European Innovation Partnership on Raw Materials

Application for a Raw Materials Commitment

Standardization of sustainable mining management systems

Acronym:
Stand4Mines

Links to the Strategic Implementation Plan:
• II. Non-Technology Pillar
  ○ II.A Priority Area: Improving Europe's raw materials framework conditions
    • Action area n° II.1: Minerals Policy Framework
      • 12) Develop guidelines with EU reporting standards and national and EU mineral reporting schemes based on standard terminology
    • Action area n° II.3: Public Awareness
      • 2) Promote early and open communication between mining companies, public authorities and neighbours and local communities.
      • 4) Encourage industry to adopt and raise awareness of the extent to which industry adheres to the voluntary codes

Objectives of the commitment:

Despite the several schemes related to the certification of sustainability in the mining activity developed by different groups of stakeholders (e.g. power companies, banks or big mining companies), there is currently a lack of a common procedure to assess the sustainability adapted to the characteristics of the European SMEs in mining sector.

Standards are a powerful tool, and the objective of the commitment is to develop European Standards of Sustainable Mining Management. The standards would include requirements and measurable indicators and, if possible, be compatible with some of the existing schemes.

The existing Spanish Standards UNE 22470 “Sustainable Mining Management indicators” and UNE 22480 “SMM system requirements” will be used as a basis for the new standard, and the suitability of the developed document should be checked by some pilot projects in different countries.

Description of the activities:

The main part of the work will be focused on the development of a standard making sure that it would be adequate for a practical use by European SMEs in the mining sector.

The main activities would be:
1. Forum creation and stakeholder’s involvement.
2. Standards development
3. Standards applicability and validation
4. Revision, if needed
5. Diffusion

And the short explanation for each of them:
1. Preferably the forum would be a technical committee (TC) or similar under the European Committee for Standardization (CEN) or ISO. Due to practical reasons not all the other “sector” initiatives can participate as partners, but desirably, all the sectors should be involved as stakeholders.
2. Is the core activity. Based on the existing identified documents and with the input of the stakeholders, a standard should be developed. The Spanish standards which have been successfully applied during the last years are currently under revision. The revision is taking into consideration some of the international schemes related to sustainability, like GRI, Better Coal, UN Global Compact or Equator principles. If possible, the standard should be compatible with those initiatives and also with the existing management systems (quality, environmental, energy, etc.). The convenience of developing specific indicators for each subsector (metals, aggregates, natural stone, ...) will be analyzed. The current Spanish standards to be used as a reference are based on the well known Plan-Do-Check-Act (PDCA) cycle and therefore, the compatibility with other management systems is foreseen to be good. The approval of a standard cannot be guaranteed in advance, because it depends on many factors, but the partners will do their best to publish a standard or to develop a similar document (technical specification, CEN workshop agreement, publicly available specification, etc.). The whole development process of a standard could take a long time and the commitment is to propose the text, not necessarily to publish the final document within the target dates.
3. Standards are useful only if they can be implemented. Some of the indicators could seem very logic written on a paper, but might be difficult to be put into practice. Therefore, the new standards will be tested in a number of mining operations proposed by the partners. After that, the conformity of the implementation will be assessed through a third part certification or a similar auditing process.
4. With the input derived from the implementation, the draft of standard will be revised, if needed. Depending on the development phase of the standard the revision will be managed in a different way; publishing an amendment, drafting a new version, introducing the comments during enquiry phase, etc.
5. Diffusion is also a very important activity, because the usefulness of the document is directly proportional to its spread. The participation is sector fairs and different fora will be crucial to succeed. Also some related activities could be done, like videos, online course, leaflets, etc. If the standard is seen to be suitable, it could also be proposed to become an international standard under ISO procedure, boosting its potential impact.

**Description of the expected impacts:**

The different procedures existing today for the certification of the sustainability of the mining activity (GRI, Bettercoal, etc.) are private initiatives, mainly focused to large companies, and in particular to those operating in conflict or less developed countries. Their practical implementation is complex and expensive, and therefore is not well suited for small and medium size mining operations, which are the most common in Europe.

Developing a European Standard on the sustainability of mining operations will facilitate the implementation of this type of management systems in European mining SMEs, as this process can be easily integrated with other existing management systems. In addition, as based in a public scheme, the implementation and certification procedures will be cheaper, as they could be done by any consultant and auditing companies active in the sector.

The expected impacts are:
1. Promote a common vision of sustainability in the non-energy extractive industry at European level.
2. Facilitate the implementation of a voluntary sustainable mining management scheme with indicators specifically adapted to the non-energy extractive industry sectors in Europe.
3. Facilitate the integration of mining sustainability concepts in existing and future European legislation.
4. Improve trust relationship among all the stakeholders
5. Improve the social acceptance of mining activities.
6. Contribute to economic and social development of local communities.
7. Improve the efficient use of natural resources.
8. Improve restoration and rehabilitation of natural areas affected by mining activities.
9. Promote the use of best available techniques.
10. Contribute to the streamlining the permitting procedure.
11. Help to formalize the set of data to be provided to the authorities for statistical or other regulatory purposes

**Expected innovation outcomes:**
- New products to the market
- New processes
- New services
- New business models
- Societal innovation

**Comments:**

The innovation aspects are relatively modest. However, the outcomes are expected to bring new processes (management system) and services (consultancy and certification) to the market, as well as a new business concept for the mining activity and improving the social acceptance of this activity.

At EU level, society continues to regard mining negatively, and therefore is important to develop tools that can help companies to improve and demonstrate their sustainability performance, and gain trust from society.

