How are citizens engaging in the ecological transition and circular economy in the Republic of Moldova, and what are their attitudes towards sustainability?





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Erasmus+ project EDU-2024-CBHE 101179344
"PubCirEco – Critical role of PUBlic employees in CIRcular ECOnomy implementation: Embedding circular economy thinking in HEIs"

Importance and relevance of the research

1

Ecological transition

The shift to a circular economy depends not only on legislation and technology, but also on citizens' participation, habits and acceptance of policies.

2

European integration

The Republic of Moldova has been an EU candidate country since 2022 and opened accession negotiations in 2024, which brings its environmental policy into comparison with EU practice.

3

Evidence for public policy

Empirical data on citizens' attitudes, plastic waste generation, separate collection and the application of legislation support the design and monitoring of public policy.

The global picture: circularity and waste in figures

6.9%

of the global economy is circular, down from 7.2% in the previous assessment

Source: Circle Economy, Circularity Gap Report 2025

2.1 billion t

of municipal solid waste generated worldwide in 2023; projected to reach 3.8 billion t by 2050

Source: UNEP, Global Waste Management Outlook 2024

USD 361 billion

global cost of municipal solid waste management in 2020, including hidden costs (USD 252 billion direct); USD 640.3 billion per year projected by 2050 without action

Source: UNEP, Global Waste Management Outlook 2024

11.8%

circular material use rate in the EU in 2023; the Circular Economy Action Plan aims to double it by 2030 (target 23.2%)

Source: Eurostat (2024)

Plastics worldwide: production, waste and end-of-life

460 Mt

plastics produced worldwide in 2019, about twice the 2000 level

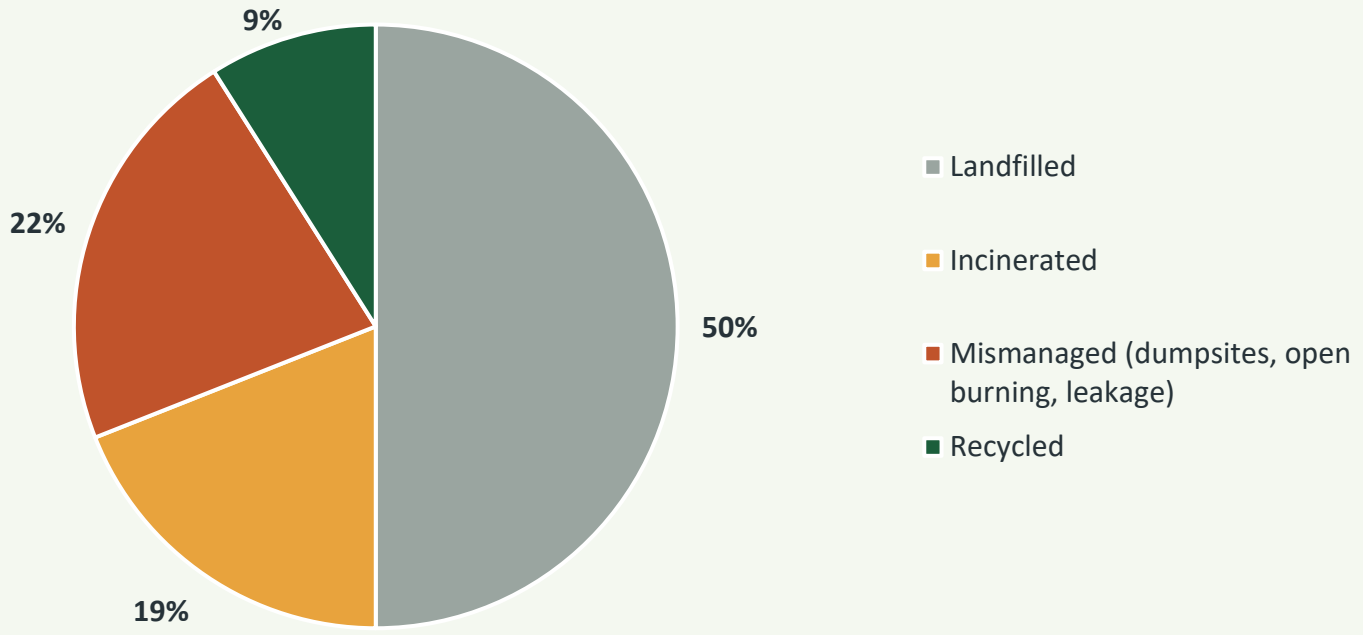
353 Mt

plastic waste generated in 2019, more than double the 2000 level

≈ 15%

of plastic waste collected for recycling; 40% of it was disposed of as residues

End-of-life of plastic waste worldwide, 2019, % of plastic waste



Source: OECD (2022), Global Plastics Outlook

Policy context: milestones for the EU and the Republic of Moldova



2016	2020	2022	2024	2027
Extended producer responsibility (EPR) concept legislated in the Republic of Moldova	EU Circular Economy Action Plan: goal of doubling the circular material use rate by 2030	23 June: the Republic of Moldova is granted EU candidate status	25 June: EU accession negotiations with the Republic of Moldova formally opened	1 January: Deposit-Return System (DRS) to be implemented in the Republic of Moldova

Sources: Council of the EU; Eurostat; authors' study data (EPR, DRS)

Purpose and objectives of the research

Purpose

To investigate empirically how citizens of the Republic of Moldova engage in the ecological transition and the circular economy, their attitudes towards sustainability, and the level of use of plastic products and plastic waste generation, including consumer behavior and the application of the legislative framework.

1,419
citizen survey respondents

6
target groups in the plastic study

Objectives

- Assess citizens' participation in recycling and clean-up activities and the ecological measures used in households
- Identify willingness to invest in energy efficiency, support for emission regulations and awareness of EU initiatives
- Evaluate perceptions of government support, barriers to sustainable behavior and measures that could encourage it
- Measure the use of plastic products and plastic waste generation across six target groups
- Analyze separate collection, extended producer responsibility, the perception of legislation and consumer motivation

Webinar overview

1,419 survey respondents

Part 1. Citizens' attitudes towards sustainability

- Participation in recycling and clean-up activities
- Ecological measures in the household
- Energy efficiency and emission regulations
- EU initiatives and government support
- Barriers and motivating measures

