinLand project is further one of a string of efforts from the European Commission to promote sustainable mining and Rodrigo Chanes (DG-Grow) elaborated on this perspective through his presentation **Current developments in Mineral Policy in the EU and links to landuse planning**. Here follow some points

Geological surveys should be more active in land-use planning – RMI, EIP RM SIP, RMSG.

EU aims at a climate neutral industry in Europe and for this we need raw materials to fit European need for supply.



The new President of the European Commission, Ursula von der Leyen – is pushing the European Green Deal in order to achieve that EU is the first climate neutral continent and this will demand more need of raw materials and Critical Raw Materials needed for the climate transition. The European Green Deal has been launched through which critical mineral resources may have a strong position.

Near future important aspect is coming Horizon Europe (most relevant is Pilar 2) which is under development and will contain raw materials.

One very important aspect is to show upon needs of Mineral Raw Materials which has been done through a string of H2020 efforts like Minatura and Orama with data and statistics. One important example is the publication "Project life in quarries" which is about how to keep and increase biodiversity during extraction and create favorable conditions for biodiversity after closure.

Another important aspect is how mining can connect to and even provide support for the local biodiversity and good practice examples will be found in the new publication "Biodiversity Non-energy mineral extraction in relation to Natura 2000" where good practice aspects of coexistence or land use that follow in sequence will be found: (https://ec.europa.eu/environment/nature/natura2000/management/docs/NEEI%20case%2 Ostudies%20-%20Final%20booklet.pdf).

Rodrigo also elaborated upon how catch up the results from the CSA project with the intent of "how to have better impacts with the projects", i.e., projects like Minland, Minatura and Mireu and catch up results from MinLand within the RMSG.

Minland is well received with many interesting deliverables, e.g., D5.1 Logical Framework and D3.2 Case studies. It was informed that a discussion will follow with the project about how to use the results best by the commission. Also, that there is an increased effort from the EC side for uptake of the project results by the relevant stakeholders.

The JRC functions within mineral raw materials and land use - Simone Manfredi, DG JRC, ISPRA

In the following presentation it was elaborated by Simone Manfredi about how to catch up, archive and make available results and information from EU raw materials projects like MinLand in the presentation "The JRC functions within mineral raw materials and land use".

Manfredi explained the RMIS functionality – some key points are:

Aim is to not just store results (from projects) but improve uptake by channelling H2020 results into the RMIS.

Different aspects of raw materials information divided in sections – see RMIS website. New: RMIS newsletter – first edition just published

Discussions will follow with JRC regarding the inclusion of MinLand results. Specifically, the MinLand project in the JRC perspective is about:

MinLand – policy and legislation section with some remarkable synthesis reports like the Case studies (D3.2). How and what to include in detail will be further discussed between JRC and the Minland project.



It was concluded also that MinLand will have space within the RMIS gateway and on the part describing Policy and legislation. In fact, Minland is already part of RMKG tile in RMIS and the case studies could fit well under the Policy and Legislation per country Tile in the RMIS. Also, a new sub section on land use planning could be created where the MinLand guidance reports could be located.

Reports that were mentioned in addition to the case studies are the Guidelines (D6.2), local WS reports among others. Simone gave the message that the most relevant reports will be added as pdf files.

Panel discussion - Key stakeholders' aspects and positions – How critical is the engagement of stakeholders (government, community, companies) to successful land use planning and management

Moderated by Riikka Altonen (Ministry of Economic Affairs of Finland)

Panel: Rodrigo Chanes (DG GROW), Aurela Shtiza (IMA-Europe), Erika Ingvald (SGU), Johannes Drielsma (Euromines), Dirk Fincke (UEPG), Eibhlin Doyle (Department of Communications, Climate Action and Environment, Ireland), Daniel Oliveira (Laboratório De Geologia e Minas, Portugal)

Riikka Altonen Extensive EU research has been completed and it is well known what is needed and desirable. A problem is to communicate this knowledge from the European level to regional and local level. Riikka asked the panel "How critical is the engagement of the stakeholders to successful land use planning"?

Eibhlin Doyle caught up with that the new transition to green economy will lead to that we need more raw materials also since the population (World) increased while at the same time the increase of the population requires the increase of other land uses for food production and living too. We need not only more food, but also places to live in, places to go to and work and for this we need raw materials (mineral).

