

## DEVELOPING ECOLOGICAL MARKETING THROUGH THE SUSTAINABLE PUBLIC PROCUREMENT

DOI: <https://doi.org/10.53486/dri2025.29>  
UDC: [339.138:352/354]:504(478)

IULIAN GANGAN

[iulian.gangan@yahoo.com](mailto:iulian.gangan@yahoo.com)

ORCID ID: <https://orcid.org/0009-0007-6985-1064>

OXANA SAVCIUC

[ox.savciuc@ase.md](mailto:ox.savciuc@ase.md)

ORCID ID: <https://orcid.org/0000-0001-8629-5660>

Academy of Economic Studies of Moldova

**Abstract.** *In the context of the climate crisis and the depletion of natural resources, the Republic of Moldova has committed, through its Environmental Strategy 2024–2030, to aligning national policies with European objectives for sustainable development. The strategy aims to reduce greenhouse gas emissions, adapt to climate change, transition to a circular economy, and protect biodiversity. An important direction is the promotion of ecological marketing, which supports sustainable products and services through energy efficiency and social responsibility. In this regard, Sustainable Public Procurement (SPP) becomes a strategic tool, guiding public demand towards ecological products and encouraging producers to change their behavior. SPP contributes to innovation, social responsibility, and reducing environmental impact. Although Moldova allocates limited resources for environmental protection, the National Environmental Fund and international partnerships support sustainable investments. Compared to the European Union, where public procurement accounts for an average of 14% of GDP, in Moldova it stands at around 11%, indicating significant untapped potential. Through coherent public policies and cross-sector collaboration, sustainable procurement can catalyze the development of ecologic marketing and the transition to a sustainable and resilient economy.*

**Keywords:** *sustainable development; Environmental Strategy 2024–2030; climate change; ecological marketing; sustainable public procurement (SPP); circular economy; environmental protection; ecological impact; environmental education*

### Introduction

Sustainable development, both globally and in the Republic of Moldova, requires a reorientation of public policies and economic practices towards environmental protection and resource efficiency. In this context, ecologic marketing plays a vital role by promoting environmentally friendly products and services and educating consumers about their long-term benefits.

One of the key tools for achieving these objectives is sustainable public procurement (SPP), which integrates environmental and social criteria into procurement processes, encouraging producers to adopt sustainable business models. Through public procurement, the state can become an example of responsible consumption, supporting the transition to a green economy.

The aim of this article is to analyze how ecological marketing can be developed through SPP in the Republic of Moldova, highlighting both the challenges and opportunities in this field.

### Basic content

The main direction of actions of the Environmental Strategy of the Republic of Moldova for the period 2024–2030, are the sustainable management of natural resources, which includes the implementation of effective policies for the protection of air, water, soil, biodiversity and natural ecosystems. At the same time a crucial direction to be mentioned is the integrated management of waste and chemicals or the development of the infrastructure and services necessary to reduce the quantities of deposited waste and increase the recycling rate. Integrated environmental monitoring by ensuring an efficient system for monitoring the quality of environmental factors and pollutant emissions is another direction of action. Ecological marketing in another priority direction of actions

and namely education and awareness by promoting ecological education and public awareness on the importance of environmental protection. (Strategy 2024-2030)

The Environmental Strategy 2024–2030 is aligned with the global 2030 Agenda for Sustainable Development and the European Union's environmental objectives, representing an important step towards sustainable development and a green economy in the Republic of Moldova.

The transition to a green and circular economy has turned ecological marketing into a necessity. The goal of ecological marketing is to promote, distribute, and provide services that can be consumed without harming the environment. It emphasizes efficiency, energy, renewable resources, pollution reduction, and social responsibility. Ecological marketing involves adapting the four traditional elements of the marketing mix—product, price, placement, and promotion—to align with environmental principles.

**Table 1. Ecological Marketing Mix**

No.	Name	Characteristics
1.	<b>Ecological Product</b>	Natural, recyclable raw materials, elimination of animal testing, eco-friendly technologies and packaging
2,	<b>Ecological Price</b>	Based on demand and investments in ecological practices
3.	<b>Ecological Placement</b>	Reduction of environmental pollution elements and use of sustainable distribution channels
4.	<b>Ecological Promotion</b>	Avoidance of misleading "greenwashing" practices

*Source: compiled by the authors based on (Arrowsmith, S. 2010; Gosavi, AB, 2013.).*

From the perspective of ecological marketing, public procurement influences the quality of products and services and is essential for the adoption of sustainable technologies and materials. Through a strategic reorientation toward objectives grounded in supporting the development of a green economy, the state can transform public procurement into a driver of sustainable development. Encouraging economic agents to adopt sustainable practices will promote the supply of ecological products, innovation, and competitiveness. This approach reduces environmental impact, increases the efficiency of public resource use, and supports a modern and responsible economic framework. Ecological marketing development in the Republic of Moldova is still in its early stages, but it can be expedited by using a key tool like sustainable public procurement.

