Co-ordinated by ECMWF

CO_2 Human Emissions

CARBON HUMAN EMISSIONS & VERIFY

JOINT GENERAL ASSEMBLY

Introduction

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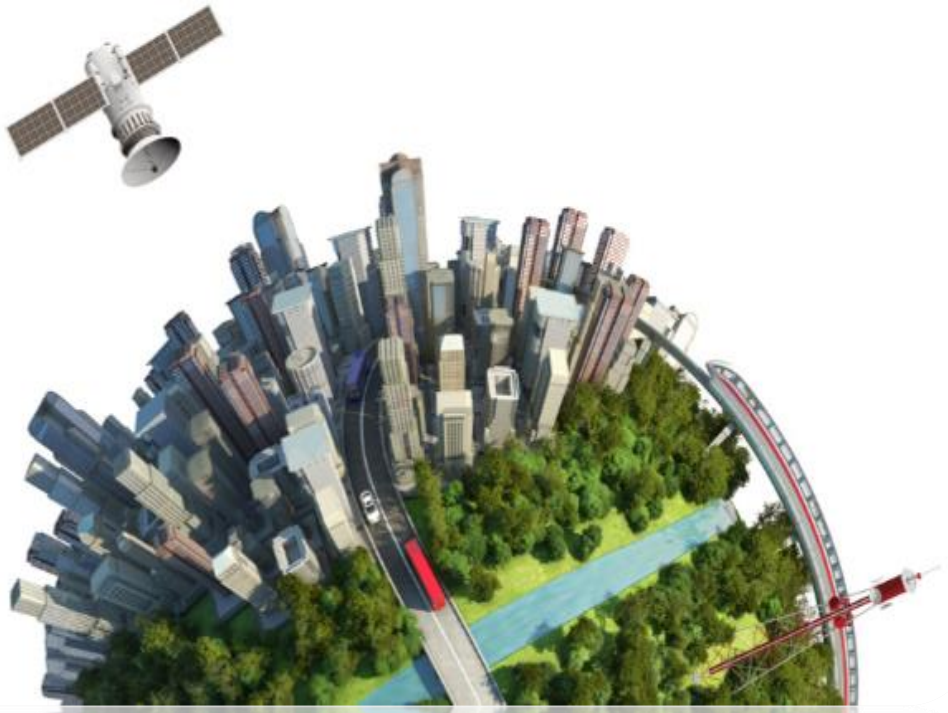
CHE-CO2 Human Emission Project (& its numbers)

Aim:
Build European monitoring capacity for anthropogenic CO_2 emissions

How:
CO_2 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

Project Funding:
3.75 ME (1.25 ME/year)

Consortium Numbers
22 partners Institutes

Work Content Numbers
7 work-packages:
5-Science development,
1-International liaison,
1-Management & Coms
7 Milestones
45 Deliverables

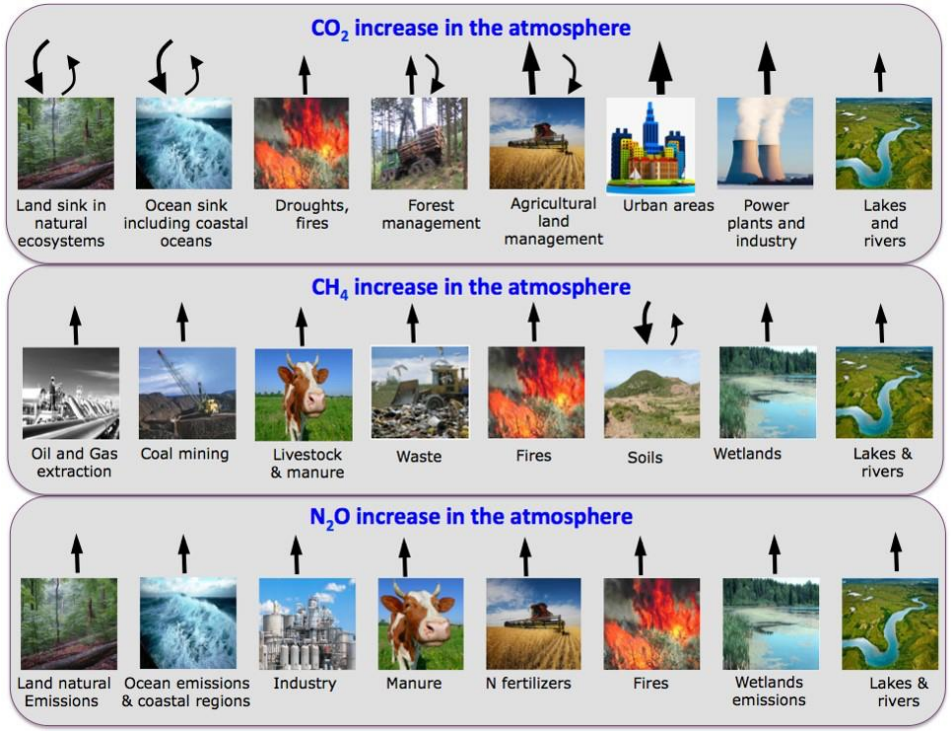
344.25 Person Month
(Eq 8.8 FTE)

