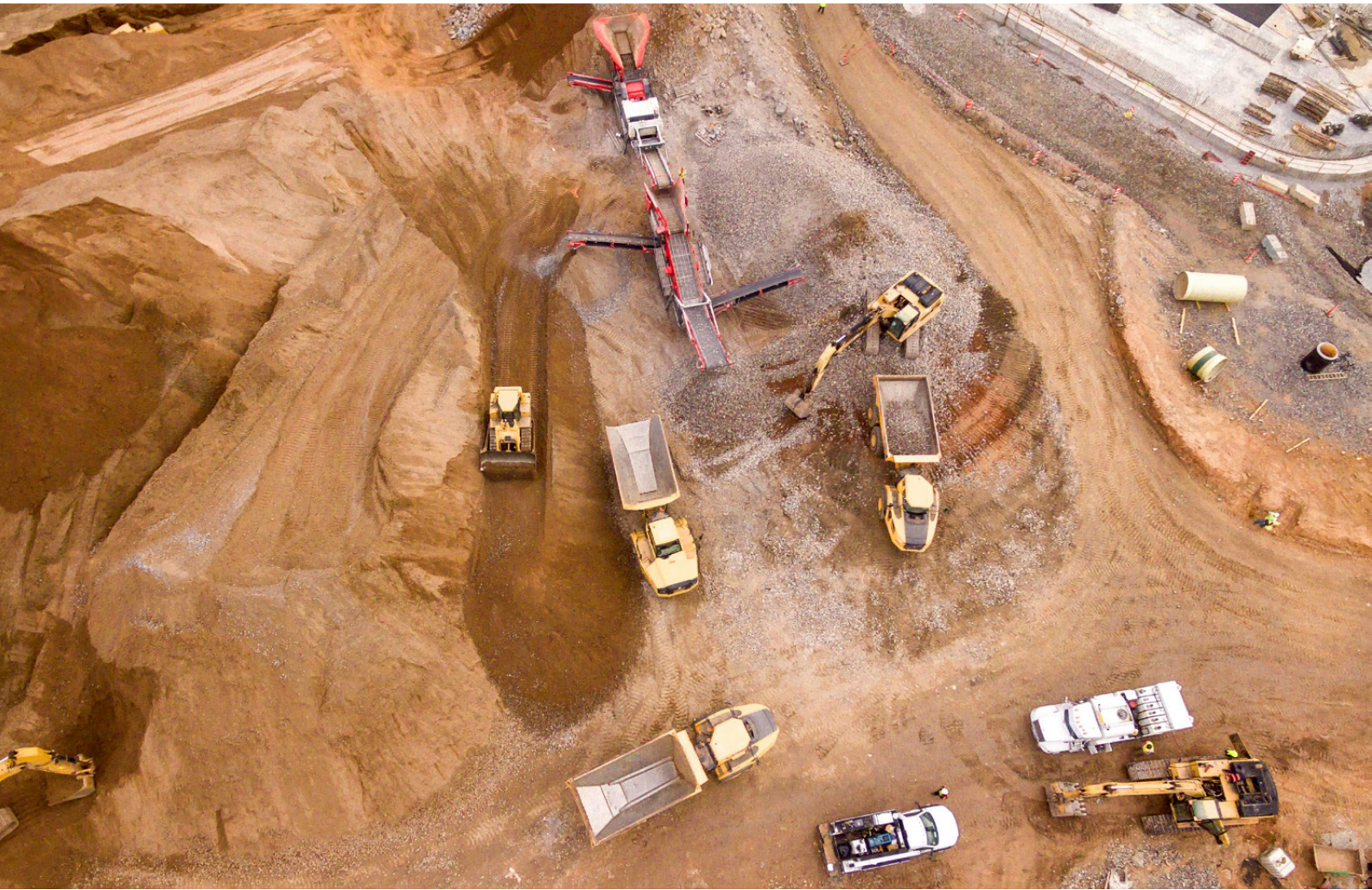


5 CLEAN PROJECTS DRIVING DOWN OPERATIONAL COSTS IN NORTH AMERICAN HEAVY INDUSTRIES





Cost reduction is a major challenge for North American industries in 2025 as the region seeks to absorb the impact of import tariffs. But it is not just costs that are on the agenda.