6 target groups surveyed

Part 2. Plastic products and plastic waste in the Republic of Moldova

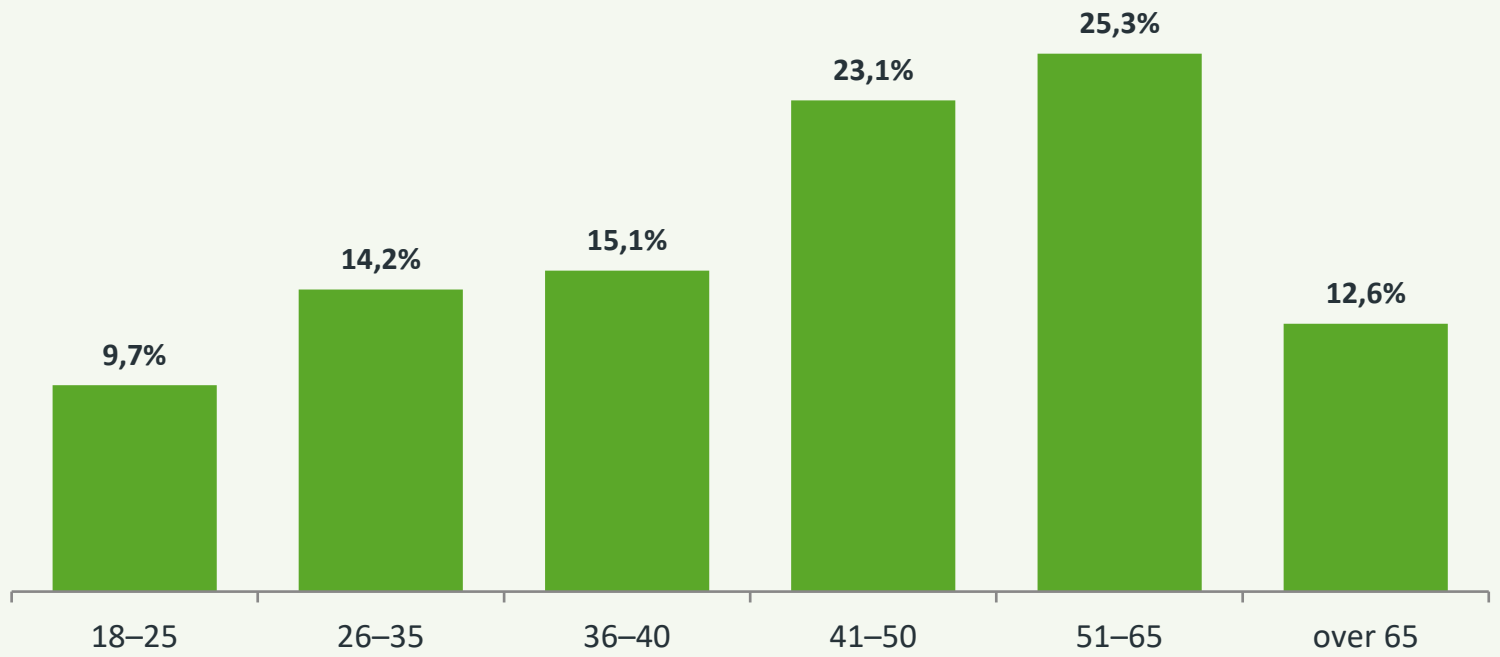
- Study sample and plastic waste generation
- Separate collection and extended producer responsibility
- Perception of the legislative framework
- Consumer behavior
- Solutions: the Deposit-Return System from 2027

Survey sample: 1,419 respondents

1,419
responses received

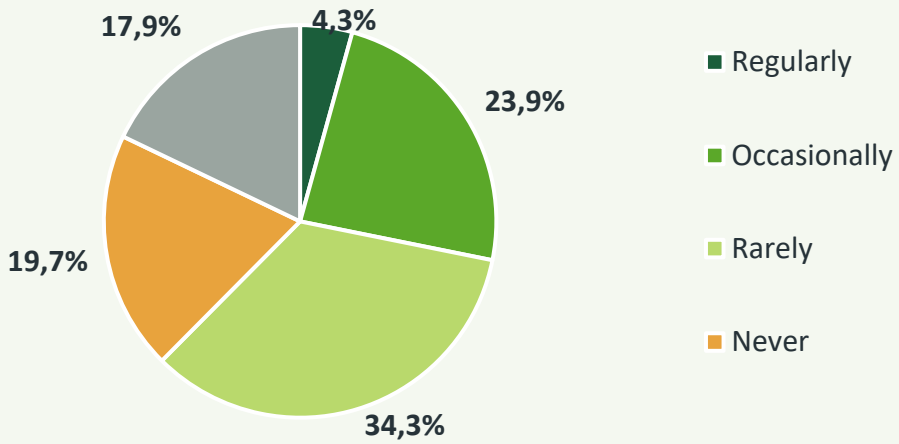
48.6%
women

45%
men



Participation in recycling and environmental clean-up activities

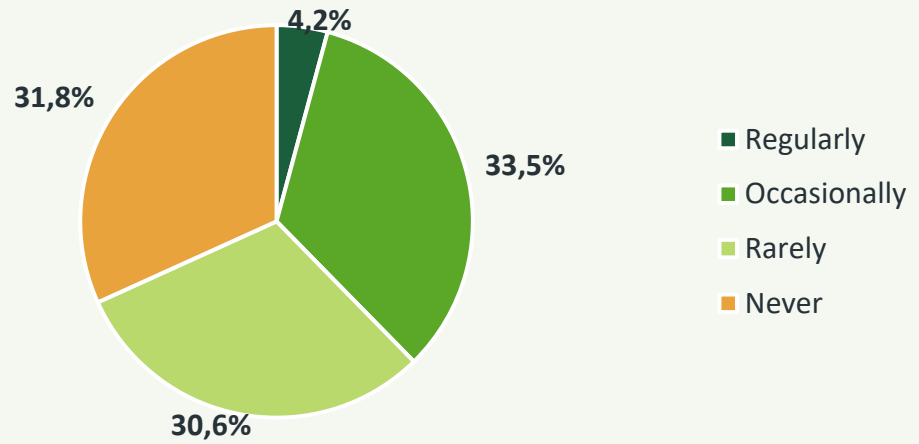
To what extent do you participate in recycling activities?



17.9% don't know what recycling is; 19.7% don't recycle

Existence of a serious gap in the population's ecological education

How often do you participate in environmental clean-up campaigns or activities?

