Heavy Industry Decarbonization: Steps toward Net-Zero

Rebecca Dell
10 February 2021
Heavy industry is responsible for more than 20% of all GHG emissions.

Create markets

Underlying logic: make sure cost of low-GHG production is passed through to final consumers

Buy Clean – Public Procurement
• 20% of steel and half of cement goes into civil engineering
• Incentivize both best practices and innovation

Clean Product Standards
• Apply to both public and private purchasing
• Critical for *material efficiency*, especially in building codes

Private Procurement
• Multiple structures: voluntary standards, advance market commitments, buyers’ clubs
Support innovation

Both public and private investment in heavy industry innovation is very low compared to other sectors.

Increase and realign expenditures
• Many only consider energy efficiency, not overall environmental performance and other co-benefits
• Integrate manufacturing, construction, and waste-processing

Demonstration at scale
• Many technologies languishing in laboratories and pilots for decades (H2-reduction, inert Al anodes, &c.)
• Potential model: Important Projects of Common European Interest
Support deployment

As more decarbonization options become available, we can support deployment like we have in the power sector.

Tools include:

• Credit supports
• Tax credits
• Subsidies, including carbon contracts-for-differences
• Direct contracting and investment

Enabling infrastructure (electricity, H2, CO₂) will be critical
Protecting and investing in people

None of the other approaches will work if we don’t have the right people to implement them and if people don’t see clear benefits.

- Training practitioners throughout the value chain
- Targeting underserved communities for investment
- Emphasizing quality job creation, protecting workers’ rights and safety
- Properly funding workforce transitions, where needed
- Building informational infrastructure to support markets and policies
- Investing in enforcement of the rules
Climate-safe heavy industry is possible and affordable with the right investments and approaches.

Rebecca Dell
rebecca.dell@climateworks.org

Report: *Build Clean – Industrial Policy for Climate and Justice*
December 2020