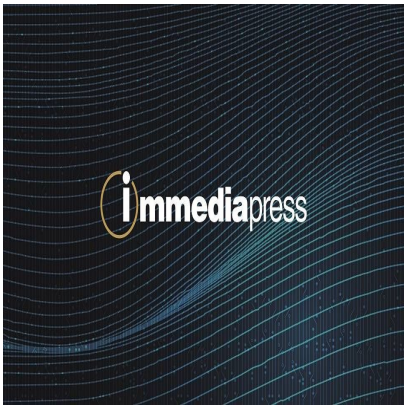

Competition for water poses risks to the energy transition

Descrizione

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COMUNICATO STAMPA â?? CONTENUTO PROMOZIONALE

ICMM report maps where mining and metals facilities intersect with water stress, depletion, drought, flood and interannual variability risks

LONDON, July 22, 2026 /PRNewswire/ â?? Nearly two-thirds of mining and metals facilities worldwide are located in areas facing significant physical water risk, according to new analysis by ICMM.

Our Global Mining and Metals Water Dataset and report, also reveal that competition for water between mining and metals operations and other industrial and domestic users is the greatest physical water risk facing the industry. It highlights the importance of coordinated integrated land and water use planning at regional scales, as demand grows for the materials needed for clean energy systems.

Minerals and metals are essential to the energy transition and the low-carbon economy of the future, but this analysis shows that the conditions needed to produce them are constrained by physical water risks.

Key findings include:

The analysis found that water risk in mining and metals is global in scope but diverse in nature, differing according to geography and commodity. Some facilities face chronic competition for water; others face drought, flooding, or unpredictable annual supply. In some regions and supply chains, these risks overlap, creating vulnerabilities that must be addressed at through water stewardship and coordinated action across governments, industry, investors and the companies that use these materials.

Commenting on the findings, ICMMâ??s Director of Data and Research, Dr Emma Gagen, said:

â??Our research shows that water is already a material issue for the mining and metals sector. If water risk exposure is not better understood and managed across the wider economy, we risk sleepwalking into a major constraint on the energy transition. This is why leading mining companies including ICMM members have embedded water stewardship principles and practices, to manage water in ways that are socially equitable, environmentally sustainable and economically beneficial.â?•

The findings show that water risk exposure is not evenly distributed across the sector. In Chile, the worldâ??s largest copper producer and home to a significant share of global lithium reserves, 85.8% of facilities face high or extremely high baseline water stress and interannual variability at the same time. In Africa and the Middle East, 80.7% of facilities are exposed to high or very high drought risk, while in Oceania, 74% face high or extremely high interannual variability in water supply.

Dr Emma Gagen added that:

â??Until now, there has been no comprehensive, cross-commodity global assessment of how the mining and metals sector is exposed to water risk. By developing credible and accessible data, ICMM aims to support more informed decision-making by policymakers and investors on water risk exposure, helping to manage the demand created by the energy transition.

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â??This dataset is a starting point for others to explore, use and collaborate with us to continue improving the collective picture of water risk across the industry.â?•

The report draws on ICMMâ??s updated Global Mining Dataset (v1.5) of 12,000 facilities â?? including mines, smelters, refineries and plants â?? and overlays facility locations with global water-risk datasets to assess exposure to selected physical water quantity risks. The Global Mining and Metals Water Dataset was produced in partnership with the WWFâ??s Water Risk Team and the World Resources Institute (WRI).

Crystal Davis, Global Director for the Food, Land & Water Programs World Resources Institute, said:

â??With the global surge in the mining and production of critical minerals, driven by the energy transition, countries are grappling with how to meet the rising demand while promoting responsible mining activities. Responsible mining starts with shared access to credible, publicly available data on where water risks are greatest. WRI welcomes ICMMâ??s contribution as a meaningful step toward providing governments, communities, investors and companies with a foundation data base needed to help plan and act across the full value chain.â?•

Notes to editors

This dataset and report are part of ICMMâ??s wider Global Mining Data Project that aims to significantly improve the quality and accessibility of industry-wide information by building robust, transparent data that can inform policy and advance wider discussions about mining and metalsâ?? evolving role in sustainable development.

Like all large-scale datasets, the Mining and Metals Water Dataset has limitations. The data focuses on water risks and does not provide any information on the impacts or contribution of mining and metals to water risks. It is an intersectional analysis between a global mining and metal layer and global water risk layers. There are no global datasets on facility-level water consumption, withdrawals, discharge

quantities or qualities to allow assessments of impact and contribution at this stage. See the Limitations section of the report for further information.

In addition, the dataset does not include data on facility-level or company level impacts or contributions to local water systems, nor does it attempt to assess operational performance, efficiency or progress against corporate targets. As such, the dataset should not be used to benchmark individual assets or companies, or to draw conclusions about the alignment of individual corporate disclosures with sector-level results.

Methodology

Datasets from WWF and WRI were selected for their wide recognition and comprehensive coverage of water risk. Each offers distinct strengths and limitations, and ICMM assessed both to identify the most relevant indicators for inclusion in the Global Mining and Metals Water Dataset.

We also partnered with an independent peer reviewer to understand the limitations and strengths of our methodology, datasets used, and insights. This helped to refine our approach and data, ultimately strengthening our approach while being transparent with our limitations.

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Please see the Methodology Section of the Report for further details.

About ICMM

ICMM stands for mining with principles. We bring together a third of the global metals and mining industry, along with key partners to drive leadership, action and innovation for sustainable development, ultimately delivering a positive contribution to society. Through collaboration, ICMM member companies set the standard for responsibly produced minerals and metals in a safe, just and sustainable world.

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