

From Conflicts to Synergies between Mitigation and Adaptation Strategies to Climate Change: The Case of Lisbon Downtown 2010-2030

Authors : Nuno M. Pereira

Abstract : In the last thirty years, European cities have been addressing global climate change and its local impacts by implementing mitigation and adaptation strategies. Lisbon Downtown is no exception with 10 plans under implementation since 2010 with completion scheduled for 2030 valued 1 billion euros of public investment. However, the gap between mitigation and adaptation strategies is not yet sufficiently studied alongside with its nuances- vulnerability and risk mitigation, resilience and adaptation. In Lisbon Downtown, these plans are being implemented separately, therefore compromising the effectiveness of public investment. The research reviewed the common ground of mitigation and adaptation strategies of the theoretical framework and analyzed the current urban development actions in Lisbon Downtown in order to identify potential conflicts and synergies. The empirical fieldwork supported by a sounding board of experts has been developed during two years and the results suggest that the largest public investment in Lisbon on flooding mitigation will conflict with the new Cruise ship terminal and old Downtown building stock, therefore increasing risk and vulnerability factors. The study concludes that the Lisbon Downtown blue infrastructure plan should be redesigned in some areas in a trans- disciplinary and holistic approach and that the current theoretical framework on climate change should focus more on mitigation and adaptation synergies articulating the gray, blue and green infrastructures, combining old knowledge tested by resilient communities and new knowledge emerging from the digital era.

Keywords : adaptation, climate change, conflict, Lisbon Downtown, mitigation, synergy

Conference Title : ICCST 2018 : International Conference on Climate Change Science and Technologies

Conference Location : Lisbon, Portugal

Conference Dates : April 16-17, 2018