



Atmosphere Monitoring

An Integrated System approach as contribution to the Enhanced Transparency Framework

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Integrating data streams to provide added-value information

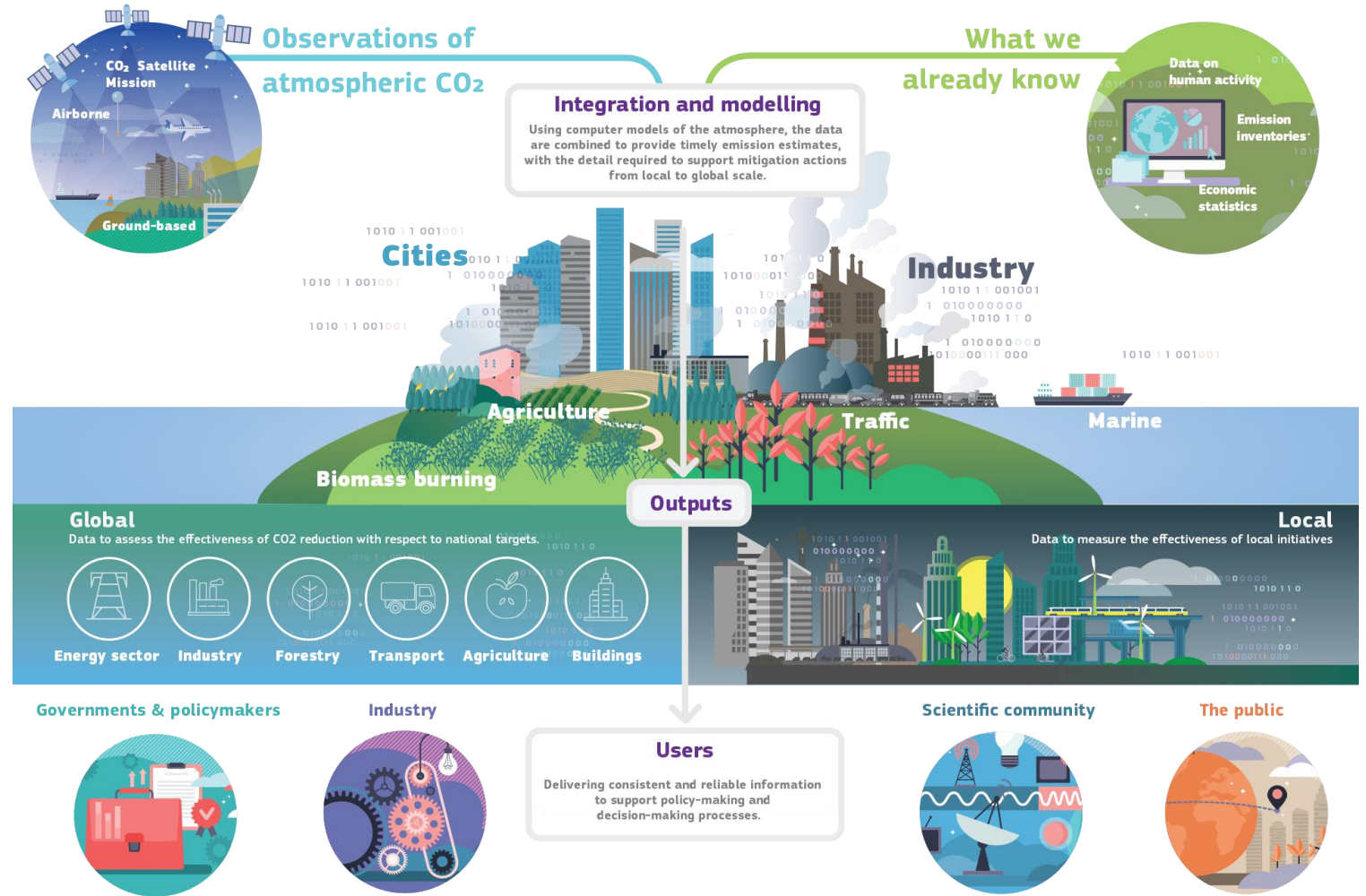
Copernicus anthropogenic CO₂ emissions monitoring capacity

Observations have huge potential to provide added-value information in support of reporting and mitigation actions.

However, observations do not directly measure emissions.

