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Impact of Recycling Environmental Impact Materials on Energy Savings: Life-Cycle Assessment

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Message from the Guest Editors

Dear Colleagues,

Global warming and soaring waste generation are the foremost challenges faced by the modern world due to inefficient use of existing high-environmental-impact materials. To overcome these issues, recycling and reusing resources are increasingly being emphasized. Life-cycle assessment (LCA) is an ideal method to analyze the alternatives for resource recovery in a context of environmental sustainability. LCA can be more interesting and descriptive when combined with other assessment techniques such as risk assessment and technoeconomic analysis to examine different alternatives for a particular system and provide useful insights on the potential trade-offs among different impact categories. The use of recycling and LCA is an excellent combination, as LCA guides towards the goal of minimizing wastes.

This Special Issue will showcase studies on the impact of recycling on different high-environmental-impact materials (e.g, building materials, packaging and biobased materials). Studies in sustainable production, technoeconomic assessment, energy savings and scalability in the context of recycling and LCA of high-environment-impact materials are encouraged.

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Message from the Editor-in-Chief

Environmental issues are quickly becoming central political, economic and academic topics of the twenty-first century. A large number of modern challenges are directly or indirectly caused by complex interactions between environmental issues. Such issues require interdisciplinary research, knowledge and insights to understand and, ultimately, for solutions to be found. Through the journal Environments, we strive to create a platform for meaningful discourse by accepting contributions from a wide range of fields. We sincerely hope you will consider publishing your distinguished work in this highly-accessible, peer-reviewed journal.

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