Assessing urban climate change resilience

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Recent extreme weather events demonstrate that many urban environments are vulnerable to climate change impacts and as a consequence designing systems for future climate seems to be an important parameter in sustainable urban planning. The focus of this research is the development of a theoretical framework to assess climate change resilience in urban environments. The methodological approach used encompasses literature review, detailed analysis, and combination of data, and the development of a series of evaluation criteria, which are further analyzed into a list of measures. The choice of the specific measures is based upon various environmental, urban planning parameters, social, economic and institutional features taking into consideration key vulnerabilities and risk associated with climate change. The selected criteria are further prioritized to incorporate into the evaluation framework the level of importance of different issues towards a climate change resilient city. The framework could support decision making as regards the ability of an urban system to adapt. In addition it gives information on the level of adaptation, outlining barriers to sustainable urban planning and pointing out drivers for action and reaction.