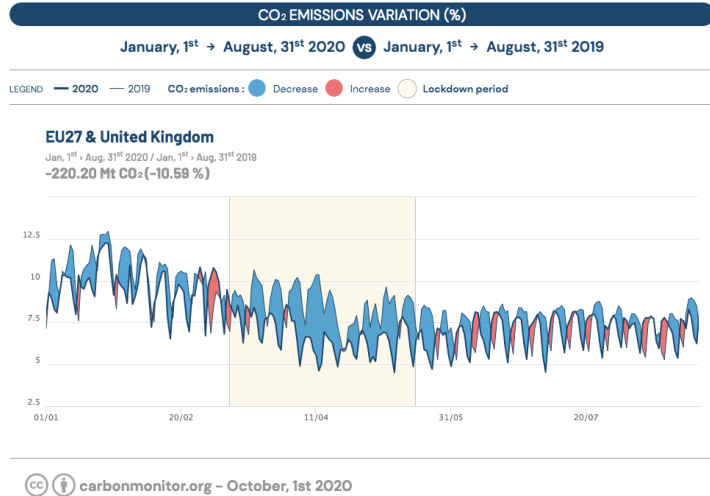
Combining observations with state-of-the-art modelling in an Integrated System approach provides added value in terms of:

- Timeliness
- Spatial and temporal detail
- Global consistency





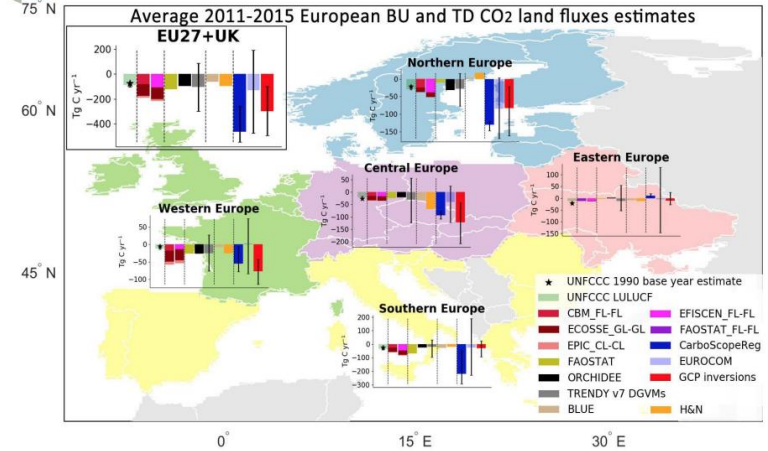
Current pre-operational examples



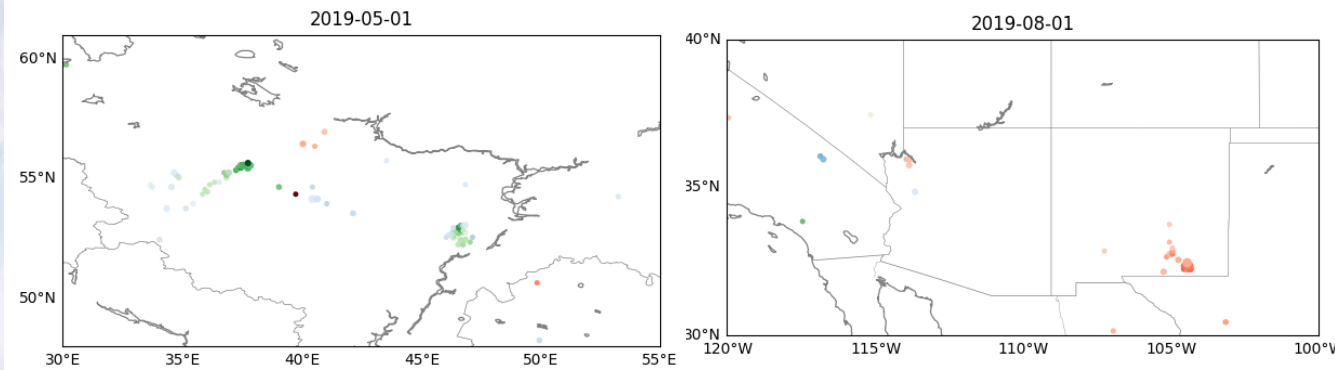
Using human activity data to follow short-term emission trends



