

The 6th International **ASHRAE** Conference on

EFFICIENT BUILDING DESIGN

**MATERIAL & HVAC
EQUIPMENT TECHNOLOGIES**

October 4, 2024 | 12:15–1:15 pm (Beirut time)
AMERICAN UNIVERSITY OF BEIRUT



PATHWAYS AND SOLUTIONS TOWARDS NET-ZERO WHOLE LIFE CARBON BUILDINGS BY 2050

by

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| Bio

Prof. Dr. Shady Attia is an architectural engineer and professor in sustainable architecture and building technology at the University of Liège in Belgium. He is heading the Sustainable Building Design Lab, founded in 2014. The lab activities focus on design decision support of high-performance buildings and user-centered advanced facades. His overarching goal is to promote energy efficiency, carbon carbon-neutral built environment, human comfort, and health within buildings.

| Abstract

The presentation is focusing on the pathways and solutions needed by various stakeholders and decision-makers to implement whole life cycle based net-zero greenhouse gas (GHG) emissions from buildings in policy and practice. This means to achieve the ultimate goal of the Paris Agreement, which is to limit global warming to well below 2°C, above pre-industrial levels by aiming to achieve climate neutrality by 2050 latest. In this context, 'Paris-goal compatible' technologies and solutions including energy efficiency, renewable energy and storage are presented. The presentation will explore the advances in science towards the transition of the building and real estate sector towards net-zero whole-life carbon including low-carbon materials, heat pumps, smart grids and district heating and cooling. In parallel issues of fuel poverty, wellbeing and thermal comfort in the MENA region will be explored. The presenter will seek an engagement and knowledge exchange with the attendees to further discuss the implementation potential of solutions into practice to promote and support the delivery of carbon neutral buildings at speed and at scale.



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