

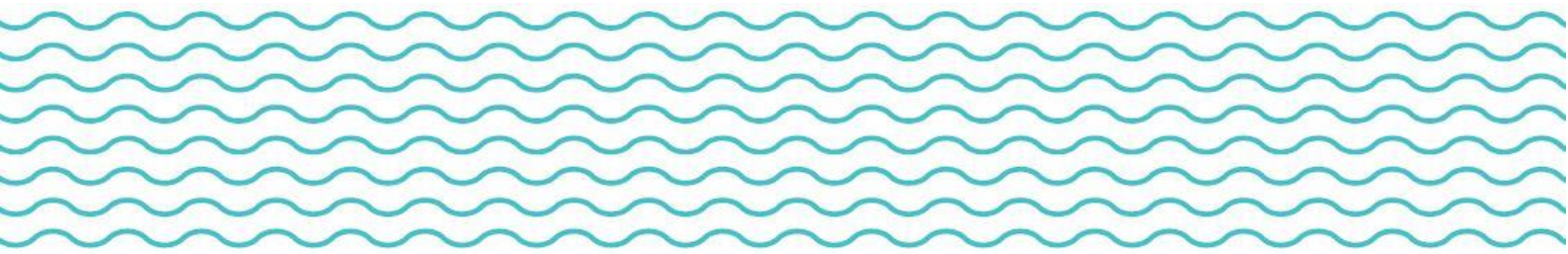


GLOBAL CCS  
INSTITUTE

# The Global CCS Institute at COP 28

**30 November – 12 December**

Dubai, United Arab Emirates



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## The Institute at COP 28

As an official observer of the UNFCCC, the Global CCS Institute will be on the ground in Dubai, United Arab Emirates, to attend the 28<sup>th</sup> session of the Conference of the Parties to the UNFCCC (COP 28).

COP 28 will be a crucial opportunity for global leaders to evaluate climate mitigating efforts that have been put in place to limit global warming whilst assessing ways to strengthen climate targets.

The Institute will closely follow climate negotiations and discussions relevant to carbon capture and storage technology, including the first-ever Global Stocktake, and engage with policymakers where appropriate. To heighten our engagement with stakeholders across the climate action spectrum, the Institute will host and take part in several events at COP related to CCS and carbon management.

Below are details related to our activities, along with key messages we aim to highlight at COP 28.

### Key Messages

#### **Paris climate targets cannot be reached without carbon capture and storage (CCS)**

- The role of carbon dioxide capture, removal and storage technologies as it relates to limiting global warming to 1.5°C cannot be understated, with its value further substantiated by the mitigation pathways illustrated by the Intergovernmental Panel on Climate Change (IPCC).
- The IPCC finds that all scenarios that limit warming to no more than 1.5°C deploy Carbon Dioxide Removal (CDR) technologies. Direct Air Carbon Capture and Storage (DACCS) removes CO<sub>2</sub> directly from the atmosphere, while Bioenergy with Carbon Capture and Storage (BECCS) captures CO<sub>2</sub> from bioenergy combustion.

#### **CCS is vital to reaching net-zero emissions.**

- Today, there are over 350 CCS facilities in various stages of development globally, with operating facilities having the capacity to capture and store 50 million tonnes of CO<sub>2</sub> per year.
- Despite the promising scale up of CCS projects in the pipeline – a staggering increase in the development pipeline of 102% over the last year alone – a continued acceleration is needed. By 2050, the number of projects will need to increase by 100-fold if we are to meet net zero emissions.
- According to the IEA's Net Zero Emissions 2050 scenario, around 1Gt of CO<sub>2</sub> emissions per year needs to be captured and stored by 2030.

#### **CCS is flexible technology that has been working safely and effectively for approximately 50 years.**

- Carbon capture and storage can be applied across a wide range of carbon intensive facilities, including cement, steel, chemical, energy production and more.

- CCS projects have been in operations since mid-1990s.
- Europe and North America lead the CCS charge, with many CCS networks taking off by Europe's North Sea – led by Norway, the UK, Netherlands and Denmark – and the United States developing projects nearby industrial pockets across the country.
- The development of CCS has also been supported in many other countries around the world, including Australia, Brazil, Canada, China, Japan, Indonesia, Nigeria, Saudi Arabia, South Africa, UAE.

**Policy instruments, greater public support and technological innovations will enhance CCS deployment.**

- CCS-specific policy and regulatory frameworks will heighten clarity and confidence for industry to deploy CCS projects.
- Supportive CCS mechanisms include emission certification and trading, legally enforced emission restraints, emission taxes, demand for zero or low carbon industrial products, government support in subsidies, tax credits, risk sharing.
- Current examples of policies that are supporting the rapid scale-up of CCS include America's 45Q tax credit, the EU Innovation Fund support scheme, the UK's emissions trading scheme and CCS business modes, the Netherland's Contract for difference.

