CoAdapt

Press Release

The CoAdapt project – ‘Communities for Climate Change Action’ - is benefiting from funding from the so-called Norwegian Grants under the EEA funds. On the Polish side, the project operator is the National Center for Research and Development. Polish partners of the project are represented by scientists from leading Warsaw universities and scientific institutions: SGGW (Department of Landscape Architecture) and the University of Warsaw (Faculty of Geography and Regional Studies) and we also cooperate with scientists from the Warsaw University of Technology, the Institute of Geography and Spatial Management of the Polish Academy of Sciences and the University of Gdansk. The Norwegian partners are: the West Norwegian Research Institute (WNRI) and the University of Oslo. They are landscape architects and geographers including climatologists, hydrologists and landscape ecologists, as well as dendrologist, environmental engineer zoologist and architects, i.e. all those who have an impact on shaping the environment we live in, as well as sociologists, computer scientists and game designers.

The aim of the CoAdapt project is to design a simulation game called the ‘Neighborhood with Climate’ that motivates local communities to take action to adapt to climate change in their immediate environment - in neighborhood.

The problem of climate change affects all of us, but it is particularly acute for residents of cities and towns, where extreme weather events such as heat waves, torrential rains and periods of drought are particularly severe. On a global scale, it is difficult to take effective action against such changes on an individual or neighborhood group basis, which is different on a local scale. Pro-adaptive solutions to minimize the negative effects of climate change can be implemented within a neighborhood, from those that serve to improve the microclimate to rainwater management.

Serious games are increasingly used as decision-support tools. The ‘Neighborhood with Climate’ game is designed **to best adapt the environment of a residence to climate change**. One can introduce various solutions (40 in total) including: rain gardens, absorption basins, climbing plants, trees, flower meadows, and special algorithms allow us to verify the effectiveness of the solutions chosen in the estate and check whether we have reduced air temperature, improved air quality, how much rainwater we have captured, and at the same time whether our proposals will promote biodiversity and be economical to use.

The ‘Neighborhood with Climate’ game has been designed in board and computer versions in such a way as to play on one's neighborhood. The game board is a real housing estate selected by the player, and in the computer version the player indicates the neighborhood on the map.

Testing the game

As part of the project, cooperation was undertaken with the City of Warsaw in 2022 so as to jointly test the game The ‘Neighborhood with Climate’ on 6 different Warsaw housing estates. Almost 80 participants took part in the workshops with the participation of residents, experts from Warsaw universities, including residents, local leaders, community activists and even ‘garden guerrillas’. The educational game proved to be an effective tool for consulting different generations of residents, listening to their needs and discussing in consultation with experts what actions are feasible to implement and what are their climate-environmental and social benefits. Residents played in their neighborhoods, observing how the changes made affect the quality of neighborhood space. The goal of the workshops, meetings with residents, and joint walks was to develop pro-adaptation solutions that will allow settlements and residents to better adapt to the changing climate and extreme phenomena (drought, high summer temperatures, tropical nights or stormy precipitation). The game was also tested by Norwegian scientists.

We are implementing these solutions with residents as part of the project. A budget of 30,000 to 40,000 zlotys per neighborhood is planned for the introduction of selected solutions, for example, planting of vegetation, rainwater retention devices, introduction of community gardens.

In just a few weeks the game will be available online for residents throughout Poland.