

# What is CCS?

**CO<sub>2</sub> Capture and Storage (CCS)**  
 is a climate-change mitigation technology  
 that returns the carbon back to where it  
 came from: deep underground

## CO<sub>2</sub>

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 separate CO<sub>2</sub> from the flue gas at large-scale CO<sub>2</sub> emission sources (e.g. cement and steel factories, incineration facilities, biomass/gas/coal plants) to avoid polluting the atmosphere. Once separated, the CO<sub>2</sub> may be used as a feedstock in various industries or compressed and transported to a suitable site for storage.

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## Storage

consists in injecting CO<sub>2</sub> 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. Natural CO<sub>2</sub> reservoirs demonstrate the long-term trapping of CO<sub>2</sub>.

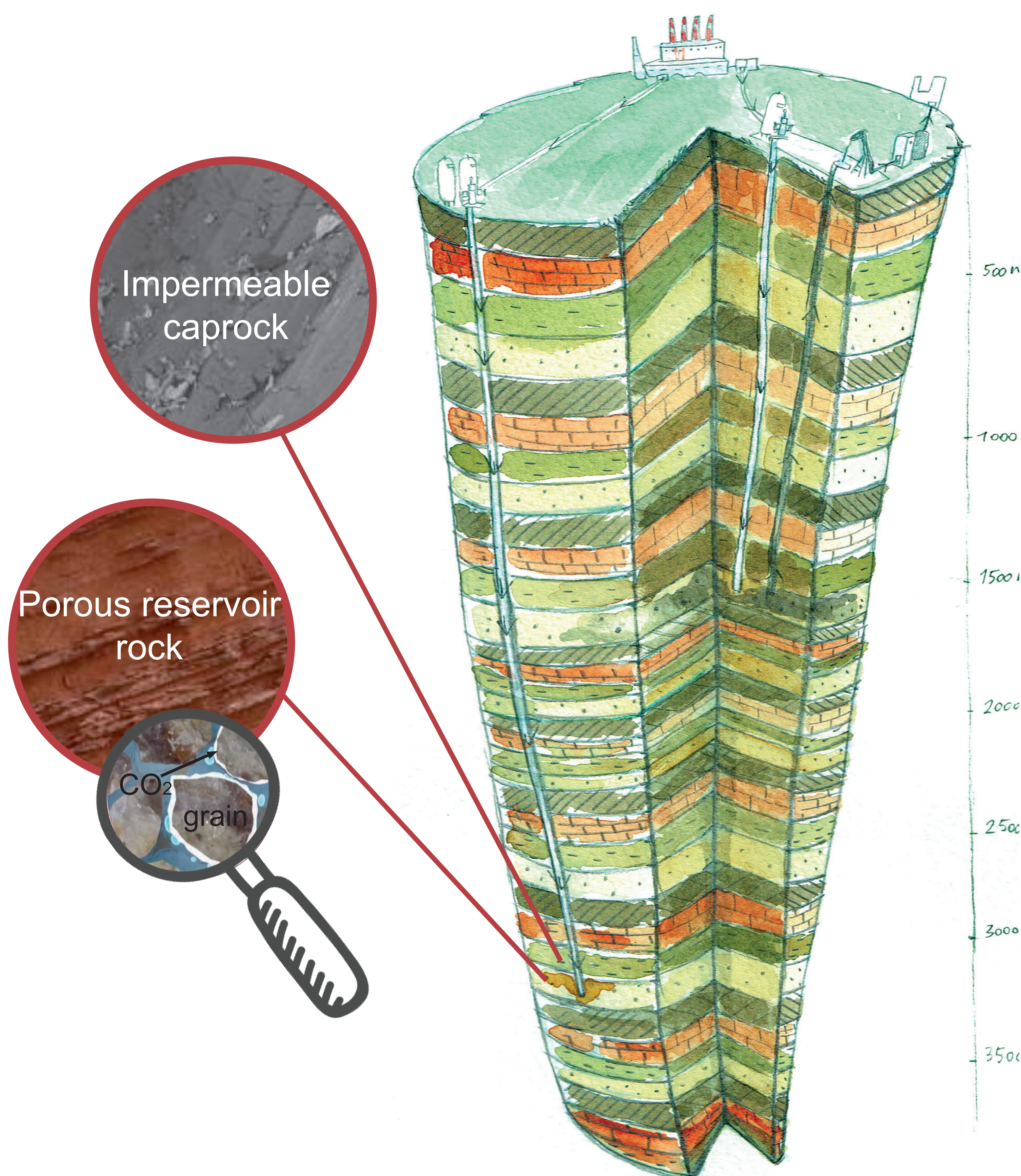


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