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COMBINATION OF ECOLOGY AND AESTHETICS OF THE INTERIOR WITHIN THE FRAMEWORK OF LIMITED FINANCIAL RESOURCES

***Summary.** The article discusses the important issue of balancing environmental sustainability and interior aesthetics with a limited budget. It explores modern techniques and materials that can help create a stylish and eco-friendly space without significant financial investment.*

The article emphasizes the use of natural and recycled materials, energy-efficient lighting, and minimalist design, which can help reduce costs and promote sustainable development. It provides practical tips for interior planning that allow for the harmonious integration of beauty, comfort, and environmental responsibility, while taking into account financial constraints.

***Key words:** ecology, aesthetics, design, comfortable environment, interior, practicality.*

The importance of considering the combination of environmental sustainability and aesthetic appeal in interior design within the constraints of limited finances is due to increasing awareness of environmental concerns and the need to save resources with a budget. Modern design trends focus on using eco-friendly materials and techniques that improve quality of life and promote health, but these often come at a higher cost than traditional options.

In situations where finances are limited, it is essential to find a balance between sustainability and aesthetics to create a comfortable, functional, and

appealing space without excessive expenses. This is significant not only in terms of sustainable consumption but also practically, as affordable eco-conscious; solutions contribute to the wider adoption of sustainable design principles.

Thus, studying this topic can help us develop effective and budget-friendly interior design approaches that meet the demands of modern society and the economic reality.

The purpose of studying the combination of environmental friendliness and aesthetics in interior design is to identify and develop optimal methods and approaches for creating interior solutions that meet both environmental and aesthetic requirements of users. This helps to create a comfortable, healthy, and visually appealing space that minimizes the negative impact on the environment. Additionally, the goal is to find a balance between environmental friendliness, aesthetic considerations, and budget constraints in order to promote the widespread use of sustainable practices in interior design.

To study the combination of environmental friendliness and interior aesthetics with limited financial resources, an integrated approach is recommended. First, it is essential to analyze available literature and successful case studies, which can help identify effective and cost-effective solutions. Additionally, conducting online surveys and interviews with designers and experts can provide practical recommendations and insights into popular combinations. Visualizing and modeling interiors using free or low-cost programs can be a convenient way to save resources while still allowing for a qualitative evaluation of aesthetics and environmental impact.

An analysis of available eco-friendly materials, considering their cost and aesthetics, will help you choose the best options. Additionally, it is beneficial to conduct field observations and visit projects that have been implemented to gather live data and feedback, minimizing research costs. It is also essential to

establish collaboration with manufacturers and suppliers of eco-friendly materials, obtaining samples and advice free or at a nominal cost.

An integrated and systematic approach would allow for the effective study and application of a combination of environmental friendliness and aesthetics within an interior design with a limited budget. The degree of research into the combination of these two aspects is currently at an active stage of development and interdisciplinary investigation. The fundamental theoretical concepts of "green" design, such as the use of natural and recyclable materials, minimization of harmful effects, and rational energy use, have been well studied and described in relevant literature.

Aesthetic aspects are viewed through the lens of harmony, natural textures, and comfortable perception. However, there is still a lack of standardization in criteria for evaluating the aesthetics of environmentally friendly interiors. Practical research demonstrates the positive impact of these solutions on people's health and psychological well-being, linking environmental friendliness to aesthetics through improved quality of life.

In design practice, environmentally friendly materials and technologies are used to create attractive interiors. However, the high cost and limited availability of these solutions hinder their widespread adoption, which limits the depth of understanding of economic and cultural factors.

There are gaps in the research on the integration of traditional and modern environmentally friendly materials, considering regional and cultural characteristics. The combination of environmental friendliness and aesthetic appeal of the interior has been studied sufficiently on a theoretical and practical level. However, it requires further systematization and the development of universal methods for assessing and considering economic and socio-cultural factors in order to achieve a deeper understanding and more effective application [1, p. 9].

The study of the balance between environmental friendliness and aesthetic appeal of interior design began in the XX century, in response to growing environmental awareness and the emergence of design as a distinct field. In the 1960s and 70s, movements for nature conservation and sustainable development gained momentum, influencing the development of eco-conscious design principles. During this period, emphasis was placed on the use of natural, environmentally friendly materials and reducing waste and energy usage. However, aesthetic considerations were primarily focused on functionality and simplicity.

In the 1980s and 1990s, the concept of environmental friendliness began to be integrated with aesthetic principles, through the development of biophilic design. This approach emphasizes human harmony with nature by using natural motifs and textures in interior design. At this time, studies started to emerge linking the visual perception of interior spaces with psychological well-being and health. This increased interest in combining environmental sustainability with aesthetics.

