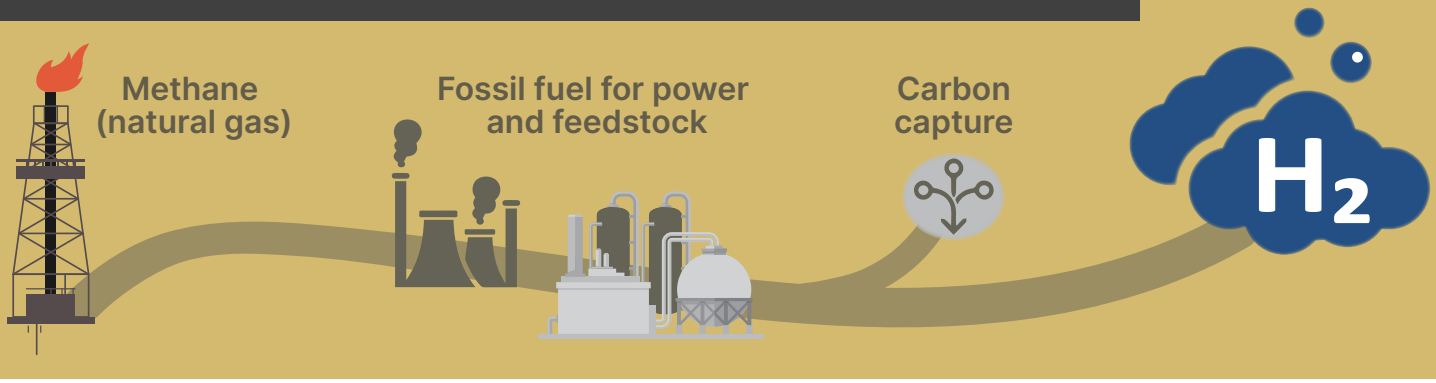
Blue Hydrogen: Don't Believe the Hype



False Promises

Hype surrounding blue hydrogen has spread across the U.S., spurred by billions in funding and incentives included in the 2021 Bipartisan Infrastructure Law and the 2022 Inflation Reduction Act. The **fossil fuel industry promises** that blue hydrogen, produced from methane, can be manufactured cleanly and contribute to climate change mitigation measures.

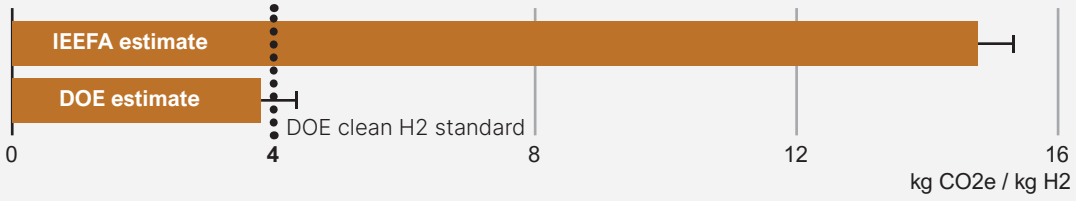
Unrealistic Assumptions

Blue hydrogen's environmental benefits rest largely on assumptions in a Department of Energy (DOE) model named GREET, a congressionally mandated tool for evaluating U.S. hydrogen projects. Due to its **unrealistic and extremely favorable assumptions**, the model significantly understates the likely greenhouse gas intensity associated with blue hydrogen production.

Downplaying the Risks

These assumptions downplay the climate risks associated with blue hydrogen. Underestimating the climate impact of blue hydrogen **minimizes the gamble that the federal government is taking** by supporting the rapid development of hydrogen produced from fossil fuels.

A conservative case shows blue hydrogen emissions to be nearly four times the "clean" standard established by DOE.



IEEFA's research makes clear that the hype related to blue hydrogen will result in the funding of **projects that exacerbate climate change** and extend our reliance on fossil fuels for decades.

Addressing the Problem

To accurately estimate **how dirty blue hydrogen is**, the DOE should employ more realistic model assumptions that are based on current scientific knowledge of methane emissions and hydrogen leakage rates, and on real-world performance of carbon capture and sequestration (CCS) technologies.

Read the Report

Blue Hydrogen: Not Clean, Not Low Carbon, Not a Solution

Institute for Energy Economics and Financial Analysis