OECD Forum 2025 –

Advancing Responsible Business Conduct in Sand and Silicate Supply Chains

Closed-door consultation session – 6 May 2025

Session summary

This session was co-organised by the **University of Queensland's Global Centre for Mineral Security** and the **OECD Secretariat**, as part of a joint effort to advance responsible sourcing and due diligence in sand and silicate supply chains. This session convened a cross-sectoral group of stakeholders to explore the challenges and opportunities for advancing responsible business conduct (RBC) in sand and silicate supply chains.

Attendees included representatives from international organisations such as UNEP, UNDP and IGF. We welcomed companies such as ASML, Mercedes-Benz AG, IKEA STMicroelectronics, H&M (Lifestyle Brands), Trafigura, Infineon and a number of consulting firms. Industry-led platforms including RMI, IRMA also participated, along with civil society, academic institutions, and sustainability reporting bodies. Please see annex 1 for the full participants' list.

These materials, essential yet often overlooked, underpin infrastructure, construction, and high-tech sectors globally. The consultation sought to establish a shared understanding of the need for action and the potential direction for future due diligence efforts with upstream, downstream, and cross-cutting perspectives on these overlooked but critical supply chains.

This position paper has been prepared by the session organisers—the University of Queensland's Global Centre for Mineral Security and the OECD Secretariat—as a reflection of the key insights and priorities that emerged during the partner consultation at the 2025 OECD Forum. It is intended to articulate the organisers' perspectives on the direction of travel for responsible sourcing and due diligence in sand and silicate supply chains.

While the paper draws on contributions and discussions from a diverse group of participants, it does not seek to represent consensus views or official positions of all those present. Rather, it offers a synthesis of the organisers' interpretation of the issues, opportunities, and next steps that were explored during the session.

Background

The University of Queensland, supported by the OECD, IKEA and Roca Group, convened a dialogue on responsible sourcing standards for sand and silicates in 2023 and 2024 to support the production of an OECD baseline study on Responsible Business Conduct in sand and silicate supply chains.

The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (henceforth the OECD Guidance) provides practical, government-backed due diligence recommendations to assist companies in avoiding contributing to serious human rights, conflict and financial crimes through their mineral purchasing decisions and practices. The OECD Guidance is for use by any company in the mineral supply chain and applies to all minerals globally. However, to date, due diligence recommendations of the OECD Guidance have not systematically been applied to sand and silicates, a family of minerals extracted across the globe in extraordinary volumes with associated governance, social and environmental risks.

The baseline study analyses existing knowledge on sand and silicate supply chain risks as relevant to the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas[1] (OECD, 2016) and the OECD Handbook on Environmental Due Diligence in Mineral Supply Chains[2] (OECD, 2023). It draws on 454 academic, civil society and industry texts discussing social and environmental risks along sand and silicate supply chains, as well as 6 group discussions with 25 actors grounded in real-world sand and silicates supply and value chains and their sustainability concerns.

The full report will be published in mid 2025.

2025 Consultation objectives

The purpose of 2025 closed door consultation session was to establish the need and direction of travel to advance due diligence for responsible sand and silicates.

Anchor-setting: Why Due Diligence on Sand and Silicates?

The session opened by establishing a compelling rationale for advancing Responsible Business Conduct in sand and silicate supply chains—materials long overlooked yet globally fundamental. Drawing from the OECD's forthcoming baseline study, participants learned that sand and silicates—encompassing aggregates, industrial sands, clays, natural stone, and high-purity quartz—represent the largest volume of solid material extracted on Earth, with extraction surpassing 50 billion tonnes annually. The most consumed solid materials on the planet is coming under the same pressure to be sustainably sourced as other raw materials.

The Case for Action: Scale, Dependence, and Impacts

Sand and silicates represent the largest physical flows in the global economy—estimated to be 70,000 times the volume of many other minerals and materials discussed at the Forum.

They are widespread and often hidden material flows, with high levels of dependence across the global economy and evidenced risks for human rights, environmental and other negative

[1] Available at: https://mneguidelines.oecd.org/mining.htm, last accessed 13 January 2025.
[2] Available at: https://www.oecd.org/en/publications/handbook-on-environmental-due-diligence-in-mineral-supply-chains_cef843bf-en.html, accessed 13 January 2025.

systemic impacts across sourcing contexts—from artisanal operations to large-scale industrial extraction — in many places in the world.

Despite their scale and relevance across sectors—from construction to tech—these materials have been treated as low-risk. Yet, a clear shift is underway. Regulatory expectations are rising, scrutiny is intensifying, and stakeholders are increasingly unwilling to accept the status quo of untraceable, ungoverned material flows. The OECD baseline study adds to the body of evidence for the potential for risk in sand and silicate supply chains, mapping.