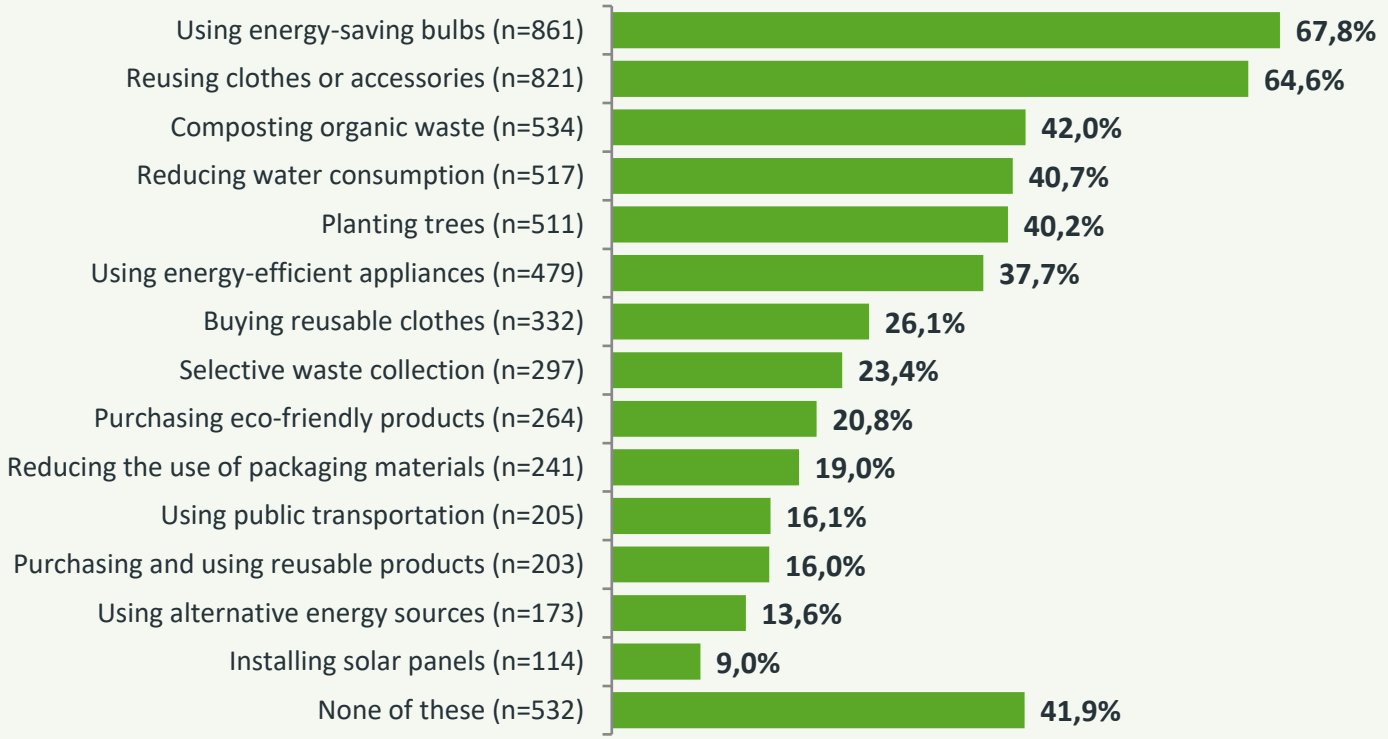


4.2% regularly get involved; 31.8% never get involved

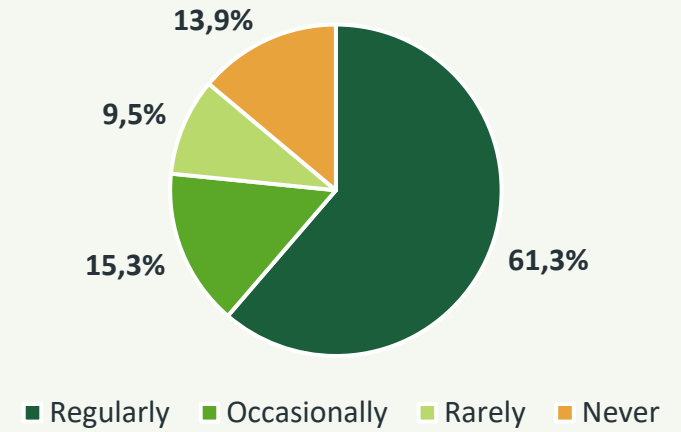
Lack of ecological culture among the population

Distribution of respondents' answers regarding the ecological measures used in their household, %

Environmental / sustainable behaviors practiced, % of respondents (n = number of respondents)



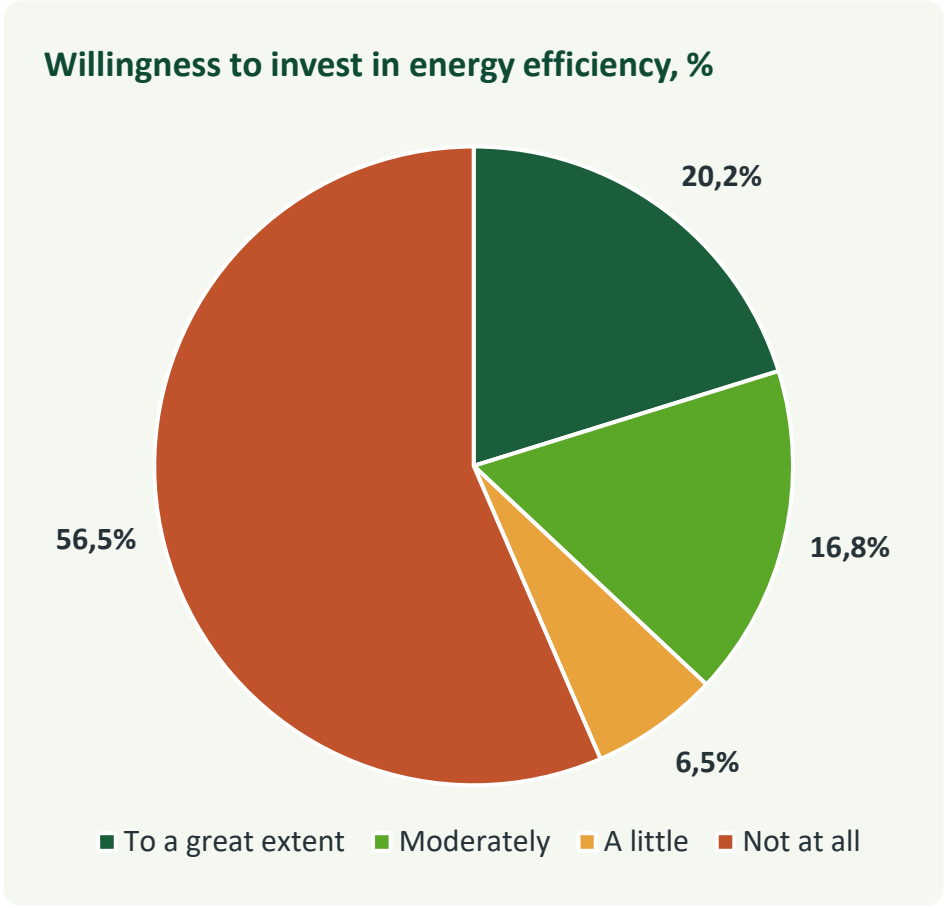
How often do you use reusable products?



