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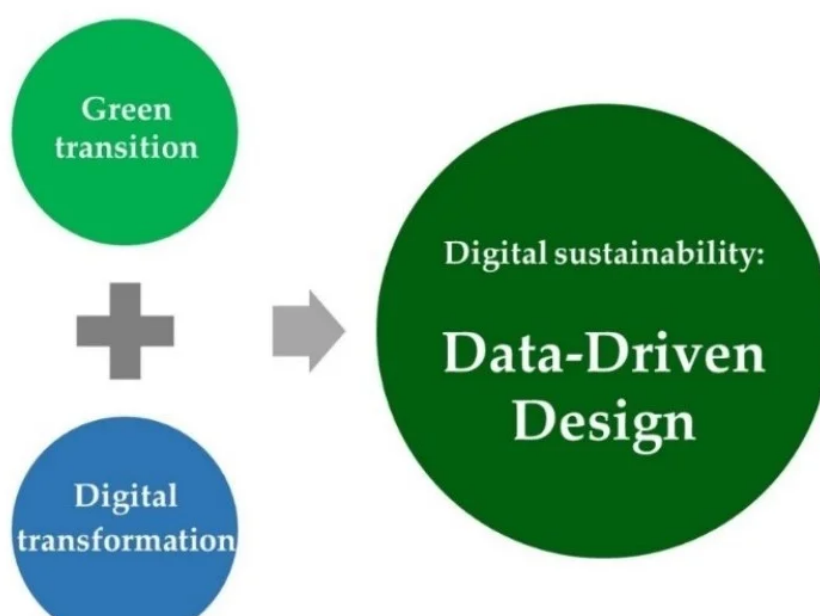
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A special issue of [Sustainability \(/journal/sustainability\)](#) (ISSN 2071-1050). This special issue belongs to the section "[Green Building \(/journal/sustainability/sections/building\\_sustainability\)](#)".

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**Dr. Carl Peter Leslie Schultz**

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## Special Issue Information

Dear Colleagues,

Ensuring long-term, sustainable prosperity within the environmental limits of our planet is the challenge of our lifetime. Consequently, the **AEC sector** is subject to increasing demands for more sustainable solutions. While the COVID-19 pandemic has temporarily changed the focus from the climate, biodiversity, and broader sustainability crises to managing its social and economic consequences, it also provides an occasion for re-thinking and re-considering our ordinary business processes (European Policy Centre, 2020). The **AEC sector** should seize this moment to optimise business models by further aligning efforts to advance the **green transition** with the **digital transformation**. Digital technologies and processes are considered key to accelerate the transition to an environmentally and socially sustainable economic model that complies with the Paris Agreement and Sustainable Development Goals—SDGs (European Commission, 2019). In this Special Issue, we define **Digital Sustainability in Building Design** as the activities that seek to advance sustainable buildings through the creative deployment of digital technologies and workflow frameworks during the building design process.

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The objective of this Special Issue is to gather scientific advances on the combination of **green and digital transformation in the AEC sector**. We invite researchers to submit contributions with the conceptualization or development of cutting-edge and recent advances in IT solutions for analyses, simulations, calculations, visualizations, etc., integrated into the workflow of building designers to facilitate the creation of sustainable design proposals and solutions throughout the design process.

The scope of the work includes, but is not limited to, the following:

- IT Supported Architectural and Engineering Design;
- IT Supported Sustainability goals in Building Design (i.e., compliance with specific regulations, certification systems or standards);
- Design and Decision Support Systems;
- Building Information Modelling;
- Knowledge Modelling and Linked Data;
- Integrated Process and Product Design;
- Data, Information, and Knowledge Management;
- Artificial Intelligence and Machine Learning in the AEC industry;
- Model-Based Management Tools and Systems;
- Life Cycle Management (LCM)/Life Cycle Sustainability Assessment (LCSA) Tools;
- Communication and Collaboration Technologies;
- Cloud-based Simulation and Collaboration;
- Visualization and Simulation Techniques;
- Digital-Twin for Design;
- Virtual Reality and Augmented Reality (VR/AR)

Dr. Aliakbar Kamari

Dr. Carl Peter Leslie Schultz

Prof. Dr. Steffen Petersen

*Guest Editors*

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## Keywords

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