

# From COP26 towards COP27

2022 CMUG Integration & Climate Change Initiative Colocation  
ESRIN, Frascati

27 October 2022

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## Glasgow Climate Pact adopted to accelerate action on climate this decade:

- Recognize the importance of the **best available science** for effective climate action and policymaking
- Urges developed countries to **‘at least double’ adaptation finance** from 2019 levels by 2025
- **‘Phase-down’ of coal** and **‘phase-out’ of inefficient fossil fuels**
- Consider further actions to **reduce non-CO<sub>2</sub> GHGs**, including methane by 2030
- Emphasizes the importance of **“protecting, conserving and restoring nature and ecosystems”** to achieve the Paris Agreement temperature goal
- Further operationalisation of the **Santiago Network** (Loss and Damage) and provision of funds for operation and for the provision of technical assistance
- Completion of the Paris Agreement Work Programme - **“Paris Rulebook”**
- **Common time frames for NDCs** agreed at 5 year intervals from 2025
- **Transparency rules** agreed - biennial reporting by all parties







Several plurilateral deals made during the COP26 World Leaders Summit.

These fall outside of the Glasgow Climate Pact and inc:

## ■ Glasgow Leaders' Declaration on Forests and Land Use

- 137-country deal to halt and reverse forest loss and land degradation by 2030
- covers 91% of the world's forest area
- Supported by all ESA member states and the European Union

## ■ Global Methane Pledge

- pledge to cut emissions by 30% over 2020-30 & move to 'best available inventory methodologies' to quantify emissions
- 109 countries, representing 46% of global methane emissions
- Supported by most ESA member states and the EU

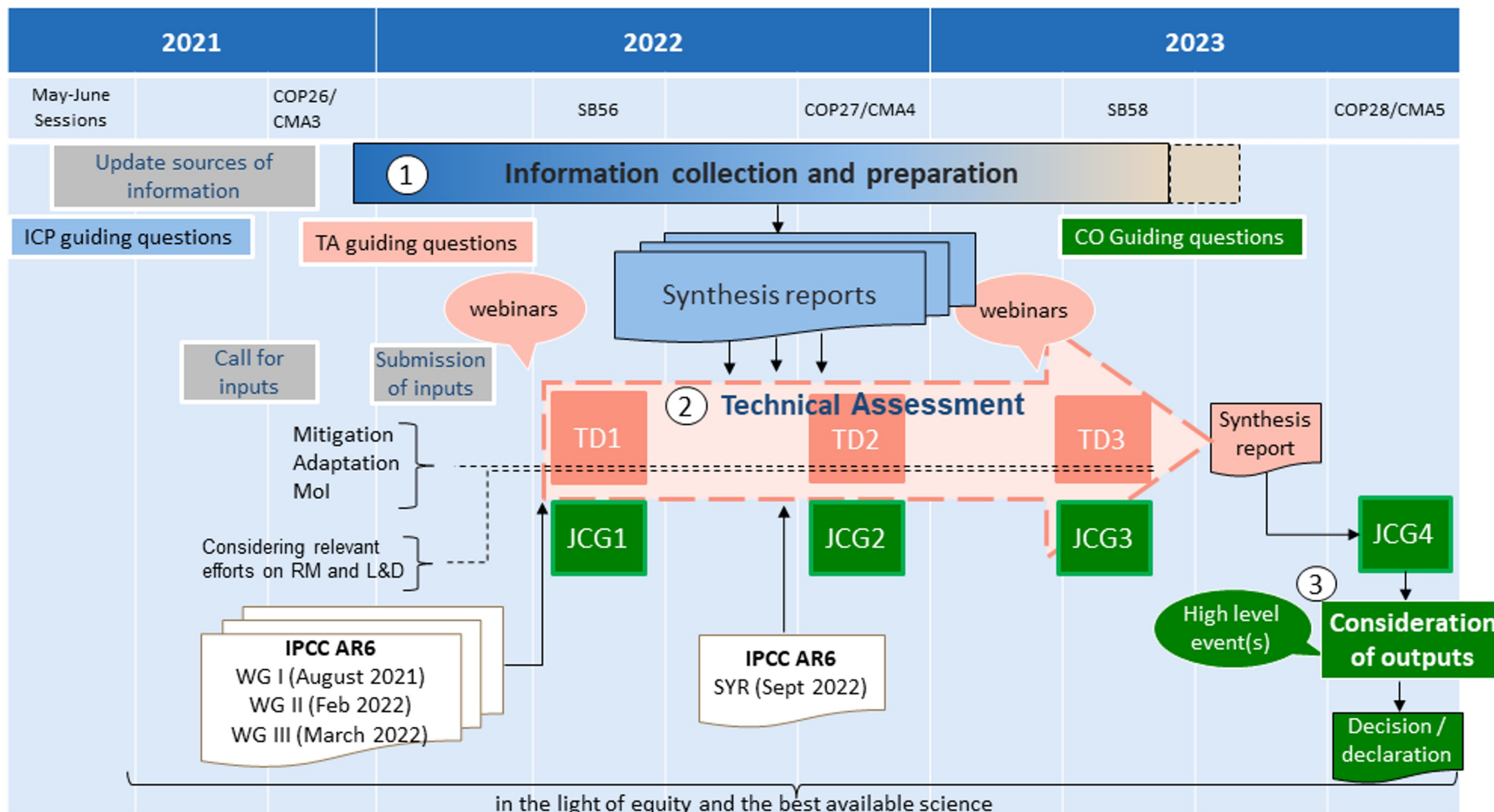
## ■ Other deals inc ...