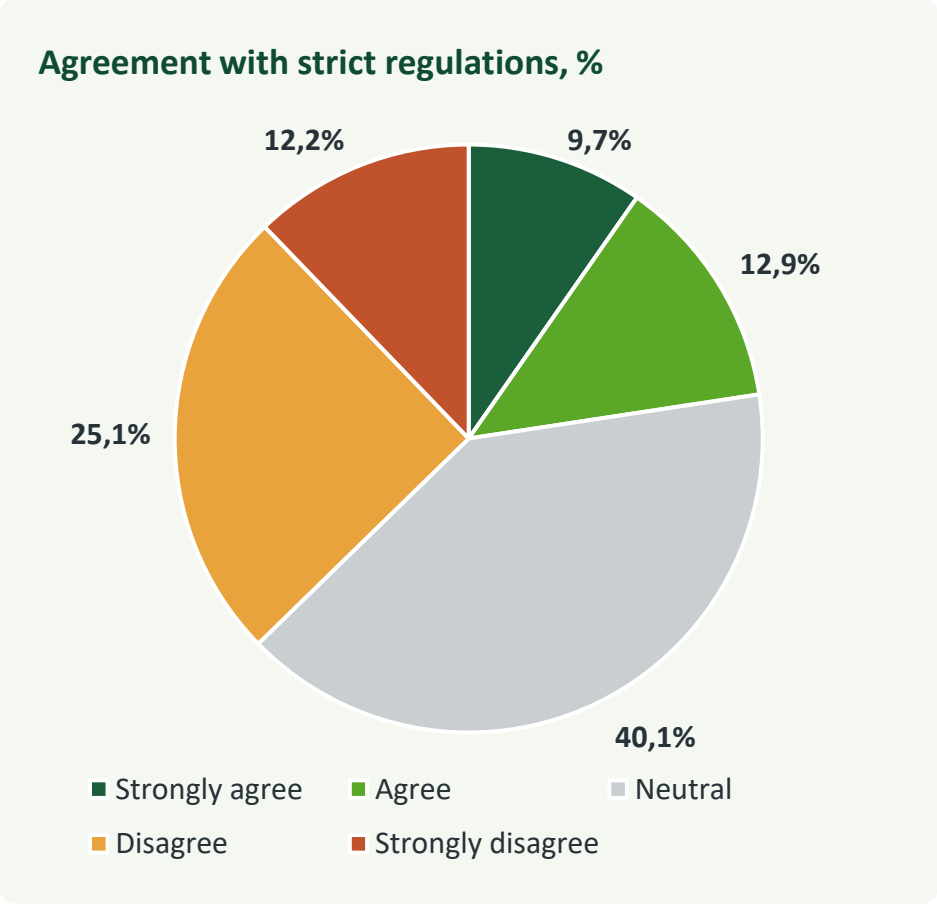
Moderate interest in environmental measures that are easy to implement and have an immediate impact on costs

To what extent would you be willing to invest in improving the energy efficiency of your home (e.g. thermal insulation, energy-efficient windows)?

- Many consumers may prioritize immediate savings over long-term investments.
- The higher upfront cost of energy-efficient technologies may be perceived as a deterrent.
- Energy-efficient technologies may be more difficult to access for some of the population, especially in rural areas where infrastructure and resources may be limited.
- There is widespread distrust in the energy efficiency of new technologies, with many consumers believing that they will not recoup their investment in a timely manner.
- Some of the population may not be well informed about the long-term benefits of energy-efficient technologies, such as energy savings and reduced utility costs.



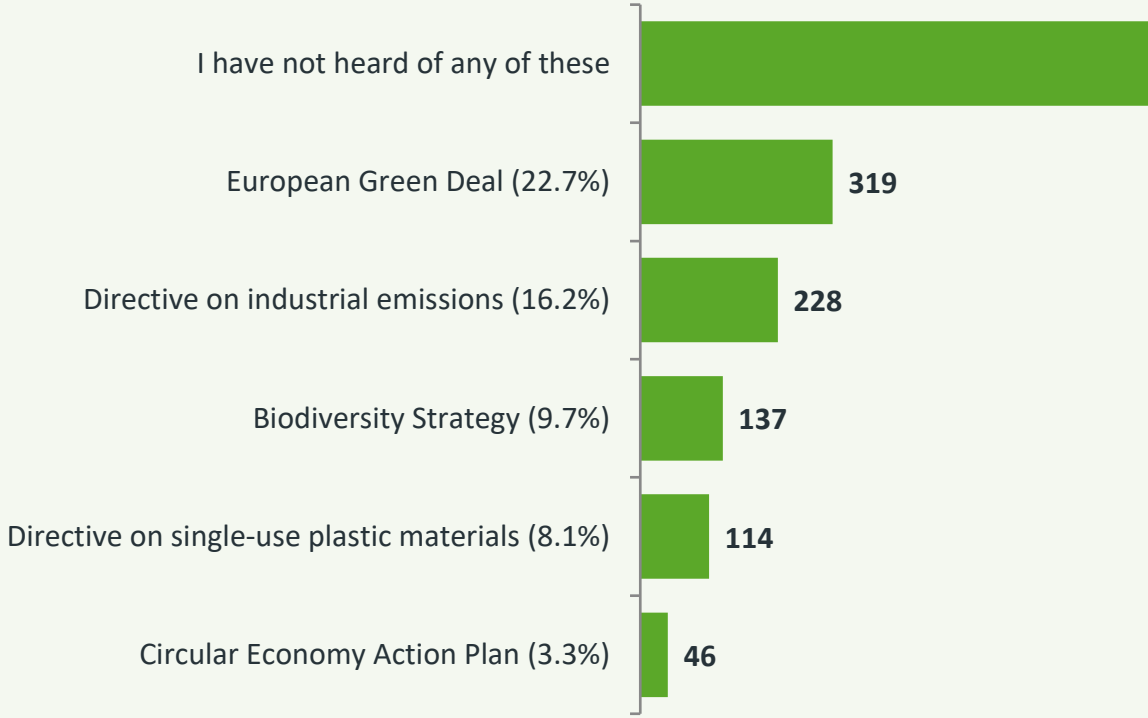
Do you agree with the introduction of strict regulations on industrial emissions to protect the environment?



