

NEW METROPOLITAN PERSPECTIVES 2020

THEMATIC SESSIONS - TS

TS-30

ECODESIGN AND GREEN BUILDING FOR SUSTAINABLE DEVELOPMENT GOALS

Keywords: SDG, Ecodesign, LCA, Green Buildings.

The 2030 Agenda for Sustainable Development, adopted by all United Nations (UN) in 2015, provides 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries and economic sectors. The building sector is recognized as one of the most relevant consumer of energy and natural resources, and producer of waste. For this reason, several strategies and directives aimed at improving the environmental sustainability of construction works and the energy performance of building have been adopted. In this context, the concept of "Green" building has gained high attention by the scientific community and policy makers as it can bring multiple benefits in several SDG. A green building is designed with the aim to reduce or eliminate the impact during construction, operation and dismantling phase. Several strategies can be implemented in green building allowing the building sector to provide effective contribute in achieving several SDGs, like in SDG 7 "affordable and clean energy", SDG 12 "responsible consumption and production" and SDG 13 "climate change" by promoting an efficient use of energy, water and other resources and using renewable energy sources. In this view, the "Ecodesign" of building due the integration of environmental aspects into building design represents a useful approach in improving the building sector sustainability along the life cycle.

This session aims at exploring different aspects of building sustainability through the presentation of case studies or procedure evaluation methodologies always keeping in mind that the potential contribute towards the SDGs achievement should be included. Therefore, papers contributing to new approaches, methods and case study applications, in order to assess developments, current policy progress and pathways toward buildings sustainability, are welcome.

Authors are invited to submit papers that deal with the following topics:

The main topics include, but are not limited to:

- Eco-innovative solutions for buildings and construction materials.
- Solutions for improving energy performance of buildings.
- Environmental sustainability assessment of buildings and construction materials.
- Integration of renewable energy generation technologies.
- New approaches to sustainable building development.
- New methodological procedures for assessing green building sustainability.

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