

Indoor Environment, ZEB, and Carbon Neutral Society

Shin-ichi Tanabe

Department of Architecture, Waseda University,

3-4-1 Okubo Shinjyuku-ku Tokyo, 169-8555 Japan, tanabe@waseda.jp

Abstract

The indoor environments should enhance occupant's health, comfort and productivity because people spend around 90% of their lives indoors. However, energy policy and carbon neutral goals in many countries are often focused only on the implementation of measurable energy savings in buildings without taking into account the satisfactions for building users. This has been changed that the energy in buildings should be reduced without compromising the indoor environmental quality. We have to clear the effects of indoor environment in terms of both health and productivity by the scientific evidences. A lot of developing countries declare to establish carbon neutral society until 2050. At the same time we have to think sustainable solutions to persuade clients to accept the concept of a relationship between indoor environmental quality and economic productivity benefits. Human centred research is required to solve these problems. Latest trends in the world and in Japan are introduced and discussed.

Keywords: (within 5)

Carbon neutral, ZEB, Productivity, Indoor environment