

“GREEN TECHNOLOGIES” IN THE ARCHITECTURAL-LANDSCAPE ORGANIZATION OF THE ENVIRONMENT

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Throughout history, mankind has been solving environmental problems. When a person led a collective lifestyle, he remained an organic component of nature, but the more rapidly humanity evolved, the more harm it did to the environment.

“Green technologies” are focused on preserving the surrounding nature, as well as improving the quality of human life. They imply the efficient use of natural resources and the use of environmentally friendly materials that have minimal environmental impact over the entire life cycle, from the production process to disposal. At the moment, the term "green" is a synonym for the word "environmental", which is reflected in all scientific spheres of mankind. Separate areas of engineering highlighted eco-design, eco-architecture and eco-construction [1].

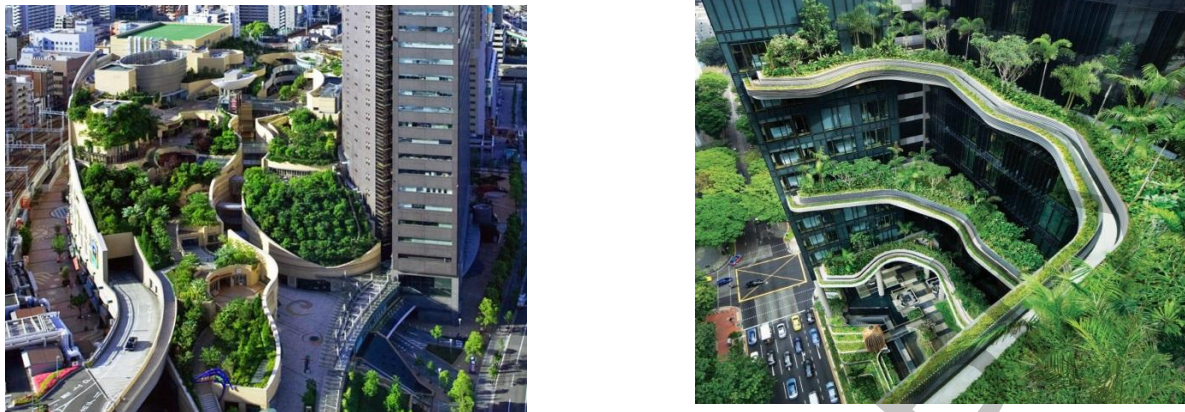
The purpose of the study is to consider the possibility of using "green technologies" as an environmental organization in order to improve the environmental situation in cities with dense point development, which allow transforming the appearance of the city.

Material and methods. The main base material for this work was the design projects of foreign landscape designers and 4-5 year students of the specialty design (interiors of offices, banks, cafes and clubs) and materials from online sources related to environmental problems. The methodology of this study is based on a comparative, comparative and systematic approach to the study process.

Findings and their discussion. The emergence of eco-design is associated with the problems of environmental pollution on a global scale. Standard urban development and everyday objects were devoid of individuality, and man-made materials of unknown origin began to cause dissatisfaction with consumers over time. In time, this coincided with a rethinking of the role of man in the world, and on the wave of a new, “green” philosophy, a new attitude to production appeared: the main principle was “harmony with nature”.

The appearance of the terms “green roofs” (Pic. 1) and “green facades” (Pic. 2) in world practice helped to combine the building with the environment, allowed landscape architects, engineers and builders to organize competent work to improve the quality of life in the city by increasing the excess the number of green areas, reducing the total noise impact [2]. "Green roofs" - partial or complete filling of the roof space with green spaces. These can be plants in containers that can be easily replaced and create new compositions, as well as flower beds planted in the ground or a lawn where you can take sunbathing without leaving your home. The presence of green roofs in foreign countries has

a great influence on the pollutant content in the air, namely a 5-10% decrease in nitric oxide and sulfur dioxide over green roofs in Toronto (2003), a decrease in sulfur dioxide by 37% and carbon monoxide by 21% in Singapore [1].



Picture 1 Urban Environment

“Green facades” is another of the design decisions aimed at increasing the number of green spaces in the environment of the building by placing them on the facades. “Living walls” differ significantly from vertical gardens in that ground cover plants are certainly planted in soil fixed to the walls. This method is suitable for low buildings and is more time-consuming, since it requires more careful selection of plants and the need for timely cutting.



Picture 2 Blooming building façade



Picture 3 Built-in Home Example

If we recall and analyze the design of the dugouts, we can conclude that in such a building the microclimate in any season of the year is much more comfortable than in an overground building. A similar technique is applicable in modern construction, namely geoplastics, which involves the use of terrain for the purpose of its architectural transformation. With this method, some part of the original landscape is intentionally left untouched: the building is “inscribed”

in the existing natural form (hill or hollow) instead of leveling the ground with excavators or filling the lowlands with imported soil (Pic. 3).

This approach provides users with the opportunity to feel inside the ecosystem, moreover, a more comfortable air temperature will remain inside such a building, which will lead to lower energy costs.

The least costly way to improve the environmental situation is to expand the bicycle infrastructure, which has a lot of positive aspects: environmental friendliness and promotion of sports; reduction in the number of car parks; take up little space; attractive appearance [2].

Conclusion. World practice has shown that architects and designers in their projects are increasingly using green technologies that can improve the environmental situation in residential premises and in the cities themselves.

1. Yatsenko V.V., Vishnevskaya E.V. RESEARCH OF APPLICATION OF “GREEN TECHNOLOGIES” IN THE ARCHITECTURAL-LANDSCAPE ORGANIZATION OF THE ENVIRONMENT // International Student Scientific Herald. –2018 No. 2; URL: <http://www.eduherald.ru/ru/article/view?id=18437> (accessed: 11/05/2019).
2. https://rodovid.me/green_city/zelenye-tehnologii-v-stroitelstve.html”.

DESIGN FEATURES OF CULTURAL CREATIVE ENVIRONMENT

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New trends in the organization of environment of cultural and entertainment institutions are associated with current socio-economic, information and technological conditions. The urgent task is the organization of space, which will allow to make interaction between people and the environment, to change the space depending on new tasks. Mobile constructions for the exposition, complex lighting systems and audiovisual equipment, stylistically neutral space are the basis of modern cultural environment.

The result of thinking about the problem of developing the creative potential of the city is the formation of creative clusters, which are spaces of concentration of creative people and organizations that develop and demonstrate their ideas actively, are able to ensure the production process, promotion and delivery of products of creative work.

The aim of this work is to analyze the environment of creative clusters of the world and Belarussian clusters in particular.

Material and methods. Theoretical science sources and graphic images and foto were used as a material for the study. The following methods were used in the work: general scientific methods, such as theoretical comparative analysis, classification, synthesis; a retrospective analysis; grapho-analytical methods.