

Is there anything else we can do with the captured CO₂?

Opportunities to use captured CO₂ are very limited compared to the volume that is being produced and the potential for CO₂ storage. Current industrial demand for CO₂ is in general satisfied meaning there is limited scope for additional CO₂ to be taken up by these industries. CO₂ use, unlike CO₂ storage is in general not a CO₂ mitigation option.

Generally, there are three possibilities:

- i. Store the CO₂;
- ii. Use it as a value-added commodity; or
- iii. Convert CO₂ to methane, biomass, mineral carbonates, or other substances.

Some of the uses for commodity CO₂ result in a portion of the carbon dioxide being sequestered, which is an added benefit. A common example of this is enhanced oil recovery (EOR). In the United States, for example, oil companies currently inject more than 30 million tonnes of CO₂ per year in depleting oil formations to enhance the production of crude oil. A portion of this CO₂ remains underground.

A similar CO₂ use/storage application is the enhancement of methane production from coal seams that are too deep to be mined. Research for concepts for converting CO₂ to other chemicals, especially fuels, are underway.