Досі великою проблемою залишається прогнозування ефективності механізмів природокористування внаслідок труднощів при розрахунку економічних показників цих процесів. Складність полягає у необхідності інтеграції великої кількості факторів при розрахунку таких показників.

Ще більш чітку картину ефективності природокористування міг би дати облік шкоди здоров'ю населенню в процесі природокористування, індексу гуманітарного розвитку, а також індексу сталого економічного добробуту{ 3}.

Отже, ефективне природокористування допоможе людству забезпечити сталий комфорт і мінімізувати вплив на навколишнє середовище. Але щоб досягти максимального показника ефективності використання ресурсів, інновації потрібно вводити не поодиноко, а в межах цілої країни, а в майбутньому і світу загалом. Це достатньо довгий і дорогий шлях, оскільки ще в країнах третього світу досить низький рівень життя. Досить важливо розробляти програми зі збереженням навколишнього світу з оглядом на можливості країни, в яких них повинні діяти.

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UPDATING THE GREEN BUILDING CONCEPT FOR THE POST-WAR RESTORATION OF CULTURAL HERITAGE

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According to International Centre for the Study of the Preservation and Restoration of Cultural Property, cultural heritage must be recognized as a crucial element of the recovery process immediately following the end of an armed conflict, and not be considered a luxury to await attention later [1]. Currently, the

reconstruction the historical and architectural heritage is still one of the most urgent problems in the urban planning sector of Ukraine. UNESCO has already confirmed the destruction or damage of 186 objects of cultural heritage of Ukraine, including buildings of museum-reserve complexes, cultural centers, theaters and libraries [2]. In such a situation, a technological problem is highlighted: is there and opportunity to rebuild the destroyed object or not, and if so, is it possible to apply green building technologies. Because of this, issues regarding the conceptual rethinking of architectural and spatial solutions, building production processes through the prism of modern requirements for energy saving and environmental friendliness become more acute [3].

In new construction, the greenest design strategies could be embraced: minimizing environmental impact while inspiring the community to think of the future as waste-, energy- and water-positive. In particular, the issue of restoration of these cultural buildings with the application of the requirements for a "green museum" is relevant. Cultural institutions can also last well into the future. Longevity in museums can translate to a higher cumulative carbon footprint, so, considering that museums are designed for a long service life, "Design, Build, Operate Green" seems to be more important now than ever before [4]. A green museum is a museum that incorporates concepts of sustainability into its operations, programming, and facility. As a general rule, green museums reside in a building featuring sustainable architecture and technology. Museums implementation of sustainable practices in building or altering facilities are carry out such that they are sustainable. This includes using LEED (Leadership in Energy and Environmental Design) building practices [5].

However, it should be noted that museums are a challenging building type with diverse programming, from preserving and displaying collections to providing and maintaining visitor facilities, each with its own climatic requirements. The complexities involved in building or renovating a museum, combined with undertaking a sustainable design certification effort, can be daunting for someone unfamiliar with the process. To ensure that preservation concerns are integrated into the design, conservators must both understand the process and be an effective part of it. That is why such construction projects construction projects should also be carried out at a higher level of sustainability of all organizational, management and production processes.

The triple bottom line of environmental, economic and social efficiency must be considered to achieve operational sustainability. The growing demand for sustainable business processes has led to significant transformations in the project management knowledge system. In particular, the "GPM P5 Global Standard for Sustainable Development in Project Management (GPM P5)" was developed [6].

Assessing the sustainability of project management includes measuring the impact of the project on the external and internal environment.

Applying GPM P5 to construction project management is an important task for decision makers. The specifics of the production of the construction “product”, its resource intensity, also require more extensive work with the environment of the construction project. The sustainability orientation of the construction project must be represented in the processes, tools, and project actions throughout the entire life cycle [7].

Researchers consider project planning as a significant factor contributing to the successful implementation of projects. In [8], it is proposed to evaluate the level of implementation of the planning function in terms of "maturity" of project management, its ability to apply the necessary tools and methods to reduce uncertainty. It is argued that mature planning makes project goals more specific and understandable to the project team. From a sustainability perspective, mature planning is seen as a basis for tracking actual progress, including on the environmental and social sustainable development goals.

Most researchers prefer to evaluate project planning from a process perspective. At the same time, they are guided by the PMBOK (Project Management Body of Knowledge) project management standard [9]. Such studies take into account the project objectives, directly related to the sustainability of the so-called “project triangle according to PMBOK”: time, cost, scope and quality. The sustainable development goals can be achieved by “embedding” sustainable development issues at different levels of the hierarchy of project plans, by “simple implementation of the plan” and “monitoring on a monthly/weekly basis”. However, such tools lack flexibility. In [10] emphasizes the importance of environmental sustainability indicators for construction projects. The construction industry is considered one of the biggest contributors to climate change due to the consumption of natural resources and the generation of greenhouse gases. The authors note that proper management of construction projects, with a sustainability-oriented decision-making system and subsequent monitoring, can mitigate this problem. The tools are proposed that only partially monitor the sustainability-orienteers of decisions regarding construction projects, namely by three indicators: waste reduction, energy consumption, and carbon emissions.

Further development of the research requires expanding the structure of the corresponding indicators. In particular, it is important to focus on such LEED indicators as integrative process, location and transportation, sustainable sites, water efficiency, energy and atmosphere, material and resources, indoor 1nvironmental quality, regional priority credits, innovation [11]. The LEED Scorecard at the “Material and Resources” level includes the following sub-indicators: storage and collection of recyclables, construction and demolition waste management planning,

building life-cycle impact reduction, building product disclosure and optimization – environmental product, building product disclosure and optimization – sourcing of raw material, building product disclosure and optimization – material ingredients, construction and demolition waste management.

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