Transitioning away from coal | phasing out oil and gas production | ending finance for fossil fuels overseas | greening the international financial system





# Timeline of the first Global Stocktake



# The First Global Stocktake – Call for Inputs



**Title:** Call for inputs from Parties and observer States, UN Agencies and other international organizations and non-Party Stakeholders and observer Organizations, to the first global stocktake:

**77 Submissions:** 8 from Parties, 4 from UN Agencies, 6 from IGOs, 59 from NGOs

<i>Admitted intergovernmental organizations (IGOs)</i>			<i>Submission date</i>	<i>Thematic Areas</i>
International Energy Agency (IEA)	<a href="#">IEA_The First Global Stocktake</a>	English	09/03/2022	Adaptation,Mitigation,Finance,Mea of implementation
Organisation for Economic Co-operation and Development (OECD) on behalf of Organisation for Economic Co-operation and Development - OECD	<a href="#">2022.02-OECD-Inputs-to-the-Global-Stocktake</a>	English	07/03/2022	Finance
European Space Agency (ESA) on behalf of the Systematic Observation Community, represented by national and international research centers, universities, meteorological organizations, space agencies and intergovernmental and United Nations organizations.	<a href="#">SO-in-GST-2022-final</a>	English	02/03/2022	Adaptation,Mitigation,Finance,Mea of implementation,Capacity building,Technology,Loss and damage,Science
International Transport Forum, Organisation for Economic Co-operation and Development	<a href="#">ITF Submission to the First Global Stocktake</a>	English	01/03/2022	Mitigation



# Structure & Contributors

- **Executive Summary & Introduction**
- **The Global Climate Observing System (GCOS)**
- **Mitigation** – Systematic Observations Supporting Atmospheric greenhouse gas emission monitoring and improved Inventories for AFOLU
- **Adaptation** – Systematic Observations to Improve Resilience to the Adverse Impacts of climate change
- **Means of Implementation** - Systematic Observations supporting Finance, Technology Transfer & Capacity Building
- **Cross-cutting Issues** - Systematic Observations to Support Reporting and Best Practices Across Thematic Areas, including Loss and Damage

## Main Contributors

- David Crisp (NASA/JPL-retired)
- Maxx Dilley (WMO)
- Sara Venturini (GEO)
- Anthony Rea (WMO/GCOS)
- Frank Martin Seifert (ESA)
- Carlo Buontempo (ECMWF)
- Mark Dowell (EC/JRC)
- Osamu Ochiai (JAXA)
- María José Sanz Sánchez (BC3)
- Jürg Luterbacher (WMO)
- Ian Jarvis (GEOGLAM) ...

<https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202203012343---SO-in-GST-2022-final.pdf>

## Steps towards implementation of the Paris Agreement

- Parties have made progress in several technical areas
  - scaling up **mitigation ambition** and implementation
  - **building adaptation** to the inevitable impacts of climate change e.g. more frequent and extreme weather events, Loss and Damage
- The first technical dialogue of the **Global Stocktake** took place
- **Science** has been a central focus with the earlier release of AR6 WG II and WG III reports, AR6 Synthesis Report due for release in late 2022 or early 2023.
- Preparation of major political decisions, notably on **finance for Loss and Damage**, to be taken at COP27

❖ **Brought together the AFOLU Roadmap Team and the Terrestrial Observation Panel for Climate (TOPC) of GCOS.**

❖ **Objectives:**

- make a start on defining how society's needs for information related to AFOLU and its reporting can be expected to evolve in the coming years
- consider the policy needs and assumed AFOLU information needs in the 2035 timeframe on the assumption that this foundation can inspire and drive the generation of the CEOS AFOLU Roadmap

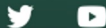
❖ **Structured along the lines of our AFOLU thematic expert teams:**

- **Forests & Biomass, Agriculture, OLU (mangroves, wetlands..)**
- **And the dimensions of global assessments and syntheses; national climate policy and actions; GHG inventories**

❖ **Other CEOS activities: Strategy for GST, GHG Roadmap**



<https://4thcarbonfromspace.esa.int/>



📅 25-28 OCTOBER 2022 📍 HYBRID

# 4TH CARBON FROM SPACE WORKSHOP

Characterising the land component of the Carbon Cycle and its connection with the ocean and atmosphere

REGISTER



**In parallel here in ESRIN**

## Climate Implementation Summit

### Egyptian presidency structured COP27 action agenda with a focus on implementation:

- aiming at mobilizing collective efforts for **ambitious emission reductions** from different sectors,
- enhanced **transformative adaptation agenda** on the ground,
- enabling flows of **appropriate finance** and
- **delivering** on the ground **on time and at scale**.

