COMET (the Coalition on Materials Emissions Transparency) is advancing emissions transparency to support the decarbonization of mineral and industrial supply chains.

In the World Economic Forum’s recent report on global risk, four out of five of the top risks were environmental. Dozens of companies including BaoSteel, Barrick, Daimler, and Ternium have restated earnings downward due to supply chain risk of key materials. These losses are just the tip of a quickly melting iceberg. A report by Carbon Disclosure Program (CDP) indicates that mining companies “are generating up to US$16 billion in emissions costs by passing down the risk in their value chain.”

**THE PROBLEM**
Companies with CO₂-emitting assets face increasing pressure to reduce the climate impact of their activities, supply chains, and products. This pressure is coming from investors, consumers, and regulators.

To survive in this new landscape, companies must proactively work to understand and reduce the environmental impacts of their business. However, neither consumers, corporates, or financial institutions know the embodied emissions in the products they produce or sell. While methods like life-cycle analysis and environmental product declarations exist, none use a verifiable, comparable, or widely adopted emissions reporting framework capable of sending supply chain signals.

**THE SOLUTION**
To truly reform material supply chains, new solutions for markets, capital, and policy are required. COMET (the Coalition on Materials Emissions Transparency), an alliance launched by Rocky Mountain Institute, MIT’s Sustainable Supply Chains initiative, the Columbia Center for Sustainable Investment and the Colorado School of Mines, is working with financiers, producers, and buyers to create a standard greenhouse gas (GHG) calculation framework for mineral and industrial supply chains.

Building on our combined experience creating industry frameworks and methodologies, this coalition will move all major capital providers, producers, and buyers forward on climate alignment together, de-risking first movers and ensuring that the developed framework is actionable.
THE IMPACT

A carbon accounting methodology supports framing for policy to accelerate the building of a sustainable energy future. Furthermore, a framework on materials production provides the cornerstone for integrating environmental, social and governance (ESG) reporting metrics that ensures company’s social license to operate can be maintained for years to come.

- By creating a standardized reporting framework, COMET will support and enhance existing initiatives for sustainable production, making GHG disclosure comparable, reliable, and widely accepted.
- By developing a clear understanding of emissions from making key materials like steel, copper, and cement, COMET will provide insight into the carbon content of our cars, buildings, and phones, connecting demand signals for low-carbon materials throughout the supply chain.
- By rooting this calculation framework within GHG protocol, COMET will help quantify sustainable production, enabling meaningful and profitable product differentiation for low-carbon materials.

HOW YOU CAN HELP

By joining COMET, mining and metals corporations can participate in the building of an accounting framework with a sufficient level of rigor to organize buyers around purchasing low-carbon materials at scale. This will incentivize investment in sustainable means of production and lead to the installation of low-cost renewable power, a lower per-unit cost of production, and protection against market downturns.

COMET is interested in partnering with corporate members to create a framework that will help them meet their sustainability goals and protect their social license to operate. Working collaboratively with a team of cross-industry players, we will design a framework that will meet the needs of manufacturers, financiers and buyers for verifiable, credible, universally accepted industrial emissions assessment.

The COMET effort is coordinated with other initiatives through the World Economic Forum, most noticeably the Mission Possible Platform’s Green Steel initiative, where the COMET methodology will serve as a fundament for driving change in the iron and steel supply chain.