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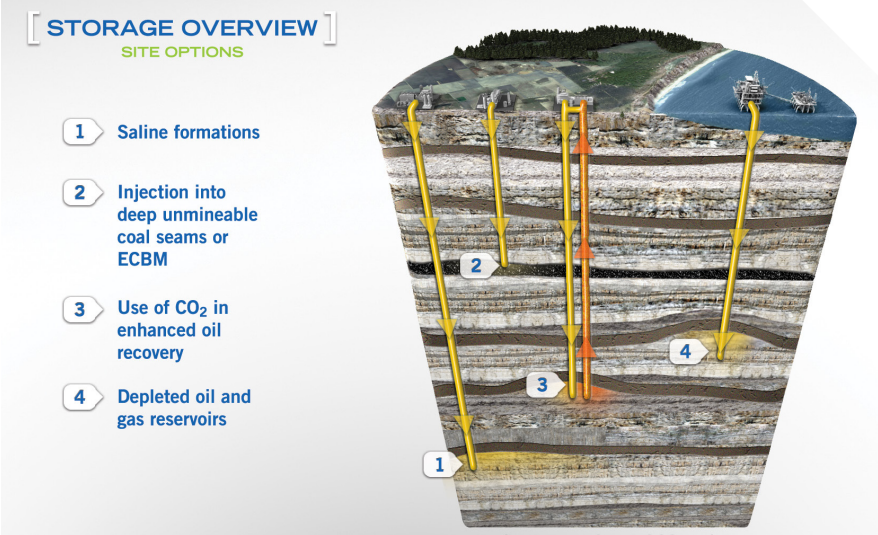

SECURE GEOLOGICAL STORAGE OF CO_2

Carbon dioxide (CO_2) is a naturally occurring greenhouse gas that is also produced by human activity. Permanently storing CO_2 emissions deep underground can help address climate change by keeping them out of the atmosphere.

Geological storage involves injecting CO_2 captured from industrial processes into rock formations deep underground, thereby permanently removing it from the atmosphere.

Typically, the following geologic characteristics are associated with effective storage sites:

- rock formations have enough millimetre-sized voids, or pores, to provide the capacity to store the CO_2
- pores in the rock are sufficiently connected, a feature called permeability, to accept the amount of CO_2 at the rate it is injected, allowing the CO_2 to move and spread out within the formation
- an extensive cap rock or barrier at the top of the formation to contain the CO_2 permanently.