Land use is usually on the surface and is basically 2D – mineral deposits on the other hand are different since we need to think 3D and particularly for metals. There is also 4<sup>th</sup> dimension which is time. Deposits that today may be not economic to extract today may be tomorrow. How do we plan for this time perspective and avoid the raw material sterilization?

ED – Elaborated on impact of exploration of mineral deposits which has less impact on land than plowing – but is less accepted. Recognition for the need ("society's need for raw materials") rarely come into play when the local community comes into play. Exploration brings and means a different stakeholder's engagement than mining.

We also need to plan for closure. On Ireland two metal mines have closed within recent time with achieved remediation leading to new wetlands and newly created habitats within the old tailings area. Previous extracted land can become useful for community — need to show the community regarding this. A mine and tailings can go back to being useful for other uses (agriculture, bird habitat). The technology exists; however, it is still hard to convince local stakeholders. Mining is not popular and therefore Europe need something to promote mining and huge increase of awareness for the communities. Successful land use is not always what everyone else is considered successful. Approach is not always to draw lines but need to prioritize metal mines. We need to have an open perspective because we don't know where the next deposit will be found. The example of proceeding from an active tailings pond to wetland may have an impact on public opinion.



The EU could help increase awareness on the new phase of exploration and mining that we are in now. In terms of land use, metals should be given a priority, as we don't know in advance where they are. Metal mining, in relation to land-use planning, should be a priority because you never know when and if there will be a next feasible ore deposit located.

Aurela Shtiza: Mining should be viewed more as a temporary – not permanent use of land. Several case studies exist to demonstrate that there is life during and after mining. E.g. extraction of bentonite from underneath an agricultural field in Spain. Top soil was removed in parts and returned after the material was excavated. The farmers even could choose to get a more smoothed, better workable terrain in return. The whole operation took only 1 year. It is key to connect to other sectors and make these successes known. New legislations necessary but also need to be creative and share this where in the after use there is a new business model for the land, e.g., the Eden park in Cornwall formerly a kaolin & clay extractive site. There are plenty of case studies that need to be made known. Can be used as a momentum with the stakeholders to show how these issues can be solved.

Riikka – Mininig Industry is very old fashioned - however as stakeholder engagement is a very modern part it is needed early involvement. Mineral land-use aspects need to be approached at the very early stage of exploration.

Erika Ingvald – It is important with involvement from different government bodies. Resistance to mining has grown in Sweden.

Erika Ingvald – Stakeholder involvements – is a deal breaker if not done early enough the industry is lost. Can be turned for a difficult situation and is necessary. It is important for the industry to invest in too, not just in geology. There are really successful local projects where protests been turned – this makes this a deal breaker. Industry must invest in stakeholder communication it is however difficult to communicate with journalists (medias negative perception) but after Paris agreement the mining has been possible to discuss (with journalists). There also has been much discussion about green technology and conflict minerals, but resistance remains. Regional authorities are not informed well enough about the process, and their rights and duties when it comes to permitting.. The problem is biggest for junior exploration companies as they do not have the resources for this type of communication work. They have been leading the search for "green" minerals in Sweden, as the big companies stay with their traditional commodities, as diverging is not profitable. We cannot beforehand assign land for exploration but need all land to be open to exploration firstly take action when we know what to explore and extract. Regional authorities - that do not know what role they are - have been intensely communicated with by the survey and industry. Problem is that junior companies do not have enough of cash to pull through this process (of stakeholder communication). Juniors are important for finding the new ores. Swedish National Interests - explained - eleven different - used for assessment for most appropriate LU. The most appropriate land use is weighted in a final decision. The geological survey is responsible for this land use aspect.

Dirk Fincke It needs to be communicated that the non-energy extractive industries are part of the solution, not a problem. Running out of aggregates can be very painful and expensive situation for (construction) companies and communities. Every year, we satisfy a demand of more than 3 billion tonnes of aggregates in Europe and we truly are a European Industry, producing in Europe and for Europe. We are here to stay.