Today, in the XXI century, there has been a growing focus on sustainable and eco-friendly interior solutions, driven by concerns about climate change and the need for sustainable development. Modern research not only addresses technical aspects such as materials and energy conservation but also explores issues related to perception, emotional comfort, and cultural factors in designing eco-friendly spaces. During this time, knowledge has been systematized, and new criteria have been developed for evaluating the aesthetics of eco-conscious interior designs.

Turning to nature has always been a source of inspiration for artists and designers. Modern and rural styles are closely linked with eco-friendly design, which is becoming increasingly popular due to its positive impact on the

environment and the desire for a healthy lifestyle. Eco-design provides positive energy and promotes a more sustainable future.

Table 1

Periods of eco–design formation [2, p. 28]

Periods	Years	Direction	Representatives	Features
First period	1986 - 1990	Ascetic	Germany	Durability of manufactured items Low usage of products
		Modernization	Japan	Repeated production of products, low energy consumption
		Harmonic	Italy	Carefulness in the manufacture, use and disposal or recycling of furniture
Second period	1991 - 1996	Technological	USA	Thorough research into harmless raw materials and technologies in their production

Thus, the history of studying environmental friendliness and interior aesthetics reflects the gradual integration of ecological and artistic approaches, from a focus on materials and form to a holistic perception of space that promotes health, comfort, and sustainability.

Note that the basic principles of combining environmental friendliness with interior aesthetics include several key elements. Environmental friendliness in the interior refers to the use of natural, renewable, and recyclable materials, as well as minimizing the use of toxic substances that can have negative impacts on human health and the environment. Aesthetics in the interior are associated with the harmonious combination of colors, textures, shapes, and lighting that create a pleasant visual and emotional experience in the space.

Sustainable design takes into consideration long-term environmental, economic, and social factors to create functional and aesthetically pleasing interiors with minimal impact on nature. Biophilic design incorporates natural elements and motifs to promote well-being and emotional comfort, while health

and well-being are also important factors, which are supported by air quality, proper lighting, and material safety. The use of renewable and natural materials, such as wood, linen, cotton, and bamboo, contributes to the environmentally friendly nature of the interior. This is because these materials are renewable and do not deplete natural resources. Additionally, energy conservation and resource efficiency are achieved with technology that reduces energy and water consumption, thereby minimizing the impact on the environment. Finally, circular economy principles involve recycling and reusing materials in order to reduce waste and conserve resources.

All these concepts form a holistic approach to creating interiors that harmoniously combine environmental friendliness with aesthetics. Modern methods for incorporating environmental considerations and interior aesthetics within a limited budget are diverse and varied.

Let's take a brief look at some of them.

1. Using recycled materials.

Recycling old furniture and restoring wooden elements from improvised materials can be an economical way to create a stylish and environmentally friendly interior. For example, restoring old dressers or tables with natural paints and oils can help reduce waste and create a unique piece of furniture.

2. Natural textures and colors

Using inexpensive natural fabrics such as linen, cotton, or jute for textiles and decorative elements creates a warm and welcoming atmosphere. Painting the walls with soft natural shades such as beige, green, or terracotta improves the overall appearance without significant additional cost.

3. Minimalism and Functionality

A minimalist design with a focus on functionality helps to reduce the number of items in an interior, which in turn reduces costs and resource consumption. The use of simple geometric shapes and open spaces creates a modern and environmentally friendly interior.

4. Plants for the interior.

Houseplants do not require significant expenses, while they improve the air quality and add liveliness and beauty to the interior. Using indoor plants is a cost-effective way to enhance the environment and aesthetics of your home.

5. Lighting and energy efficiency.

Maximizing the use of natural light and using energy-efficient lighting reduces electricity consumption and enhances the interior with a natural lighting that is both safe and beautiful.

6. DIY approach (Do-it-yourself approach).

Decorative elements made by hand from eco-friendly materials, such as wicker baskets and paintings made from recycled materials, allow you to create a unique and stylish interior with minimal effort. The concept of eco-design promotes a careful attitude towards the environment and things in the home. Being close to nature has a positive impact on human behavior. At the same time, interior designers describe this style as follows:

- clear structure;
- freedom of space;
- variety of geometric shapes;
- minimum of things with their greater functionality;
- high-tech solution;
- bright and fresh color accents;
- variety of texture combinations.