With many industrial players eying export markets and touting clean energy targets, cost cutting is increasingly tied to decarbonization.

Decarbonization, enhanced efficiency and operational cost reduction are all on the agenda at [Reuters Events' Future of Heavy Industries USA 2025](#) event in Pittsburgh, on September 16 and 17. Here are five projects that are leading the way this year.

MINING: NEWMONT'S ELECTRIFICATION OF MINING EQUIPMENT

Vehicle fuel is an important yet often-overlooked source of costs and emissions in mining.

Yet it could become a thing of the past at Newmont Corporation after the gold mining major signed a deal with Caterpillar to purchase 26 battery-powered autonomous vehicles for underground and open-pit operations by 2027.

The move could yield a 30% cut in Scope 1 and 2 emissions by 2030, while delivering savings on diesel fuel and vehicle maintenance, since electric vehicles are generally more reliable than internal combustion engine equivalents.

PETROCHEMICALS: 1POINTFIVE BLUEBONNET SEQUESTRATION HUB

Occidental Petroleum-owned carbon capture, utilization and sequestration company 1PointFive is developing a hub in southeast Texas to take emissions from industrial partners and potentially use them as feedstock for fuels and plastics.

The Bluebonnet sequestration hub has federal funding and in October 2024 it was announced that midstream energy services provider Enterprise Product Partners would build a carbon transportation network connecting the facility to third parties around the Houston Ship Channel.

This would reduce the cost of emissions reduction for industries in the region.

CONSTRUCTION: SMITH-MIDLAND'S NAVAL SEA SYSTEMS COMMAND CONTRACT

Precast concrete specialist Smith-Midland, of Virginia, is helping to reduce costs and improve energy efficiency at a refueling and complex overhaul center being built for the Naval Sea Systems Command.

Comprising office spaces and fitness and counseling areas, the center is being built using Smith-Midland's high-performance, thermal and fire code-compliant SlenderWall system, which includes interior framing, insulation and vapor barriers in a single lightweight panel.

The SlenderWall precast concrete panels are 66% lighter than traditional walls, making them cheaper and quicker to install, with improved energy efficiency and sustainability.

STEEL: CMC'S WEST VIRGINIA MICRO MILL

Not so much a cost-reduction project as a capital investment in sustainability, Commercial Metals Company (CMC) has committed to spending \$450 million on a new micro mill in Berkely County, West Virginia.

The plant is intended to produce 500,000 tons of straight-length and spooled rebar a year, made from 100% recycled steel. Powered with electricity instead of fossil fuels, the electric arc furnace mill will use 81% less energy than the industry average and produce 65% less carbon dioxide emissions.

Due to start up in late 2025, the CMC mill will also consume 96% less water than standard steelmaking operations.

TRANSPORTATION: CKPC'S HYDROGEN-POWERED LOCOMOTIVES

Diesel is a costly and polluting fuel for railway operations, which is why operator Canadian Pacific Kansas City (CPKC) is switching to a cleaner option. The British Columbia-based rail company brought its first hydrogen-powered locomotive into mainline service this year.

The locomotive, CP1201, is equipped with a hydrogen tender adapted from liquified natural gas and refueled from a fixed refueling station near Alberta, Canada. It is being used to haul steelmaking coal for CPKC customer Elk Valley Resources.

Low-carbon hydrogen fuel is currently more costly than LNG but prices are expected to fall over time as production volumes increase. CPKC is said to be planning an expansion of its hydrogen-powered locomotive fleet throughout 2025.

EFFICIENCY, DECARBONIZATION AND INNOVATION

These are just a few examples of how North American industrial leaders are coping with tariffs, policy shifts and trade uncertainties while maintaining a long-term drive for decarbonization.

More case studies will be shared at [Reuters Events' Future of Heavy Industries USA 2025](#), the premier gathering for energy-intensive sectors, where 250 executives from mining, metals, steel, cement, chemicals, finance, policy and technology will converge to gain insights and build connections.

Don't miss this opportunity to share knowledge, harness collective strengths, drive down operational costs, boost efficiency and achieve low-carbon goals. To register, visit events.reutersevents.com/energy-transition/industry-usa.

