



# VERIFY:

Observation-based system for  
monitoring and verification of  
greenhouse gases

**NETWORKING MEETING**

**Day 3: CH<sub>4</sub> N<sub>2</sub>O**

*“Alternative methods for inventory verification: opportunities and limits”*



# HOUSEKEEPING

1. **Rename** yourself adding your affiliation *before* your name
2. Please mute your microphone: if you need to **intervene** or ask **questions**, write in the Chat
3. Keep your **webcam** off – activate it only when speaking
4. Keep your mobile at hand, we will interact through Mentimeter ([www.menti.com](http://www.menti.com))
5. Follow up interactions → Google doc:

<https://docs.google.com/document/d/1c9JRQjMHy9OcZigf7mDpQFfIJ3TDnHAhPbtzFdA-73U/edit#>



# VERIFY Project



## Aim:

Quantify more accurately C Stocks & fluxes of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O across the EU

## How:

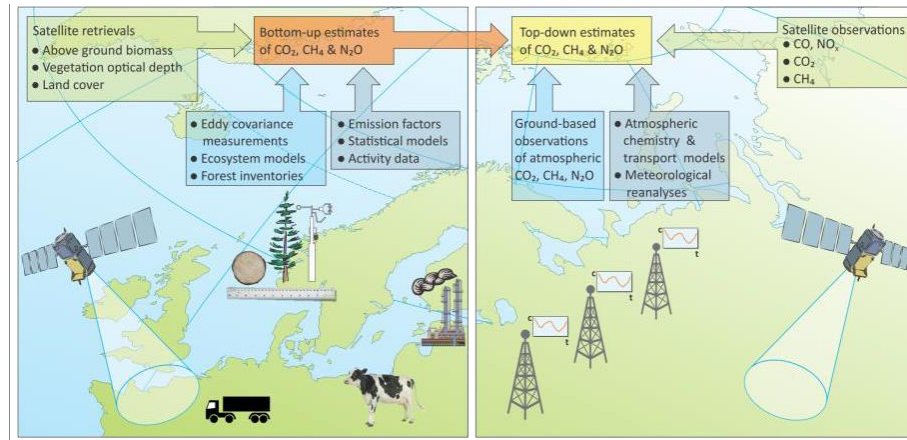
Based on independent observations and modelling.

## Why:

To support the Paris Climate Agreement

Web site for more details

<http://verify.lsce.ipsl.fr/>



Project Duration:

**48 month**

Project Funding:

**10 ME** (2.5

ME/year)

Consortium  
Numbers

**40 partners**

Institutes

Work Content  
Numbers

**9 work-packages:**

3-Verification

science,

1-Inventories

1-Synthesis &

Products

2-Policy relevance

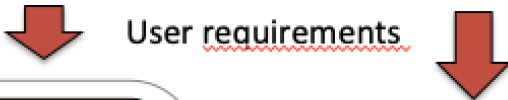
& Intl program

input



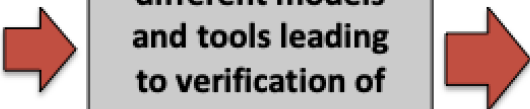
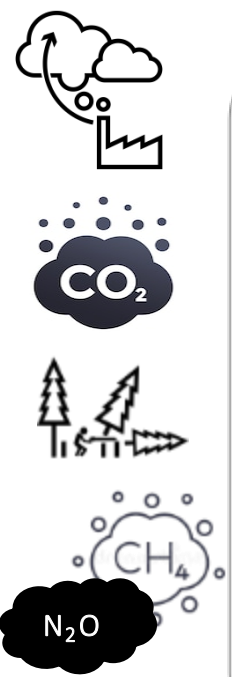
**WP1: GHG MRV user requirements**  
 Contribution to IPCC task force on inventories  
 Inventory fact sheet for each EU MS

Emission reporting



User requirements

- WP2: Verification method for fossil CO<sub>2</sub> emissions**
- WP3: Verification method for terrestrial CO<sub>2</sub> sources and sinks and C stocks**
- WP4: Verification methods for CH<sub>4</sub> and N<sub>2</sub>O emissions**



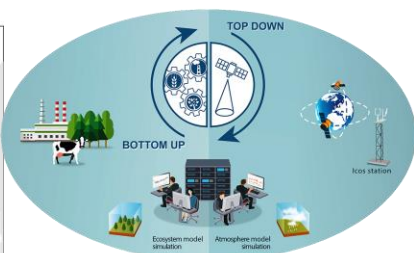
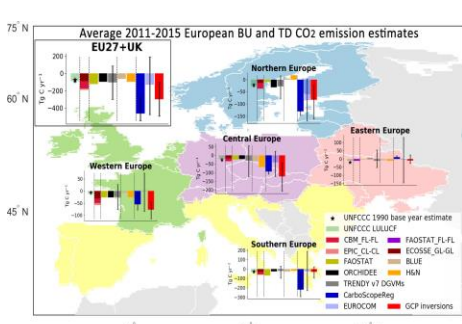
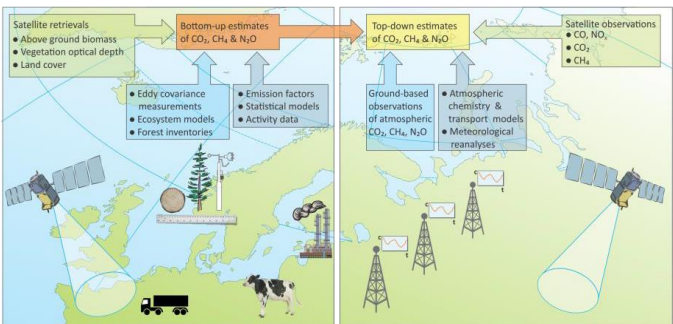
**WP5: Reconciliation and assessment of different models and tools leading to verification of GHG inventories**

