Environmental, Social & Governance (ESG)

Zircon Industry Report 2026

SUMMARY

ZIA has completed its sixth ESG and Sustainability Performance Benchmarking Study, analysing performance across 20 key ESG indicators from 2018 to 2025. Twenty-two companies took part (7 Producers, 15 Consumers), up from 10 in the original study. The exercise provides participating members with valuable insights to strengthen ESG data collection, measure performance, benchmark against peers, and support stakeholder engagement and reporting.

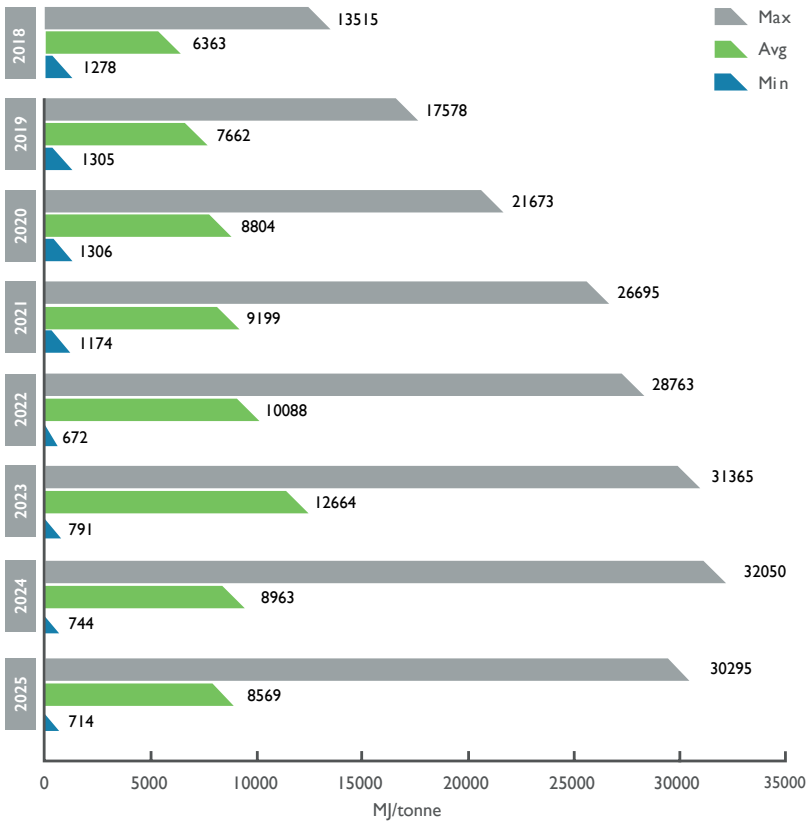
As in previous years, the full report, including an Annex of data specific to each organisation, is available to those ZIA members who participated.

ENVIRONMENTAL

- Average Environmental Reportable Incidents increased from 0.22 to 0.48 in 2025, driven by Consumers. Producers fell from 0.57 to 0.17, the lowest in eight years
- Average Energy Intensity decreased from 8,963 to 8,569 MJ/MT of production in 2025
- Average % of Water Recycled decreased from 49% in 2024 to 33.8% in 2025
- Average Water Intensity (water consumed or withdrawn per MT of zircon production/activity) increased 38% to 45.38 m^3/tonne of production in 2025
- Average waste intensity increased from 9.75 to 12.16 kg/tonne
- 45% of participants now have ISO 14001, EMAS or EMS certified sites and 27% have ISO 45001 sites

