COST MANAGEMENT

The New Cost Equation for Energy and Materials

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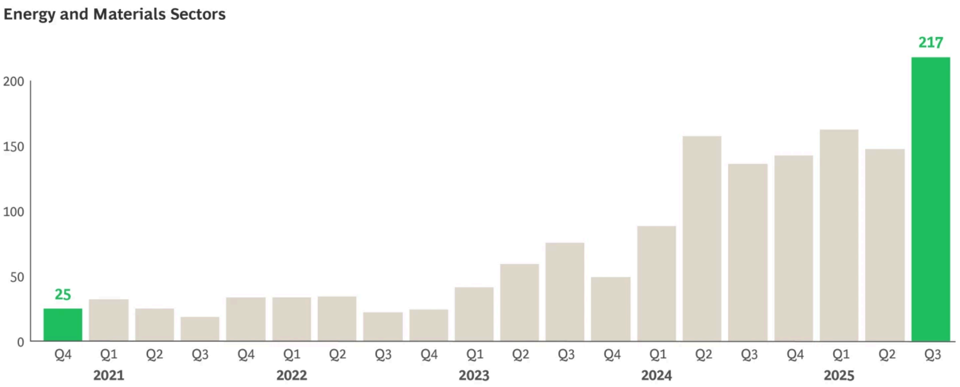
Companies across energy, raw materials, and commodities are in the midst of major cost realignments. Some inputs, like solar panels and batteries, are getting cheaper, but many essential costs are rising significantly. Grid and labor expenses are up, and tariffs are also exerting a burden on these sectors. At the same time, investing in AI and compliance adds new upfront costs, despite the promise of long-term savings. The challenge isn't simply to cut expenses. It's also about managing a shifting cost structure and reinvesting smartly to build resilience and growth.

Resource Industries Face New Cost Challenges

Energy and materials producers are among the sectors most exposed to global tariff impacts, according to Bloomberg's Tariff Impact Matrix. Agriculture and diversified mining are facing profit declines, while oil and gas demand has softened, pushing prices and margins lower. Extreme weather and escalating labor costs are compounding the strain. As BCG's Rebecca Fitz notes, with commodity prices depressed, companies must lean heavily on cost programs and productivity gains to protect earnings.

The result is what Fitz describes as the start of a "capex supercycle," as companies channel investment into grid modernization, electrification infrastructure, and energy storage to meet decarbonization goals and surging AI-related power demand. Yet, spending ambitions often exceed available cash flow, making operational efficiency an essential survival lever. As BCG's Jamie Webster observes, amid geopolitical and policy volatility, "the one lever companies truly control is cost."

Mentions of “AI & Machine Learning” on Earnings Calls



Sources: Bloomberg; BCG analysis.

Policy in the US and Europe Is Shaping Decisions

On top of inflation and volatility, government policy is becoming a major cost driver. The US has expanded steel and aluminum tariffs, affecting components critical to renewable energy infrastructure, while Europe’s Carbon Border Adjustment Mechanism will soon impose new fees on carbon-intensive imports. These measures are forcing companies to rethink project design and supply chains. However, our experts argue that embedding compliance early can turn regulation into a competitive advantage, creating flexibility and positioning companies for growth during the energy transition.

Buying Smarter to Lower Input Costs

With input costs and trade volatility rising, procurement is now central to cost transformation. Webster advocates for diversified sourcing and flexible contracts to safeguard supply chains from geopolitical shocks. BCG’s Wolfgang Schnellbächer calls for “a new era of optimizing into the supply chain,” emphasizing collaboration with suppliers, shared problem-solving, and smarter logistics to uncover hidden inefficiencies.

Efficiency Upgrades Pay for Themselves

Efficiency gains—through proactive maintenance, process optimization or digital transformation—remain a cornerstone of cost resilience. In agriculture, precision tools improve yields and reduce waste; in metals and mining, retrofitted kilns and smelters cut energy intensity. Across sectors, firms are leveraging AI to optimize production planning, procurement and predictive maintenance. Utilities use AI for fault detection and grid forecasting, while mining companies deploy digital twins to reduce downtime and enhance safety.

Cutting Costs Now for Long-Term Resilience

The imperative to reduce costs has become inseparable from the drive to modernize. Cost discipline today funds the investments that will define the next decade, from cleaner production to upgraded infrastructure. Schnellbächer underscores the critical need for energy companies to reduce costs. “The average cost of living will become more expensive when these companies struggle,” he says.

Together, efficiency, smart procurement and AI become a system for success. When applied wisely, this system is what will fund tomorrow’s cleaner, more resilient economy.

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