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ECMWF



**CO₂
Human
Emissions**

CHE – AFOLU

Introduction to CHE workshop on
«Agriculture, Forestry & Other Land Use»
(AFOLU)

Richard Engelen & Gianpaolo Balsamo

25.11.2020 CHE project workshop on AFOLU

CHE project (2017 - 2020) – Month 38 of 39 😊

Aim:

Build European monitoring capacity for anthropogenic CO₂ emissions

How:

CO₂ emission estimation system driven by Earth observations (remote sensing and in situ) combined with enhanced modelling system

Why:

To support the Paris Climate Agreement and its implementation



Project Duration:

39 month (38 ✓)

Project Funding:

3.75 M€ (1.25 M€/year)

Consortium Numbers

22 partners Institutes

Work Content Numbers

7 work-packages:

5-Science development,

1-International liaison,

1-Management & Coms

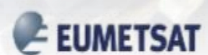
7 Milestones (6

✓)

45 Deliverables (35 ✓)

344.25 Person Month

(Eq 8.8 FTE)



CoCO2 project (2021 – 2023) approved 😊

Aim:

Consolidate a Copernicus CO₂ pre-operational prototype for the 1st Global Stock Take (GST-1)

How:

CO₂ emission estimation system driven by Earth observations (remote sensing and in situ) combined with modelling to build an information products portfolio

Why:

To support the Paris Agreement in its operational implementation phase



Project Duration:

36 month

Project Funding:

9.00 M€ (3.00 M€/year)

Consortium Numbers

25 partners Institutes

Work Content Numbers

9 work-packages:

- 4-Science development,
- 1-Prototype integration,
- 1-Observations & Nat. link,
- 1-Information Products,
- 1-Coordination & Outreach
- 1-Ethics

