



New Projects added to CO2RE Database: Details

Title	Status	Country	Operational Date	Industry	Capture Rate	Facility Storage Type	Facility Short Description
The ZEROS Project	In Construction	United States	2020s	Power Generation	1.5	Enhanced oil recovery	The ZEROS project is a proposed two-plant project in Texas United States designed to gasify and combust waste fuels in an oxyfuel-based process. This ensures high CO2 concentrations in flue gas suitable for capture and storage.
Prairie State Generating Station Carbon Capture	Advanced Development	United States	Mid 2020s	Various	6	Dedicated geological storage	This project seeks to establish a 50+ million tonne commercial geological storage hub in Illinois USA. Adjacent power plants such as Prairie State Generation (816 MWe coal-fired power plant 10 Mtpa CO ₂) which has been awarded a full-scale FEED study and regional ethanol plants are potential CO ₂ sources.
Mustang Station of Golden Spread Electric Cooperative Carbon Capture	Advanced Development	United States	Mid 2020s	Cement Production	1.5	In Evaluation	The University of Texas at Austin is conducting a Front-End Engineering and Design study for CO ₂ capture at the Mustang Station using Piperazine Advanced Stripper (PZAS) process. The Mustang Station is a 450 MWe natural gas-fired combine cycle power plant
San Juan Generating Station Carbon Capture	Advanced Development	United States	2023	Power Generation	6	Enhanced oil recovery and potential dedicated geological storage	Enchant Energy proposes to capture up to 6 million metric tonnes per annum CO ₂ from the SJGS Unit 1 (340 MW) and Unit 4 (507 MW). Captured CO ₂ will be used for enhanced oil recovery in the Permian Basin. Additional CO ₂ sequestration optionality in an EPA-certified Class VI injection well is under examination funded through a \$17.5 million DOE CarbonSAFE award. The SJGS retrofit project FEED study awarded by the US DOE is underway.
Plant Daniel Carbon Capture	Advanced Development	United States	Mid 2020s	Power Generation	1.8	Dedicated geological storage	A carbon capture plant retrofit Front-End Engineering and Design (FEED) study using the Southern Company subsidiary Mississippi Power's Plant Daniel existing natural gas-fired combined cycle power units as a basis is currently underway by Southern Company Services and Linde-BASF.
Gerald Gentleman Station Carbon Capture	Advanced Development	United States	Mid 2020s	Power Generation	3.8	In Evaluation	The project plans to capture up to 3.8 million tonnes per annum CO ₂ from the 700 MWe Gerald Gentleman Station Unit 2. The project is currently in Front-End Engineering and Design (FEED) study awarded by the US DOE.
Cal Capture	Advanced Development	United States	2024	Power Generation	1.4	Enhanced Oil Recover	California Resources Corporations Carbon Capture project is planned to capture CO ₂ from the 550 MWe natural gas combined cycle plant located in California United States with a total of 1.4 million tonnes per annum captured and stored. Electric Power Research Institute California Resources Corporation and Fluor are working together on a Front-End Engineering and Design (FEED) study based on Fluor's amine-based Econamine FG Plus process. The captured CO ₂ will be either stored or used for enhanced oil recovery in the nearby Elk Hills Oil Field.
Drax BECCS Project	Early Development	United Kingdom	2027	Power Generation	4	In Evaluation	The Drax BECCS Project aims to capture 4 million tonnes per annum from one (660 MW) of the biomass-fired power lines at the UK's biggest power station by 2027. CO ₂ will be transported by pipeline and stored in southern North Sea via dedicated geological storage. The Drax BECCS Project will be an anchor CCS project for the wider Zero Carbon Humber Cluster. Drax also plans to convert all four of its biomass units to BECCS by 2035 delivering 16 Mtpa of negative emissions.
LafargeHolcim Cement Carbon capture	Early Development	United States	Mid 2020s	Cement Production	0.725	Enhanced oil recovery	Svante LafargeHolcim Oxy Low Carbon Ventures and Total is conducting a study to assess the financial viability and design requirements of 0.725 million tonnes per annum CO ₂ capture facility at LafargeHolcim's cement plant in Colorado United States.
Velocys' Bayou Fuels Negative Emission Project	Early Development	United States	2024	Chemical Production	0.5	Dedicated geological storage	Oxy Low Carbon Ventures, LLC is planning to take, transport and store CO ₂ captured from the Velocys Inc's proposed Bayou Fuels biomass-to-fuels facility. When in operation in 2024, the plant will capture 0.3 to 0.5 million tonnes CO ₂ per annum while enabling the production of negative emission transportation fuels.