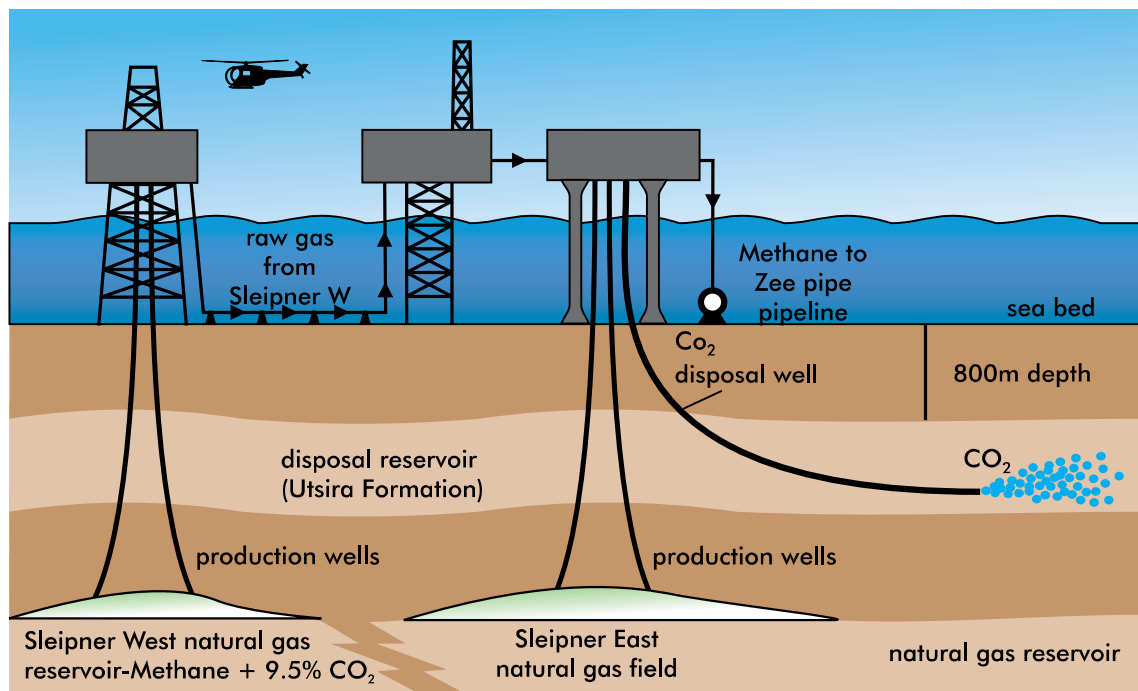


Offshore geological and ocean storage of CO₂ both involve capturing the gas from a stationary emissions source such as a power plant or other industrial facility and then transporting the highly compressed CO₂ offshore via a sub-sea pipeline or ocean tanker.

There is, however, a major difference between offshore geological sequestration and ocean sequestration in the way in which the CO₂ is stored.

Offshore geological storage involves the CO₂ being injected into a geological formation deep beneath the seabed where it will be stored for thousands of years, isolated from the ocean water.

In the case of ocean storage, the CO₂ is injected directly into the water column either at mid-depth (1500 to 3000 metres), where it dissolves in the ocean waters, or at greater depths (below 3000 metres), where it forms a deep CO₂ lake.



Offshore geological storage has been successfully demonstrated at Statoil's Sleipner field in the North Sea (about 250 km off the coast of Norway) since 1996. At Sleipner, CO₂ is separated from produced natural gas and stored in a deep saline formation about 1000 metres beneath the seabed.

No ocean sequestration demonstration projects as yet exist.