25 Milestones

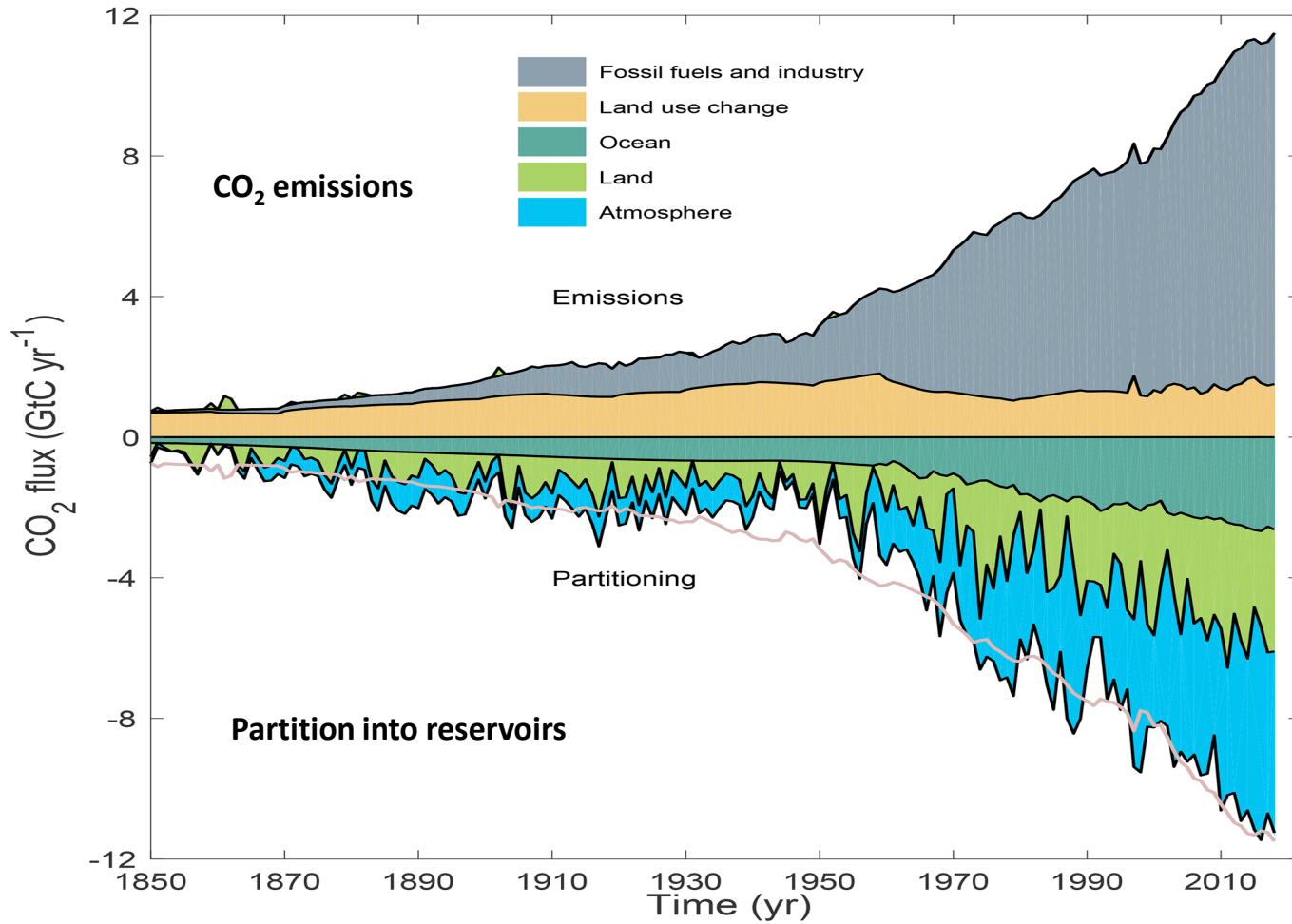
67 Deliverables

920 Person Month

(Eq 25.5 FTE)



