

CLIMATE ADAPTIVE NEIGHBORHOODS

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ABSTRACT

The so called “grey neighborhoods” were built between 1958 and 1965 due to the expansion process of the heavy industry near the cities in order to provide enough homes for the workers. Standardized collective housing typologies have been used, organized in such a way to form an inner courtyard.

Today, in Romania these neighborhoods represent a big majority of the constructed urban environment. Their overall quality has degraded during the time and small improvements have been made. They now fail to meet modern living standards and contribute to a general trend of moving out to the new sprawl areas around the city. The public spaces were left unattended and the green areas around the blocks were occupied by cars and unauthorized garages. Because they are so wide spread, introducing an adaptive system that improves their overall quality will have a major impact not only on the neighborhoods but also on the quality of life.

This paper presents a possible revitalization design scenario of these neighborhoods by introducing adaptive design principles. The apartments are reconfigured and new extensions are added on the current unused attics. More, adaptive building envelope is provided and elevators to facilitate access to the upper levels are integrated. The inner courtyards are redesigned into a positive space. Renewable energy systems are integrated and a “smart grid” connection system is installed.

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