

8. Regional cooperation and competitiveness of economies and industries

SUSTAINABLE ENERGY CONSUMPTION IN PUBLIC BUILDINGS: THE SIGNIFICANCE OF OCCUPANTS' BEHAVIOUR

Abstract

Significant energy amount is consumed in public, commercial and office buildings and therefore the sustainable energy consumption there is important. Reviewed scientific papers on energy consumption in public buildings emphasize on appliances that are the most often used in that type of buildings. These appliances include computers, printers, copy machines, lighting, air conditioners, and heating. Human behaviour in terms of energy saving and decreasing levels of CO₂ emissions is an important factor solving diminishing energy resources and environmental problems. Human behaviour in this area is not less important than the use of new energy saving technologies. The main objective of this paper is to investigate what determinants of sustainable energy consumption in public buildings are most studied in the scientific literature and to test the impact of some energy saving determinants on employees' behaviour in public building in Greece. The questionnaire survey has revealed that even though the organization pays the bill the employees believe that saving energy at work is important. The results also show that female employees more than males feel responsible for energy problems, such as the exhaustion of energy sources or global warming. These results may be applied during the consideration of the interventions encouraging energy – saving behaviour.

Keywords: sustainable energy consumption, energy saving, energy saving behaviour, determinants, public buildings, office buildings.