- Reconciliation of all VERIFY estimates
- Uncertainty analysis
- Budget fact sheet for each EU MS

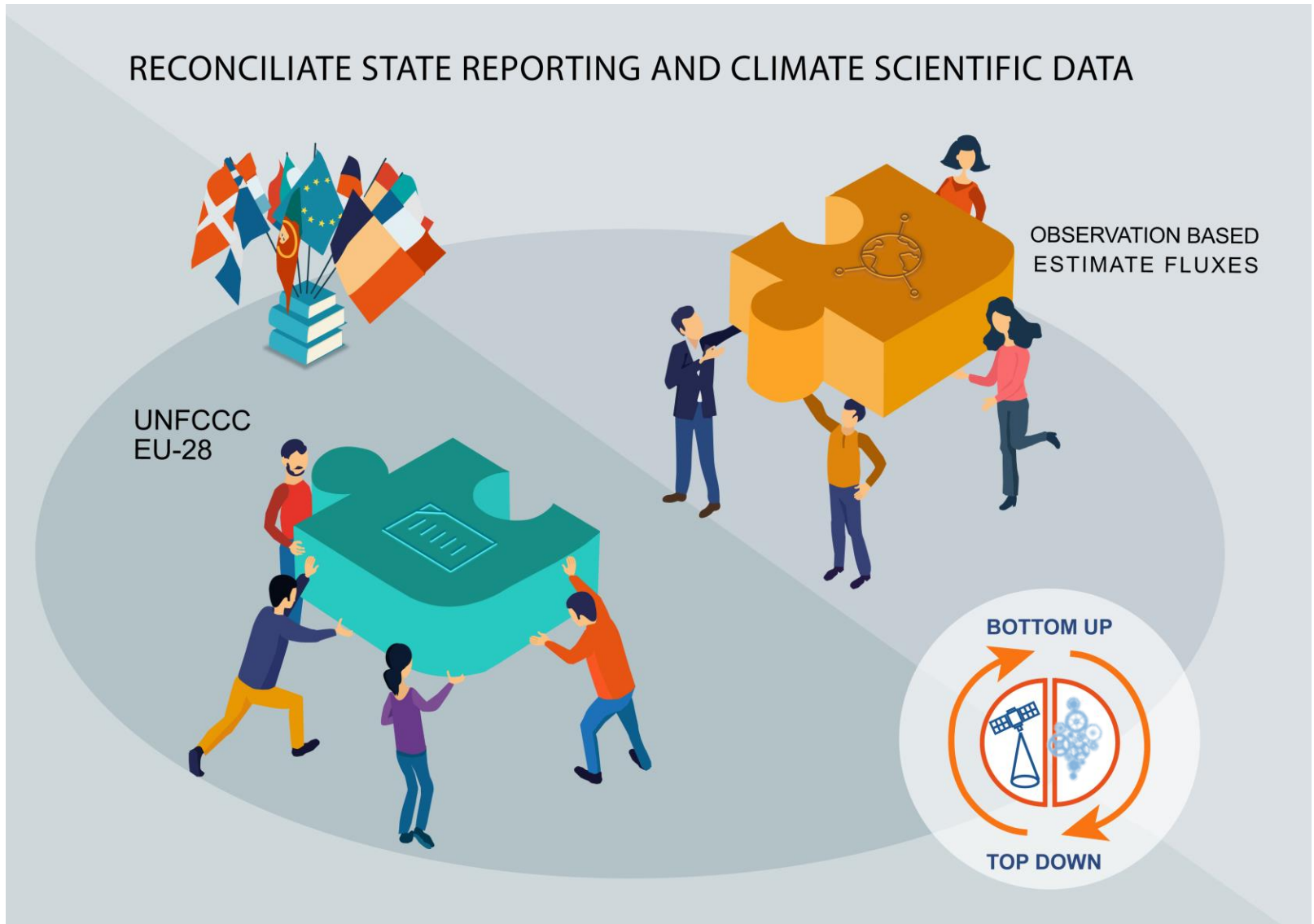
**WP6: Prototype of an international GHG monitoring and verification system**

- Budget fact sheets
- Policy makers support tool
- Application to other regions
- System prototype

**WP7: Input to international programs and society**  
 WMO, GCP, GEO, ...



## RECONCILIATE STATE REPORTING AND CLIMATE SCIENTIFIC DATA





# NETWORKING MEETING

## Day 3: CH<sub>4</sub> N<sub>2</sub>O

**Objective:** interaction between national inventory agencies and the scientific community

*“Alternative methods for inventory verification: opportunities and limits”*

13:00	Opening	Chair: Lucia Perugini, CMCC
13:05	Introduction : emission inventory bottom-up data/model requirements for CH <sub>4</sub> and N <sub>2</sub> O	Jean-Pierre Chang/ Anaïs Durand, CITEPA France
13:25	Experience on using inversions for UNFCCC reporting requirements	Alistair Manning, MetOffice UK
13:40	VERIFY latest synthesis results	Roxana Petrescu, VU Amsterdam
13:55	Top-down CH <sub>4</sub> approaches	Dominic Brunner, Empa
14:10	Top-down N <sub>2</sub> O approaches	Rona Thompson, NILU
14:25	Discussion	Jean-Pierre Chang, CITEPA France Dirk Günther, UBA Dessau &
15:00	Wrap up	Greet Janssens- Maenhout
15:15	End of meeting	