

# **Cleveland-Cliffs Selected to Receive \$575 Million in US Department of Energy Investments for Two Projects to Accelerate Industrial Decarbonization Technologies**

CLEVELAND--(BUSINESS WIRE)-- Cleveland-Cliffs Inc. (**NYSE: CLF**) announced today that two of its projects have been selected for award negotiations for up to \$575 million in total funding from the United States Department of Energy (DOE) to pursue two decarbonization investments at Middletown Works in Ohio and Butler Works in Pennsylvania. Following successful negotiations, these projects will allow for substantial reductions in greenhouse gas (GHG) emissions across the Cliffs' footprint and will also create efficiencies that meaningfully drive down operating costs while securing and growing good-paying Union jobs. This federal funding is being made available through DOE's Industrial Demonstrations Program funded through the Infrastructure Investment and Jobs Act and the Inflation Reduction Act.

## **Middletown Works DRI Plant and Electric Melting Furnaces (up to \$500 million grant)**

If awarded, the Company would replace its existing blast furnace at its Middletown Works Facility in Middletown, Ohio with a 2.5mtpa Hydrogen-Ready Direct Reduced Iron (DRI) Plant and two 120 MW Electric Melting Furnaces (EMF) to feed molten iron to the existing infrastructure already on site, including the BOF, Caster, Hot Strip Mill, and various finishing facilities. Middletown will maintain its existing raw steel production capacity of approximately 3 million net tons per year and will no longer use coke for iron production. The EMF technology is well established and, together with the injection of hydrogen in blast furnaces, is a preferred route for meaningful reduction in carbon emissions for integrated steelmakers worldwide.

The process will dramatically reduce carbon emissions intensity, and will consolidate Middletown Works as the most advanced, lowest GHG emitting integrated iron and steel facility in the world. The facility will have the flexibility to be fueled by natural gas, which would reduce current ironmaking carbon intensity by over 50%; a mix of natural gas and clean Hydrogen; or clean Hydrogen, which would reduce current ironmaking carbon intensity by over 90%.

Hydrogen demand from this "flex-fuel" DRI plant stands to support DOE's "Hydrogen Earthshot" and DOE's Hydrogen hub initiatives.

The new facility is expected to reduce production costs by approximately \$150 per net ton of liquid steel produced, or a \$450 million annual savings relative to the existing configuration. These savings do not consider any of the premiums expected to be generated from sales of

low-carbon steel, such as Cliffs H2™ and Cliffs HMAX™.

This investment will secure 2,500 jobs at Middletown Works, where the unionized workforce is represented by the International Association of Machinists (IAM). The flex-fuel DRI plant and EMFs will require 170 additional jobs. The project will result in 1,200 building trades jobs during peak construction.

As the DRI facility can be fed with standard, blast-furnace grade pellets, the project will take full advantage of the Company's United Steelworkers (USW) represented iron ore mining and pelletizing units. The new configuration also avoids the use of significant amounts of prime scrap metal, which Cliffs anticipates will become shorter in supply and higher in cost throughout the rest of the decade. The process will also allow Cliffs to maintain the level of quality of the steel produced, which would otherwise be degraded with increased scrap usage, maintaining the Company's leading position in the automotive end market.

The net capital outlay for Cliffs will be approximately \$1.3 billion, net of capital avoidance on the existing blast furnace and coke plants, over a 5-year period primarily starting in 2025 and expected to conclude by 2029. Cliffs' portion will be funded using liquidity on hand and its own free cash flow generation. The Middletown site offers enough available space to construct the new facility without encumbering the existing processes, effectively eliminating interference risks during the construction and commissioning phase. Cliffs thanks both Midrex and Hatch for their collaboration in developing the initial planning for this transformational project.

The Company does not anticipate any material capital spending related to this project to occur in 2024 and maintains its current capital expenditures outlook for this year, reiterating its capital allocation priorities currently focused on executing more aggressive share buybacks.

### **Butler Works Induction Reheat Furnaces (up to \$75 million grant)**

If awarded, Cliffs would also replace two of its existing natural-gas fired high-temperature slab reheat furnaces at Butler Works in Butler, Pennsylvania with four Electrified Induction Slab Reheat Furnaces, to bring optimum efficiency to its production of electrical steels, a critical component of the electrification of America and the greening of the electrical grid.

