UNFCCC COP 29

Welcome to our COP 29 carbon capture and storage (CCS) information page. Please click on the active links for information

The <u>Gulf Coast Carbon Center (GCCC)</u>, partners with <u>IEA Greenhouse Gas Research & Development Programme (IEAGHG)</u>, <u>Carbon Capture & Storage Association (CCSA)</u>, and the <u>International CCS Knowledge Centre</u> to help circulate information about carbon capture and storage (CCS) at official side events and exhibits.

View the COP 29 agenda here.

COP 29 Special Events

- November 19, 2024, 15:00 -16:30, Official UNFCCC Side Event, "Is there any Climate Finance for Carbon Capture and Storage, Especially in Emerging Economies?" located in Room "SIDE EVENT 7, Blue Zone"
- Exhibit Booth 27 about Carbon Capture and Storage (CCS), November 18–21, 2024. The following information and links were shared at the COP 29 exhibit booth 27.

What is Carbon Capture and Storage (CCS)?

Carbon capture and storage (CCS), also known as Carbon Capture, Utilization and Storage (CCUS), is a low carbon technology that captures carbon dioxide (CO₂) emissions from manmade or anthropogenic sources (e.g., power generation to iron, steel, fertilizer, cement, and chemical manufacturing, etc.). CO₂ is then compressed, transported via pipeline or ship, and subsequently injected deep (0.8 to 3 kilometers) below the surface for permanent underground storage. This process prevents anthropogenic CO₂ from entering the atmosphere and safely stores CO₂ permanently underground. For local industries, CCS supports jobs and business investments by providing infrastructure to allow affective large-carbon emission reductions while also helping develop local infrastructure and resources.

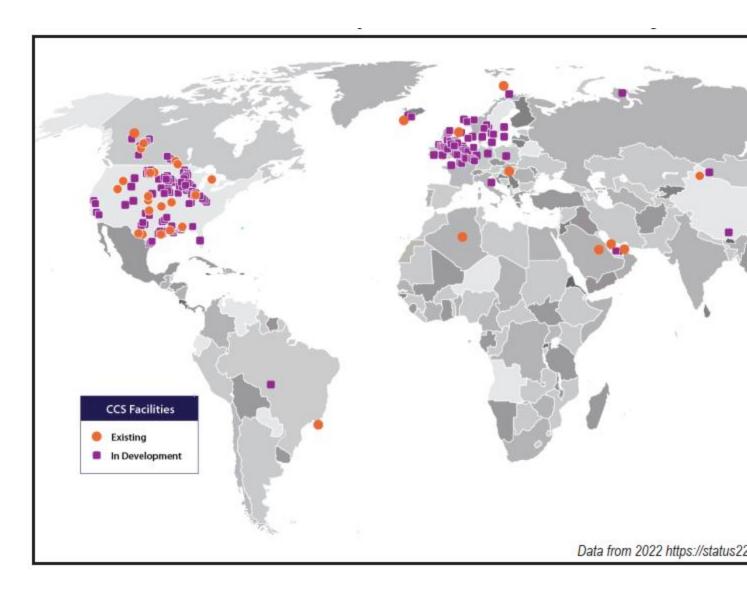
- <u>Learn</u> about CCS and what needs to happen to make drastic reduction in emissions long term by researchers at The University of Texas at Austin, Bureau of Economic Geology, Gulf Coast Carbon Center (1.5-minute BEG GCCC video)
- <u>Click here</u> to watch a movie about what we do after capturing large amounts of CO₂? How do we transport and store CO₂ underground? (~ 6-minute video from <u>roads2removal.org</u>)
- Watch how CCS is a way to mitigate the contribution of fossil fuel emissions by capturing and storing CO₂ (3-minute IEAGHG video)
- Explore how CCS works and the value of reducing emissions and achieving net zero carbon dioxide by 2050 across all industries within the U.K. (~ 3 min video from CCSA)
- Access presentations from the <u>International Workshop on Offshore Geologic CO₂</u>
 Storage knowledge with those who are interested in doing CCS, and to facilitate countries

- to identify their specific issues, challenges, and opportunities towards developing their national programs.
- <u>Subscribe</u> to the IEAGHG Newsletter to get the latest information on CCS

How does CCS happen?

- <u>Discover</u> how CCS works and the value of reducing emissions across all industries. How do we reach net zero by 2050? (*3-minute video from Carbon Capture & Storage Association*)
- The <u>United Nations Framework Convention on Climate Change (UNFCCC) Climate Technology Centre and Network (CTCN)</u> is a mechanism that facilitates training and support, and builds the capacity for developing countries in climate change mitigation and adaptation technologies. <u>Review</u> a paper describing the processes for application to the CTCN, how CTCN support stimulated CCS developments in Nigeria and Ghana, and the potential benefits for other developing countries.
- How do you conduct a national CO₂ Storage Assessment? Designed to help government bodies and policy makers with limited prior CCS experience find information, here is a guide that outlines the materials required and methodology to undertake initial national-scale storage assessments.
- Study an <u>example</u> of a stakeholder workshop, used by a small island developing state (SIDS) and how they began their CCS Journey. Local universities in Trinidad and Tobago held an international knowledge-sharing symposium on CCS for state, academic and private stakeholders to discuss national CCS development with technical support from international partners.
- <u>Tour</u> the Boundary Dam Capture Facility in Saskatchewan, Canada (9-minute CCS Knowledge Center video)
- Investigate a <u>case study</u>: Recommended pathway to deliver the UK's CCS goal of net zero emissions The CCSA's report "CCUS Delivery Plan Update 2023" includes updated information on CCS in the UK particularly the potential for CCS to unlock around £40 billion investment for the UK economy by 2030.
- <u>Survey CCS</u> activities undertaken by the IEAGHG. This Annual Review outlines the work undertaken and produced by the IEAGHG including key achievements, networks, technical reports, information papers and presentations made by members of staff at external meetings.

Where are CCS Projects today?



According the **Global CCS Institute**, as of July 2024, 50 operational projects are currently capturing 51 Megatones per annum (Mtpa). An additional 578 projects with the potential to store 365 Mtpa are currently in development. -2024 Global Status Report

Review the Global CCS Institute's Global Status of CCS 2024 – Executive Summary.

Educational Resources

- The next Greenhouse Gas Control Technologies Conference will be held in Perth, Australia.
 - The Greenhouse Gas Control Technologies (GHGT) Series is the world's foremost conference in the field of CCS. It provides an opportunity for researchers, industry professionals and policymakers to share their knowledge and

experience. Featuring over a hundred expert speakers from across the globe, GHGT gives you the opportunity to hear from thought leaders on a huge range of areas related to CCS. The conference covers topics such as Carbon Capture, Transportation, Storage, Utilization, Monitoring and more.

• Receive CCS Educational materials that are suitable for teachers (K-22) to help students explore CCS.

Previous COP Events & Activities

We are your CCS Information Providers

- <u>Gulf Coast Carbon Center</u>, located at the <u>Bureau of Economic Geology</u>, at <u>The University of Texas at Austin</u>
- IEAGHG
- Carbon Capture & Storage Association
- International CCS Knowledge Center











