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This book discusses how climate change and heat islands are a main contributor to water related problems in urban areas in Košice, Slovakia. Green roofs are used as a tool to assist in solving these water related issues. The need to provide housing in urban areas is expected to rise to 66% in 2050, according to the United Nations. Many urban areas have seen natural permeable green areas replaced with concrete constructions and hard, non-permeable surfaces. The densification of existing built-up areas is responsible for the decreasing vegetation, which results in the lack of evapotranspiration cooling the air, thereby creating urban heat islands. Several studies, discussed in this book, have shown that natural and permeable surfaces, as in the case of green roofs, can play a crucial role in mitigating this negative climate phenomenon and providing higher efficiency for buildings, leading to savings such as water, one of the focal points of this research.

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