The primary benefits of this project are lower carbon emissions, substantially reduced energy costs and improvements in slab quality, allowing for approximately 25,000 tons of additional production capacity from improved process yield. This investment will secure 1,300 jobs at Butler Works, where employees are represented by the United Auto Workers (UAW). The project will require 220 building trades jobs at peak construction.

The company also expects to generate approximately \$80 million in annual cost savings and yield improvements following the installation of the new equipment. The net cost of this facility to Cliffs is expected to be \$100 million spent over a 4-year period.

Lourenco Goncalves, Cliffs' Chairman, President, and Chief Executive Officer said: "Completion of our \$1 billion clean hydrogen-ready Toledo DR Plant through the depths of COVID stood as strong evidence of Cliffs' expertise and resolve to drive down emissions. We are grateful for the support of the Department of Energy and their recognition of

Cleveland-Cliffs' strong leadership in steel decarbonization. Through these selections, DOE recognized and rewarded Cleveland-Cliffs' track record of successfully executing large capital projects that result in operational efficiencies and lower GHG emissions."

Mr. Goncalves added: "The investment at Middletown Works is confirmation that Cleveland-Cliffs is the benchmark for iron and steelmaking technology in the world, ahead of Japan, Korea, Europe, and China. Our experience in using natural gas has seamlessly catalyzed our transition into using hydrogen. Middletown and Butler Works are both critically important to the success of Cleveland-Cliffs and the industrial might of the United States. Both plants support good-paying, middle-class union jobs. We appreciate the Biden Administration's shared belief that union jobs are essential for continued success of manufacturing, supply chains, infrastructure, and defense in the United States. In addition, these projects have remarkably strong IRR's and short payback periods. The Department of Energy has facilitated a perfect situation for our union workforce, our decarbonization endeavors, our communities in Ohio and Pennsylvania, and our shareholders."

U.S. Senator Sherrod Brown stated, "This partnership will ensure that IAM steelworkers in Middletown remain at the forefront of the global steel industry. This is why we passed the Bipartisan Infrastructure Law and the Inflation Reduction Act – to ensure Ohio manufacturing continues to lead the world in the technologies that will drive our economy for decades to come." Brown continued, "The Cleveland-Cliffs Middletown Works plant will support growing industries in Ohio while creating good-paying jobs, and ensuring that Ohio remains a national leader in manufacturing and innovation."

### **About Cleveland-Cliffs Inc.**

Cleveland-Cliffs is the largest flat-rolled steel producer in North America. Founded in 1847 as a mine operator, Cliffs also is the largest manufacturer of iron ore pellets in North America. The Company is vertically integrated from mined raw materials, direct reduced iron, and ferrous scrap to primary steelmaking and downstream finishing, stamping, tooling, and tubing. Cleveland-Cliffs is the largest supplier of steel to the automotive industry in North America and serves a diverse range of other markets due to its comprehensive offering of flat-rolled steel products. Headquartered in Cleveland, Ohio, Cleveland-Cliffs employs approximately 28,000 people across its operations in the United States and Canada.

### **Forward-Looking Statements**

This release contains statements that constitute "forward-looking statements" within the meaning of the federal securities laws. All statements other than historical facts, including, without limitation, statements regarding our current expectations, estimates and projections about our industry or our businesses, are forward-looking statements. We caution investors that any forward-looking statements are subject to risks and uncertainties that may cause actual results and future trends to differ materially from those matters expressed in or implied by such forward-looking statements. Investors are cautioned not to place undue reliance on forward-looking statements. Among the risks and uncertainties that could cause actual results to differ from those described in forward-looking statements are the following: continued volatility of steel, iron ore and scrap metal market prices, which directly and indirectly impact the prices of the products that we sell to our customers; uncertainties associated with the highly competitive and cyclical steel industry and our reliance on the demand for steel from the automotive industry; potential weaknesses and uncertainties in

