

WHAT IS CCS?

CARBON CAPTURE AND STORAGE

Carbon capture and storage (CCS), also referred to as carbon dioxide capture and sequestration, is an integrated suite of technologies that can prevent large quantities of the greenhouse gas carbon dioxide (CO₂) from being released into the atmosphere.

CO₂ is captured – typically from large industrial processes – before it is emitted into the atmosphere. Captured CO₂ is then transported to a carefully selected and secure storage site, where it is injected deep into a rock formation for permanent storage.

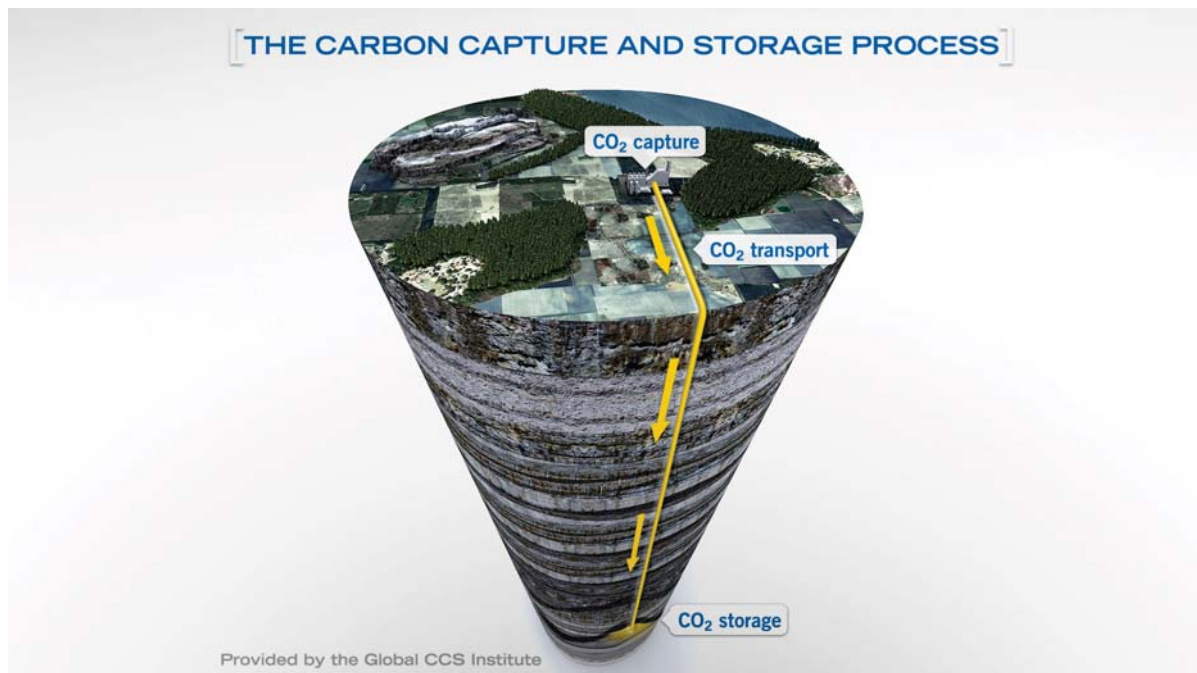
Because CCS can achieve significant emission reductions, it is considered a key option within the portfolio of approaches required to reduce emissions.

There are three major stages involved in this technology:

Capture – the separation of CO₂ from other gases produced at large industrial process facilities such as coal and natural gas power plants, steel mills and cement plants.

Transport – once separated, the CO₂ is compressed and transported, usually via pipelines, to a suitable site for geological storage.

Storage – CO₂ is injected into deep underground rock formations, often at depths of one kilometre or more.



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