

# The Global CCS Institute at COP 29

11 November – 22 November

Baku, Azerbaijan

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#### The Institute at COP 29

As an official observer of the UNFCCC, the Global CCS Institute will be on the ground in Baku, Azerbaijan to attend the 29<sup>th</sup> session of the Conference of the Parties to the UNFCCC (COP 29).

COP 29 will be an opportunity for global leaders to evaluate 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 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.

#### Global CCS Institute Led Events

Institute events at COP 29 will cover a range of CCS-related topics, from financing, project development, CCS in emerging economies, policy and more. Concurrently, the Carbon Management Challenge (CMC) will also keenly host convenings, in which the Institute will act as the CMC's Secretariat.

Join us at the events below to hear experts from around the world share their insights.

#### Advancing CCUS in the Cement Sector

#### Blue Zone

Organised in collaboration with the Clean Air Task Force and the Global Cement and Concrete Association

13 November | 14:00 PM - 15:00 PM

**Location**: Global Cement and Concrete Association Pavilion

#### Speakers:

- Global Cement and Concrete association Paul Adeleke, Director of Strategy (MC)
- Global Cement and Concrete association Thomas Guillot, CEO Communications and Policy
- University of Texas, Austin Katherine Romanak, Research Scientist
- Government of Alberta Minister of the Environment and Protected Areas, Hon. Rebecca Schulz
- Heidelberg Dr. Katharina Beumelburg, Chief Sustainability & New Technologies Officer
- Global CCS Institute
- Thai Cement Manufacturing Association

## Financing Carbon Management Projects Blue Zone

14 November | 11:30 AM - 12:15 PM

**Location**: IETA Pavilion

#### Speakers:

- MUFG Bank Yukimi Shimura, Managing Director, Sustainable Business Division
- IETA Katie Sullivan, Managing Director
- Jean-Philippe Brisson, Partner and Global Chair Carbon Capture and Sequestration Working Group, Latham & Watkins
- Holcim Pavan Chilukuri, VP Global Head of CCUS
- Global CCS Institute Guloren Turan, Chief Impact Officer (moderator)

## Scaling Up CCS in the Global South Blue Zone

14 November | 12:15 PM - 1:00 PM

**Location**: IETA Pavilion

Speakers:

- International Finance Corporation Sadesh Sookraj
- IEAGHG Tim Dixon, Director and General Manager
- The Administrative Center for China's Agenda 21 Dr. Zhang Xian, Ministry of Science and Technology
- Nabil Al Bulushi CDT, Petroleum Development Oman
- Global CCS Institute Ellina Levina, Head of Public Affairs

## Ramping Up Industrial Decarbonisation Through CCS Deployment Blue Zone

Organised in collaboration with the Clean Air Task Force

15 November | 9:30 AM - 10:30 AM

Location: Global Cement and Concrete Association Pavilion

#### Speakers:

- United States Department of Energy (TBD)
- Global CCS Institute Xiaoliang Yan, China Country Manager, Global CCS Institute
- Holcim Pavan Chilukuri, Vice President/ Group Head of CCUS

## Carbon Management Challenge: Scaling Carbon Management to Gigatons Blue Zone

16 November | 12:10 PM - 13:00 PM

Saudi Arabia Pavilion

#### Green and Low Carbon Technologies in China

Blue Zone

18 November | 13:30 PM - 15:00 PM

China Pavilion

## CCS Developments at COP 29: A Debrief by the Carbon Management Challenge

Blue Zone

19 November | 1:30 PM - 2:30 PM

European Investment Bank-Benelux Pavilion

Moderator: Noora Al Amer, CMC Coordinator

#### Carbon Management Challenge Ministerial (invite-only)

Blue Zone

15 November

<u>Please contact the CMC Secretariat for any inquires</u>

# External Speaking Engagements at COP — Where You Can Find Us

#### **Greece Pavilion**

Blue Zone

Title: CCUS: Mitigating Climate Change and Decarbonizing Industry Through CCS

Date: 14 November

Time: 14:00 PM - 14:45 PM

Institute Speaker: Jarad Daniels, CEO, Global CCS Institute

#### Oman Pavilion

Blue Zone

Title: CCS Progress in Oman (tbc)

Date: 14 November

Time: 10:30 AM - 11:30 AM

Institute Speaker: Mohammad Abu Zahra, Head of MEA Region, Global CCS Institute

#### Global Carbon Council Pavilion (tbc)

Blue Zone

Title: Carbon Markets for Wider & Deeper Implementation of Carbon Capture, Storage &

Utilization (CCUS) Projects

Date: 15 November

Time: 15:00 PM - 16:30 PM

Institute Speaker: Mohammad Abu Zahra, Head of MEA Region, Global CCS Institute

#### Morocco Pavilion

Blue Zone

Title: Advancing the Power-to-X Economy: The Role of Carbon Capture and Synthetic Fuels

in the Energy Transition Date: 15 November

Time: 9:30 AM - 10:30 AM

Institute Speaker: Mohammad Abu Zahra, Head of MEA Region, Global CCS Institute

#### **UNFCCC Global Innovation Hub Pavilion**

Blue Zone

Join this UNFCCC-led CCS event on CCS opportunities and challenges

Date: 16 November

Time: 15:00 PM - 16:00 PM

Institute Speaker: Mohammad Abu Zahra, Head of MEA Region, Global CCS Institute

#### **Key Messages**

The Global CCS Institute aims to advocate for the scale-up of carbon capture and storage whilst at COP 29, championing the following key messages:

Many countries around the world have committed to achieving net-zero carbon dioxide

 $(CO_2)$  emissions by mid-century. Carbon management technologies can help the world rise to the urgency of this challenge due to its ability to reduce  $CO_2$  emissions at their source through Carbon Capture and Storage technologies and to address  $CO_2$  already in the atmosphere through carbon dioxide removal technologies.