[Global CCS Institute Led Events \(in chronological order\)](#)

**The Institute will be organising several events at COP 28** that will touch on a range of CCS related topics. Join us at the events listed below to hear experts from around the world discuss CCS financing opportunities, CCS in emerging economies, ongoing industry efforts to scale-up the technology and more.

[Tackling the Climate Challenge through Carbon Management Technology in Europe](#)

30 November | Blue Zone – Benelux Pavilion | 15:30 – 16:30

CCS is becoming more prominent EU-wide as 2030 climate targets approach and new targets for 2040 are developed to chart the next step in the path to the 2050 commitment of carbon neutrality. The European Commission is supporting the acceleration of CCS deployment with legislative and regulatory actions under the Fit for 55 Package, the Green Deal Industrial Plan and Sustainable Carbon Cycles. EU-wide policies such as:

- The EU CCS Directive
- The EU ETS
- The proposed target to develop geological storage with a capacity to store 50 million tonnes of CO<sub>2</sub> per year as of 2030 as outlined in the pending NZIA
- Funding support distributed as part of the EU Innovation Fund

Several European countries are leading the way. Notably, Norway – a CCS first mover – is developing CO<sub>2</sub> storage to support climate efforts domestically and across Europe. The Netherlands has been using a dedicated subsidy scheme SDE++ to support CCS. Belgium is the first European country to sign bilateral agreements for cross-border transport of CO<sub>2</sub> as it lacks suitable storage sites but needs CCS to achieve its climate goals. This session will discuss the progress made in Europe as it relates to CCS deployment.

**Speakers:**

- Ane Gjengedal, Government of Norway, Ministry of Petroleum and Energy
- Andrei Marcu, European Roundtable on Climate Change and Sustainable Transition
- Claude Loréa, Global Cement and Concrete Association
- Ellina Levina (moderator), Global CCS Institute

**Objective:** This event will highlight the policy instruments that are driving CCS success in Europe. CCS developments in Europe set examples for other countries considering CCS in their transition plans.

## Driving Emission Reductions in Heavy Emitting Sectors

### COP 28 Presidency side event

5 December | Green Zone – Women’s Pavilion | 10:00 – 11:00

Heavy emitting industries and sectors will need to significantly reduce their CO<sub>2</sub> emissions if net-zero targets are to be met. Globally, industrial players are looking to decarbonise their operations through a number of ways, including through carbon management technologies.

In countries around the world, carbon management will play a role in curbing emissions from cement, steel, chemical plants and more. Join us as we unpack how these technologies are helping to facilitate the just transition and hear about the ongoing opportunities tied to collaboration and knowledge sharing related to carbon management.

**Speakers:**

- Rahma Alshamsi, COP 28 Presidency
- Brad Crabtree, US Department of Energy, Office of Fossil Energy and Carbon Management
- Lee Beck, Clean Air Task Force
- Devika Wattal, Global Cement and Concrete Association

**Objective:** This event will call for the rapid decarbonisation of heavy emitting industry through the scale up of carbon management technologies and the enhancement of supportive policy mechanisms, whilst highlighting ongoing opportunities tied to collaboration and knowledge sharing.

## CCS Opportunities in China

5 December | Blue Zone – China Pavilion | 13:00 – 14:15

China continues to move forward with carbon capture, utilization, and storage (CCUS) projects to decarbonise its industrial operations. This side event is devoted to showcase China’s latest actions and advancements in CCUS and will be hosted by the Department of Climate Change of the Ministry of Ecology and Environment of China, co-organized by the Global CCS Institute, China’s CCUS Association, CNPC, SINOPEC, and Beijing Normal University.

**Objective:** The event aims to examine the state of CCUS in China as it contributes to addressing climate change, and to seek international collaboration.

## Financing Opportunities for CCS Climate Technology

6 December | Blue Zone – IETA Pavilion | 12:00 – 12:45

Creating a business case for CCS will be critical to ensuring the scale-up of the technology and reducing emissions from carbon intensive industries. Promisingly, new financial instruments and tools are being proposed and implemented to support industrial CCS projects. In the EU, grants for low-carbon technologies are leveraged. The EU emissions trading scheme (EU ETS), along with Carbon Contracts for Difference (CCfD) in the UK and the Netherlands, are mechanisms that will continue to drive the CCS scale up for years to come. In North America, tax credits are incentivising the private sector, lowering the costs to decarbonise their operations.

With demand for low-carbon products rising, and ESG taking priority in investment decisions, CCS cannot be discounted as a climate solution for carbon intensive yet needed industries, such as cement, steel, chemicals and others.