The study's findings illustrated how these materials are embedded in everything from global infrastructure to ecological systems, highlighting a wide array of human rights, environmental, and governance risks, many of which are already recognised under OECD frameworks:

- **Annex II risks,** including forced labour, tax evasion, bribery, mislabelling of origin, and support for armed groups.
- **Environmental handbook risks,** including erosion, biodiversity loss, water stress, GHG emissions, and waste mismanagement.
- **Other systemic risks,** including land conflicts, displacement, Indigenous rights violations, unsafe working conditions.

Despite their ubiquity, these materials remain under-acknowledged in global due diligence conversations. The message is clear: due diligence here is not only needed—it's overdue.

The OECD Guidelines for Multinational Enterprises already provide a workable due diligence framework, but until now, they have rarely been systematically applied to these materials. This part of the session was a call to change that.

During the session discussion, one participant posed a question that captured a common approach for many to supply chain due diligence across stakeholders: **"Are there clear pinch points in sand and silicate supply chains where due diligence efforts can realistically be focused?"**

This catalysed reflections on the salience of pinch points in a **diffuse, fragmented, and often opaque nature** of sand and silicates supply chains. Unlike many mineral supply chains that have distinct processing or export hubs where traceability can be concentrated, sand and silicates often move through **localised, decentralised, and highly variable pathways**. For some supply chains, like semiconductors, as one representative from this sector remarked, there are a handful of refiners. For others, however, such as glass, industrial sand products or construction, the lack of obvious globally-relevant focal points will complicate the identification of risk leverage or control.

Sense-making: Implications for Due Diligence Practice

Participants engaged in a group discussion of what due diligence on sand and silicates looks like in current practice and gaps, interrogating the practical implications.

Reflecting on the state of due diligence for these materials, several insights emerged:

- **The report adds to current thinking:** Efforts are underway, yet a wider conversation could surface key gaps and opportunities.
- **Supply chain complexity**: Flows can be hidden, non-linear, and fragmented across formal, informal, and illicit networks: some actors lack of clarity about where and how to act for risk management or positive impact.

- **Benchmarking:** Good practices are underway but remain isolated practices.
- **Recognition and visibility gaps**: Responsible supply chain due diligence practices exist but go unacknowledged.
- **Data limitations**: There is a significant absence of baseline data, making risk identification and benchmarking difficult.

Key propositions for moving forward on due diligence on sand and silicates based on current practice and gaps, included:

We need to do supply chain due diligence on these materials.

We must collaborate across sectors, from upstream to downstream.

We must build on, not duplicate, the existing due diligence architecture.

Path-finding: Where do we go from here?

In the final part of the session, participants considered how to advance aligned action as a response to the need not to further fragment the landscape of actions on responsible supply chain due diligence connected to these vast supply chains.

At least three specific alignment actions are needed:

- Develop a **tailored commitment signal** that accommodates sector-specific realities while sending a coherent message about the need for action broadly – and that we are all responsible to act – on responsible sand and silicates.
- Identify **complementary standards and processes** to support convergence on a supply chain due diligence best practice. The OECD Due Diligence guidelines are the foundation stone, but there are other efforts underway or in demand for particular materials and sectors.
- Enabling performance claims from making commitment signals and implementing supply chain due diligence practice through a coherent effort to articulate likely outcomes from due diligence implementation and showing this through **existing certification, reporting, or benchmarking tools**.

Participants discussed how to operationalise commitments, looking to frameworks, standards, and sectoral initiatives that might offer credible ways forward. There was broad consensus that the OECD Due Diligence Guidelines should remain the foundation, but that a tailored, process-based approach would be required—one that bridges upstream, downstream, and cross-cutting standards without expecting a perfect fit.

The conversation framing explicitly acknowledged that this is a busy space, with a vibrant patchwork of projects, initiatives, and organisations already active in related and adjacent areas. At the same time, it recognised that existing due diligence systems remain incomplete and are not yet fully equipped to address the specific challenges posed by these materials.

The group explored how to connect existing efforts, signal meaningful commitments, and begin mapping actionable next steps. In a fragmented and overlooked space, the ambition is now to make sand and silicates visible—and responsibly sourced—through convergence, not duplication.

Participants were asked to identify 3 initiatives, groups, or projects they believed should be engaged or aligned with to advance responsible sourcing in sand and silicate supply chains, including identifying their own by way of inviting connection from UQ and the OECD on the topic.

