

## **The role of biometeorology in adaptation strategies**

T. Cegnar

Environment Agency of Slovenia, Ljubljana, Slovenia

In recent years, the biometeorological science has made significant progress. However, the main challenge is how to make more and more complex information understandable and ready to use. The specialized needs of specific end users are fairly well defined and known. The major challenge is how to tailor the biometeorological information for the purpose of adaptation strategies to climate change and action plans.

There are many parameters in the environment that are going to change; it is difficult to predict their interactions and integrated impact. Also the adaptive capacity of general public and in particular of the most vulnerable groups is not only a function of physiological parameters, but depends heavily on economic and social development. Despite all the uncertainties, the biometeorology is and will play an important role in developing adaptation measures. Just to list some of the topics to be considered: urban climatology, outdoor and indoor air quality, building design, thermal conditions, UV radiation, early warnings in case of extreme heat or cold stress, air pollution and UV radiation, as well as vector, food and water borne diseases.

Most of the tools already exist and many of them are already in place. The dilemma is whether we need many separate detailed indices or integrated holistic assessment of exposure. Until now, we mostly use very specific indices and only a few attempts to provide an integrated assessment took place. There is a threshold for the amount of new indices people are ready to accept. Keeping the right balance between very detailed information and the integrated information is not easy. Restrict ourselves only to the provision of scientific information is not enough, our mission is also to encourage people to respond and change their behaviour.