Sustainable supply chains of raw materials from mineral resources

An overview of ISO work

2024-04-26, UNECE Resource Management Week 2024
The views expressed are my own and do not necessarily reflect those of the United Nations.
The ISO system

- Global network established in 1947 → today 171 members represent ISO in their country

- We produce voluntary International Standards → 25 000+

- 800+ technical committees and subcommittees developing 100+ standards every month

- We are coordinated by a Central Secretariat in Geneva
ISO sustainability objectives

• Environmental and social sustainability is prioritized in the development of ISO standards

• Create coherence and interoperability with other tools on sustainability

• Contribute to international and national policy implementation linked to sustainability

• Enhance ISO’s strategic partnerships for sustainability

• Ensure the contribution from all relevant stakeholders in ISO’s standards development
ISO/PC 348 – Sustainable raw materials

Intends to:

• Specify criteria and industry best practices for sustainable raw materials

• For ‘mineral resources’ or ‘minerals’ as a naturally occurring deposit in the Earth’s crust of an organic or inorganic substance, such as metal ores, industrial minerals and construction minerals, excluding energy raw materials and water *

• Cover the full value chain, from extraction (mining) to processing, to refining, to final product manufacturing

Approved in September 2023.
Work to start in July 2024.
For details: https://www.iso.org/committee/9983866.html

* Definition from the EU principles for sustainable raw materials (based on the definition from the EU Extractive waste directive)
ISO/PC 348 – Participation
Relevance of ISO/PC 348 – The facts

• Mineral raw materials, and related industries through the supply chain, are essential to the manufacturing of renewable-energy technologies required for carbon emissions to reach net zero.

• Mineral raw materials are sourced, processed and traded in global supply chains.

• Need for significant global collaboration to create an environment that supports effective and efficient industry activities to meet increasing international regulations and demand, while upholding sustainability principles.
Relevance of ISO/PC 348 – The responses

- There is a global commitment to uphold ESG principles, as expressed by G7/G20 (Sapporo and Delhi, 2023)

- The EU Principles of Sustainable Raw Materials (2021) are aligned to this global commitment

→ PC 348 proposes to use the EU Principles of Sustainable Raw Materials as a starting point

- 3 categories of principles
- 8 principles
- 24 guiding points
Global Relevance of ISO/PC 348 – Work ahead

• Participation of ISO members (multi-stakeholder)

• Consideration of other legislative frameworks

• Influence from organizations in liaison (ITA, ICMM, CRMA)

→ PC 348 aims at providing:
  • harmonization of ESG criteria aligned to the global commitments
  • a list of accepted industry best practices related to the agreed ESG criteria

US – Regulations (e.g. Food and drug administration,...)

EU – European Directives (e.g. Machines, Lifts, Medical devices,...)

Australian Regulations (e.g. Therapeutic Goods Administration,...)

Other national regulations

Global ISO standards

### Stocktake of ESG standards/guides/tools


#### Table 1: Overview of ESG standards/guides/tools

<table>
<thead>
<tr>
<th>Standard/Tool</th>
<th>Organisation</th>
<th>Governance structure</th>
<th>Frequency of update</th>
<th>Part of supply chain</th>
<th>Is there a reporting component to the tool?</th>
<th>Audience for report?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICMM Standard Development (SD) Framework (including ICMM Mining Principles and Position Statements)</strong></td>
<td>International Council on Mining and Metals (ICMM)</td>
<td>Industry led initiative (initial 10 principles), with the updated Mining Principles based on a global public consultation with 260 respondents from 33 non-mining industries</td>
<td>Position Statements updated irregularly (latest 'Climate Change' in 2021), depending on developments of critical industry challenges.</td>
<td>General Mining and On-Site Processing</td>
<td>Members are required to disclose, publicly, their Performance Expectation validation activities on an annual basis.</td>
<td>Interested parties in a company’s Performance Expectation validation.</td>
</tr>
<tr>
<td><strong>IRMA Initiative for Responsible Mining Assurance (IRMA)</strong></td>
<td>Multi-stakeholder equitably represented committee of industry, government, and non-industry sector</td>
<td>Industry led initiative</td>
<td>Standard revision process in line with IRMA Standards and Assessment Criteria, Development Process (2021)</td>
<td>Due diligence</td>
<td>Publication of summarised results required: Supply Chain policies, the IRMA Audit Summary Report and the OECD Due Diligence Report (anually).</td>
<td>Downstream companies</td>
</tr>
</tbody>
</table>

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**Note:** The table continues with similar information for other standards and tools, including IRMA Standard for Responsible Mining, TSM Protocols and Frameworks, ITSCI Joint Industry Traceability and Due Diligence Programme, etc.
IWA 45, Sustainable Critical Minerals Supply Chains

IWA = International Workshop Agreement

To support the understanding of the range of sustainability frameworks available

Two workshops concluded (February and April 2024)

3rd workshop week 13 May, registration to open soon

Outcomes and recommendations to be delivered end June

→ PC 348 will integrate the insights of IWA 45

Survey – New standard for sustainable raw materials

Short survey to help understand the broader needs of the raw materials sector for the development of a new ISO standard that harmonizes criteria for sustainable raw materials from mineral resources and sets out industry best practice.

The survey will be open until Tuesday 14th May.

Please feel free to share the survey link with your networks who are interested in this area.

→ PC 348 will integrate the results of the survey

https://tinyurl.com/ISORAWMAT
Other ISO committees relevant to critical minerals

<table>
<thead>
<tr>
<th>Material-specific (chemical analysis testing, traceability)</th>
<th>Material-agnostic (ESG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO/TC 26 Copper and copper alloys</td>
<td>ISO/TC 82/ SC 7 Sustainable mining and mine closure</td>
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<tr>
<td>ISO/TC 27 Coal and coke</td>
<td>ISO/TC 207 Environmental management</td>
</tr>
<tr>
<td>ISO/TC 79 Light metals and their alloys</td>
<td>ISO/TC 308 Chain of custody</td>
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<tr>
<td>ISO/TC 79/ SC 5 Magnesium and alloys of cast or wrought magnesium</td>
<td>ISO/TC 323 Circular economy</td>
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<tr>
<td>ISO/TC 79/ SC 12 Aluminium ores</td>
<td>ISO/PC 348 Sustainable raw materials</td>
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<tr>
<td>ISO/TC 132 Ferroalloys</td>
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<tr>
<td>ISO/TC 155 Nickel and nickel alloys</td>
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<tr>
<td>ISO/TC 183 Copper, lead, zinc and nickel ores and concentrates</td>
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<tr>
<td>ISO/TC 298 Rare earth</td>
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<tr>
<td>ISO/TC 333 Lithium</td>
<td>JWG on Sustainability</td>
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<tr>
<td>ISO/TC 345 Specialty metals and minerals (Sb, Be, Co, Cr, Graphite, Nb, Pt group)</td>
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</table>

The Critical Minerals Coordination Committee provides a forum for the Officers of these committees to coordinate activities.
ISO/PC 348 – Next steps

First meeting planned late October 2024:

• Consideration of the recommendations from IWA 45 and the results of broader survey of market need

• Consolidation of title, scope and strategic business plan

• Identification of missing stakeholders

• Development of initial draft

• Planning work ahead

Join us in Berlin!
Through your National Standards Body or applying for a liaison
Thank you.

Working together to make lives easier, safer, better.

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