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Editorial**Overview of challenges and achievements in the Climate Adaptation of Cities and in the Climate Proof Cities program**

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Abstract

Despite all international, national and local initiatives to mitigate climate change, a certain degree of climate change is unavoidable. Urban environments in particular seem vulnerable to the consequences of climate change. How can cities, which are dynamic systems where most people live and work, prepare for such changes in climate? In the Netherlands, the Climate Proof Cities (CPC) research program (2010-2014) was established, aimed at: “strengthening the adaptive capacity and reducing the vulnerability of the urban system against climate change and to develop strategies and policy instruments for adapting our cities and buildings”. The program has contributed to the knowledge on assessing vulnerability of cities, on adaptation options and their effectiveness, and on governance of adaptation. Important features are the role of green infrastructures in combination with available water, improved building designs and collaboration between urban planners and water managers. Nonetheless, in spite of this effort and many other national and international efforts, research in these fields is still in its infancy, and much remains to be done. The broad scope of the CPC research program incited the establishment of this Special Issue. In addition, also papers from other researchers have been added to this Special Issue, in an attempt to provide a valuable – albeit inexhaustive – view on the challenges and achievements in adaptation of cities to climate change.

1. Scope and motivation for a new special issue in Building and Environment on climate adaptation in cities

Despite all international, national and local initiatives to mitigate climate change, a certain degree of climate change is unavoidable [1]. Urban environments in particular seem vulnerable to the consequences of climate change: increased risk of flooding, droughts and heat waves [2-5]. How can cities as dynamic systems, where most people live and work, prepare for such changes in climate?

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