International academic literature states that public procurement is not just a simple administrative tool, but a complex strategic mechanism, with significant implications for the economy, society and the environment. Public procurement is an essential element of the functioning of the state, through which public authorities acquire goods, services or works necessary to carry out public functions. International academic literature asserts that public procurement is not merely a simple administrative tool, but rather a complex strategic mechanism with significant implications for the economy, society, and the environment. Public procurement is a key element in the functioning of the state, through which public authorities acquire goods, services, or works necessary to fulfill public functions.

Transparency International Moldova highlights the normative dimension of the public procurement process, emphasizing—alongside transparency, efficiency, and fairness—the social and ecological roles of procurement. In this expanded view, procurement becomes a strategic instrument for promoting innovation and sustainable development (EPI, 2023–2024). According to Piga and Tatrai, an appropriate legislative framework is essential for steering procurement processes toward the public interest and for preventing corruption (Gustavo, 2020).

The author Khi V. Thai, a recognized expert in the field of public procurement management, emphasizes in his works the importance of the legal framework and the principles of transparency, efficiency, and fairness that govern this process. In his view, these principles—transparency, efficiency, and fairness—have become fundamental in the governance of public procurement under current conditions.

An important aspect of the sustainability of public procurement is that it goes beyond the logic of the lowest price, taking into account life-cycle costs, environmental impact, and social benefits. In this way, the state becomes a strategic actor in the transition to a green economy, influencing the demand for energy-efficient, recyclable, and ethical products (Eurostat, 2024). Through this mechanism, public authorities not only stimulate sustainable markets but also shape responsible consumption and usage behaviors in society, strengthening the state's position as a central actor in promoting a sustainable economy.

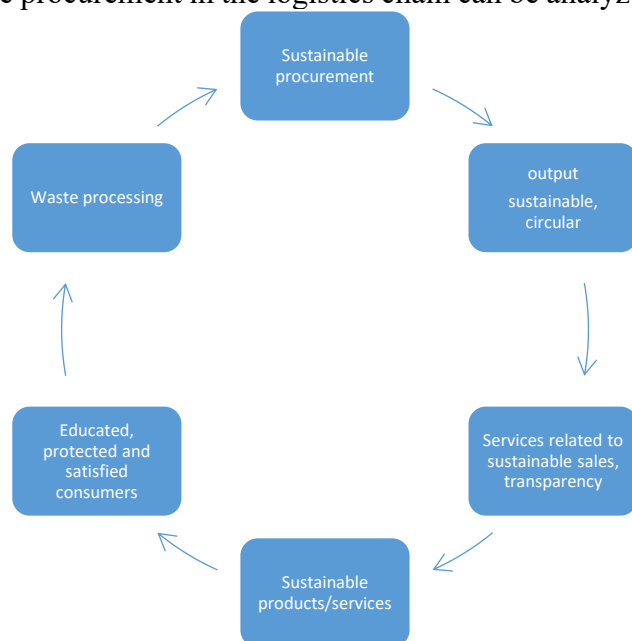
National report based on the OECD set of ecological growth indicators Moldova ranks lowest among European countries in terms of investment in environmental protection. Both the government and businesses have spent too little on these purposes compared to most European countries. In recent years, Moldova has allocated only 0.5% of GDP to environmental protection, while the EU average is 1.9%. There are multiple causes for low investment, generally related to financial constraints and the state of the Moldovan economy. Environmental economic instruments (e.g. environmental taxes and permits) are not able to improve the situation. Environmental protection is often sacrificed in favor of other political or economic priorities.

National Ecological Fund is a public financial instrument, managed by the Ministry of Environment and constitutes an important source of support for sustainable development and environmental protection. The Fund was created in accordance with the Law on Environmental Protection No. 1515-XII of June 16, 1993 and operates on the basis of a regulation approved by the Government, which establishes the manner of collection, administration and use of financial resources. By supporting local and regional projects, the Fund contributes to reducing environmental risks, increasing the quality of life and the transition to a green economy

After 2017, funding through the National Ecological Fund was reorganized, allocating funds from the state budget. However, only about 20% of the resources were directed towards wastewater collection and treatment, with the rest being used for other projects, such as the construction and management of water supply systems.

Sustainable public procurement has the potential to transform markets, through a model effect and by creating high standards of environmental performance.

The place of sustainable procurement in the logistics chain can be analyzed in the following diagram:



**Figure 1. The logistics chain from a sustainable economy perspective**

*Source: developed by the authors*

The development of ecologic marketing through sustainable procurement faces a series of challenges such as:

- lack of information about organic production systems and ecological education among consumers;
- arguing for higher prices for organic products;
- difficulties in assessing the environmental impact of ecological products and services;
- lack of coherent regulations or political will in certain regions.

