



An integrated assessment of climate change impacts for Athens- relevance to stakeholders and policy makers

C. Giannakopoulos (1), M. Hatzaki (1,2), E. Kostopoulou (2,3), K. Varotsos (1,2)

(1) Environmental Research, National Observatory of Athens, Athens, Greece (cgiannak@meteo.noa.gr, +30- 2108103236),

(2) Division of Environmental Physics and Meteorology, National and Kapodistrian University of Athens, Greece, (3) Energy Environment Water Research Center, The Cyprus Institute, Nicosia, Cyprus

Analysing climate change and its impact needs a production of relevant elements for policy making that can be very different from the parameters considered by climate experts. In the framework of EU project CIRCE, a more realistic approach to match stakeholders and policy-makers demands is attempted. For this reason, within CIRCE selected case studies have been chosen that will provide assessments that can be integrated in practical decision making. In this work, an integrated assessment of climate change impacts on several sectors for the urban site of Athens in Greece is presented.

The Athens urban case study has been chosen since it provides excellent opportunities for using an integrated approach across multiple temporal and spatial scales and sectors. In the spatial dimension, work extends from the inner city boundaries to the surrounding mountains and forests. In the temporal dimension, research ranges from the current observed time period (using available meteorological and sector data) to future time periods using data from several climate change projections. In addition, a multi-sector approach to climate change impacts is adopted. Impacts sectors covered range from direct climate impacts on natural ecosystems (such as flash floods, air pollution and forest fire risk) to indirect impacts resulting from combined climate-social-economic linkages (such as energy demand, tourism and health). Discussion of impact sector risks and adaptation measures are also exploited.

Case-study work on impact sector risk to climate change is of particular interest to relevant policy makers and stakeholders, communication with who is ensured through a series of briefing notes and information sheets and through regional workshops.