The EC presentation just showed that 15% of the EU territory is occupied by Natura2000 but it is actually 18% and on top of this comes national and regional protected areas. We count 27,000 Natura 2000 sites; the number of aggregates extraction sites is similar to that: 26,000 across all Europe. During the UEPG Sustainable Development Awards Ceremony of 20 November 2019, 53 entries from 13 European countries of excellence for sustainable development were presented in a Brussels Concert Hall with 200 participants. WWF Europe was in the UEPG Jury praising the performance of these entries on environmental management and biodiversity. Aggregates producers are involved in projects where aggregates extraction next to rivers creates retention areas helping nearby communities to avoid disastrous floods, while the extraction becomes a positive side effect. LU planners will realize that running out of aggregates can be very expensive and will not but supplied from outside of Europe. UEPG also approached other land use groups such as representatives of offshore Wind parks to verify whether marine aggregates extraction (temporary activity) could be done before the installation wind mills (permanent activity). Working together with other industries (e.g.) wind parks is beneficial: as example: check before building something: small scale extraction as preparation before other land uses (e.g. wind mills), can be beneficial for both sectors. Vice versa wind mills and solar panels can very well be put in or around active or restored aggregates extraction sites. The European Aggregates Industry increasingly produces not only primary aggregates, but also recycled aggregates, renewable energy, and Natura 2000 and protected areas. That is a very sustainable way of using and transforming land. We are part of the solution, not part of the problem. ED – good to look at mineral resources before installation of wind turbines - otherwise land can be sterilized from the aspect of mineral resource extraction. Manuel mentioned that there is no extraction ("of mineral resources") along the Spanish coast.

DF further stressed upon the importance of linking mineral extractive activities with land use at all levels.

Rodrigo Chanes – What are the competences what should the union do what should the MS do. Extraction is the duty by the MS due to need of these resources and there is therefore a need for political will to do this. Non-energy raw materials is a Member States competence. The EU can play a role in exchanging best practices and communicating facts (CRMs, land use statistics, etc.). This is long term work. Outreach to the regional level is very important.

The European Commission has a long-term commitment "in raw materials" in order to support extraction ("of mineral resources"). Concerning Horizon 2020 coordination and support actions a wider outreach of results is needed. One possible way is to select most relevant results, discuss them in the Raw Materials Supply Group and assess, e.g., the interest of providing recommendations or EU guidelines.

Communication to a national level would be a challenge as even terminology and the meaning of word differ from country to country – make sure that definitions are correctly understood. Important, in this context is the MinLand project. Results need to be disseminated at EU level through to country level to local levels. Case studies are important – the project should discuss with the RMSG. Some specific issues are if:

- do we want to set guidelines for land-use planning
- how to extract the relevant parts ("data, messages, suggestions").
- how classifying and identify and translate because definitions are not the same.



- Where the stakeholder engagement formally should take place in the permitting process. What is the right moment to start? It is already part of an EIA, but that stage is too late to start stakeholder engagement.

#### Short discussion on EIA follows:

DO we need EIA - legislation for speaking to stakeholders – Riikka no. EIA – Johannes Drielsma – EIA process usually starts when the company starts its initial activities.

Exploration – Riikka – What are the possibilities of combining exploration and other land use? Can we enhance exploration activities since there is too little money put into this activity. RC – too little is being extracted. – one problem is to get information about what is happening regarding exploration and contribution from the MS- this is poor. Sweden, Finland supplies good data, Cyprus also, want to put this into statistics ("RC for EU"). Riikka – this is important.

Daniel – One should never consider a mine as closed. There are serious problems with opening new Li-mine in Portugal, this is frustrating as many quarries already exist with lithium as a product. Resistance is on an emotional, non-logical level and this movement is growing. There is lots of ignorance and misinformation. People are much more used to quarries. Land use is one of the most frustrating aspects of the job, particularly for mineral raw materials, as a survey potential and deposits we know but we know which formations have mineral potential. Never consider an old mine closed – this is never considered. When a request for a report comes, we do the report but unfortunately not binding after we delineated the deposits. Portugal LU used in ceramic industry. Large mine potential areas. Large upset about new possible mine with upset populace against without any knowledge about mining. There is a really big issue with villages ("against mining") with a big sign don't do the mine. Anti-mining movement have grown to the stage where government officials have been chased away. When geology professors and students are on field trips they have been attacked. Good news. On non-metallics people are used to quarries it is known that the whole region will be depressed socially so therefore allowed. For metals survey increasingly difficult – There is a new requirement from the government that material can only be mined in the country if it is also further processed in the country ("the additional value added to Portugal"). This complicates things further as the development of smelters meet resistance too. A public discussion going in Portugal takes into account that the country not only having the mines but also the smelters to secure a higher added value is delivered.