The exercise produced a diverse set of actors, spanning upstream, downstream, and cross-cutting domains (see full mapping annexed below), including:

- **Upstream / production-focused**: IRMA, IGF, ARM, ICMM, GIZ
- **Downstream / application-focused**: CSC, Global Wind Energy Council, Solar Stewardship Initiative, ESIA, International Hydropower Association
- **Cross-cutting / sustainability governance**: UNEP IRP, OECD RBC, UNDP, WWF, RMI, EITI, PRI, UNODC, BSR, INTERPOL-WWF

The stakeholder mapping confirmed both wide-ranging interest and strong potential for cross-sectoral partnerships. As one participant noted, “there is a lot of work to be done.” A key recommendation was to explore collaboration with established initiatives on deeper mapping of sand-related supply chains—particularly in emerging sectors like semiconductors and solar panels, where material footprints are expanding but remain under-scrutinised. At the same time, distinct efforts will be needed to trace supply chains in construction, land reclamation, and infrastructure, where the dynamics differ markedly from traditional mineral supply chains.

This proposal resonated with participants, reinforcing the need for a cross-sectoral approach to due diligence and a clearer understanding of supply chain pinch points, rather than defaulting to existing mineral governance models. Notably, a construction sector representative remarked on feeling “lonely” in the room, underscoring gaps in sectoral representation and the importance of treating this mapping as a starting point—not a complete picture.

Even in its partial form, the exercise highlighted a shared recognition: no single actor can address this governance gap alone—and that action must fill this critical governance gap but action without coordination risks a proliferation of competing standards or inconsistent expectations.

Closing Reflection

The session concluded with a clear call to action. The responsible sourcing of sand and silicates is no longer optional—it is necessary, urgent, and will be increasingly expected. We need a pragmatic, strategic, and collaborative response to this challenge, aiming to:

- Stay ahead of regulatory change
- Fill critical due diligence gaps
- Strengthen resilience and trust
- Find competitive advantage and opportunity in being a leader
- Set credible, aligned commitments, best practices means for demonstrating performance claims.

Participants left with an understanding that we – and our partners – believe this is the time to lead on responsible sand and silicates, together. We are moving forward with a coalition that has formed organically through the production of the OECD Baseline study, tasked with delivering practical outcomes for improved alignment and coordination, support to enhancing due diligence action on sand and silicates in collaboration with others, and driving towards positive impact.

ANNEX 1

PARTICIPANTS LIST

Organisation	Family name	First name	Job title
Afai Consulting BV	Eslava	Nicolas	Director
ASML	Amelsfort	Martjin	Senior Manager, ESG Sustainability | Strategic sourcing & procurement
ASML	Gerritsen	Laura	Strategic Sourcing and Procurement
Benchmark Intelligence / European University Institute	Cisco	Giovanni	Researcher, Transnational Governance (Energy & Environment)
BMW	Lutz	Ellen	Raw Materials Strategy and Risk Management
Breakthrough Energy Ventures	Dusseux	Eric	Venture Partner
Bureau Brussels	Smeets	Astrid	Director, European Public Affairs
EPRM	Sauerwein	Titus	Senior Advisor
GIZ	Schloesser	Tim	Head of Project Extractives for Development (X4D)
H&M	Post	Elin	H&M Lifestyle Brands: H&M Home, Raw materials sourcing lead
Holcim	Patterson	Brent	Head of Performance and Analytics
IISD/Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF)	Hamisi	Jonathan	Senior Policy Advisor [Working on nonmetallic minerals]
IKEA	Popa	Mihai	Raw Material Leader - Inorganic Materials, Materials and Innovation
IMPACT	Gitu	Lynn	Programme Leader
IMPACT	Seguin	Kady	Policy and Research Director
Infineon	Krüguer	Kathrin	Procurement, Due Diligence on conflict and other minerals
IRMA	Messner de Latour	J.J.	Responsible Sourcing - Traceability and Minerals Integrity
Kumi Consulting Ltd	Collovray	Jean-Baptiste	Senior Consultant
MCS Group	Batista	Sofia	Co-CEO
Mercedes-Benz AG	Knacksterdt	Jan	Project Coordinator Human Rights & Raw Materials
NA	Lelia	Li	Independent consultant
OECD (Session organiser)	Maréchal	Louis	Senior Advisor, Directorate for Financial and Entreprise Affairs, Responsible Business Conduct Centre, Minerals & Extractives