LULUCF: OVERALL EUROPEAN CO₂ LAND FLUXES



Reconciling independent LULUCF estimates to reduce overall uncertainties



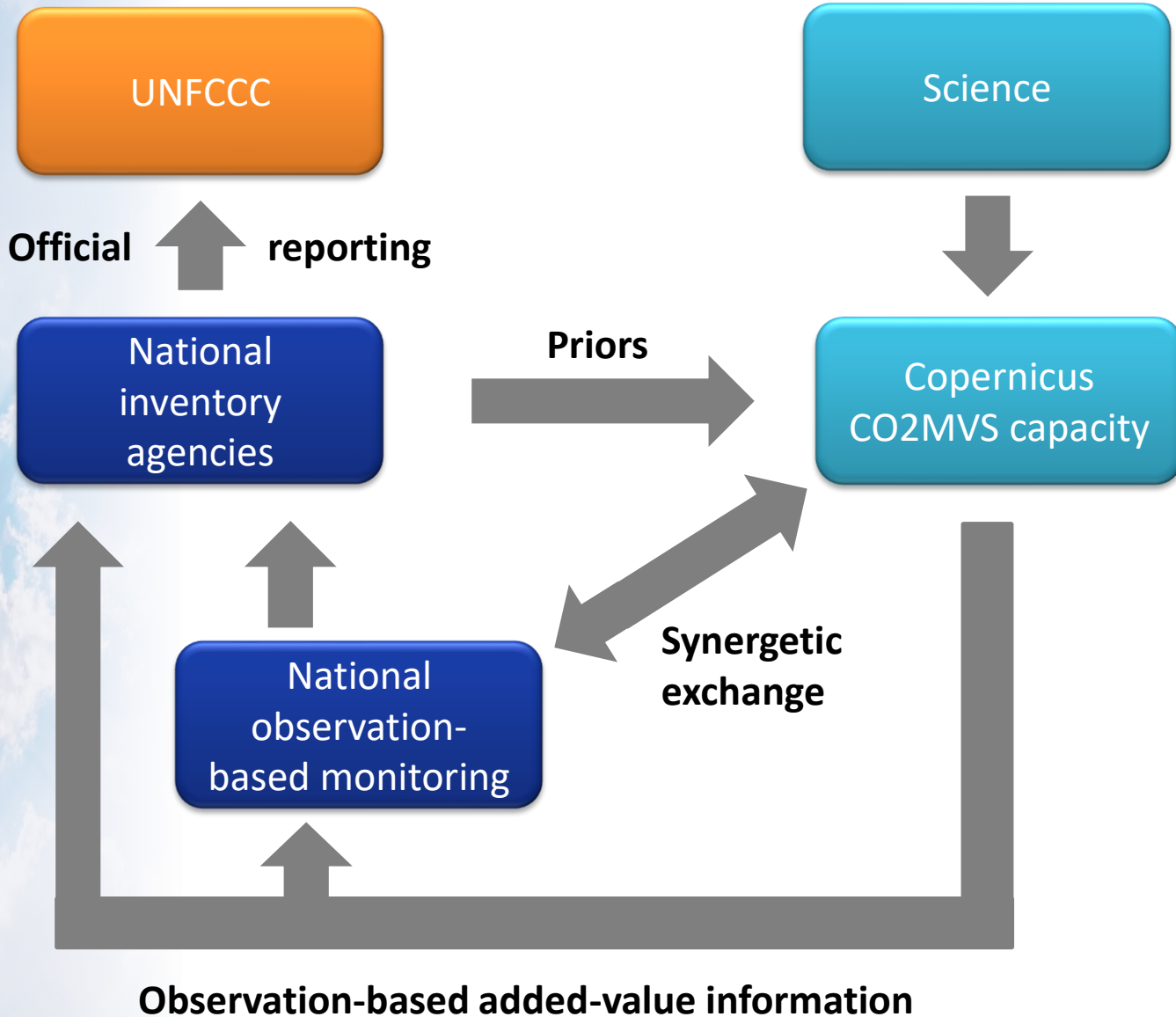
Routine monitoring of differences in methane concentrations between satellite observations and reported inventory data





Atmosphere
Monitoring

Copernicus support for Parties



An integrated system approach, combining different information sources based on the latest science, can provide a valuable contribution to the Enhanced Transparency Framework.

Implementation requires international coordination and active interaction with the Parties to the Convention.

