



The Potential of the Built Environment in Climate-Related Challenges (2nd Edition)

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Message from the Guest Editor

Dear Colleagues,

This Special Issue is the second edition in a series of publications dedicated to “The Potential of the Built Environment in Climate-Related Challenges” (https://www.mdpi.com/journal/atmosphere/special_issues/Built)

It is well documented that the built environment has a major impact on climate change. The consequences in terms of greenhouse gas emissions are significant.

The development of information technology has led to the provision of advanced modelling tools that are capable of carrying out highly sophisticated analyses and predictions.

However, new and interesting possibilities arise from the possible applications of Artificial Intelligence. Optimisation algorithms are already available that can easily operate on these "Building-Informed Models".

The aim of this Special Issue is to present the state of the art and possible application developments that will facilitate the exploitation of Artificial Intelligence’s potential to reduce the energy impact of the built environment, thus contributing to reductions in atmospheric pollutant emissions and carbon dioxide consumption in the name of combating climate change.





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Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

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