Johannes – Stakeholder engagement – political will – that is the missing stakeholder. There is namely a lack of political leadership and will. Reflecting on French case with projects finally runs out of resources. MinLand – system can work – political will and leadership is needed. This goes down to awareness of the laws. Permitting processes drain companies financially and kill projects. It is necessary to promote the existing laws, as often people are unaware that their demands when it comes to opening a new mine are already enshrined in the law. Unknown that miners are actually following the laws. It is not possible to open a mine without a closure plan. This is not well known or communicated – why do not the governments and EU promote our laws. We can have mines if people want them. Very small areas ("out of EU total area") are heavily impacted by extractive industry. Media leadership is not the way.

There have been almost 11 years since the RMI was launched. It is now time to end up with further analysis and planning, and to start instead implementing and producing. Ten years of



raising awareness – death by analysis – constantly contribute to projects to this explain what the law wants us to do – autopsy. Very difficult for industry to advice governments to use the land. Euromines have documents ("necessary for the process") on their web site. Happy to block a mine and import from overseas. The EU can provide leaderships -political leadership – not acceptable EU talk about resource rich and resource poor – rather lack of information. If there is political will it can be turned around. Quarries are havens for biodiversity – metals will own large areas of land. Problem when land is not owned close to mines therefore residential areas occurred. Johannes – SDGs – media leadership is not the way – industry is not the gap, laws is not the gap, political leadership is the gap. We know raw materials are important we need political leadership.

Manuel – question for MinLand – EU is not national government which take responsibility, in Spain it is even the regions.

EI – Yes political leadership needed – they will not do anything against public acceptance - an environment needs to be created so that they can speak out. There is a need to speak out and improve awareness. Upstream products should have a label that it was created from mined products.

Stakeholders have legal certainty to stop the process even at a late stage. Clauses should be put for time limits after which no veto is possible.

The word "mining" is problematic. Lack of industrial leadership too. Church, bankers, politicians are no longer looked upon to or trusted ("GS make connection to general trust issues within the society").

EU needs to deal with the legacy sites – money is needed ("resources are necessary in order to attack this problem").

ED – Politicians will not speak – need the EU to say this is a great idea. Really important to improve on awareness. Old limestone quarry – owner Irish loved gardening she developed the pit into a garden with a café. The people working in this café had no clue what a quarry is. We need to connect to upstream product with a label this comes from a mined product.

AS – political will is necessary – company has paper permit – but cannot start because the stakeholders can stop the project. Needs an implementable legislation about time limits for decisions in permitting – after a certain time a decision must be taken.

Johannes – In carbon capture there was a clause to make this happen. Can be done with political will.

ED – When looking at studies it is all about from the cradle to the grave for the mines ("a mining project contains use of available geological information, exploration through extraction to closure, remediation and post-use of land").

Vitor Correia – Portugal is the 7<sup>th</sup> largest Li producer in the world. As long as it is seen as a quarry extraction is Ok however when viewed as a Lithium mine then we have a problem.

Johannes – we also need leadership from the industry.

Gerry Stanley – comment – lack of political leadership – been a problem over the past tenfifteen years. Church was once important, bankers once, not just the politicians, Second,



question – legacy is one of the issues – Europe we need raw materials what is Europe doing about the legacy side? Will Europe step up the plate and deal with the needs?