global economic conditions, excess global steelmaking capacity, oversupply of iron ore, prevalence of steel imports and reduced market demand; severe financial hardship, bankruptcy, temporary or permanent shutdowns or operational challenges of one or more of our major customers, key suppliers or contractors, which, among other adverse effects, could disrupt our operations or lead to reduced demand for our products, increased difficulty collecting receivables, and customers and/or suppliers asserting force majeure or other reasons for not performing their contractual obligations to us; risks related to U.S. government actions with respect to Section 232 of the Trade Expansion Act of 1962 (as amended by the Trade Act of 1974), the United States-Mexico-Canada Agreement and/or other trade agreements, tariffs, treaties or policies, as well as the uncertainty of obtaining and maintaining effective antidumping and countervailing duty orders to counteract the harmful effects of unfairly traded imports; impacts of existing and increasing governmental regulation, including potential environmental regulations relating to climate change and carbon emissions, and related costs and liabilities, including failure to receive or maintain required operating and environmental permits, approvals, modifications or other authorizations of, or from, any governmental or regulatory authority and costs related to implementing improvements to ensure compliance with regulatory changes, including potential financial assurance requirements, and reclamation and remediation obligations; potential impacts to the environment or exposure to hazardous substances resulting from our operations; our ability to maintain adequate liquidity, our level of indebtedness and the availability of capital could limit our financial flexibility and cash flow necessary to fund working capital, planned capital expenditures, acquisitions, and other general corporate purposes or ongoing needs of our business, or to repurchase our common shares; our ability to reduce our indebtedness or return capital to shareholders within the currently expected timeframes or at all; adverse changes in credit ratings, interest rates, foreign currency rates and tax laws; the outcome of, and costs incurred in connection with, lawsuits, claims, arbitrations or governmental proceedings relating to commercial and business disputes, antitrust claims, environmental matters, government investigations, occupational or personal injury claims, property-related matters, labor and employment matters, or suits involving legacy operations and other matters; supply chain disruptions or changes in the cost, quality or availability of energy sources, including electricity, natural gas and diesel fuel, critical raw materials and supplies, including iron ore, industrial gases, graphite electrodes, scrap metal, chrome, zinc, other alloys, coke and metallurgical coal, and critical manufacturing equipment and spare parts; problems or disruptions associated with transporting products to our customers, moving manufacturing inputs or products internally among our facilities, or suppliers transporting raw materials to us; the risk that the cost or time to implement a strategic or sustaining capital project may prove to be greater than originally anticipated; our ability to consummate any public or private acquisition transactions and to realize any or all of the anticipated benefits or estimated future synergies, as well as to successfully integrate any acquired businesses into our existing businesses; uncertainties associated with natural or human-caused disasters, adverse weather conditions, unanticipated geological conditions, critical equipment failures, infectious disease outbreaks, tailings dam failures and other unexpected events; cybersecurity incidents relating to, disruptions in, or failures of, information technology systems that are managed by us or third parties that host or have access to our data or systems, including the loss, theft or corruption of sensitive or essential business or personal information and the inability to access or control systems; liabilities and costs arising in connection with any business decisions to temporarily or indefinitely idle or permanently close an operating facility or mine, which could adversely impact the carrying value of associated assets and give rise to

impairment charges or closure and reclamation obligations, as well as uncertainties associated with restarting any previously idled operating facility or mine; our level of self-insurance and our ability to obtain sufficient third-party insurance to adequately cover potential adverse events and business risks; uncertainties associated with our ability to meet customers' and suppliers' decarbonization goals and reduce our greenhouse gas emissions in alignment with our own announced targets; challenges to maintaining our social license to operate with our stakeholders, including the impacts of our operations on local communities, reputational impacts of operating in a carbon-intensive industry that produces greenhouse gas emissions, and our ability to foster a consistent operational and safety track record; our actual economic mineral reserves or reductions in current mineral reserve estimates, and any title defect or loss of any lease, license, easement or other possessory interest for any mining property; our ability to maintain satisfactory labor relations with unions and employees; unanticipated or higher costs associated with pension and other post-employment benefit obligations resulting from changes in the value of plan assets or contribution increases required for unfunded obligations; uncertain availability or cost of skilled workers to fill critical operational positions and potential labor shortages caused by experienced employee attrition or otherwise, as well as our ability to attract, hire, develop and retain key personnel; the amount and timing of any repurchases of our common shares; and potential significant deficiencies or material weaknesses in our internal control over financial reporting.

For additional factors affecting the business of Cliffs, refer to Part I – Item 1A. Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2023, and other filings with the U.S. Securities and Exchange Commission.

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