



BUILD BACK BETTER AND GREENER

Reuse projects for green reconstruction



Executor



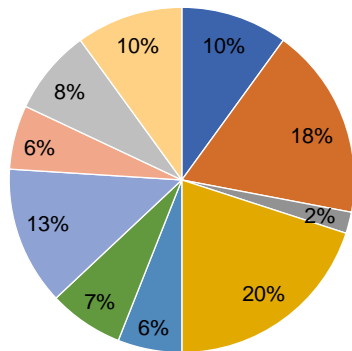
Ministry for Development
of Communities
and Territories of Ukraine



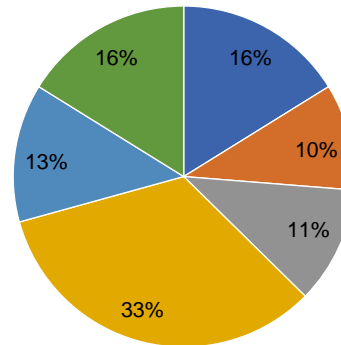
BREEAM®



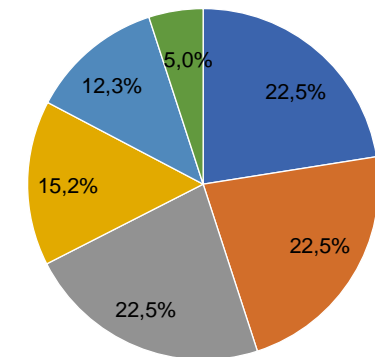
Rating	%	Rating	Received points	Rating	%
Impressive	≥ 85	Platinum	80+	Platinum	65...80+
Perfectly	≥ 70	Gold	60...79	Gold	50...65
Very good	≥ 55	Silver	50...59	Silver	35...50
Good	≥ 45	Certified	40...49	Bronze	Up to 35
Suitable	≥ 30				
Outside classification	<30				



- Management
- Hazards
- Transport
- Materials
- Land use and ecology
- Health and well-being
- Energy
- Water
- Waste
- Pollution



- Location and transport
- Urban sustainability
- Water efficiency
- Energy and atmosphere
- Materials and resources
- Environmental quality and microclimate



- Environmental Quality
- Economic Quality
- Technical Quality
- Place Quality
- Process Quality



Public buildings. Environmental criteria and life cycle assessment method –

assessment of improved environmental performance of public buildings and structures, at the stages of design, construction, commissioning, maintenance, repair and end of life.

WG PC 3 "Life Cycle Assessment" of the National Technical Committee for Standardization TC 82 "Environmental Protection"

developed a standard based on the results of a life cycle analysis of facilities built in accordance with the requirements of energy-efficient, green, and sustainable construction standards.

ISO 21929-1:2011; ISO 15686-5:2017

ISO 14040:2013; ISO 14024:2018

ISO 14025:2006; EN 15804:2013

ISO 14001:2015; ISO 45001:2018; ISO 50001:2018



КИЇВСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ БУДІВНИЦТВА І АРХІТЕКТУРИ

ПРИЙМАННЯ КОМПІЄ

The method of evaluating the correspondence according to the Harrington desirability function

10 categories of requirements which are divided into two groups

UNIVERSAL CATEGORIES



management



infrastructure and sustainability
of the territory



indoor comfort and safety



waste management



environmental protection

ADJUSTED CATEGORIES:



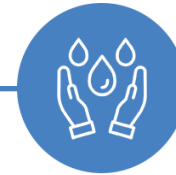
life safety



construction products



architecture and planning



water efficiency



energy efficiency

This categories with variable values depending on the natural, climatic and economic characteristics of the territory.



Ecological construction products

Those that meet the environmental criteria for evaluating products of a certain category and their life cycle under the certification scheme according to ISO 14024.

Certified products receive from the assessment body the right to use a special logo (ecolabel), which is used as a tool for providing environmental information about improved product characteristics (B2C, B2B, public procurement).



<https://globalecolabelling.net>



ISO 14024:2018

It is recommended that when establishing requirements for products, determine the compliance of their environmental characteristics with the standards of type I environmental labeling in accordance with DSTU ISO 14024:2018 (EN ISO 14024:2018, IDT) for the following categories:



Concrete and concrete products;



Window blocks;



Gypsum construction products;



Products made of polymer materials;



Ceramic products;



Thermal insulation materials (all types);



Paints and varnishes;



Rolled steel;



Floor coverings made of wood;



Dry building mixtures;



Wallpaper;



Electrical equipment and household appliances.

Project of an energy-efficient school with improved environmental characteristics



Project of an energy-efficient kindergarten with improved environmental characteristics



Project of an energy-efficient center for provision of administrative services a with improved environmental characteristics (development at the final stage)



All three projects for reconstruction meet the environmental criteria of the standard, which is achieved in particular:

1. Thermal insulation properties of building envelopes.
2. Energy consumption accounting and control systems.
3. Automated resource consumption monitoring systems.
4. Energy-efficient lighting systems and building engineering systems.
5. Renewable energy sources
6. Heat-accumulating properties of reinforced concrete building frame elements (especially shelter structures), as well as ceramic wall structures.
7. Minimum cold bridges due to optimization of the shape of building envelopes and reduction of the number of heat-conducting inclusions on facades.
8. Energy-efficient and environmentally certified building products.
9. Solar protection systems (reduction of energy consumption for cooling and air conditioning needs in the warm season).
10. Life cycle cost.

A bidder who submits a bid for the amount of UAH 100,000 and has fulfilled all the requirements of non-price criteria with a maximum weight of 30%

The correction factor for this proposal will be equal to:

$$KK = 1 + (0,1 + 0,15 + 0,05) / 0,7 = 1,85$$

Then the quoted price at which the Supplier will participate in the auction will be equal to:

$$100,000 \text{ UAH} / 1.85 = 54,054.05 \text{ UAH}$$

That is, a bid of UAH 100,000 that meets the total value of non-price criteria is equal to UAH 54,054.05 in a competitive auction relative to the price bid of participants who do not meet the requirements of non-price criteria.



proz•rro

Open to partnership for further steps

Participation in the development of the draft:

- Law of Ukraine "On Green Recovery"
- environmental criteria for the admissibility of investment projects.

Further development of the system of environmental criteria for the certification of various types of buildings and structures.

Review, update and development of new environmental criteria for the eco-labeling program for construction products, taking into account Directive (EU) 2024/825 and Regulation (EU) 2024/3110.

Development and promotion of the e-Catalog of construction products with integration into the e-system of public procurement Prozorro.

Development of methodological recommendations for communities and other customers regarding the task of designing energy-efficient green construction facilities.

Development and implementation of the Vocational Training and Retraining System for green skills in construction
Development of new standard projects for other types of buildings.

What was also done during the war

Methodological guides on the basics of design and reconstruction of energy-efficient buildings of general secondary education institutions and kindergartens with improved environmental characteristics.

DSTU ISO 15686- 5:2023 Buildings and real estate objects. Planning of the operational period. Part 5. Life cycle cost assessment (ISO 15686- 5:2017, IDT) has been developed and adopted.

At the final stage of development, a new edition of DSTU 9171:2021 Guidelines for ensuring the balanced use of natural resources during the design of structures.

e-Catalog of construction products recommended for rebuilding better than before.

TSO calculator for calculating the life cycle cost of products.





Thank you for your attention!



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