### Speakers:

- Alex Milward, UK Government, Department of Energy Transition and Net Zero
- Maris Densmore, ACR at Winrock International
- Julian Mylchreest, Bank of America

**Objective:** This event aims to highlight the importance of establishing financing mechanisms to drive the accelerated deployment of CCS. It will also showcase emerging CCS business models.

## Scaling up CCS in Emerging Economies

6 December | Blue Zone – IETA | 12:45 – 1:30

Momentum around carbon capture and storage as a climate solution is taking off globally, including in emerging economies. From granting mechanisms, to knowledge sharing and capacity building, emerging economies with booming industrial hubs are turning to CCS technology as a tool to support their climate action goals. Hosted by the Global CCS Institute, this event will feature the lens of CCS policy experts at the forefront.

### Speakers:

- Nathalia Webber, CCS Brasil
- Professor Jia LI, the Hong Kong University of Science and Technology
- Sadesh Sookraj, International Finance Corporation
- Paul Zakkour, Carbon Counts

**Objective:** This event aims to highlight that CCS, as a climate tool, has the capacity to be deployed globally – including in emerging economies – to render significant emission reductions. It will also identify the needs for knowledge sharing and capacity building.

## External Speaking Engagements at COP – Where You Can Find Us (in chronological order)

### Indonesia Pavilion

#### Blue Zone

Title: Harnessing Potential of Indonesia CCS Development for Carbon Removal Implementation Towards a Cleaner Future

Date: 2 December

Time: TBC

Speaker: Guloren Turan

### UAE Independent Climate Change Accelerators

#### Green Zone

Title: Net Zero Consortium (NKC) Report Launch

Date: 3 December

Time: 15:00 – 16:00

Speaker: Jarad Daniels

### Saudi Green Initiative

#### Green Zone

Title: Scaling Carbon Capture, Usage & Storage – Necessity and Feasibility

Date: 4 December

Time: 10:45 – 11:20

Speaker: Jarad Daniels

### Danish Pavilion

#### Blue Zone

Title: Carbon Capture and Storage: Enabling and Scaling up CCS-projects: What Regulatory, Technical, and Financial Solutions Will Take us to Project Execution?

Date: 5 December

Time: 16:30 – 17:30

Speaker: Guloren Turan

### Kingdom of Saudi Arabia Pavilion

#### Blue Zone

Title: CCUS in Action: The Role of Carbon Capture, Utilization, and Storage in Advancing Climate Solutions

Date: 5 December

Time: 11:00 – 11:50

Speaker: Jarad Daniels

### Oman Pavilion

#### Blue Zone

Title: Scaling up the Deployment of CCS Climate Solutions

Date: 5 December  
Time: 14:30 – 15:30  
Speaker: Mohammad Abu Zahra

## Gulf Corporation Council (GCC) Pavilion

### Blue Zone

Title: Role of Carbon Capture and Storage (CCS) to achieve a Net-Zero World  
Date: 6 December  
Time: 14:00 – 15:30  
Speaker: Mohammad Abu Zahra

## Global Cement and Concrete Association Pavilion

### Blue Zone

Title: Raising Global Ambition for Carbon Management: The Carbon Management Challenge  
Date: 6 December  
Time: 9:00 – 10:00  
Speaker: Jarad Daniels

## KAPSARC off-site side-event, in partnership with OIES, WEC, IEEJ

### Blue Zone

Title: High-emitting Sectors in the Energy Transition: Bridging Gaps in Implementation and Enablers  
Date: 6 December  
Time: 3:30 – 5:30  
Speaker: Ellina Levina

## Kingdom of Saudi Arabia Pavilion

### Blue Zone

*Event by the Clean Energy Ministerial CCUS Initiative*

Title: Carbon Management in the Gulf Region  
Date: 6 December  
Time: 15:30 – 16:20  
Speaker: Mohammad Abu Zahra

## Kingdom of Saudi Arabia Pavilion

### Blue Zone

Title: Gulf Region as a Carbon Management Powerhouse  
Date: 6 December  
Time: 15:30 – 16:20  
Speaker: Mohammad Abu Zahra

## GECF Pavilion

### Blue Zone

Title: CCUS: Technology, Policy and Finance  
Speaker:  
Date: 9 December  
Time: 10:00 – 11:30



Speaker: Mohammad Abu Zahra

## Malaysia Pavilion

Blue Zone

Scaling Up Low Carbon Technology Solutions

Date: 10 December

Time: 15:15 – 16:00

Speaker: Mohammad Abu Zahra

## Contact Us

Will you be at COP? Get in touch with our delegates in attendance:

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Have an inquiry about speaking engagements and events? Get in touch with our contacts below:

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For the latest version, please head to the Institute's [COP 28 event page here](#).