

Production cost of renewable H_2 compared to fossil-based H_2 with and without carbon capture

Figure 2

Guidehouse based on BNEF (2021), Prognos et al. (2020), Hydrogen Europe (2020), Gas for Climate (2020), Agora Energiewende and AFRY Management Consulting (2021)

The price range for fossil-based H₂ reflects an implicit carbon price of \notin 50/tCO₂ in 2020 increasing to \notin 100/tCO₂ in 2030. For natural gas, a price of \notin 20/MWh is assumed. The capture rate for fossil-based H₂ with carbon capture is assumed to be around 75%