2020 CEOS Strategic Implementation Team Technical Workshop
4.1 and 4.2: Carbon and Biomass

Supporting the UNFCCC and the Global Stocktake
Observations - the foundation for commitments and decision making on climate change

Observations
- GCOS
- CEOS
- WMO

Research
- WCRP
- International Science Council

Assessment
- IPCC

Policy
- Parties
- SBSTA / SBI
- COP/ CMA/ CMP

Article 4.1(g) Commitments

Article 5
Research and systematic observation

SBSTA Research and systematic observation agenda item
The systematic observation community will contribute to the GST – indirectly, through Parties, constituted bodies, IPCC, UN Agencies. Can it contribute directly?
The “ambition” cycle of the Paris Agreement

**Communicate individual efforts (forward looking)**
- **NDCs**: 2020, 2025, 2030 …
- **Adaptation Communication**: …
- Long-term low GHG development strategies: 2020

**Take action to implement Paris Agreement**
- At national and international level
  - Limit global warming to < +2/1.5°C
  - Enhance adaptive capacity, resilience, & low-emissions development
  - Finance compatible with resilient development and low emissions

**Take stock of implementation of the Paris Agreement and assess collective progress towards its purpose and long-term global goals**
- **Global stocktake (GST)** (2023, 2028, 2033)
  - Comprehensive: mitigation, adaptation and means of implementation and support

**Report individual efforts (backward looking)**
- Biennial transparency reports (BTRs): 2024, every 2 years after
- Includes information necessary to track progress made in implementing and achieving NDCs

Informs Parties in:
- Updating NDCs in a nationally determined manner (progression clause)
- Enhancing international cooperation for climate action
→ **Key to catalyze progress**

The global stocktake – an anchor for the ambition cycle to bring it all together
35. The SBSTA welcomed the work of the scientific community, Parties, climate service providers, and space agencies in collecting, managing and openly sharing data and processed data products for addressing climate change and current and future climate risk.

The SBSTA urged Parties and relevant organizations to continue to establish and support open data sharing, and the development of openly available, relevant and accessible data products, particularly for supporting and monitoring adaptation and mitigation.

40. Recalling the conclusions of SBSTA 47, the SBSTA welcomed the continued work of the Joint CEOS/CGMS Working Group on Climate in response to the GCOS implementation plan.

It recognized the systems approach of the constellation architecture, which combines satellite, in-situ and modelling components for emission estimates, for monitoring CO₂ and CH₄ from space.

It encouraged meaningful engagement among the space agencies, modellers and Parties in the implementation and use of the system.
A common framework with embedded flexibilities for developing countries that need it in the light of their capacities.

National communications (NCs), Biennial update reports (BUR), and REDD+ Forest Reference Emission Level and/or Forest Reference Level

Biennial Transparency Report

National communications, GHG Inventories, and Biennial Reports (BRs)

Technical Expert Review

Technical assessment of BURs and Technical assessment of REDD+ FREL/FRL

Facilitative Multilateral Consideration of Progress

Reviews of national communications, GHG inventories, and Biennial reports

Facilitative Sharing of Views

Multilateral Assessment

Reporting requirements are changing and synergizing under the Paris Agreement

NB 2019 refinement to IPCC guidelines not (yet) acknowledged by Parties as the resource to use for inventories
Standing reporting requirements on top of the Enhanced Transparency Framework

Annual GHG inventory by developed countries (in BTR-years, may be stand-alone or part of BTR)

National communications

Parties may submit their national communication and BTR as a single report, in accordance with the ETF MPGs for information also covered by the national communication reporting guidelines.

In addition, Parties shall include in the report:

a) Supplemental chapters on research and systematic observation and on education, training and public awareness, in accordance with NC guidelines;

b) For those Parties that have not reported adaptation in BTRs, an additional chapter on adaptation, in accordance with the NC relevant guidelines.

