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## Urban Heat Island Mitigation Strategies: Experimental and Numerical Analysis of a University Campus in Rome (Italy)

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Sustainability 2020, 12, 7971; <https://doi.org/10.3390/su12197971>

Original submission received: 12 August 2020 / Revised: 22 September 2020 / Accepted: 24 September 2020 /

Published: 25 September 2020

(This article belongs to the Collection Sustainable Buildings and Energy Performance)

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### Abstract

The urban heat island (UHI) phenomenon is strictly related to climate change: in urban areas, the lack of green zones and water sources causes negative effects on buildings' energy performance. Starting from this, an expert climatic conditions in a university area in Rome was achieved, also a phenomenon. The analyzed area was recently renewed, with solutions in building was re-designed aiming at high performance; on the other hand, refurbished leading to large paved surfaces, characterized by high temperature (around 50 °C) on paved surfaces, around 30 °C on walls, and around 20 °C on roofs.



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