

Special Issue

Applications of Sustainable Energy and Advanced Air Conditioning Technologies in Building Energy Efficiency

Message from the Guest Editors

The application of sustainable energy and advanced air-conditioning technologies in the construction sector has emerged as a key driver for low-carbon building development. Renewable energy solutions, such as photovoltaic power systems, ground-source heat pumps, and wind power, supply clean electricity to buildings, significantly reducing carbon emissions. Meanwhile, high-efficiency HVAC equipment, like variable refrigerant flow (VRF) systems and magnetic levitation centrifugal chillers, when integrated with smart building management systems, enables dynamic energy consumption optimization and enhanced energy efficiency.

This Special Issue, entitled “Applications of Sustainable Energy and Advanced Air Conditioning Technologies in Building Energy Efficiency”, is dedicated to the latest advancements in the applications of sustainable energy and advanced air conditioning technologies. Topics for submission include, but are not limited to, the following:

- Applications of sustainable energy;
- Energy consumption prediction;
- Advanced air conditioning technologies;
- Data mining and analysis of HVAC systems;
- Energy conservation;
- Energy saving.

Guest Editors

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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

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