Special Issue

Life Cycle and Costs Assessment for a New Generation Low-Impact Transport Sector

Message from the Guest Editors

Decarbonizing the transport sector stands as a critical effort in the global pursuit of mitigating climate change. Life Cycle Assessment (LCA) and Total Cost of Ownership (TCO) are essential methodologies in this context, offering a thorough evaluation of both the environmental impacts and economic viability throughout the entire lifecycle of transport systems. These methodologies emerge as crucial tools for assessing the environmental impacts associated with various modes of transportation, ensuring that political decisions are made without inadvertently shifting environmental burdens. The aim of this Special Issue is to collect contributions regarding the role of LCAs and their related studies in shaping a sustainable future across all areas of the transport sector in a technology-neutral approach. This includes the evaluation of the Greenhouse Gas (GHG) footprint and TCO of various powertrains, such as electric, hydrogen, biofuel, and hybrid technologies, for dedicated applications. The scope spans from road transport to international transport, including the aviation and maritime sectors.

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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