MinLand methodology, achievements & network clustering Chair:

**Chair: Erika Ingvald (SGU)** 

#### Land-use planning and mineral-based industrial value chains - Irina Sokolova (Minpol)

WP5 main achievements were

- Delphi survey: well informed and high-level discussion about mineral resources land use planning and extraction
- A logical framework for mineral land use planning
- A connection between CRM, value chains and land use planning

**Mineral Land use challenging Societal and Environmental issues -** Theo van der Sluis (Wageningen Environmental Research)

Theo – Part of guidelines – were presented. Some specifics from Theo's presentation were:

- Aarhus 1. Access to information 2. Public participation in decision making 3. Access to justice
- Clear link to SDGs
- SLO third reason

Transparency – done in open way without secrets – trust and honesty is important. 3 things that should be made clear when applying good practice points: 1) planning process should be clear and informed. 2) role of stakeholders 3) ethics of decision making and involvement. Some key points are:

- Clarity on how the planning process takes place
- Transparency in relation to consultations and communications
- Ethics of decision making of the company should follow a line of "Inform Consult Involve Collaborate Empower"
- Stakeholder is everyone that has a stake in the area.
- Important is early involvement solution depends on how polarized the conflict

Further, the stakeholder interactions should have: Inform, consult, involve, collaborate, empower: there exist various levels of participation or stakeholder engagement. No one right strategy, but different strategies are needed at different stages or different situation. But it is clear that only informing stakeholder is often not enough.

Example Netherlands – innovative societal solutions for extraction of aggregates – support conservation of important species, e.g., Eagle's. There is example of successful collaboration and empowerment level of participation is a new wind turbine company that lets people



decide if and where they would place wind mills in Netherlands. In summary, companies that ensure early involvement, are open, discuss alternatives and build lasting relations with stakeholders are more successful

Good practice suggestions can be found in report D6.2.

A question was asked about how to best talk to big groups of stakeholders as holding collaboration meetings with hundreds of people would be inefficient. It is suggested to select few representatives of stakeholder groups at the right level. Most important is to give people a feeling that they are heard.

The Intermin project promoting international networking on Raw Materials - Manuel María Regueiro González-Barros (Geological Survey of Spain, IGME)

Some specifics of the project:

- Manuel elaborated upon the project and the goals with establishing long-term lasting international network for professionals
- Map skills and knowledge within EU, key knowledge gaps and emerging needs, road for improving skills and knowledge, establish common training programmes in the raw materials sector
- Involves educational and research institutions in the EU in primary and secondary raw materials sector.

**Good Practice Elements, Guidelines and Recommendations for mineral land-use** - Ronald Arvidsson & Nikolaos Arvanitidis, MinLand Project Coordinators (SGU)

RA: Summarizing important results of the project.

.Some key aspects are:

The project presents case studies based upon mineral resources from the two main legal pillars, mineral resources controlled/owned by the government (country, "licensed for extraction") and private owned minerals. The cases are further sub-divided into metals, aggregates, industrial minerals and critical raw materials.

MinLand case studies are the core of the project together with the data base (www.minland.eu) and data from WP2.

The whole mining life cycle is described in the cases (Wp3) and also in more detail critical raw materials (WP5).

The work packages, WP2-WP8 all containing important elements.

Mineral land use consists of at least two main parts:

Land use planning based upon available high-quality geological information.

Land use coupled with the permitting process that will feed back into land-use planning.



Workshops and Network – it is of great value to work internationally to trigger discussion and discuss differences in order achieve synergies for improvements upon once own practices and systems.

Guidelines with specific components from the cases put into a framework. Some of the impacts are:

- Geological data is the base for mineral land use.
- Equal assessments of mineral and other land uses.
- Instrument for Mineral safeguarding to prevent sterilization.
- SLO was addressed by Theo van der Sluis
- Clear connection of land use to permitting

### The MIREU project and land-use - Kaisa Turunen (Geological Survey of Finland, GTK)

#### MIREU is about:

- Mining and metallurgy region but is in need of improved cooperation (lacking).
- Socio-economic changes in mining and metallurgy regions
- Important, regions often recognize extractive industries important to their development
- Social acceptance often higher locally/regionally than nationally

Land-use planning in MIREU embedded in:

- Conflicting interests and SLO- e.g., example is Cornwall example where mining and SLO connect well.
- Mining and cultural heritage
- Policy framework and mineral ownership

#### The MineFacts project challenging Social License to Operate aspects - Nike Luodes (GTK)

EITrawmaterials funded project on wider-society learning regarding education about mining industry and municipalities to support informed decisions about land use, economic factors and more regarding mining. Three main points:

