# 2nd Regional Civil Society - Industry Dialogue

**"Towards sustainable mineral production - The role of industry and civil society"**

*Summary*

This document outlines the key findings of the second Regional Civil-Society-Industry Dialogue, entitled "Towards sustainable mineral production - The role of industry and civil society", which took place in Copenhagen on 8 October 2014. The Dialogue was composed of **three sessions:** keynote introductions from industry, civil society and policymaking; relevant practical examples; and exchange on future pathways for stakeholder collaboration.

## Introduction to the project and workshop objectives

**Andreas Endl** from the Institute for Managing Sustainability, Vienna University of Economics and Business in Austria provided a short overview of the Cobalt project and its objectives. **Kurt Muehmel** from BIO by Deloitte in France summarised the aims of the COBALT Dialogues and introduced concepts at the core of the discussion, such as sustainable mineral production. **Sorin Mierlea** from A.N.P.C.P.P.S Romania made a short introductory presentation on the CSO perspective on sustainable mineral production.

## Session 1: Framing the dialogue – key insights and takeaways

### *KEYNOTE: ANDERS SAND, LULEÅ UNIVERSITY OF TECHNOLOGY, SWEDEN*

- Sustainability in minerals and metals production must include **social, environmental and economic** considerations.

**Social**

- Sustainable mines need to supply **relevant information** to society, **assume responsibility** for **safety standards** and **support development** of the local community

**Environmental**

- For a mine to be sustainable, it needs to **carry out** environmental assessments, **monitor** environmental effects, **handle and store** waste, and **conserve** resources

**Economic**

- A sustainable mine is profitable to the mining company providing **resources to invest** in safety, environmental impact prevention, social programmes.
- The main challenge for sustainable development in the extractive sector in general is to **find the appropriate balance** between the three dimensions (social, economic, environmental).

### *KEYNOTE: PER KALVIG, THE GEOLOGICAL SURVEY OF DENMARK AND GREENLAND, DENMARK*

- There are several **sustainability challenges** related to the mining sector such as methodologies to define when a mine is depleted, prevention of premature mine closures, mining low-grade ore, etc.
- The original pit-design and local infrastructure normally prevents changes in the mining set-up and therefore valuable **resources may remain un-exploited.**
- Another sustainability issue is that tailings and mine waste are **potential sources for metals** – but are mainly regarded as **environmental liabilities**. Therefore their potential of becoming a profitable resource is not being exploited yet.
- With mining activities in Europe **declining**, sustainable mineral production is increasing outside its borders.

### *KEYNOTE: SYLVIE FRABOULET-JUSSILA, SITRA - FINNISH INNOVATION FUND , FINLAND*

- The mining industry and its stakeholders created the **Finnish Network for Sustainable Mining** with the support of SITRA. The objectives of the Network are to **improve stakeholder cooperation** and **promote more sustainable mining** practices in Finland.
- The core group is composed of 15 members representing 12 stakeholders (mining companies, labour organisations, environmental NGOs, etc.) and SITRA. Four working groups were established that are dedicated to specific topics of interest such as CSR, local cooperation activities, reduction and prevention of environmental impacts, development of the Network's own rules and operation.
- The Network has been very successful so far: stakeholder cooperation regarding sustainable mining practices has improved. SITRA will stop supporting it by July 2015 and the Network will continue as an independent body.

Participants were asked to exchange with others in their stakeholder group and to identify their group's key role and competencies in fostering a balance between the three stakeholder dimensions and to give two concrete examples of how such a balance could look like. Key takeaways are summarised below:

| Stakeholder group | Roles | Examples |
|---|---|---|
| **Industry** | Promote the knowledge and importance of mining<br>Promote new technologies and standards for sustainable management | Kiruna mine in Sweden: the negotiation process between stakeholders when both the towns of Kiruna and Malmberg gradually had to be moved.<br>I²Mine project developed technologies and equipment for deep mining in order to reduce environmental damages |
| **CSOs** | Prevention and awareness raising<br>Create momentum and dialogue with the other actors | Change the rules of the game: standardisation of products, improve quality and durability of products |
| **Researchers** | Provide innovation and BAT<br>Provide indisputable evidence for more objective decision-making | Reassessing potential of mining waste as secondary sources |

## Session 2: Learning from practical experiences – key insights and takeaways

### *INTEGRATING SUSTAINABILITY INTO MINERALS EDUCATION: JAN ROSENKRANZ, LULEÅ UNIVERSITY OF TECHNOLOGY, SWEDEN*

- The number of **educational programmes** dedicated to the raw materials sector is **in a state of decline**.
- The **demand side** for skilled professionals within the raw material sector is **difficult to estimate** because relevant statistics are largely missing.
- Most educational institutions can be found in regions having **a strong mining industry** and/or a long standing history in mining related education.
- Although some EU Member States suffer from **low student intake** to geoscience related education in comparison to domestic needs in these academic fields, **the supply-demand** situation is **balanced** in Europe as a whole.
- There are several **strategies to mitigate skill shortages** such as: development of full study course lists and syllabi, single training courses, and transformational studies.

### *Case study: Horst Hejny, European I²Mine Project, United Kingdom*

- I²Mine is an FP7-funded project with 27 European partners which aims to pave the way to **sustainable deep mining** in the future
- Deep mining is a very complex process and faces **safety** (rock stability, safety for the personnel etc.) and **economical** challenges (resource efficiency, reducing emissions, cost effectiveness etc.)
- One of the objectives of I²Mine is to develop **new methods**, **technologies** and **equipment** for deep mining in order to reduce environmental damages and to increase competitivenes amongst underground related industries
- The I²MINE project illustrates that there is a need for **new and modern vision** based on a socio-technical approach along the whole value chain

### *Case study: Stephane Chervel, European EO-MINERS Project, France*

- **EO-MINERS** is another FP7-funded project which aims to bring into play Earth observation-based methods and tools to facilitate and **improve interaction** between the mineral extractive industry and society for its **sustainable development** while improving its **societal acceptability**.
- EO product development involves the creation of paper maps and posters, digital maps, 3D models and animations, and have proven invaluable for stakeholders.
- Major challanges were identified during the dialogues with stakeholders such as: **establishing confident relations** with mining companies (reluctance to make data public) or **getting acquainted with local communities'** concerns and demands (lack of information, rumours).

### *Case study: Henning Holmström, Tasman Metals AB, Sweden*

- **Norra Kärr** is one of the most important **deposits** in the Western world for REE and it could supply all of Europe's REE needs for the next 50 years.
- The project aims to take into consideration the **three pillars** of sustainable mining otherwise it might not get funded, since shareholders, governments, communities and customers demand minimum impact and sustainability.
- So far, **Norra Kärr** has received a lot of criticism from local NGOs despite its sustainability efforts. These protests have had a great impact on the negociation process of obtaining a mining licence in the area. Negocations are still ongoing.

Participants presented framework conditions for improving the collaboration between different stakeholders on boosting sustainable mineral production.

### *Framework conditions (enabling factors for succes)*

- Importance of generating win-win relations, where all the stakeholders get something back when getting on board;
- Importance of building up credibility within the network;
- Neutral and independent conductors are required in the networking communication and bonding of different stakeholders;
- Mandatory participation of the public in licensing procedures;
- Continuous dialogue in order to build relationships. Time is a key enabling factor to build up a network of stakeholders.