VERIFY Project (& its numbers)

Aim:
Quantify more accurately carbon stocks and the fluxes of carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) across the EU

How:
Based on independent observations and modelling in support of inventories that rely on statistical data.

Why:
To support the Paris Climate Agreement and its implementation



Project Duration:
48 month

Project Funding:
10 ME (2.5 ME/year)

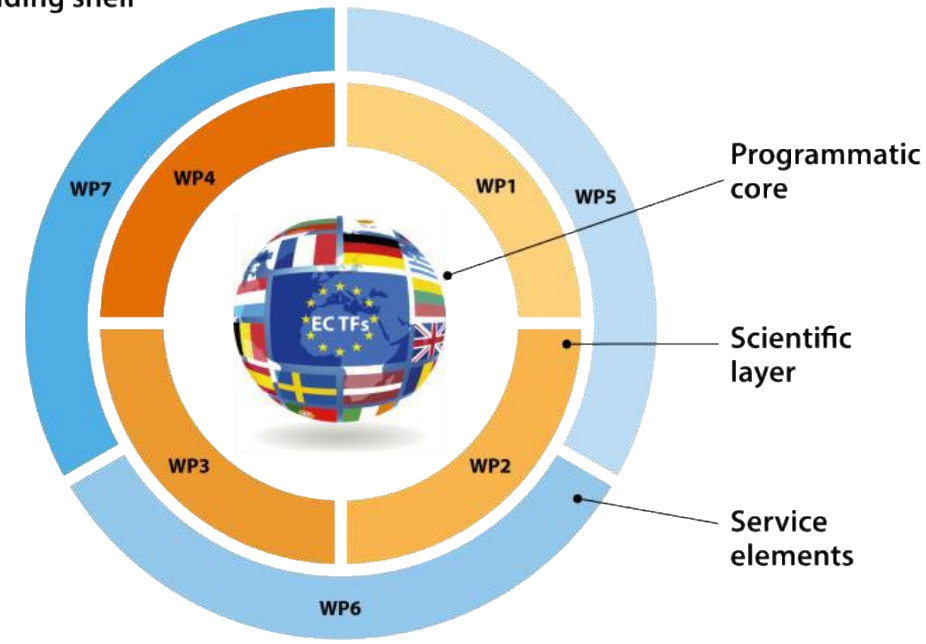
Consortium Numbers
40 partners Institutes