- Citizens who disagree with strict regulations may not see viable alternatives to improving the environmental situation.
- Regulations that impose additional costs on industries could lead to higher prices and job losses, and this may generate opposition to such measures.
- If citizens do not trust government institutions or their ability to implement and monitor these regulations, they may be more reluctant to support them.
- Perceptions of systemic corruption may also make citizens skeptical about the effectiveness of these regulations. In the context of the Republic of Moldova, where information on environmental issues may be limited, citizens may not be fully aware of the impact of industrial emissions on health and the environment.

Have you heard about the following EU initiatives in the field of sustainability and the environment?

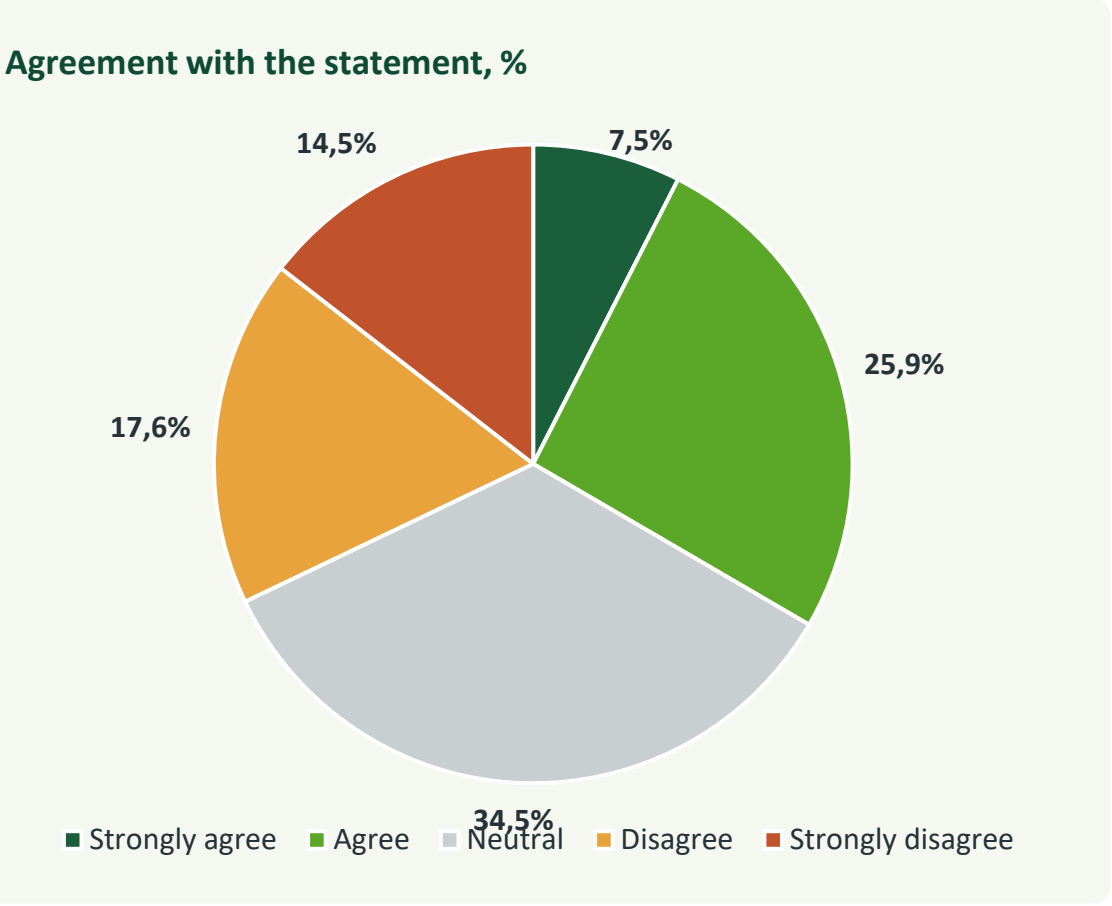
Familiarity with European environmental initiatives, number of respondents





1,166
respondents have not heard of any of these EU initiatives

How much do you agree with the following statement: “Implementing EU sustainability policies will improve the quality of life in Moldova?”



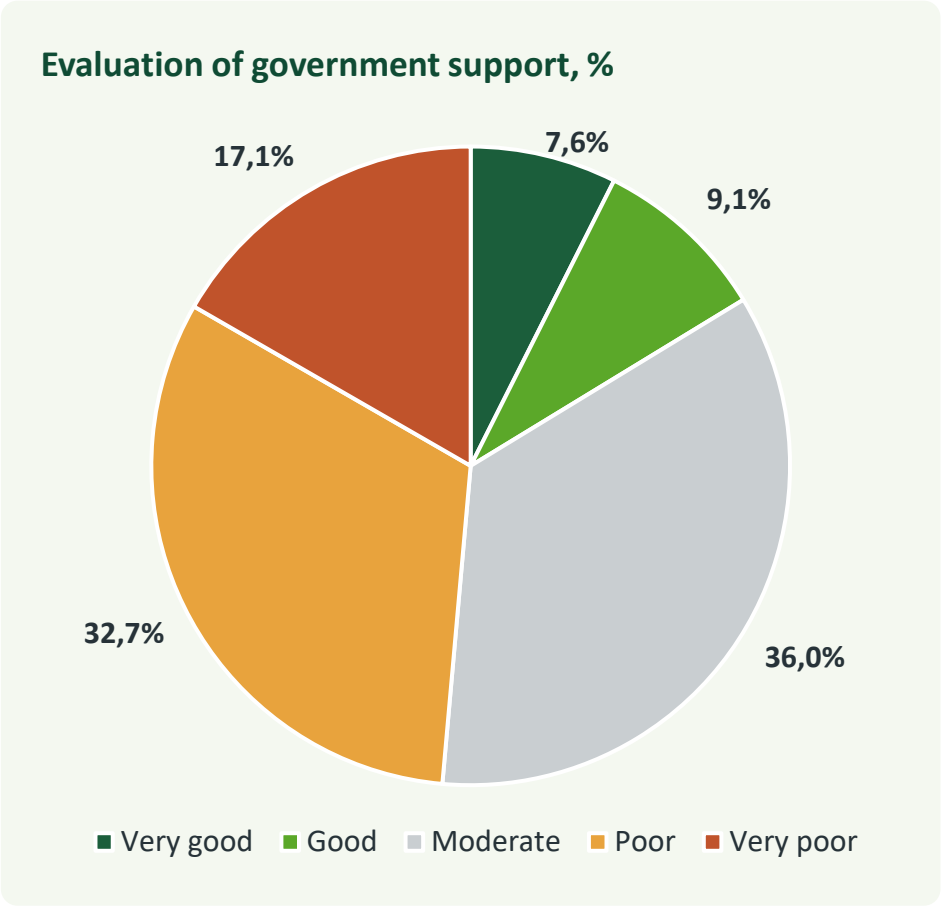
Possible explanations

Insufficient information of the population about the impact on the environment

Some of the population may perceive these policies as forms of “taxation” rather than beneficial measures