- Across the various pathways depicted in the IPCC Special Report on 1.5°C, between 350 and 1,200 gigatonnes (Gt) of CO<sub>2</sub> per year will need to be captured and stored this century.
- It is important to underline that deployment of CCS is necessary in addition to other
  mitigation measures, not in place of them. Thus, a combination of solutions, each
  responsible for its share, has been identified to bring global emissions to levels consistent
  with climate targets. Therefore, delivering the shares attributed to CCS and CDR is critically
  important.
- As of June 2024, the CCS projects in operation can capture and store more than 50 megatonnes (Mt) of CO<sub>2</sub> per year. The deployment rate of CCS must increase significantly to contribute its assigned gigatonnes per annum share to meeting carbon neutrality by 2050 while preserving jobs in hard to abate industries and creating new jobs in the developing CCS industry.
- CDR technologies, such as Direct Air Capture and Storage (DACCS) and Bioenergy with CCS (BECCS), will be needed to address residual emissions in certain sectors where there are technical limits to decarbonization strategies. According to the IPCC, all pathways that limit global warming to 2°C and lower include the use of CDR (both technology and nature-based solutions) in addition to the implementation of emissions reductions. CDR is not a silver bullet, but it can uniquely fill the gap by addressing historic emissions and residual emissions in hard-to-abate industries and sectors.
- Technology-based CDR with geological storage provides extremely robust CO<sub>2</sub> removal. The amount of CO<sub>2</sub> stored can be directly measured rather than estimated, providing high levels of certainty about the quantity or emissions abatement delivered.

## Policy, regulatory and financial support is crucial to accelerate deployment of CCS and CDR technologies. Carbon markets can enable CCS and CDR scale up.

- The business case for CCS depends upon regulations that price or limit CO<sub>2</sub> emissions, policies that create direct financial incentives for capturing and storing CO<sub>2</sub>, or a combination of both.
- 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 the US'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.
- Greater inclusion of CCS in country specific NDCs can help drive MDB support.
- Such funds, like the CCS trust fund, would help finance activities such as writing legislation,
   CO<sub>2</sub> storage resource assessments, techno-economic modelling, feasibility studies, and small-scale demonstration projects.
- There is a need for international carbon markets to enable CCS and CDR scale up. National compliance and voluntary carbon markets (like EU ETS, UK ETS, US voluntary CDR challenge) provide some incentives for CCS and CDR projects and set examples of robust regulatory frameworks that are necessary to ensure safe and permanent storage of CO<sub>2</sub>. Agreement on Article 6 of the Paris Agreement is needed to create the foundation

of a global carbon market. It would also allow countries to collaborate on setting harmonized rules and methodologies as well as sharing risks.

# Collaboration is essential to drive deployment of carbon management technologies and ensure that CCS and CDR can play their vital roles in the global transition towards carbon neutrality.

- Strong and sustained policy support by leading nations has launched the CCS industry.
- Collaboration is now essential to drive the industry's growth by applying the collective knowledge and capabilities of governments, the private sector and researchers to remove barriers, decrease costs and support investment.
- Governments continue to play a critical role in supporting carbon management research and development, driving investment, and addressing legal and regulatory issues. Collaboration on CCS is taking many forms.
- Private sector companies are entering into public-private partnerships with governments to advance CCS projects.
- Governments are also collaborating with each other and with researchers to create regulatory and policy frameworks, and private sector companies are collaborating with each other to develop CCS value chains.
- Bilateral collaboration between governments on transboundary movement of CO<sub>2</sub> is an essential component of the CCS industry development.

## Multilateral collaborative initiatives facilitate knowledge sharing and drive common ambition.

- There are a number of collaborative platforms around the world including the Clean Energy Ministerial, Mission Innovation, the Carbon Management Challenge, the IEAGHG, and the Asia CCUS Network that are proving incredibly useful in driving ambition and sharing knowledge.
- The Carbon Management Challenge is a global initiative to address the gap between existing carbon management deployment levels and those identified in the scientific analyses as necessary. To that end, the goal of the CMC is to see 1 Gtpa of carbon management capacity realised by 2030.
- 22 countries and the European Commission have joined the CMC to date, and are working across areas including policy development, project financing, and effective communication with communities to support awareness and project development.
- The CMC will play a proactive role in addressing key barriers to CCS deployment in developing economies around the world.

#### Contact Us

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

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#### Have a broader question about the Institute's events? Email us below:

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This document was published on 08/11/2024.

Head over to www.globalccsinstitute.com/news-media/events for forthcoming updates.