Eurostat statistics shows that the non-energy extractive industry in the EU is mainly composed by SMEs. For instance, if we look at 2009 figures for NACE code B07 (metal ores) and B08 (various minerals and quarry products) there were around 17,700 companies that employed more than 233,300 workers, with an average ratio of 13 employees per company. This action is suitable for them.

**Name of the coordinating organisation:**
AENOR
**Country:**
Spain
**Entity profile:**
Other
**Other:**
National Standardization Body. A private association, whose members are the Administration and other associations.

**Role within the commitment:**

Managing the whole process
Ensuring the permissions to use copyright documents (UNE 22470, UNE 22480, etc.)
Leading the standardization process
Acting as secretariat in the relevant technical committees or relevant working groups
Reporting adequately
Ensuring all the partners play their assigned roles

Other partners:

**Name of partner:**
AITEMIN

**Country:**
Spain

**Entity profile:**
Other

**Other:**
Private, non-profit research organization

**Role within the commitment:**
To actively participate in the process of European standardization, based on their experience and the knowledge acquired during the development of the Spanish Standards, where AITEMIN has acted as Secretary of standardization technical committees

**Name of partner:**
COMINROC

**Country:**
Spain

**Entity profile:**
Other

**Other:**
Industrial association (Spanish Confederation of Extractive Industries of Rocks and Industrial Minerals)

**Role within the commitment:**
o To actively participate in the revision and follow up of the proposed European sustainable mining management standards. o To provide inputs for the development of specific indicators of the subsectors represented in the association. o To identify industrial partners for the pilot implementation of the proposed standards o To actively participate in the dissemination of the standards and to promote a wider use

**Name of partner:**
CONFEDEM

**Country:**
Spain

**Entity profile:**
Other

**Other:**
Industrial association (Spanish Confederation of Mining and Metallurgy Enterprises)

**Role within the commitment:**
o To actively participate in the revision and follow up of the proposed European sustainable mining management standards. o To provide inputs for the development of specific indicators of the subsectors represented in the association. o To identify industrial partners for the pilot
implementation of the proposed standards o To actively participate in the dissemination of the standards and to promote a wider use

Name of partner: Mining Directorate. Spanish Ministry of Industry, Energy and Trade (MINETUR)
Country: Spain
Entity profile: Governmental/public body
Role within the commitment: o To actively participate in the revision and follow up of the proposed European sustainable mining management standards. o To provide inputs related to the mining regulations and data requirement at National and International level o To actively participate in the dissemination of the standards and to encourage the promotion of a European standard

Name of partner: Ministry of Environment, Energy and Climate Change
Country: Greece
Entity profile: Governmental/public body
Role within the commitment: o To actively participate in the revision and follow up of the proposed European sustainable mining management standards. o To provide inputs related to the mining regulations and data requirement at National and International level o To actively participate in the dissemination of the standards and to encourage the promotion of a European standard

Name of partner: MIRO, The Mineral Industry Research Organisation
Country: United Kingdom
Entity profile: Other
Other: Private, non-profit research organization
Role within the commitment: o To actively participate in the revision and follow up of the proposed European sustainable mining management standards. o To provide inputs for the development of specific indicators of the different subsectors of the European mining industry, with a special focus on British companies. o To identify industrial partners for the pilot implementation of the proposed standards o To help in the pilot implementation of the proposed standard o To actively participate in the dissemination of the standards and to promote a wider use

Name of partner: VTT Technical Research Centre of Finland
Country:
Finland

**Entity profile:**
Other

**Other:**
Public, non-profit research organization

**Role within the commitment:**
- To actively participate in the revision and follow up of the proposed European sustainable mining management standards.
- To provide inputs for the development of specific indicators of the different subsectors of the European mining industry, with a special focus on Nordic countries.
- To identify industrial partners for the pilot implementation of the proposed standards.
- To help in the pilot implementation of the proposed standard.
- To actively participate in the dissemination of the standards and to promote a wider use.

**Name of partner:**
MinPol KG - Agency for International Minerals Policy

**Country:**
Austria

**Entity profile:**
Other

**Other:**
Internationally operating network consisting of experts in the field of minerals policy

**Role within the commitment:**
Contribution to all aspects of mineral policies in the field of mining, minerals economy, mining and environmental engineering, geology and IT, supporting dissemination and promotion activities.

**Name of partner:**
Direção Geral de Energia e Geologia (DGE-G) (Ministry of Environment)

**Country:**
Portugal

**Entity profile:**
Governmental/public body

**Role within the commitment:**
- To actively participate in the revision and follow up of the proposed European sustainable mining management standards.
- To provide inputs related to the mining regulations and data requirement at National and International level.
- To actively participate in the dissemination of the standards and to encourage the promotion of a European standard.

**Name of partner:**
European Federation of Geologists

**Country:**
Belgium

**Entity profile:**
Other

**Other:**
Private, non-profit organization
Role within the commitment:
• Support forum creation and stakeholder’s involvement • Support standards applicability and validation • Support revision of the standards, if needed • Diffusion will be the main activity for EFG

Name of partner:
IGME (Instituto Geológico y Minero de España)
Country:
Spain
Entity profile:
Governmental/public body
Role within the commitment:
o To actively participate in the revision and follow up of the proposed European sustainable mining management standards. o To provide inputs related to the mining regulations and data requirement at National and International level o To actively participate in the dissemination of the standards and to encourage the promotion of a European standard

Existing EU contribution:
No

Period to implement the commitment:
Wednesday, 1 April, 2015 to Sunday, 1 April, 2018