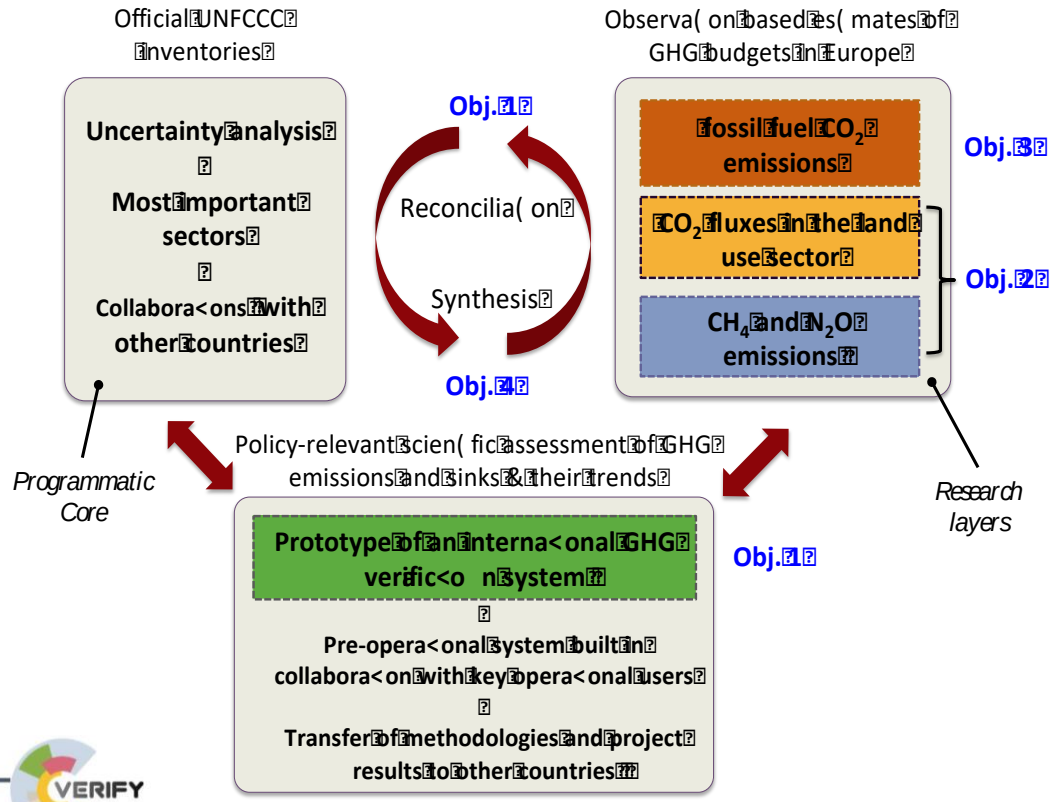
Work Content Numbers
9 work-packages:
3-Verification science,
1-Inventories
1-Synthesis & Products
2-Policy relevance & Intl program input
1-Ethics
1-Management & Coms
44 Milestones
103 Deliverables

1078.85 Person Month
(Eq 22.5 FTE)

CHE and VERIFY Connectivity

CHE capacity building shell





CO_2 Human Emissions

VERIFY

SCARBO

CHE and VERIFY Synergies

- Competency:
  - There are 12 partners in common between CHE & VERIFY
  - Strong links with the CO2 Task-Force & CO2 MAG
- Complementarity:
  - CHE focus on the benefit of existing/future satellite CO2 missions for anthropogenic flux estimates
  - VERIFY strongly link the Inventory Agency and the “observation – modelling GHG” communities
- Codevelopment:
  - Key building blocks and EU observation–based GHG monitoring system.
- Service-oriented:
  - Strong focus on applied-research from in-situ & satellite Earth Observations.

CHE+VERIFY Joint General Assembly Agenda

Day-1 – CHE Project	Day-2 CHE+VERIFY Open Science Day	Day-3 VERIFY Project
CO2 Task Force & European Commission vision	International Dimension of GHG Monitoring	VERIFY GHG user requirements
Science Core Work-Packages Presentations & Discussion	Carbon Cycle Uncertainties – Role Satellite & In-situ Observations	Verification methods Work-Packages
Posters Session Introduction	Reducing Uncertainties of CO2 Human Emissions – Role of Data Assimilation	Assessment and tools for MVS
Service Elements Work-Packages Presentation & Discussion	Other GHGs and CO2-co-emitted species	Input to International Programmes
CHE International Coordination and boards input	Way forward - Towards an operational service and community of practice	Focus on GHG at country and European level
Welcome Reception & Posters	Social Dinner	Closure of work

The GA to identify & provide recommendations