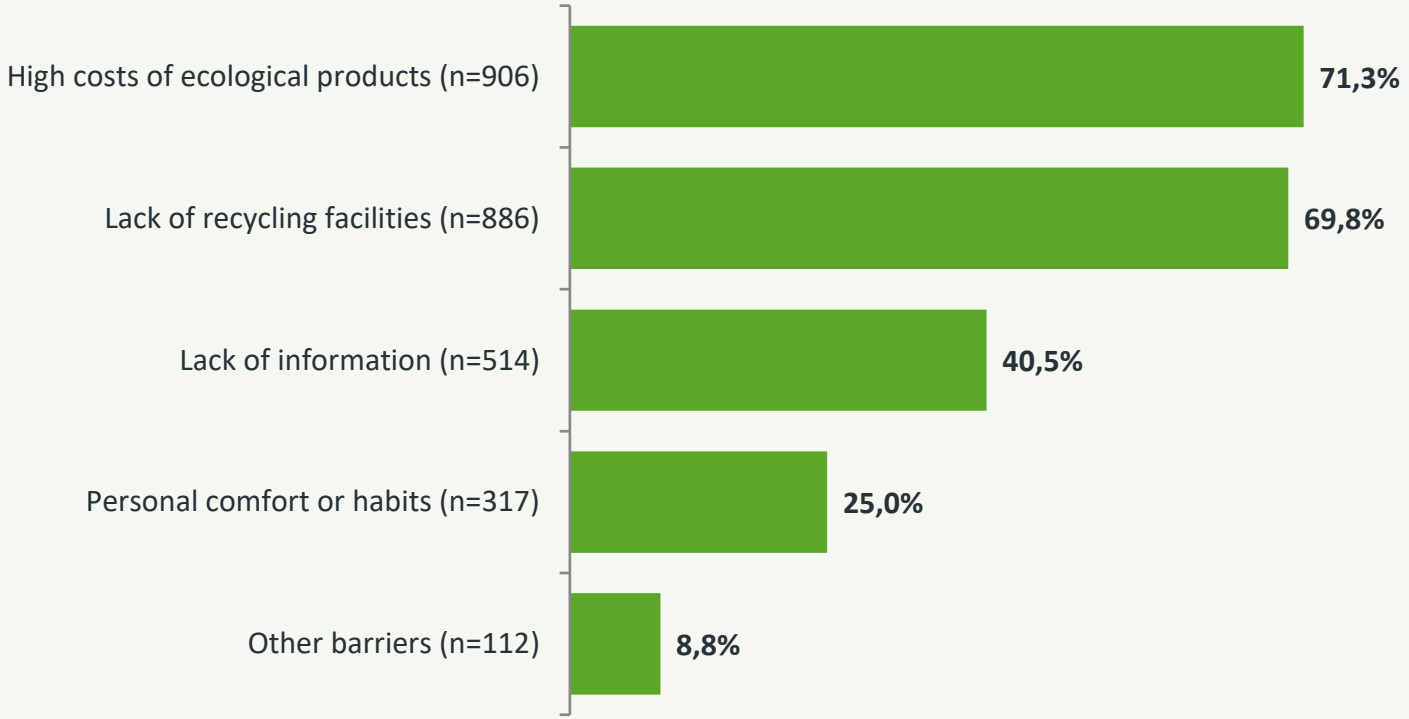
How do you evaluate the support of the Government of the Republic of Moldova for environmental policies compared to the practice of EU countries?

- The Republic of Moldova faces significant economic challenges, which often sees environmental policy as secondary to other priorities, such as economic development and social stability.
- Although environmental legislation exists, its implementation can be inconsistent and resources allocated are often limited. This can lead to a general perception of inefficiency.
- A lack of transparency in decision-making and resource allocation for environmental policies can contribute to citizens' distrust of government and poor perceptions of support.



What are the main barriers that prevent you from adopting more sustainable behaviors?

Barriers to adopting ecological practices, % of respondents (n = number of respondents)



