



# MN Iron Ore & the Green Economy

A one-day virtual forum focusing on the role of Minnesota iron in the decarbonized steel of tomorrow.



**Wednesday, March 16, 2022 | 9:00am-2:30pm**

Registration – <https://bit.ly/MNIronOre>

## I. Greetings, Introductions (9:00-9:10 AM)

Peter Clevenstine – MNDNR  
Jason Janisch – Jasper Engineering  
Julie Marinucci – St. Louis County

## II. Introduction to Greenhouse Gas Emissions

Frank Kohlasch, Climate Director, MPCA (9:10-9:35 AM)

**An overview of Minnesota’s Greenhouse Gas Emissions including: sectors, trends, and scope; state efforts including the Governor’s Executive Order, Climate Change Subcabinet, and State Action Teams.**

## III. Sustainability in the American Steel Industry

Kevin Dempsey, President and CEO, American Iron and Steel Institute (AISI) (9:35-10:00 AM)

**The U.S. steel industry continues to actively work on strategies to further reduce emissions and enable a low-carbon future as a critical material for sustainable technologies and infrastructure. This talk will provide an overview of the industry, trends in steelmaking and raw materials, sustainability accomplishments, and the path ahead.**



#### IV. Steel in a Greener World

Lynn Lupori, Head of Consulting, CRU (10:00-10:50 AM)

CRU Consulting is the management consulting division of the CRU Group providing independent and proprietary advice to the world's leading metals, mining and fertilizer companies, suppliers to the industry, governments, and financial institutions.

#### V. Company Climate Strategies

- **Cleveland-Cliffs, Inc. – Climate Commitment Plan**

Jim Kochevar, Vice President, Iron Ore Operations (11:00 – 11:30 AM)

- **US Steel – Best for All**

Rich Fruehauf, Senior Vice President, Chief Strategy & Sustainability Officer (11:30 – 12:00 PM)

#### Break for lunch (12:00 – 12:30 PM)

- **Minnesota Power – Biochar Research and Opportunities for Further Decarbonization in Mining**

Kurt Anderson, Director, Environmental and Land Management (12:30 – 1:00 PM)

#### VI. Emerging Research

- **Department of Energy (DOE) - Recent Research Initiatives on Zero/Low Carbon Steelmaking in Advanced Manufacturing**

Nick Lalena, R&D Projects Technology Manager, Advanced Manufacturing Office (1:00 – 1:20 PM)

- **Department of Energy (DOE) - The Technology Whitespace for Deep Decarbonization of Steel Production**

Jenifer Shafer, Program Director, and Katharine Greco, Fellow, Advanced Research Projects Agency – Energy (1:20 – 1:40 PM)

- **Natural Resources Research Institute (NRRI) – Iron Ore & Minerals of the Future**

Rolf Weberg, Executive Director and Brett Spigarelli, Metallurgical Engineer (1:40 – 2:20 PM)

#### VII. Recap (2:20 – 2:30 PM)