

## GEO CL-02 task and activity of EMTech/AIST related to GEO carbon task

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As shown in the web site of GEO ([http://www.earthobservations.org/about\\_geo.shtml](http://www.earthobservations.org/about_geo.shtml)) GEO (Group on Earth Observation) is a voluntary partnership of governments and international organizations for the period 2005 to 2015. The Research Institute of Environmental Management Technology/AIST joined the carbon task of GEO since 2009. The carbon task is under the "climate" area, which is one of the nine social benefits areas. Now is in the last term and the strategic target of this area is,

Before 2015, GEO aims to: Achieve effective and sustained operation of the global climate observing system and reliable delivery of climate information of a quality needed for predicting, mitigating and adapting to climate variability and change, including for better understanding of the global carbon cycle.

There are two tasks under the climate area and one of them is "CL-02, Global carbon observation and analysis", which has only one sub-task "CL-02-C1: Integrated Global Carbon Observation and Analysis System". For this sub-task, Expected Achievements by 2015 is declared as follows.

-Global carbon monitoring networks improved and coordinated, toward a sustained and operational Integrated Global Carbon Observation and Analysis System by 2020.

-A Carbon portal (linked to the GEO Portal) as a single access point to the global carbon cycle data, containing a geo-referenced database and complying with the GEOSS Data Sharing Principles.

-Updates of global and regional carbon (CO<sub>2</sub> and CH<sub>4</sub>) budgets, considering also fossil fuel emissions, provided annually, with a continuously reduced uncertainty.

-Improved methodologies for measuring and analysing carbon cycle data: develop agreed standards, improve Global Carbon Cycle Data Assimilation Systems (CCDAS); calibrate and validate space based observations.

-Provide easily understandable and accessible information and products, useful for decision makers and the general public.

The coordinator of this task is Antonio Bombelli (CCMS, Italy). However the coordination of the communities related above achievement is not always good, as pointed out at the work plan symposium at Geneva last year not only in Japan but in the world.

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