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FACTORS INFLUENCING RESIDENTS TO IMPLEMENT ENERGY EFFICIENCY MEASURES IN MULTI-APARTMENT BUILDINGS

Lauma BALODE[1*], Dagnija BLUMBERGA[2]

[1–2] *Institute of Energy Systems and Environment, Riga Technical University, Āzenes iela 12/1, Riga, LV-1048, Latvia*

[*] ***Corresponding author.*** *E-mail address: lauma.balode@rtu.lv*

Abstract – The review examines in detail the types of factors that may influence residents' motivation to implement energy efficiency measures in multifamily housing. When analyzing heating energy consumption in multi-apartment buildings, three influencing factors must be considered: the condition of the building, technology-based solutions, and occupant behaviour. Studies show that in more developed countries, energy consumption of buildings can be reduced by 30 % to 80 % if energy efficiency is improved. Technology based solutions aim to reduce heat consumption, improve resource productivity, or replace outdated technologies, but these solutions often require large investments. Occupant behavior contributes to nearly 80 % of the variation in energy use. One of the ways to achieve these goals is to improve energy efficiency in multifamily buildings, because according to available literature, residential and commercial thermal energy consumption accounts for up to 20 % of total energy consumption in underdeveloped countries and up to 40 % in more developed countries. Changing people's habits not only reduces heating energy consumption, but also does not require large investments for implementation.

Keywords – Energy consumption; energy efficiency; multi-family buildings; occupants behaviour