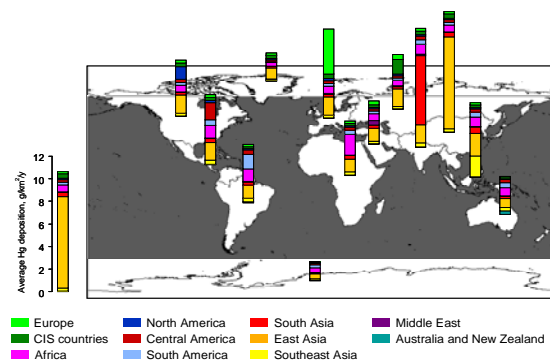


## **Task Force on Hemispheric Transport of Air Pollution (TF HTAP)**

MSC-E continued co-operation with the Task Force on Hemispheric Transport of Air Pollution (TF HTAP). In particular, it took part in the Task Force workshop held in Potsdam, Germany in February 2016. The Centre presented an overview of ongoing activities within EMEP and relevant research - projects focused on assessment of mercury pollution. It reported the final results of the multi-model research performed within the EU GMOS (Global Mercury Observation System) project and aimed at study of mercury atmospheric processes as well as assessment of mercury intercontinental transport and future scenarios.

It was demonstrated that oxidation chemistry of mercury in the atmosphere contained significant uncertainties. There is possibility of multiple oxidation mechanisms governing transformation and removal of mercury from the atmosphere. Contribution of current anthropogenic emissions to mercury deposition varies between 20% and 50% in different geographical regions. Besides, contribution of intercontinental transport is comparable or prevails over domestic sources in most regions (except for South and East Asia) (Fig. 1). Speciation of mercury anthropogenic emissions strongly affects the range of mercury dispersion and deposition. On the other hand, mercury speciation in available emission inventories contains significant uncertainties. Model evaluation of future scenarios predicts decrease of mercury deposition in the next 20 years except for South and East Asia where the 'Current Policy' can lead to deposition growth.



**Fig. 1.** Source attribution of mercury deposition to different regions on a global scale in 2013

Particular attention was paid to evaluation of mercury deposition to various aquatic regions, where mercury coming to freshwater and marine ecosystems from atmospheric deposition and other sources is biomagnifies in aquatic food webs. The presented results can contribute to the ongoing TF HTAP research activities as a part of the HTAP2 Modeling Experiments (Theme 2) and Model-Observation Evaluation and Process Diagnosis (Theme 3) [[www.htap.org](http://www.htap.org)].

*Importance of close cooperation with relevant on-going activities within international bodies including AMAP, UNEP and the Minamata Convention on Mercury was stressed. TF HTAP could play the role of an international platform for collection, discussion and dissemination of the research results on mercury and other pollutants.*