

Principal objective of EMEP4HR Norwegian-Croatian project (4 institutions involved)

METEOROLOGICAL INSTITUTE (“met.no”, Oslo, Norway)

MHSC (Zagreb, Croatia)

EKONERG (--||--)

AMGI (--||--)

The main purpose of this project is to allow a stable long-term development of Croatia’s scientific modelling capacity to support the design of environmental protection strategies. In particular, the sub-goals of this project are:

- the development of high resolution emission inventories of air pollutants in Croatia and in selected urban areas,
- the implementation and further development of a high-resolution unique version of the Eulerian EMEP Unified chemical transport model for use in Croatia,
- the development of a new capability for the assessment of urban air quality in main Croatian cities (Zagreb),
- the evaluation and testing of the new modelling capability according to international standards as a pilot project for other countries in the broader area around Croatia, and
- the support to Croatian authorities to meet the requirements from the new EU legislation on air quality

The most research is being carried out by Meteorological and Hydrological Service of Croatia (MHSC). The Department of Geophysics at the University of Zagreb (AMGI) will act as supervisor for the theoretical part of the work. The Department of Geophysics at the University of Zagreb (AMGI) and the Meteorological and Hydrological Service of Croatia (MHSC) will be responsible for the urban-scale assessment in the city of Zagreb (city between a mountain and river).

Involved scientists from AMGI (This Institution): Branko Grisogono (PI at Faculty of Science), Zvezdana Bencetić Klaić and Danijel Belušić (partially Željko Večenaj, PhD student, too). At least 2 PhD theses and an old-fashion MS thesis (equivalent to the Scandinavian ‘licentiate’ degree) have been conceived and already largely produced together with the MHSC and met.no. Much more info may be found on the related web-sites.

After the project, a continuation could be anticipated toward extended measurements and urban-scale modeling around the town of Rijeka (surrounded by high coastal mountains and the sea, where the coastline turns ~ 200 degrees).