

Gear up: Green Steel is coming to the U.S.

– Following the [significant developments announced](#) by the Department of Energy's (DOE) Office of Clean Energy Demonstrations (OCED), automakers finally have the opportunity to start buying green steel.

April 2024

The DOE Announcement Highlights

On March 25, 2024, the DOE announced initial award negotiations for the over \$6 billion in federal funding available for industrial demonstration projects from the Inflation Reduction Act and Bipartisan Infrastructure Law. These investments will help companies like SSAB and Cleveland-Cliffs build the first clean steel facilities in the United States, and automakers achieve their climate commitments. The DOE's announcements mark a pivotal moment in the green steel industry, with funding allocated for two transformative projects.

- Swedish green steel leader SSAB announced a greenfield, green hydrogen direct reduced iron [DRI] plant in Mississippi. This will be the first commercial-scale facility using HYBRIT technology, with green hydrogen from Hy Stor Energy. The DRI will send its green iron to SSAB's existing electric arc furnace in Iowa to make green steel.
- Cleveland-Cliffs announced a hydrogen-ready DRI project at its Middletown Works in Ohio. This initiative will grow the union workforce and replace the coal-based blast furnace, a boon for the local community and our climate. However, it is unclear where Cliffs will get its hydrogen from and when.

After DOE's Announcement: Automakers' Next Moves

The prospect of procuring green steel is now closer than ever. To ensure these projects come to fruition and pave the way for a greener future, automakers must act now. Automakers have the opportunity to explore advanced procurement agreements, positioning themselves as pioneers in adopting green steel and de-risking industry investments by reaching out directly to SSAB.

Automakers can further make a difference by directly working with Cleveland-Cliffs to ensure its furnace uses green hydrogen. Beyond direct procurement engagements, joining

buyers coalitions like RMI's Sustainable Steel Buyers Platform can offer automakers an opportunity to convert commitments to offtake, and signal climate intent. The platform is an aggregated procurement effort to gain early access to initial supplies of near-zero steel in the U.S. By supporting steelmakers in achieving the lowest possible embodied emissions in their products, automakers can guarantee the integrity of the green steel they invest in and be first in line to secure green steel.

Automotive companies can play a pivotal role in accelerating global decarbonization through initiatives like SteelZero. By partnering with SteelZero, automakers commit to 100% net zero steel by 2050, with an interim commitment to buy and use lower emission steel for 50% of their steel requirement by 2030. Volvo Cars and Polestar have already made their commitment. Joining SteelZero ensures green steel integrity and fosters responsible production. Participation positions automakers at the forefront of sustainable innovation, aligning steel production with environmental imperatives.

The impact of transitioning to green steel cannot be overstated. With steelmaking currently contributing to a [significant portion](#) of global greenhouse gas emissions, the automotive industry has a unique opportunity to drive positive change. By championing clean steelmaking technologies and supporting initiatives like those announced by the DOE, [automakers can dramatically reduce emissions](#) and improve air quality for communities.

Signed,
Race to Green Steel