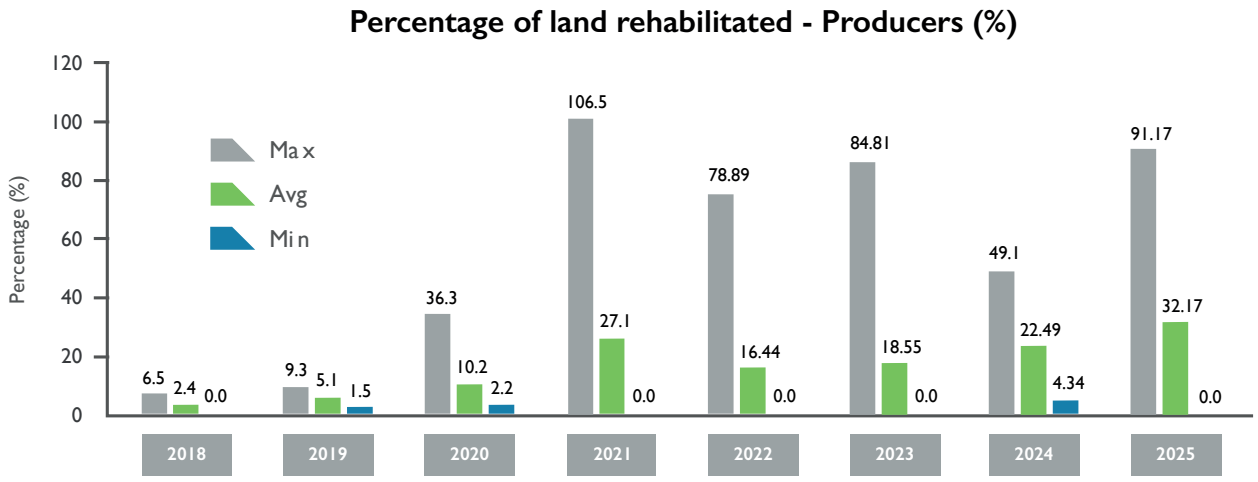
Energy Intensity[1]

(MJ/Metric tonne of production)



BIODIVERSITY

- Average percentage of land rehabilitated to total land in 2025 increased by 43% (22.5% to 32.2%)



Environmental Incident Frequency Rate (EIFR) increased

from 0.04 to 0.10 per million hours worked, although most companies reported zero incidents

Average % of renewable energy of energy consumption rose slightly

from 8.68 to 8.95%. The leading Producer reached ~56% renewable consumption, although half the participating companies have yet to adopt renewable energy sources

19% increase in % Waste Recycled

from 28.22 to 33.66% in 2025

Average GHG Intensity declined

from 0.476 to 0.459 MT CO_2e/MT

SOCIAL

DIVERSITY



- Average % of female employees rose from 18 to 19.32% in 2025



- Number of companies with differently-abled employees doubled from 3 to 6 in 2025. This reflects growing awareness of inclusive employment practices



- Average of 27% of women in board/executive roles (down from 29.2%), with the leading Producer at 57%



- % of women in board/executive roles in the Producer category increased from 25.36 to 29.42% in 2025

SAFETY



- Over 214 million person-hours worked over the last eight years with zero fatalities



- Average Lost Time Injury Frequency Rate (LTIFR) rose slightly from 5.0 to 5.27 per million hours worked, although the highest reported rate fell from 34.4 to 28.2. The Producer average rose from 0.05 to 1.69, while the Consumer average fell from 8.0 to 7.06



- Average Near Miss Frequency Rate (NMFR) increased in 2025, driven by Consumers. Producer category saw a significant reduction

GOVERNANCE

- Zero lawsuits or government actions for Producers and a decrease for Consumers
- All 22 participants have a sexual harassment process and provide employee training
- Vast majority of members have established policies on:
  - **Human rights & modern slavery (82%)**
  - **Equal opportunities and non-discrimination (95%)**
  - **Business code of conduct (95%)**
  - **Anti-corruption and anti-bribery (100%)**
  - **Environmental, Social and Governance (82%)**

Approach and Methodology Summary

1 **Public domain data search:** Identification of ESG related Key Performance Indicators (KPIs) based on practices followed by leading mining and metal sector companies/associations with published information.
2 **ESG KPIs and metrics questionnaire:** Considering their sustainability and business relevance, availability of data etc. a realistic and manageable list of ESG KPIs was compiled.
3 **Data template circulation:** Circulated final set of KPIs and their assessment methodology and templates.
4 **Engagement with member companies:** The pre-populated questionnaire was shared individually with companies via the Sphera SCCS platform tool requesting data for 2025 (and for those members who have not previously provided data for 2018, 2019, 2020, 2021, 2022, 2023 and 2024).
5 **Data validation and analysis:** Consultants reviewed the responses and, where necessary, contacted members directly for clarification or additional information.
6 **Reporting:** Summary and full report presented to ZIA. Summary report including main KPIs for individual participating members was shared with those companies.

[1] Energy intensity is calculated based on summation of total renewable electricity energy (wind, solar, hydro, biomass, biogas), electricity consumption sourced from grid and total non-renewable energy (coal, furnace oil/HFO, diesel, natural gas, LPG) divided by production tonnage

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ZIA operates a strict antitrust policy and Code of Conduct for all member communications and activities.

Our members commit to ZIA values, which serve to encourage the industry to operate sustainably and with integrity.