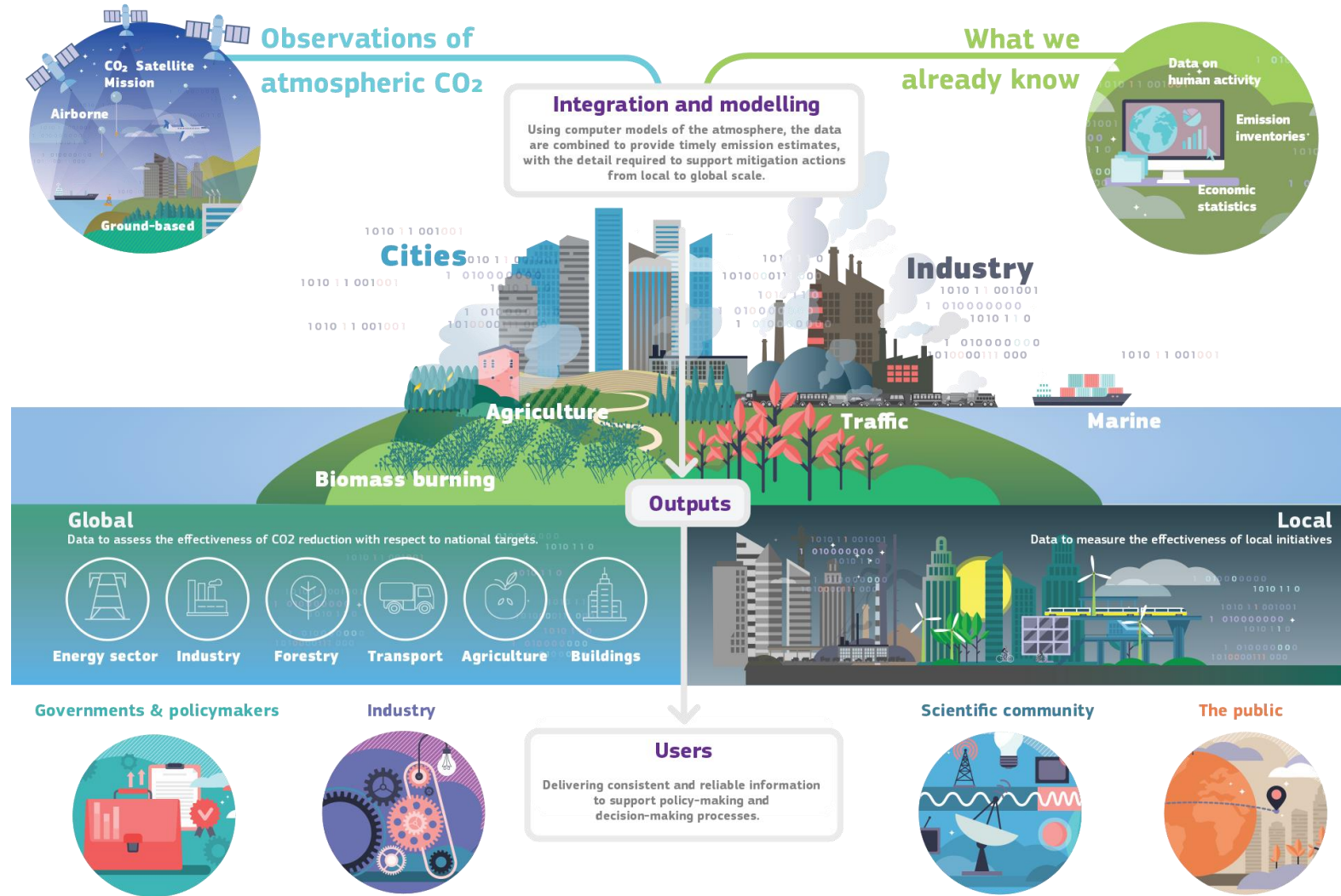
Global Carbon budget – AFOLU



[Global Carbon Budget, Friedlingstein et al., 2019](#)

CO₂ HUMAN EMISSIONS

Proposed Copernicus CO2 MVS capacity



CHE AFOLU Workshop - Aim

- Define a European consolidated view on the needs (for UNFCCC/Paris Agreement, EU carbon neutrality targets) with respect to the AFOLU sector, which then can be translated into technical requirements for the CO₂ MVS capacity.
- Define the agenda for a wider AFOLU workshop in 2021 with international outreach.

CHE AFOLU Workshop - Questions

- What are the UNFCCC requirements for the AFOLU sub-sectors and how are these currently handled in the official reporting?
- Are there specific areas for which the reporting and/or monitoring could be improved by using additional information?
- What is the current state of science (both bottom-up and top-down and how they converge)?
- What observations do we have to support observation-based estimates?
- Is there a role to play for an integrated system approach for AFOLU, such as the Copernicus CO2MVS?
- To what extent do we need to account for AFOLU in the CO2MVS anyway in order to close the carbon cycle?

CHE AFOLU Workshop – Day 1

14:00 Introduction Richard Engelen & Gianpaolo Balsamo

14:15 IPCC/UNFCCC/EU-LULUCF perspective Giacomo Grassi

14:45 EU Member States perspective Marina Vitullo

15:15 Earth Observation perspective Frank Martin Seifert

15:45 Break

16:00 Discussion, using “Padlet” tool.

16:45 Wrap-up

17:00 End of meeting

CHE AFOLU Workshop – Day 2

09:30 Introduction Richard Engelen & Gianpaolo Balsamo

09:45 Science perspective

Roxana Petrescu

10:15 Outcomes from VERIFY workshop

Lucia Perugini

10:45 Break

11:00 Discussion, using “Padlet” tool.

12:00 Wrap-up and topics for next workshop

12:30 End of meeting

Housekeeping notes

Please keep your camera turned on and your microphone muted throughout the meeting.

If you would like to make a comment or ask a question, please raise your hand by using the hand icon.

You will find this by clicking on the "Participants list" at the bottom centre of your screen.

Once in the list at the bottom of the window, click the button labelled "Raise Hand" that appears at the bottom.

Please also be ready to use Padlet throughout the event the link will be sent in the chat and can be found in your delegate information email



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