

# CCS, ARTICLE 6 & BEYOND

GLOBAL PERSPECTIVES

NOORA ALAMER  
SENIOR INTERNATIONAL CLIMATE CHANGE POLICY ADVISOR



GLOBAL CCS  
INSTITUTE

---

# TOPICS

1. Landscape and potential impact of Article 6 and on CCS
2. CCS in COP 27
3. Issues and expected measures towards generating CCS credits

---

## ABOUT US

# Accelerating the deployment of CCS for a net-zero emissions future.

### WHO WE ARE

International CCS think tank with offices around the world.

Over 175 members across governments, global corporations, private companies, research bodies and NGOs, all committed to a net-zero future.

### WHAT WE DO

Fact-based influential advocacy, catalytic thought leadership, authoritative knowledge sharing.



# ARTICLE 6 LANDSCAPE AND CCS

- Article 6 of the Paris Agreement allows countries to pursue voluntary cooperation to achieve emission reduction targets set out in their NDCs

## ARTICLE 6.2

Allows countries to trade emission reductions and removals called Internationally Transferred Mitigation Outcomes (ITMOs) through unilateral, bilateral or multilateral agreements.

Currently active with bilateral agreements implemented under this mechanism announced in COP 27:

- ✓ Ghana and Switzerland – climate smart rice project
- ✓ Vanuatu and Switzerland – Lelepa Island renewable energy micro-grid

## ARTICLE 6.4

Creates a global carbon market overseen by the Article 6.4 Supervisory Body (SB) that generates and trades Certified Emission Reductions (CERs).

Replaces the Clean Development Mechanism (CDM) of the Kyoto Protocol, which CCS became eligible for inclusion provided that a set of CCS-specific modalities and procedures to ensure environmental integrity were met.

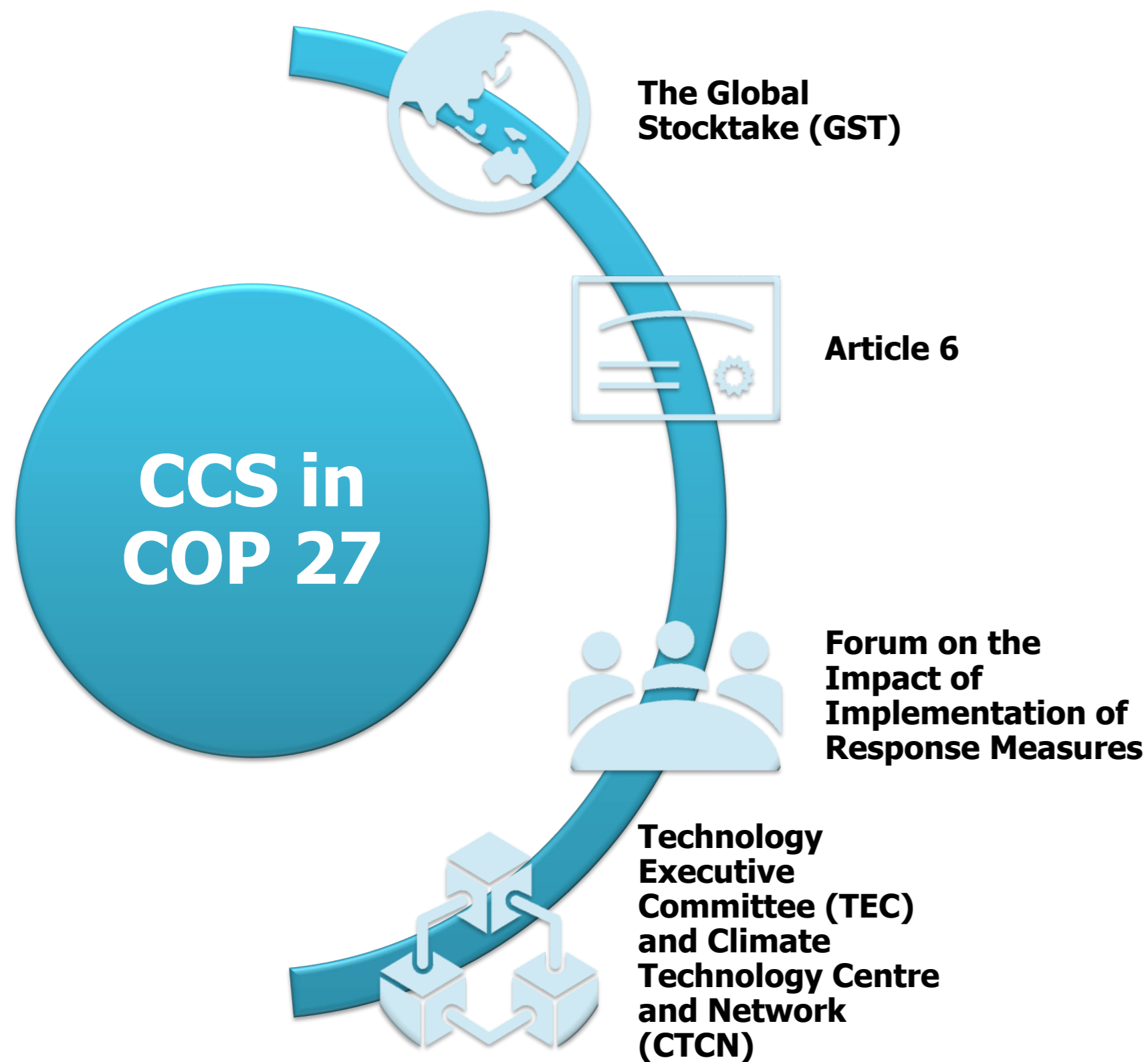
The Article 6.4 Supervisory Body (SB) is currently developing a methodology for carbon removals, which includes engineered removals i.e. Direct Air Capture and Storage (DACCS) and Bio-energy Carbon Capture and Storage (BECCS).