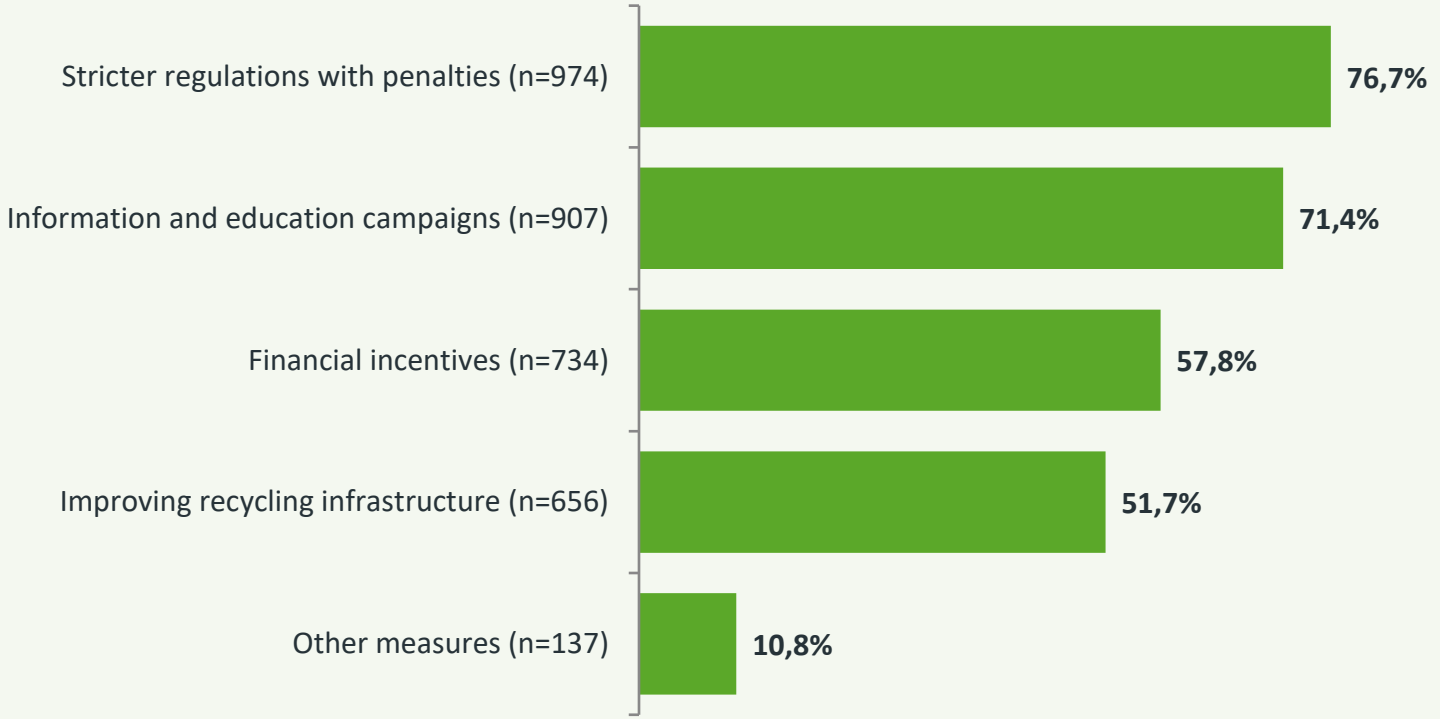
71.3%
name high costs of ecological products as a barrier

69.8%
name the lack of recycling facilities

40.5%
name the lack of information

What measures do you think could encourage society to adopt more environmentally friendly behavior?

Measures to encourage recycling and ecological behavior, % of respondents (n = number of respondents)



76.7%

of respondents point to stricter regulations with penalties

The high percentage for strict regulations indicates a perception that voluntary measures are not enough and that a firmer approach is needed

Level of use of plastic products (including single-use) and plastic waste generation in the Republic of Moldova

Context

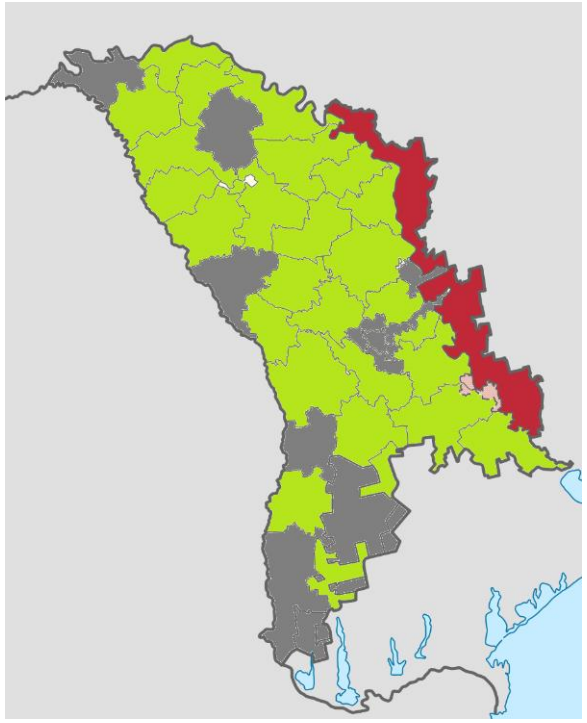
Plastics are essential components of a circular and climate neutral economy. Their durability, resource and energy efficiency, and recyclability facilitate the circularity of products and a climate neutral society. Plastics are also playing a key role in the journey towards a sustainable and climate neutral future, e.g. in electric cars, wind power stations and energy efficient homes. Plastics are key to delivering the sustainable solutions valued by society.

Purpose of the study

The purpose of this study is to empirically investigate the level of use of plastic products (including single-use ones) and the generation of plastic waste, including the determination of consumer behavior, but also to verify the practice of strengthening and applying the legislative framework by the authorities, regulatory bodies and other stakeholders.

The questionnaire was developed within the SAMRS/2022/MD/1/2 project, activity 2, sub-activity 2.1.3.

Target groups and respondents of the study



Mapping of the Target Group 1 Survey – Local Public Authorities (LPA). In green – respondents; in gray – LPAs that did not respond: Chișinău, Cahul, Gagauzia, Ungheni, Dubăsari, Drochia, Briceni, Leova; in red – the Transnistrian region, which was not part of the study.

Target groups	Long list	Target indicators	Respondents who participated in the study
1. City and district municipalities	34	30	**26**
2. Producers (importers) of plastic-packaged products and producers (importers) of plastic products	38	20	**21**
3. Entrepreneurs providing services, mainly in the food sector	26	20	**22**
4. Authorized waste management entities	6	5	**4**
5. Civil society, associations, non-profit organizations	64	10	**14**
6. Final consumers (individuals)	-	500	**527**

Main results: plastic packaging waste in the EU

36.1 kg

plastic packaging waste generated per person in the EU on average in 2022

+8 kg

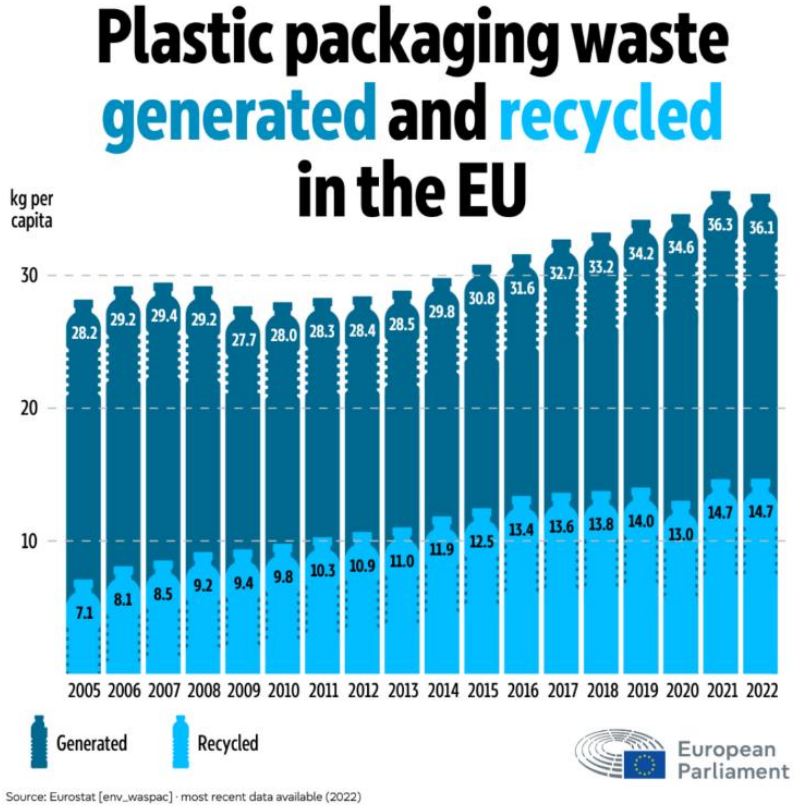
increase in plastic packaging waste per inhabitant between 2012 and 2022 (almost 8 kilos)