REDD+ Forest Reference Emission Level and/or Forest Reference Level may be submitted; and the technical annex on REDD+ for those Parties seeking results-based payments (as annex to the BTR)
Global stocktake - components

1. **Information collection and preparation**  
   2021/2022 - 2023
   - SBSTA/SBI joint contact group
   - Sources of input (inc. synthesis reports)

2. **Technical assessment**  
   2022 - 2023
   - Technical dialogue guided by 2 co-facilitators
   - Consider IPCC assessments
   - Separate SBSTA-IPCC special events

3. **Consideration of outputs**  
   2023
   - identify opportunities for enhancing efforts, challenges, good practices, and political messages
   - HL events to communicate messages

SB Chairs were invited to provide guiding questions for each of the 3 stages above

**Decision for GST modalities: Decision 19/CMA.1**  
[https://unfccc.int/documents/193408](https://unfccc.int/documents/193408)

In para 15 – After each GST – COP can refine logistical and procedural elements
Global stocktake – thematic areas

<table>
<thead>
<tr>
<th>Mitigation</th>
<th>Adaptation</th>
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<tbody>
<tr>
<td>• Overall effect of NDCs</td>
<td>• State of adaptation efforts, support, experiences and priorities</td>
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<td>• State of GHG emissions and removals and mitigation efforts undertaken by Parties</td>
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<th>Finance flows and means of Implementation and support</th>
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<tr>
<td>• Finance flows and financial support</td>
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<tr>
<td>• Technology</td>
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<td>• Capacity-Building</td>
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<th>Efforts on:</th>
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<td>• Social and economic consequences of response measures (under mitigation)</td>
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<td>• Adverting, minimizing and addressing loss and damage (under adaptation?)</td>
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<th>Inputs on equity</th>
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<td>• Fairness consideration including equity as communicated by Parties in their NDCs</td>
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GST has a thematic approach
What are the modalities of the GST and the timeline?

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<tr>
<th>2021</th>
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<td>COP26/CMA3</td>
<td>SB54</td>
<td>COP27/CMA4</td>
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### Preparatory work

- **SBSTA**: Update info sources
- **SB Chairs**: Develop guiding questions
- **Constituted Bodies/Secretariat**:
  - Prepare synthesis reports
    - CBs x9
    - Secretariat x4
  - Organize webinar (methodologies + assumptions)
  - Participate in technical dialogue
  - Support development of guiding questions

### Information collection and preparation

- Guiding questions

### Technical Assessment

1. **TD1**: Mitigation
2. **TD2**: Adaptation
3. **TD3**: Integration

- **JCG1**: IPCC AR6 WG I (Jul 2021)
- **JCG2**: IPCC AR6 WG II (early 2022)
- **JCG3**: IPCC AR6 WG III (early 2022)
- **JCG4**: Synthesis report SYR (2023)

### High level event(s)

- Webinars
- Synthesis reports + addenda
- Consideration of outputs
Contribution of EO community to assess collective progress under the first GST

Approach:

1. **Ad-hoc coordination group on systematic observation and collective progress**
   to better enable support by the EO community for Parties and the GST
   (supported by the UNFCCC secretariat) – *first meeting held Aug 2020*

2. **Possible activities**
   Support at global level to the GST AND at country-level

3. **Synthesis report** – EO community provide a consolidated contribution to the GST
   Can be produced in 3 parts corresponding to themes and guiding questions for the 3 technical dialogues

Preliminary scope of contribution:

1. Develop possible **guiding questions** (information collection, technical assessment, consideration of outputs; where are we? where we need to be? how to get there?)

2. **Aggregate information and identify indicators of progress and baselines**
   focus on the outcomes in terms of mitigation and adaptation
   (e.g. outcomes of supporting Parties to reduce uncertainties in GHG inventories, identify mitigation opportunities, and using climate services to adapt to climate change)

1. Identify **information gaps and good practices** and lessons learned

CEOS can contribute to the GST indirectly AND directly
Way forward – Pledge and review approach

**CEOS can support Party reporting** - including for
  Methodological support
  GHG inventories – emissions estimates
  IPCC methodology
  Review process / Refine data
  Including as reviewers
  Support developing countries

**CEOS can support the Global Stocktake**
  On Party-level to improve accuracy / detail
  Provide advice to Constituted Bodies
  Collaborate on synthesis report at global level (GST 2023 …)

**CEOS can support the needed integrated systems approach for MRV and GST**
  CO₂ and CH₄
  Other atmospheric GHGs
  AFOLU/ Biomass
  …

Systems approach to support at national and international level
Thank you

jpost@unfccc.int