<p>09 Nov <b>Finance Day</b></p> <p>Finance is the cornerstone for implementing climate actions and scaling up ambition and hence it has been at the heart of the UNFCCC process and the Paris Agreement negotiations. The Glasgow outcomes also reiterated the centrality of finance as a catalyst for progress on all aspects of the global climate agenda and many Parties demonstrated the political will to</p>	<p>10 Nov <b>Science Day</b></p> <p>2022 witnesses several landmark science reports from IPCC, UNEP, and other institutions. Ocean science as well as outcomes from Oceans conferences including the 3rd UN Oceans conference are gaining relevance and linkages to the global climate agenda are evident. The science related to the UNCCD and UNCBD, together with Stockholm+50 are also closely relevant and integrated</p>	<p>10 Nov <b>Youth &amp; Future Generations Day</b></p> <p>Ensuring that the voice of Youth and Future Generations is heard loud and clear is one of the objectives of the CoP27 Presidency. Having heard the priorities and concerns of Youth representatives over the past few months, it has been decided to hold a stand-alone day to engage Youth and ensure that their perspectives are taken on board and reflected across all areas</p>	<p>11 Nov <b>Decarbonization Day</b></p> <p>Since the adoption of the Paris Agreement and all the way to Glasgow in 2021, several energy intensive sectors and companies have come forward with plans and policies and actions aiming to reduce their carbon footprints and to gradually move towards decarbonization. Technologies are emerging as potential solutions to reduce carbon in the</p>
<p>12 Nov <b>Adaptation &amp; Agriculture Day</b></p> <p>Adaptation and Resilience are of crucial importance to all parties and in particular developing countries. IPCC reports including the latest working group II report highlighted the devastating impacts endured by many countries across the world, and pointed to the fact that we are not on track to deal with current climate impacts nor are we prepared for the extreme weather events</p>	<p>14 Nov <b>Gender Day</b></p> <p>The role of women in dealing with all aspects of the climate change challenge is central, crucial and indispensable. Women continue to bear a disproportionate burden from the adverse impacts of climate change, and despite some progress having been made over recent years, the gender perspective needs further work to be fully integrated into the processes of</p>	<p>14 Nov <b>Water Day</b></p> <p>Water is the source of life and livelihoods. Climate impacts on water and the linkages to wider, cross cutting impacts on development and livelihoods are well documented and substantiated by credible scientific reports and analyses including most recently by the IPCC and numerous other institutions. Discussions at the Water Day will cover all issues related to sustainable water</p>	<p>15 Nov <b>Ace &amp; Civil Society Day</b></p> <p>Climate action requires engagement with, and contributions from all stakeholders. Needless to say, Civil Society is an indispensable partner in the global effort to combat climate change. With this in mind CoP27 will hold a dedicated day to engage Civil Society and to ensure their views and perspectives are integrated in a meaningful manner. Participants will</p>
<p>15 Nov <b>Energy Day</b></p> <p>The Energy Day would deal with all aspects of energy and climate change, including renewable energy and energy transformation, with a specific focus on just transition in the energy sector, and Green hydrogen as a potential energy source for the future. It would also include energy efficiency and ways to manage the envisaged global just transition in energy</p>	<p>16 Nov <b>Biodiversity Day</b></p> <p>The day would deal with nature and ecosystem-based solutions. It would also allow the discussion about the impacts of climate change on biodiversity and the means to mobilize the global actions towards the challenges to halt biodiversity loss and to reduce the impacts of climate change and pollution. The discussions would also include the impacts of climate</p>	<p>17 Nov <b>Solutions Day</b></p> <p>Possible solutions for the broad array of climate change challenges range from the holistic, cross cutting solutions such as greening of national budgets, or sustainable cities, multilevel action and sustainable transport, to sectoral solutions like waste management, alternatives to plastic and green building. More specific solutions emanating from private sector and start-ups include</p>	<p></p> <p><b>COP27 Presidency Vision (THEMATIC DAYS)</b></p> <p>06   18 November 2022 Sharm El Sheikh, Egypt</p> <p>Download PDF</p>



## EO related:

- Recent **IPCC AR6 reports**: WG I, WG II, WG III and three Special Reports
- New **GCOS Implementation Plan**
- **CEOS Statement** at SBSTA-57
- **Earth Information Day** on 9 November
  - Dialogue session:
    - Updates on the **State of the Climate** and the **Global Climate Observing System**
    - Panel on **Earth Observations for Mitigation** and
    - Panel on **Earth Observations for Adaptation and Early Warning Systems**
  - Poster session
- Second technical dialogue of the **Global Stocktake**
- Many EO related **side events**, e.g. ESA lead “Forests in Africa”, and participation of CCI related scientists in events on REDD+, GHG, Cryosphere, ...