

## 54<sup>th</sup> meeting of the United Nations Statistical Commission

# Virtual side event on quarterly greenhouse gas emission estimates

3 February 2023, 9:00 – 10:30 (New York time)

[\(Click here to join\)](#), no registration needed)

Event organiser: Eurostat, statistical office of the European Union

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### Concept note

In 2021, Eurostat, OECD and IMF developed a methodology to produce quarterly greenhouse gas emissions based on air emission accounts according to the System of environmental-economic accounting (SEEA). Existing annual data are supplemented with modelling and a set of predictor variables. This work resulted in publication of quarterly estimates by [Eurostat](#) (for European Union countries and an EU aggregate), [IMF](#) (worldwide estimates and regional aggregates) and [OECD](#) (aggregated total for OECD countries).

The estimates allow for a short-term analysis of how the economy adapts in the recent quarters and can allow distinguishing factors that influence the volume of the emissions. These estimates are suitable for comparisons with GDP, employment, investments, policy instruments, etc. The new estimates improve substantially the timeliness, e.g. Eurostat releases the quarterly data 4 ½ months after the end of the reference quarter. Users welcomed the quarterly estimates, as timeliness gets closer to standards of macro-economic and social information. The new data also allowed showing the catch-up developments after the COVID lock-down from a climate perspective. Furthermore, the increased frequency of data releases has enhanced the visibility of SEEA information for climate action policies.

This side event will raise awareness in the international statistical community about those new data, provide an overview of the methodologies available and share experiences from dissemination practices. The event will consist of 3 presentations and a panel discussion sharing experiences on developing quarterly greenhouse gas estimates and the ways of communicating and using the estimates. The duration of the event is 90 minutes.

The quarterly greenhouse gas estimates are produced with a statistical model, also commonly used in quarterly national accounts. It is based on international guidelines such as IMF's Quarterly National Accounts Manual (2017 Edition). The basic methodological principle is to temporally disaggregate the annual time series into quarterly values and to extrapolate for those quarters for which annual data are not available yet. Both steps are performed with auxiliary information from sub-annual 'predictor' variables ('indicators') suited to approximate the quarterly behaviour of the 'target' variable (i.e. the greenhouse gases emissions). 'Predictor' variables are e.g. monthly energy statistics, short-term production

volume indices, or quarterly national accounts. The tools that have been developed can be shared. In the European Union, countries report annual data annual air emission accounts based on SEEA to Eurostat, and Eurostat produces quarterly estimates benchmarked to the annual country data. Furthermore, a few European Union countries (such as Sweden and the Netherlands) produce their own quarterly greenhouse gas emissions estimates and transmit those data to Eurostat, who incorporates them into its own quarterly estimates. This procedure is a good example of cooperation between national statistical authorities and international organisations.

### **Objectives of this side event:**

- Raise awareness about SEEA greenhouse estimates and quarterly data;
- Share national and international experiences about estimating and disseminating quarterly greenhouse gas emissions; discuss ideas to further develop methodologies and communication;
- Generate country interest to produce quarterly estimates, allowing for better international and regional comparison, benchmarking and learning from each other;
- Provide an overview of the methodologies readily available for statisticians to use; inform and assist countries interested in producing their own estimates.

## **Agenda**

**[\(Click here to join, no registration needed\)](#)**

1. Introduction (5 minutes approx.) – Eurostat
2. Three presentations, including a short Q&A<sup>1</sup> (about 15 minutes each):
  - a. Introduction to quarterly greenhouse gas emission estimates, political needs (Data gap initiative, task team, etc.) – IMF
  - b. Brief overview of the estimation model – OECD
  - c. Country practice – Sweden
3. Panel discussion (30-40 minutes), including international agencies (IMF, OECD Eurostat) and country experiences (United Kingdom, the Netherlands) – moderated by Eurostat<sup>1</sup>

The link will get open 30 minutes before the event. When joining, please enter your name as ‘country- person name’. Participants are invited to ask questions and comments through the meeting chat, rather than taking the floor.

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<sup>1</sup> Event participants are welcome to ask questions through the Webex chat

Webex meeting link:

<https://ecconf.webex.com/ecconf/j.php?MTID=mbcd71a06898f12d1f509e00b7afc1177>

Meeting number:

2741 319 7151

Meeting password:

MPp62S3JMN\*

Join from a video or application

Dial 27413197151@ecconf.webex.com

You can also dial 62.109.219.4 and enter your meeting number.

Meeting password for video system

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Join by phone

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Access code: 27413197151

Global call-in numbers

<https://ecconf.webex.com/ecconf/globalcallin.php?MTID=m2c70854374cd0851cb65c45f>

19c79aac

Meeting password for audio

67762735