



Supporting city scale GHG inventories opportunities and challenges.

Date: Friday 26 May 2023, 13:30-16:30 (CEST)

To RSVP register here

The event will be livestreamed in the following languages: English, Spanish, and Portuguese.

Agenda

- 13:30-13:40 Introduction from ICLEI: Maryke van Staden, Director of ICLEI's carbon*n* Climate Center (ICLEI)
- 13:40-13:50 Introduction from CoCO2: Dr. Richard Engelen, Deputy Director, Copernicus Atmosphere Monitoring Service, Project Coordinator of CoCO2, European Centre for Medium-Range Weather Forecasts (ECMWF)
- 13:50-14:10 City presentation: Rovana Bortolini, Director of Sustainability Policies and Projects at the Secretariat for the Environment, Urbanism and Sustainability Porto Alegre, Brazil
- 14:10-14:30 Using satellites at the city-scale: Dr. Frédéric Chevallier, Research scientist at Laboratoire des Sciences du Climat et de l'Environnement (LSCE)

Using satellite data and atmosphere models at increasing spatial resolution, the inverse modelling community is now addressing emissions from individual cities or facilities. This presentation will demonstrate how the CO2M constellation of CO_2 imagers which will allow regular and extensive observations of most emission clusters over the globe.

14:30-14:50 ICOS Cities: Dr. Lukas Emmenegger, Head of Laboratory for Air Pollution / Environmental Technology (EMPA)

ICOS Cities evaluates measurement approaches for the observation of greenhouse gas emissions in densely populated urban areas. The project supports the European Green Deal and develops tools and services for cities in support of their local climate action plans.

14:50-15:05 Short break - refresh your water jug / coffee/tea mug





15:05-15:25 High resolution emission inventories: Dr. Philippe Ciais, Research scientist at Laboratoire des Sciences du Climat et de l'Environnement (LSCE)

Deep learning-based approaches using remote sensing, socioeconomic surveys and building features can infer daily CO₂ emissions down to building and street level, demonstrated for 12 cities in South Africa, Egypt and Turkey, as part of a collaboration between LSCE and the World Bank.

15:25-15:45 Decision Support Blueprint: Dr. Roxana Petrescu, Research scientist at Vrije Universiteit Amsterdam (VUA) & Dr. Glen Peters, Research Director at Center for International Climate Research (CICERO)

The rich data and analysis building on observation systems will need a suite of tools to be accessible to decision makers. Here we outline a blueprint to develop a Decision Support System, with a focus on encouraging feedback.

- 15:45-16:30 Discussion with Audience (all above speakers as experts with audience)
 - What information do users need to support city-scale policy discussions?
 - How diverse are the city-scale user requirements or are there potential data products that fit all?
 - What sort of tools can the Copernicus CO2MVS deliver based on CoCO2 and other projects?
 - How to translate results into outcomes?
 - How to take the next step?