



What is CCS?



CO₂ Capture and Storage (CCS)
is a climate-change mitigation technology that
returns the carbon back to where it came from:
deep underground

CO₂ is a greenhouse gas produced in large quantities by human activities (e.g. transport, agriculture, industry, energy production); its accumulation in the atmosphere is disrupting the climate.

Capture processes, already used for decades, can collect CO₂ from flue gas at large emission sources (e.g. cement and steel factories, incineration facilities, biomass/gas/coal plants) or from feedstock before combustion, to avoid polluting the atmosphere. CO₂ can also be captured directly from the air. Once separated, the CO₂ may be used for various industries or compressed and transported to a suitable site for storage.

Storage involves the injection of CO₂ deep underground (>800 m) where it becomes trapped in the natural spaces between rock grains (pores). Storage sites are selected for their reservoir properties and the presence of an overlying impermeable caprock that keeps the CO₂ safely stored. Natural CO₂ reservoirs demonstrate the long-term trapping of CO₂.

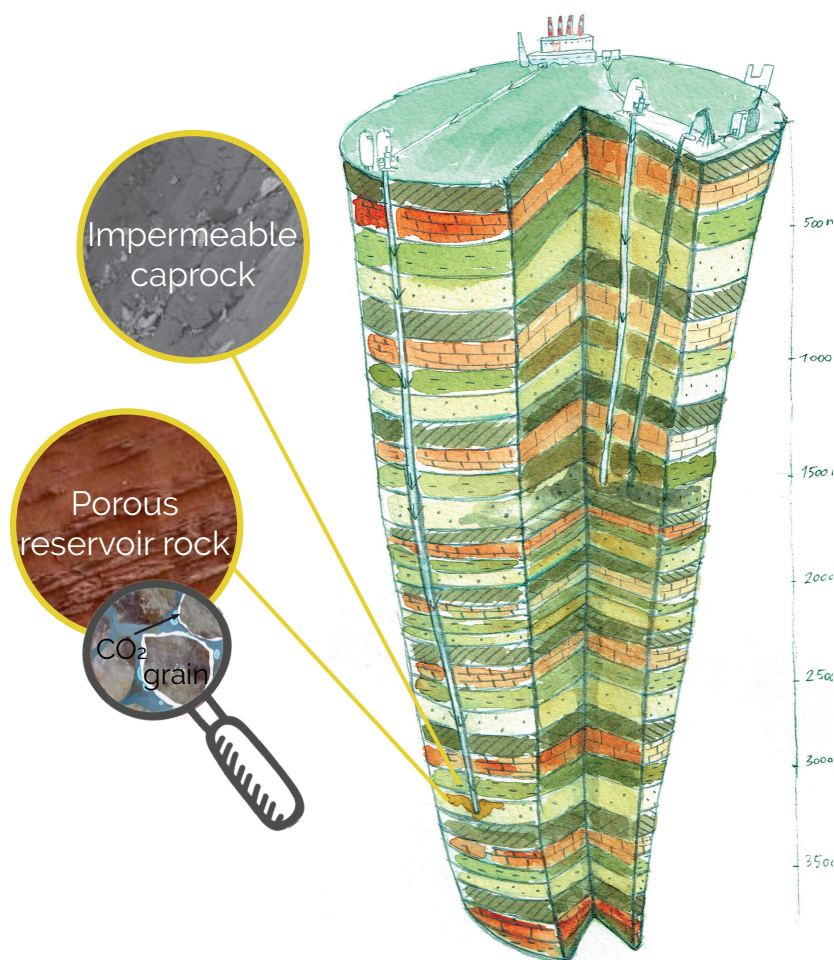


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