Special Issue Reprint

Green Building Design and Construction for a Sustainable Future

Edited by
Yongtao Tan
Peng Mao
Xiaolong Gan
Hui Xu

According to data from the International Energy Agency (IEA), buildings and construction together account for 30% of global final energy consumption and 27% of total energy sector emissions. The building sector has been making efforts to reduce carbon emissions for many years. However, there is still a long way to go to meet the Net-Zero Emissions by 2050 Scenario. Given the large amount of new construction every year, it is necessary to significantly increase the proportion of green buildings, including new buildings with green design and construction and the green retrofitting of existing buildings. The green building concept has been around for decades, aiming to reduce the environmental impacts of buildings over their life cycle. Different green building assessment tools have been developed, such as LEED, BREEAM, BEAM Plus, etc., and many buildings have been labelled as green buildings worldwide. However, the number of green buildings is still a small percentage of the existing building stocks. Therefore, it has become necessary to further promote the green concept in future building design and construction by involving different stakeholders. Moreover, the green retrofitting of existing buildings will provide important contributions to achieve net-zero emission goals. New technologies and materials will also bring disruptions for the future development of green buildings.

Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/11196

MDPI\Books
Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.

Open Access
Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.

Author Focus
Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.

High Quality & Rapid Publication
MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.

High Visibility
Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

Print on Demand and Multiple Formats
MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

Learn more ▶ mdpi.com/books