

# CEOS Recommendations on a GHG Constellation



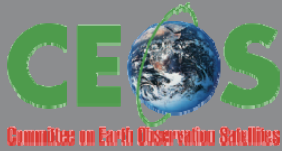
[http://ceos.org/document\\_management/Publications/WGClimate\\_CEOS-Strategy-for-Carbon-Observations-from-Space\\_Apr2014.pdf](http://ceos.org/document_management/Publications/WGClimate_CEOS-Strategy-for-Carbon-Observations-from-Space_Apr2014.pdf):

## Carbon-Action-16:

CEOS Member Agencies with interests in CO<sub>2</sub>- and CH<sub>4</sub>-measuring LEO missions will sponsor or co-sponsor one or more workshops (and require a written report) to refine the scientific and policy requirements for quantitative data on atmospheric CO<sub>2</sub> and CH<sub>4</sub> from low Earth orbit. These meetings should involve the key international science and applications communities in specifying the technical foundation and scientific requirements for as well as the societal benefits of future missions to quantify atmospheric CO<sub>2</sub> and CH<sub>4</sub> from low earth orbit.

## Carbon-Action-17:

The CEOS Atmospheric Composition VC will coordinate the detailed planning and preparation for a constellation of passive and active remote sensing instruments to measure CO<sub>2</sub> and CH<sub>4</sub> from low Earth orbit with the higher spatial and temporal resolution and accuracy needed to monitor carbon sources and sinks.



# CEOS Recommendations on a GHG Constellation



## Carbon-Action-18:

CEOS Member Agencies with interests in CO<sub>2</sub>- and CH<sub>4</sub>-measuring GEO missions will sponsor or co-sponsor one or more workshops (and require a written report) to refine the scientific and policy requirements for quantitative data on atmospheric CO<sub>2</sub> and CH<sub>4</sub> from geostationary Earth orbit. These meetings should involve the broad, international science and applications communities in advancing the technical foundation and scientific requirements for as well as the societal benefits of future missions to quantify atmospheric CO<sub>2</sub> and CH<sub>4</sub> from geostationary orbit.

## Carbon-Action-19:

The CEOS Atmospheric Composition VC will coordinate the detailed planning and preparation for a constellation of passive remote sensing instruments to measure CO<sub>2</sub> and CH<sub>4</sub> from geostationary orbit covering all longitudes with the spatial and temporal resolution and accuracy needed to monitor carbon sources and sinks.

## Carbon-Action-20:

The CEOS Atmospheric Composition VC, in cooperation with the CEOS WGCV Atmospheric Composition Subgroup, will provide coordination and support for the cross calibration of all satellite CO<sub>2</sub>- and CH<sub>4</sub>-measuring sensors, coordinate their observations, and cross validate their CO<sub>2</sub> and CH<sub>4</sub> products against accepted international standards, so that they can be integrated into single continuous global climate record.