- 1. Geological facts from geology to mine development to mine closure
- 2. Land use planning through exploration extraction and closure, legislation in the three involved countries
- 3. Potential socioeconomic impact of mining

# The X-Mine project and stakeholder interaction - Edine Bakker (SGU)

EB elaborated upon connection between improved extraction techniques and improved social acceptance for mining. The X-Mine project is about technologies that will enable the mining to be more surgical in extraction so that the blasting will be done with more precision, less explosives and NO2, less waste rock transported to the surface. This is achieved through utilizing to new technologies, drill core scanning allowing to image the rock in greater detail including finding Critical Raw Materials (improved modeling in mine and exploration), as well as improved sorting technique through which less waste is transported. The mines associated to the project utilize the project in order to improve upon the acceptance for mining through



staekhodler meetings with the local communities. In short, the connection of improved technologies to sustainable and accepted mining is:

- Improved data availability for better decision making
- Reduce environmental footprint of mining operation
- Increased social acceptance

Minland Project and interaction with stakeholders through workshops - Chrysanthi Panagiotopoulou (National Technical University of Athens - NTUA)

MinLand Network of Experts: Two larger stakeholder meetings in Brussels were held. The experts were within the field of mineral land use extraction representing, authorities, local communities, industry and NGOs. The aim of the network was to:

- Receive expert input regarding mineral land use extractive activities
- Communicate Good Practices throughout duration of the project
- Serve as a link between regions, countries and the EU
- Investigate sustainability after end of project

Chrysa made a conclusion of the clustering within the project and connection to the network activities performed within the Minland project. Summarising the connection to the different projects present and other EU projects as well. Summarising the connection to the different projects present and other EU projects as well.

One of the main connections to other EU projects, both technoligical as well as policy projects, is acceptance of exploration and extraction of mineral raw materials which the current conference highlights.

# Plenary and closing session

Ronald Arvidsson- short address thanking the MinLand consortium for a great job and leaving over to the Advisory board member Gerry Stanley.

#### Address by Gerry Stanley, MinLand Advisory Board

Gerry opened up initially for a discussion regarding drilling:

Lena Karka— drilling and extracting has the same impact from the public as mining ("in Greece")— drilling is difficult.

Gerry – drilling getting far more difficult – spreading of fake information and fake news from strange web sites contributes to misinformation regarding problems with drilling.

Gerry summarized the panel discussion with that he sees it as like a start of something really interesting. Panel – had a good composition.

Daniel referred to difficulties when students have to go to the field ("just to study the geology").



**Chair: Ronald Arvidsson** 

Gerry Stanley: In Ireland a group of people were looking at an outcrop in the middle of a golf course. By checking the rock – one Irish student responded to golfer about what they were doing – "A highway is going through here". This joke made obvious problems where there were none ("GS address difficulties with mining in general and even for studying potential developments").

Greta Thunberg has spawned a lot of people throughout the world. Democracy is evolving. In Ireland there are particularly issues over same gender marriage, abortion and climate change. The politicians set up citizen assemblies where people were dealing with each of the topics separately meeting every fortnight from experts with arguments for and against and then sitting down with a high court judge – then getting to conclusions. Ireland was the first country to vote publicly for same gender marriages.

Climate change – Ireland has declared climate emergency for Ireland – has declared specific actions about what to do. Other countries are looking at that particular model. We need to understand that democracy is evolving. MinLand tapestry nice – represents the different legislative frameworks within the EU. We have 28 MS and maybe 50ish different legal systems.

Gerry – clustering of industry. Clustering will play an important role in the future.

Raw Materials within the scope of H2020 and Horizon Europe - Closing keynote speech by Marcin Sadowski, Head of Sector - Raw Materials, European Commission (EASME)

It is a fantastic idea to close the Raw Materials Week with the MinLand conference. It was a good MinLand Final Conference. Every aspect within the Raw Materials Week (exploration, policy, aggregates, etc.) was addressed. From data to closure and tailings.

Thank you for the panel discussion. It was very informative and intellectually stimulating.

As a whole, we are making progress. Case studies, network and recommendations from the MinLand project will not solve all the problems but is a step forward. Good that there will be an afterlife of MinLand ("Connection to current call for applications within H2020").

