Green Building: The Beauty of Construction and Sustainable Development Balance

Puchko A.N. Chechuha E.G.
The Belarusian National technical university

Green building (also known as green construction or sustainable building) refers to a structure and using process that is environmentally responsible and resource-efficient throughout a building's life-cycle: from siting to design, construction, operation, maintenance, renovation, and demolition. In other words, green building design involves finding the balance between home building and the sustainable environment. This requires close cooperation of the design team, the architects, the engineers, and the client at all project stages. The Green Building practice expands and complements the classical building design concerns of economy, utility, durability, and comfort.

Although new technologies are constantly being developed to complement current practices in creating greener structures, the common objective is that green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environmental degradation.

One of the most important trends in contemporary architecture is the introduction of so-called green building standards. More and more developers are moving away from the idea that the efficiency of the building is limited to technical and economic indicators and are looking at the issue much wider, it must be harmonious to the environment and the people who live and work in it. So before our eyes begins the era of eco-development.

Green building is an innovative approach to the design and construction of modern buildings, aiming at reducing the consumption of natural resources during construction and operation and, at the same time, to improve comfort and the quality of the indoor environment of buildings. Energy efficiency is another important component of the principles of green building.

Green building is probably one of the most positive trends in modern architecture. Many technical decisions still look like futuristic sketches, but nevertheless, these technologies are already there, they are implemented and work. For an ordinary consumer remains the question to support these undertakings or not. While it is clear the development of green construction will keep the environment to live and work in harmony with the environment.