



Building the framework for climate change adaptation in the urban areas using participatory approach: the Czech Republic experience

Adam Emmer (1), Marie Hubatová (1), Miroslav Lupač (2), Michael Pondělíček (3,4), Miroslav Šafařík (5), Vladimíra Šilhánková (3,4), and David Vačkář (1)

(1) Global Change Research Institute, Department of the Human Dimensions of Global Change, Czech Academy of Sciences, Brno, Czech Republic (aemmer@seznam.cz), (2) Agentura Koniklec, p.s.c., Prague, Czech Republic, (3) Civitas per populi, p.s.c., Hradec Králové, Czech Republic, (4) Department of Regionalistics, The College of Regional Development, Prague, Czech Republic, (5) Porsenna, p.s.c., Prague, Czech Republic

The Czech Republic has experienced numerous extreme hydrometeorological / climatological events such as floods (significant ones in 1997, 2002, 2010, 2013), droughts (2013, 2015), heat waves (2015) and windstorms (2007) during past decades. These events are generally attributed to the ongoing climate change and caused loss of lives and significant material damages (up to several % of GDP in some years), especially in urban areas. To initiate the adaptation process of urban areas, the main objective was to prepare a framework for creating climate change adaptation strategies of individual cities reflecting physical-geographical and socioeconomical conditions of the Czech Republic.

Three pilot cities (Hradec Králové, Žďár nad Sázavou, Dobruška) were used to optimize entire procedure. Two sets of participatory seminars were organised in order to involve all key stakeholders (the city council, department of the environment, department of the crisis management, hydrometeorological institute, local experts, ...) into the process of creation of the adaptation strategy from its early stage. Lesson learned for the framework were related especially to its applicability on a local level, which is largely a matter of the understandability of the concept. Finally, this illustrative and widely applicable framework (so called 'road map to adaptation strategy') includes five steps: (i) analysis of existing strategies and plans on national, regional and local levels; (ii) analysing climate-change related hazards and key vulnerabilities; (iii) identification of adaptation needs, evaluation of existing adaptation capacity and formulation of future adaptation priorities; (iv) identification of limits and barriers for the adaptation (economical, environmental, ...); and (v) selection of specific types of adaptation measures reflecting identified adaptation needs and formulated adaptation priorities.

Keywords: climate change adaptation (CCA); urban areas; participatory approach; road map