

<https://doi.org/10.7250/CONNECT.2024.032>

# CLIMATE CONSCIOUS COMMUNITIES: NAVIGATING TRANSFORMATION THROUGH SIMULATION GAMES AND CREATIVE ENGAGEMENT

Vita BRAKOVSKA<sup>1\*</sup>, Ruta VANAGA<sup>2</sup>, Ģirts BOHVALOVŠ<sup>3</sup>, Dagnija BLUMBERGA<sup>4</sup>,  
Andra BLUMBERGA<sup>5</sup>

<sup>1-5</sup> *Institute of Energy Systems and Environment, Riga Technical University, Āzenes iela 12/1, Riga, LV-1048, Latvia*

\* **Corresponding author.** Email address: [vita.brakovska@zinis.lv](mailto:vita.brakovska@zinis.lv)

**Abstract** – In the context of the European Green Deal and rapid climate change, significant changes in people’s habits are necessary, transforming their behavior from resource consumers’ to climate-responsible individuals’. Addressing challenges, such as biodiversity loss, engagement in the development of a circular economy, responsible energy consumption, and resource sharing, requires changes in individuals’ attitudes and behaviors. However, individuals often lack understanding of the climate system, its link to the quality of life, and the impact of actions based on individual interests on societal transformation processes as a whole. Governments and international organizations implement various complex measures, but the dynamics of climate change by far exceeds society’s ability to adapt. To address these challenges, the authors of this paper propose using simulation games as an effective learning method. These games provide individuals with an opportunity to gain a new, community-oriented decision-making experience without creating negative effects on real systems due to inappropriate decisions. Simulation games help to better understand cause-and-effect relationships, factors influencing individual attitudes and behaviors, evaluate the consequences of decisions made, and motivate practical involvement in mitigating climate change. In order to improve the attractiveness of using the simulation game, cultural and creative industry competences are integrated, which contribute to the improvement of content, visualization and interaction. The paper examines an organizational model for simulation games that assists municipalities and other stakeholders in developing customized simulation games to promote the development of climate-responsible communities. Considering the necessity to engage diverse social groups with varying levels of digital skills, an analog format has been chosen for the simulation game, without excluding the possibility of transforming it into a digital one. The proposed model includes setting objectives, integrating elements into a holistic simulation game, and piloting the framework using examples from municipal practice. To optimize the applicability of simulation games, they need to be adapted to the geographic area and community due to individual processes and structures.

**Keywords** – *Attitudes; behavior learning method; climate-responsible individuals; culture and creative industries*

## ACKNOWLEDGEMENT

This study has been funded by the Latvian Council of Science within the research project ‘Bridging the carbon neutrality gap in energy communities: social sciences and humanities meet energy studies (BRIDGE)’ No. lzp-2020/1-0256.