## What's coming up in 2023?

A workshop organized before 30 April 2023, with a technical paper on the issues identified in the workshop to be prepared

Parties and observer organization are invited to submit their views on activities involving removals by 15<sup>th</sup> March 2023

# WHERE DOES CCS FIT IN CURRENT CLIMATE NEGOTIATIONS?



The GST process facilitates discussions that **can clarify the role of CCS in energy and industry system transformations in countries** and highlights the need for holistic and integrated approaches that consider the needs of all stakeholders. The GST outcomes document is scheduled for COP 28.

**Generating ITMOs from CCS projects under Article 6.2 are up to the cooperating countries' discretion.** ITMOs generated through bilateral agreements under Article 6.2 can potentially be used in the 6.4 mechanism as well, subject to further discussion. The SB's **carbon removals methodology can impact how CO<sub>2</sub> storage is handled in the 6.4 mechanism**, i.e. permanence and liability of carbon reversals.

Response measures are defined as the positive and negative effects from the implementation of mitigation policies and programmes undertaken by Parties to combat climate change. **The adopted workplan of the forum encourages Parties to explore CCUS** to maximize the positive and minimize the negative impacts, including through developing regulatory frameworks for CCUS and transport and strengthening policy support.

Together the TEC and CTCN mobilize a global network to deliver technical assistance and capacity building at the request of developing countries. The newly-launched 2023-2027 work plan includes language that the TEC will **"dig deeper into hard-to-abate industrial sectors, in particular the steel and cement industries"**.

---

# ISSUES AND EXPECTED MEASURES TOWARDS GENERATING CCS CREDITS

- **Monitoring requirements to address leakage risks for geological storage**
  - The [IPCC GHG Inventory Guideline 2006 \(Vol 2 Energy, Capture 5: CO2 Transport, Injection and Geological Storage\)](#) includes monitoring methods and leakage risk assessment.
  - E.g: The [EU CCS Directive](#) includes monitoring requirements, storage closure and post-closure obligations with compensatory safeguards in EU legislation in case of leakage by surrendering a corresponding amount of EU ETS allowances ([Rickels et al., 2021](#)).
- **Concerns over the environmental and social impacts of CCS**
  - Scientific research<sup>1</sup> in this area can be useful to address concerns raised.
- **External pressure from environmental NGOs as well as Parties not comfortable with CCS**
  - Increased advocacy and collaboration on CCS with NGOs, governments and civil society.

<sup>1</sup> Examples of research on the environmental and social impacts of CCS include: [Zapp et al., 2012](#); [Corsten et al., 2013](#); [Cuéller-Franca et al., 2015](#); [Markewitz et al., 2009](#); [Singh et al., 2011](#); [Kim et al., 2016](#); [Karayannis et al., 2014](#) and [Goulding et al., 2017](#)

---

# PROGRESS NEEDED FOR CCS IN ARTICLE 6

## 1. Methodologies for BECCS and DACS projects

- The European Commission recently proposed a [Certification of carbon removals](#) to help reach net zero emissions.
- Q: Will CCS and BECCS projects be valued differently and are there different liabilities?

## 2. Clarification on transfer of CDM modalities and procedures for CCS

- Q: How will they be carried over to Article 6.4 and then Article 6.2 respectively?
- Q: How will the transfer between Article 6.2 ITMOs and Article 6.4 CERs happen?

## 3. Clarification on the price of CCS-generated credits

- Q: Can/should CCS credits be sold at a premium given their potential to store CO<sub>2</sub> for ten thousand years\* or longer?

\*According to the [IPCC AR6 WGIII](#)

# THANK YOU