These approaches have proven effective for small budgets, balancing environmental concerns with modern interior aesthetics. Eco-design, like any style, has advantages and disadvantages, and it's important to understand these in order to make informed decisions. In this article, we will explore some of the pros and cons of eco-design and discuss ways to address any shortcomings.

Table 2

Advantages and disadvantages of eco–design [3, p. 68]

Pros	Cons
<p><i>Natural materials</i></p> <p>Eco-friendly materials mean a healthy and pleasant atmosphere. No harmful particles in the air from materials created chemically.</p>	<p><i>Expensive materials</i></p> <p>Natural materials, of course, will not be cheap, unlike artificial ones, but eco-style requires certain investments.</p>
<p><i>Environmental protection</i></p> <p>No emissions into nature when creating furniture and household items from environmentally friendly materials. Wood is suitable for recycling, but plastic is not.</p>	<p><i>Expensive and complex work</i></p> <p>Real eco-style consists of many elements and details in the interior, requiring diligent and complex work of the master with large material investments.</p>
<p><i>Good effect on the psyche</i></p> <p>A person is more pleased to see natural tones and feel their natural texture. The natural color of grass, soil, stone and wood can calm a person's overworked brain. Artificial materials do not have this effect.</p>	<p><i>Cleanliness of premises</i></p> <p>It can be labor-intensive to care for plants and walls made of different textures and details.</p>
<p><i>Minimum decor</i></p> <p>Eco-design does not require a lot of decor, which does not detract from the comfort of the interior. And the presence of a large number of plants, on the contrary, will be favorable for the purity of the air in the premises.</p>	<p><i>Technology</i></p> <p>Implying eco-style in the interior, a person cannot refuse modern technologies completely. Therefore, an indispensable attribute in a modern interior will be a computer, mobile phones, TV, tablets, etc.</p>

Also, the challenges of combining environmental sustainability and interior aesthetics with a limited budget mainly relate to the high cost of eco-friendly materials. These materials are often significantly more expensive than their synthetic or lower-quality counterparts. This limits your options and forces you to seek compromises, which may not always allow you to achieve your desired design. Additionally, the range of certified and reliable eco-friendly products in the budget category is limited, making it difficult to find safe and stylish solutions.

Furthermore, lack of experience and time for DIY manufacturing or restoration of elements makes it challenging to maintain eco-friendliness, as DIY requires skills and effort to achieve high-quality results.

Low-cost, eco-friendly materials often have lower durability than more expensive alternatives, leading to the need for frequent replacement and reducing the overall environmental impact. Additionally, some popular design trends may not align with environmental friendliness, creating a conflict between aesthetics and sustainable design principles. Therefore, with a limited budget, it's important to carefully balance cost, quality, and environmental considerations, requiring thoughtful choices and a willingness to compromise.

In our opinion, a combined approach should be taken to solve the challenge of combining environmental sustainability and interior aesthetics with a limited budget. Firstly, we recommend choosing local natural materials such as certified wood, cork, or clay, as they will reduce transportation costs and preserve the environment. Secondly, we suggest considering the recycling and reusing of old furniture and decorations, as this will reduce project costs and lessen the impact on nature. Additionally, minimalistic and functional designs can help reduce material consumption and create a stylish space without unnecessary expenses.

Investing in high-quality and durable materials and furniture can provide long-term savings by reducing the frequency of replacements. At the same time, customizing or refining interior elements allows for greater control over both budget and environmental impact. Clear planning and careful allocation of funds can help prioritize eco-friendly choices and avoid unnecessary spending. It is also important to use certified, economical materials and energy-efficient lighting to improve the environmental performance of a space without significantly increasing costs.

This comprehensive approach allows you to create a harmonious, practical and sustainable interior that meets both aesthetic and environmental requirements, even on a limited budget.

Conclusions on the topic of combining environmental friendliness and aesthetics of the interior on a limited budget can be formulated as follows.

- Firstly, the use of local and natural materials significantly reduces costs and helps maintain environmental friendliness.
- Secondly, reusing and recycling furniture and decorative elements allows you to create a stylish interior at minimal cost and with less impact on the environment.
- Thirdly, minimalism and a functional approach help to use resources rationally, which is reflected in cost savings and the creation of a harmonious design.
- Fourthly, investments in high-quality and durable materials pay off due to the reduced need for frequent repairs and replacements.
- Fifthly, independent production or modification of interior details makes it possible to control the budget and choose environmentally friendly solutions.
- Finally, proper planning and prioritization help to achieve the optimal balance between aesthetics, sustainability and affordability, which is especially important when financial resources are limited. Thus, an integrated approach ensures the creation of a beautiful, sustainable and economical interior.

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