

Abstract

The thesis concentrates on residential buildings evaluation from energy and financial savings perspective. More than 40 % of the total man-induced energy consumption is directed to building construction and maintenance. In these buildings, we spend majority of our lives. The aim of the study is thus to support the discussion about the benefits from new, both energetically and environmentally considerate building trends.

Theoretical part of the thesis is devoted to ecologically efficient family houses and their distinctive features in comparison to commonly built houses, whereas empirical part compares these building types from the energetic and financial viewpoint. Thesis goes on with most frequent ‚myths‘ about sustainable architecture. As a conclusion, the study aims to point out which building type is the most advantageous in terms of energy, finance, sustainability etc.

Keywords: Sustainable architecture, Passive house, Energy savings, Sustainable development