

**WMO OMM**

World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
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Ref.: 16221/2023-1.8.1

Our ref.: 16221/2023/I/GGGW

27 July 2023

Annex: 1

Subject: Update and request for contributions: The WMO-Coordinated Global Greenhouse Gas Watch and the joint Study Group on WMO Greenhouse Gas Monitoring

Action required: To contribute financially and/or other via in-kind resources to the newly established GGGW Trust Fund

Dear Sir/Madam,

I am pleased to announce that the Nineteenth World Meteorological Congress (Cg-19) which was held from 22 May to 2 June 2023, endorsed the concept of the ground-breaking Global Greenhouse Gas Watch (GGGW – formerly the Global Greenhouse Monitoring Infrastructure) through [Resolution 5 \(3.2\(2\)/1\) \(Cg-19\)](#) - Global Greenhouse Gas Watch. In doing so, Congress recognized the growing societal importance of greenhouse gas monitoring in support of improving our scientific understanding of the Earth System, and the urgent need to strengthen the scientific underpinning of mitigation actions taken by the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.

GGGW aims to take advantage of the unique position and experience of WMO to have the organization internationally coordinate top-down monitoring of greenhouse gas fluxes to support the provision of actionable information to UNFCCC Parties and other stakeholders. This exciting step forward will also complement bottom-up estimation done by national and local jurisdictions reporting on greenhouse gas emissions via downscaling.

Additionally, information that GGGW provides will improve the robustness of voluntary and regulatory carbon markets, supporting the valuation of tradeable assets and the verification of the impact of offsets.

Implementation of the Congress decision on GGGW will be led by the existing joint Study Group on WMO Greenhouse Gas Monitoring between the Commission for Observation, Infrastructure and Information Systems (INFCOM), the Commission for Weather, Climate, Water and Related Environmental Services and Applications (SERCOM), and the Research Board – commonly referred to as SG-GHG.

I am pleased to enclose, for your information, the draft revised Terms of Reference for SG-GHG, reflecting its altered mandate (See [Annex](#)).

Some seed funding GGGW was provided by Cg-19. However, to enable the timely development of GGGW over the 2024–2027 budget period, Congress additionally requested the WMO Secretary-General, in collaboration with Members, to mobilize extrabudgetary contributions ([Resolution 3 \(3.1\(2\)/1\) \(Cg-19\)](#) - Maximum expenditure for the nineteenth financial period (2024–2027)).

Therefore, I would like to ask all Members with the capacity to do so to contribute financially and/or via other in-kind resources to the newly established GGGW Trust Fund. Your

To: Permanent Representatives of Members with WMO

cc: Hydrological Advisers

resources will support the important work to draft and socialize an implementation plan in time to be presented next summer to the Executive Council at its seventy-eighth session (EC-78). Your contributions will also be critical for rapid progress on implementation activities from 2024 onward.

Further information about GGGW can be found in the [GGGW brochure](#), the [GGGW website](#), and also attached to this letter. The Director of the GGGW, Lars Peter Riishojgaard (Lriishojgaard@wmo.int) and his team stand ready to respond to any questions or suggestions you may have.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Zhang', with a stylized flourish at the end.

Dr Wenjian Zhang
for the Secretary-General

JOINT STUDY GROUP ON WMO GREENHOUSE GAS MONITORING

UPDATED TERMS OF REFERENCE

Draft, July 11, 2023

Ref.: 16221/2023-1.8.1

1. **Mandate**

In May 2023 the Nineteenth World Meteorological Congress adopted [Resolution 5 \(Cg-19\)](#) - GGGW, which:

Requests INFCOM, SERCOM and the RB, **via the joint Study Group**, to further develop the concept through a detailed implementation plan, building on existing capabilities and ongoing activities under the Global Atmosphere Watch (GAW), including the Integrated Global Greenhouse Gas Information System (IG3IS), and other relevant international frameworks, and to bring back the draft plan to the Executive Council for its review and approval.

The role of the Joint Study Group on Greenhouse Gas Monitoring (SG-GHG) is to oversee and coordinate development of the implementation plan for the GGGW on the basis of the concept adopted by the nineteenth Congress and reflecting on eight elements that have to be included in the plan.

2. **Reporting arrangements**

The Study Group will present the interim results of its work to INFCOM, SERCOM and the Research Board and seek their feedback and/or endorsements. The ultimate aim is to present an implementation plan to the seventy-eighth session of the Executive Council for its deliberation and approval.

3. **Secretariat support**

The Secretariat will arrange any necessary meetings and conference calls, provide drafting of documents, record decisions and actions items, and track issues and actions as needed.

4. **Modalities of work**

Most of the work will be conducted by email and videoconference, with the possibility of holding physical meetings when deemed appropriate by the Chair and if resources are available.

5. **Tasks**

- (a) Oversee and guide the development of the implementation plan for the GGGW based on the concept presented to the Nineteenth World Meteorological Congress, with emphasis on the following points:
 - Break down the concept into concrete implementation tasks and define their order of priority
 - Develop the timeline for the concrete tasks and establish needs for resource allocation at the national and international level
 - Develop Key Performance Indicators that would allow Members to monitor progress with the implementation of the plan

- Review and advise on the revision of applicable Technical Regulations for the WMO Integrated Global Observing System (WIGOS), the WMO Information System (WIS) and the WMO Integrated Processing and Prediction System (WIPPS) and identify additional provisions required in order to accommodate the integration of GGGW into the regulatory framework, engage with relevant elements of the WMO governance structure in this development
 - Provide advice to the Secretariat on ongoing internationally coordinated activities and their implementing bodies that are relevant to the implementation of GGGW to build a set of joint actions with these bodies, including through the collaboration agreements
 - Secure continued support for the GGGW development in the broader greenhouse gas monitoring community via engagement in existing activities and coordination mechanisms
- (b) Present an early version of the draft plan at INFCOM-3, SERCOM-3 and RB in spring 2024 for their feedback and preliminary endorsement;
- (c) Provide a draft plan to EC-78 in June 2024;
- (d) Take every opportunity to further socialize and seek input to the development of this plan, e.g. via scientific conferences, IPCC meetings, UNFCCC Workshops, COP28, IOC meetings, WMO Climate Policy Advisers.

6. Membership

The joint Study Group should be chaired by an INFCOM designated lead and is expected to consist of up to 20 members, representing:

- Infrastructure Commission (in particular SC-ON, SC-ESMP, SC-IMT)
- Services Commission (in particular SC-CLI)
- Research Board (in particular GAW (including IG3IS), WCRP, WWRP)
- GCOS
- GOOS
- CEOS
- CGMS
- GEO
- IPCC TFI

All WMO Regions should be represented.

In addition to the representation listed above, the Executive Council may wish to appoint (a) focal point(s) as members. Furthermore, given the high level of interest in this topic it is likely that some WMO Members may wish to nominate their own representatives as additional members. Such requests may in principle be accommodated but should be discussed on an ad hoc basis between the co-chairs of the group and the respective member.