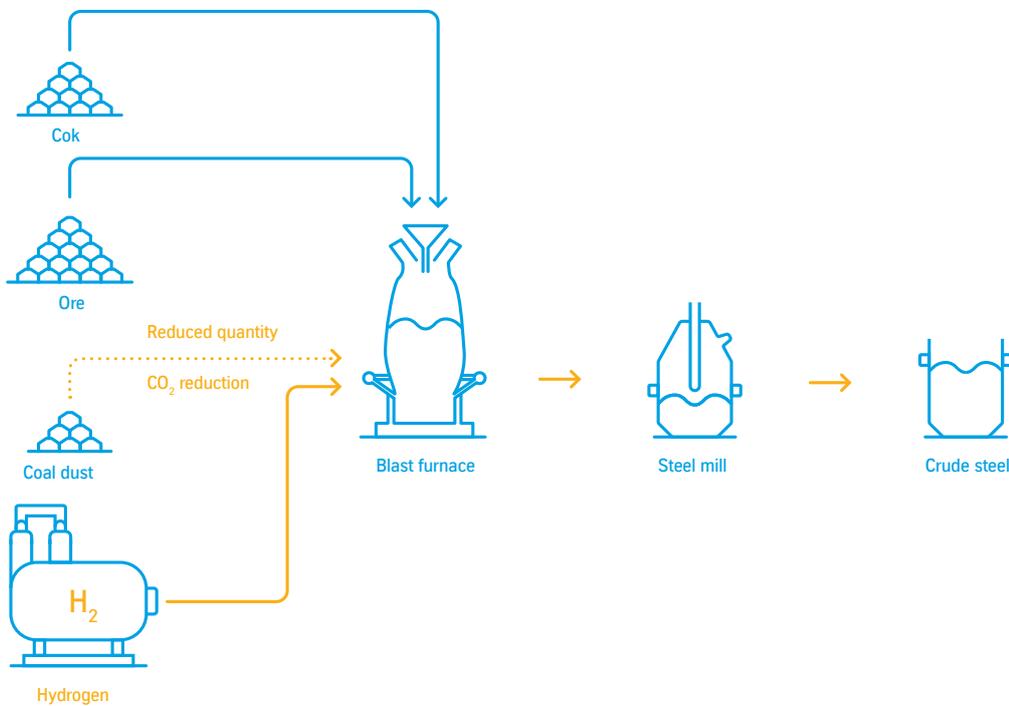


Hydrogen for the blast furnace

On the way to climate-friendly steel production, we have started using hydrogen at our blast furnace in an initial test. The basic idea is to reduce the amount of coal required for injection and replace it with hydrogen (H₂) in order to reduce CO₂ emissions.

➔ Test phase for feeding hydrogen into the blast furnace 9



Funded by the state of North Rhine-Westphalia as part of the IN4climate.NRW initiative. The hydrogen required for the project is supplied by Air Liquide, world market leader for industrial gases. The non-profit Institute for Applied Research BFI which belongs to the Steel Institute VDEh is providing scientific support for the project.

Project details:

- Project duration: 14 months
- Project budget: 2.7 million euros
- 40% funding by the Land

Outlook:

- Injection of 25,000 Nm³/h with a daily production of 4,600t

Long-term, theoretical savings potential of the technology:

- Savings of up c. 20% CO₂ per tonne of pig iron