PACT	McQuilken	James	Director, Responsible Mining
Projekt-Consult	Lörcher	Moritz	Managing Director
Responsible Minerals Initiative	Di Lorenzo	Fabiana	Senior Director, Impact and Innovation
RiaStone	Branco	Susana	Senior Manager, Environmental Health and Safety
Roca Group	Heras	Miguel Angel	Sustanability promotion lead, Roca Group
Statkraft AS	Langberg	Leda	Senior Advisor - Sustainable Procurement
Statkraft AS	Rye-Larsen	Mette	Senior Advisor Sustainable Procurement
STMircoelectronics	Orsati	Laurent	Head of Sustainable Products & Environment Management
Synergy Global Consulting	Nenot	Benjamin	Director
TDi Sustainability	Mills	Soledad	Senior Vice President
The University of Queensland (Session organiser)	Franks	Daniel	Director, Global Centre for Mineral Security, Sustainable Minerals Institute
The University of Queensland (Session organiser)	Gallagher	Louise	Responsible Sand and Silicates co-lead
The University of Queensland (Session organiser)	Holm	Daniel	Responsible Sand and Silicates co-lead
Trafigura	Mukwakwami	Norman	Head of Responsible Sourcing
UNDP	Gankhuyag	Uyanga	Head, APC Development Minerals Programme
UNEP/GRID-Geneva	Chuah	Stephanie	Project Officer
United Nations Environment Programme (UNEP)	Mohammed	Mona	Programme Management Officer
United Nations Environment Programme (UNEP)	Subratty	Djaheezah	Head of Consumption and Production Unit
United Nations Interregional Crime and Justice Research Institute (UNICRI)	Burnett-Stuart	Matthew	Associate Expert
United Nations Office on Drugs and Crime (UNODC)	Carpanese	Claudia	Research Officer
Volvo (Construction Equipment)	Coën	Stéphanie	Sustainability leader

ANNEX 2

LANDSCAPE MAPPING OUTPUT

1. 3M
2. ACP-EU Development Minerals Programme, UNDP
3. ADEME – French Environment and Energy Management Agency
4. ARM – Alliance for Responsible Mining / CRAFT – Code of Risk-mitigation for Artisanal and small-scale mining engaging in Formal Trade
5. ASCE – American Society of Civil Engineers
6. ASTM – American Society for Testing and Materials
7. B Corp – Certifing B Corporations
8. Better Mining
9. BSR – Business for Social Responsibility
10. BSI – British Standards Institution
11. CDP – formerly Carbon Disclosure Project
12. CORE Standard –
13. CMSI – Consolidated Mining Standard Initiative
14. CSC – Concrete Sustainability Council
15. Drive Sustainability
16. EcoVadis
17. EITI – Extractive Industries Transparency Initiative
18. EMRIE – European Mining Regions Innovation Ecosystems
19. ESIA – European Semiconductor Industry Association
20. Fairphone
21. FAST-Infra – Finance to Accelerate the Sustainable Transition-Infrastructure
22. GBA – Global Battery Alliance
23. GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit
24. Global Wind Energy Council
25. GRI – Global Reporting Initiative
26. Holcim – global cement and concrete producer
27. ICMM – International Council on Mining and Metals
28. IFC – International Finance Corporation
29. IFRS – International Financial Reporting Standards
30. IGF – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
31. ILO – International Labour Organization (India)
32. IMA – Sustainability Working Committee – Industrial Minerals Association
33. INTERPOL-WWF – Environmental Crime Project
34. IRMA – Initiative for Responsible Mining Assurance
35. OECD RBC – OECD Responsible Business Conduct
36. Onsemi
37. PRI – Principles for Responsible Investment
38. SASB – Sustainability Accounting Standards Board
39. SEMI – Semiconductor Equipment and Materials International
40. SHIFT – Centre for Business and Human Rights Practice
41. SSI – Solar Stewardship Initiative
42. RMI – Responsible Minerals Initiative
43. Responsible Mica Initiative
44. TAWAH – Tanzania Women Architects for Humanity
45. TDi Sustainability
46. TFCD – Task Force on Climate-related Financial Disclosures
47. TFND Task Force on Nature-related Disclosures
48. Together for Sustainability (TfS) Initiatives
49. TSM – Towards Sustainable Mining
50. UNDP – including Industrial Minerals Programme
51. UNEP GRID-Geneva
52. UNEP IRP – International Resource Panel
53. UNICRI – United Nations Interregional Crime and Justice Research Institute
54. UNODC – United Nations Office on Drugs and Crime
55. University of Queensland – Global Centre for Mineral Security (organiser)
56. World Semiconductor Council (WSC)
57. WRF – World Resources Forum
58. WWF – World Wide Fund for Nature
59. ISO – International Organization for Standardization
60. UNGC – United Nations Global Compact
61. USDOL – United States Department of Labor
62. The World Bank