SMART TECHNOLOGIES FOR SMART BUILDINGS

Region Europe and Central Asia
Award Scheme World Urban Campaign

Sustainable Development Goals Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

Summary

How can we achieve urban and housing affordability? Million of people cannot approach good housing solutions and the use of Building Information Modeling (BIM) tools can support the international community for future challenges.

Background and Objective

It can change the way we plan, build and manage our cities, optimizing costs throughout the whole project life c The idea is to develop a pilot BIM modular project in collaboration with FIABCI. The main concept is that the base-module can be employed worldwide with local construction technologies in order to preserve place identity. The aim is soft, materials, labor and maintenance costs optimization in order to increase the housing solutions for people not able to approach good housing solutions and finally promote Real Estate private sector investments in affordable housing. In a graph showing time and costs throughout the projects phases from planning and design to the building end of life, it is evident that the maintenance stage represents the main part of the building life cycle (both in terms of time and costs), remarkably higher than in the other stages. From the very early stages of the project it is possible to control the maintenance costs and develop a LCC analysis. This is the reason why the use of BIM tools supports more efficiently the project instead of using traditional building processes.

Innovative Initiative

Integrated urban planning - optimization of building costs - reduced environmental footprint

Resources devoted to delivery

 $Know\ more: \ https://www.youtube.com/watch?v=2m_IL99WOzQ\ https://www.bca.gov.sg/publications/BuildSmart/others/buildsmart_11 issue9.pdf \ https://www.youtube.com/watch?v=IWhuAQugmi8$