To overcome these obstacles, an integrated approach is needed, based on collaboration between the public, private and civil society sectors through marketing tools that would inform and educate society. Investments in the field of environmental protection range from waste management infrastructure, wastewater treatment, air pollution reduction and biodiversity conservation. The significant difference between the share of public procurement in GDP in the EU and in the Republic of Moldova highlights opportunities for Moldova to strengthen the role of the state in the economy. By increasing the share of public procurement and directing it towards strategic objectives, such as sustainable development and ecological transition, Moldova can stimulate ecologic economic sectors, promote innovation and competitiveness, strengthen infrastructure and public services, improve transparency and efficiency.

In the European Union, public procurement represents on average between 13% and 16% of GDP, varying from one Member State to another. According to Eurostat and European Commission data, in 2023, the average share of public procurement in EU GDP was around 14%, which is equivalent to over 2,000 billion euros allocated annually through public procurement procedures. Countries such as Sweden, the Netherlands and France have higher shares, while others, such as Romania or Bulgaria, have lower but increasing levels. Public procurement in the EU is regulated by Directives 2014/24/EU and 2014/25/EU, which promote transparency, fair competition, sustainability and innovation (Eurostat, 2024).

**Table 2. Comparative analysis and implications for sustainable development**

No. d/o	Indicator	European union	Republic of Moldova
1.	Purchases/GDP share	~14%	~11%
2.	Legislative framework	EU directives + national regulations	Law 131/2015 + ANSC regulations
3.	Recent trends	Digitalization, sustainability, innovation	E-transparency, adjustment to European standards
4.	challenge	Regulatory complexity, SME access	Administrative capacity, transparency, corruption

*Source: Transparency International Moldova (2023). Monitoring public procurement: good practices and corruption risks. Available at: <https://www.transparency.md>*

In the Republic of Moldova, the share of public procurement in GDP is, on average, about 10–12%, depending on the budget year and the volume of public investments. According to data from in recent years (2022–2023), the value of public procurement has varied between 20 and 25 billion lei annually, which represents about 11% of GDP. This share reflects a significant potential to direct funds to sustainable projects, but there are challenges related to efficiency, transparency and institutional capacity. (Annual report, 2023)

Investments in environmental protection play an essential role in ensuring a sustainable balance between economic development and the conservation of natural resources. The SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis provides a strategic perspective on the advantages and limitations of these investments, as well as on the associated opportunities and risks in the national and international context.

One of the most significant **strengths** of environmental investment is international support. The Republic of Moldova benefits from technical and financial assistance from the European Union, the World Bank, UNDP, EBRD and other international financial institutions, which support priority environmental projects. This support contributes to the development of institutional capacities and the transfer of good practices.

Also, the international commitments undertaken by the Republic of Moldova, such as the Association Agreement with the EU, the Paris Agreement on Climate Change and the 2030 Agenda for Sustainable Development, represent a clear framework for directing environmental policies and attracting green investments. These commitments stimulate legislative reforms and increased accountability at the government level.

However, investments in environmental protection face numerous challenges. One of the most pressing is insufficient financing. Public funds allocated to environmental protection remain modest compared to real needs, and private investments are limited by the lack of incentives and an attractive framework.

Furthermore, the weak institutional framework affects the efficiency of project implementation. Responsible institutions are often underfunded, face a lack of qualified staff and fragmented skills. This in turn leads to an inefficient distribution of funds, where resources are not directed to the most urgent or sustainable initiatives.

In the medium and long term, the Republic of Moldova has multiple opportunities to capitalize on in the field of environmental protection. The transition to a green economy, promoted at European and international level, opens new directions for investment in renewable energy, energy efficiency, recycling, organic agriculture and sustainable transport. Adherence to EU standards provides access to pre-accession funds and international ecological markets.

**Table 3. SWOT analysis of investments in environmental protection**

<b>Strengths</b>	<b>Weaknesses</b>
<ol style="list-style-type: none"> <li>1. International support</li> <li>2. International commitments:</li> </ol>	<ol style="list-style-type: none"> <li>1. Insufficient funding</li> <li>2. Fragile institutional framework</li> <li>3. Inefficient distribution of funds</li> </ol>
<b>timely</b>	<b>risks</b>
<ol style="list-style-type: none"> <li>1. Transition to a green economy</li> <li>2. Digitalization and modernization of infrastructure</li> </ol>	<ol style="list-style-type: none"> <li>1. Climate change</li> <li>2. Dependence on external financing</li> <li>3. Prioritizing other sectors</li> </ol>

*Source: developed by the authors based on (Monitoring, 2023)*

At the same time, digitalization and modernization of infrastructure can contribute to more efficient environmental quality monitoring, waste management, automation of ecological processes and increased transparency in the use of public resources. Technological innovation thus becomes a catalyst for green investments.

Investments in environmental protection, however, are exposed to major risks. First, climate change generates unpredictable costs and requires rapid interventions in disaster protection infrastructure, which can redirect resources towards reactive measures, at the expense of preventive ones.

Another significant risk is excessive reliance on external financing, which can be unstable in the current geopolitical context and contingent on domestic reforms. In the absence of solid domestic sources, ecological projects may become vulnerable to political or budgetary changes.

Last but not least, prioritizing other sectors, such as road infrastructure, defense or health, in the context of multiple crises (pandemics, war in the region, inflation), may reduce interest and support for environmental investments.



## Conclusions

In the context of the Republic of Moldova's pre-accession to the EU, environmental protection acquires the status of a strategic priority, both by virtue of the international commitments assumed in the field of sustainable development, and in response to the increasing pressures on natural resources. In the context of integrating the principles of the green economy, investments in environmental protection cover essential areas such as waste management infrastructure, wastewater treatment, air pollution reduction and biodiversity conservation.

Despite the progress made, the Republic of Moldova faces significant gaps compared to the European Union average in terms of the share of public procurement in gross domestic product (GDP). This difference reflects not only a lower investment capacity of the state, but also an underexploited potential in terms of the strategic use of public procurement as an economic and environmental policy instrument.

By strategically reorienting public procurement toward the objectives of sustainable development, the Republic of Moldova can transform this tool into a new concept for economic, social, and environmental change. From the perspective of ecological marketing, the quality of products intended to meet consumer needs is closely linked to the acquisition of technologies, raw materials, and sustainable resources used in the production and service delivery processes.

Harnessing the state's economic potential in this regard would stimulate a sustainable economy and support the development of ecological marketing not only at the national level but also globally. Promoting sustainable practices among enterprises, in response to the requirements of sustainable procurement, encourages innovation, product differentiation on the market, and the development of competitiveness. Thus, ecological marketing becomes a strategic vector for enhancing the visibility, credibility, and environmental responsibility of economic actors, contributing to the efficient use of public resources, reducing environmental impact, and increasing institutional transparency.

Finally, the orientation of public policies and economic strategies towards sustainability and ecological marketing can become a basic pillar for increasing the economic competitiveness of economic agents and for affirming the Republic of Moldova as a responsible and modern state, anchored in the values of the green economy.

## Bibliography

1. Arrowsmith, S. (2010). *The Law of Public and Utilities Procurement*. Sweet & Maxwell Publishing. 3rd edition, volumes 1 and 2, 2010. ISBN: 9780421966901. Available at: <https://www.nottingham.ac.uk/pprg/publications/books/the-law-of-public-and-utilities-procurement.aspx>
2. Gosavi, AB, 2013. Gaining Competitive Advantage through of Cell Phones. *ASM International E-Journal of Ongoing Research in Management and IT*, 1, pp.1–11 Available at: [www.slideshare.net](http://www.slideshare.net)
3. Liang, G. Factors affecting green purchasing behavior and future marketing strategy. *American Journal of Industrial and Business Management*, no. 14, 2024. p. 194-213 Available at: <https://www.scirp.org/journal/paperinformation?paperid=131369>
4. Thai, KV Public Procurement Re-Examined\*. *Journal of Public Procurement*, 1(1), 2001, p. 9–50. Available at: <https://www.ippa.org/jopp/download/vol1/Thai.pdf>
5. Environmental Strategy 2024-2030, approved by Government Decision No. 409/2024 Available at: [https://www.legis.md/cautare/getResults?doc\\_id=144295&lang=ro](https://www.legis.md/cautare/getResults?doc_id=144295&lang=ro)
6. Program for the promotion of the green and circular economy in the Republic of Moldova for the period 2024-2028, approved by Government Decision No. 495/2024 Available at: [https://www.legis.md/cautare/getResults?doc\\_id=144384&lang=ro](https://www.legis.md/cautare/getResults?doc_id=144384&lang=ro)
7. *Environmental Performance Index (EPI)*, 2023–2024] and national statistical reports of the Republic of Moldova. Available at: <https://epi.yale.edu/measure/2024/EPI>
8. Eurostat (2024). General government expenditure by function (COFOG). Available at: <https://ec.europa.eu/eurostat>
9. Transparency International Moldova (2023). Monitoring public procurement: good practices and corruption risks. Available at: <https://www.transparency.md>
10. Public Procurement Agency of the Republic of Moldova (2023). Annual report on the public procurement system. Available at: <https://tender.gov.md>
11. Gustavo Piga and Tünde Tátrai, eds., *Public Procurement Policy* (New York: Routledge, 2020)