16.16 Mt

total plastic packaging waste produced in the EU in 2022

40.7%

recycled: 6.58 million tonnes of the 16.16 million tonnes in 2022



Plastic on the Moldovan market and in municipal waste

129,994.2 t
plastic placed on the Moldovan market, including plastic packaging of products

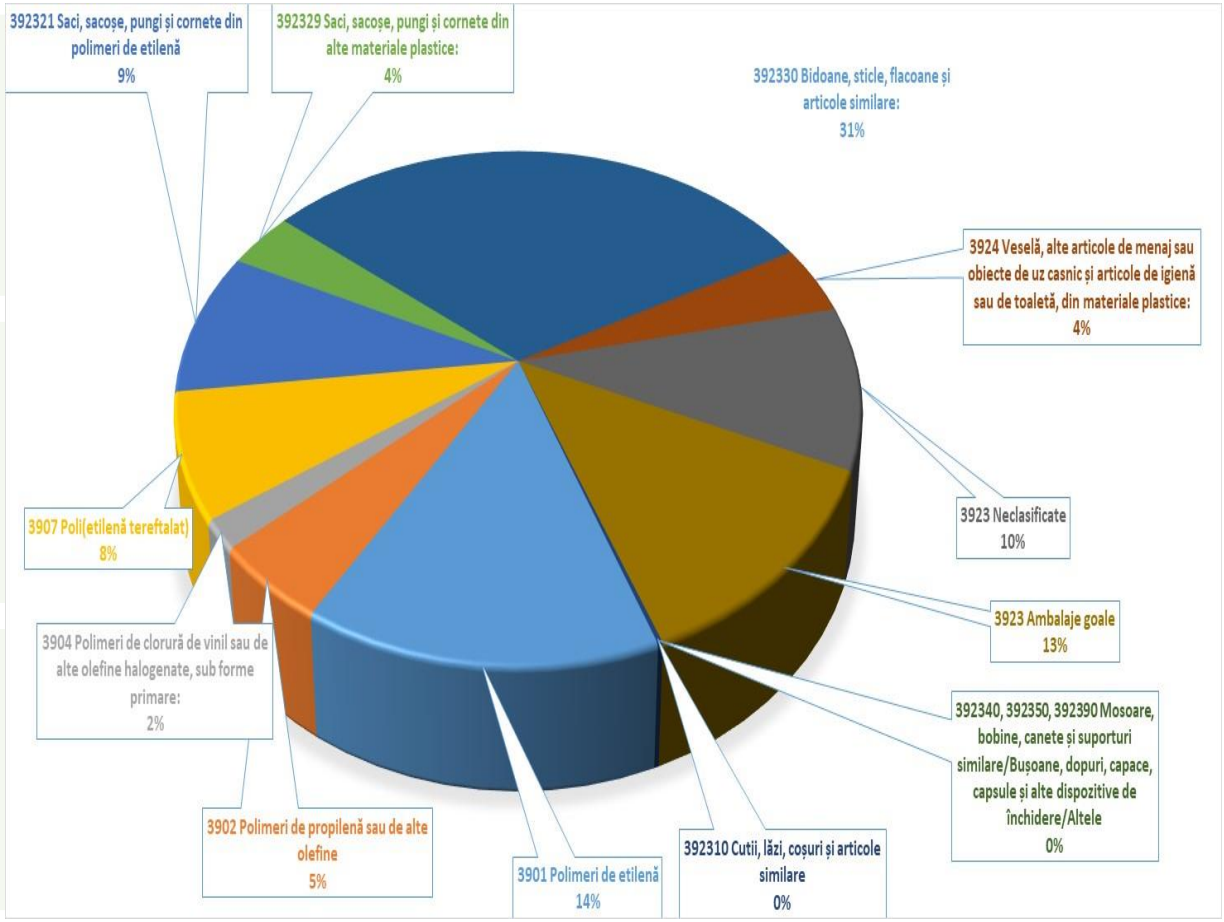
49.5 kg
plastic per capita on average

13.4%
share of plastic in the morphological structure of municipal waste, 2022 (11.3% in 2016)

155.3 thousand t
plastic in the total municipal waste, 2022

59 kg
per capita annually in the country (about 30 kg in the North, Center and South regions)

162 g
per capita daily



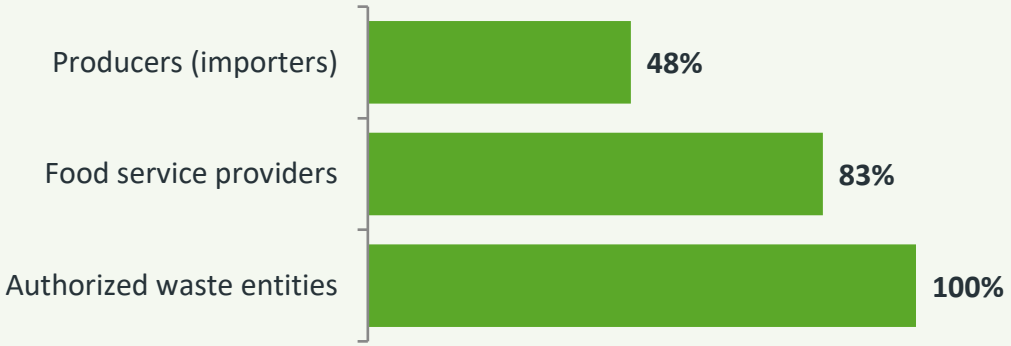
Separate collection of plastic waste and extended producer responsibility (EPR)

Separate collection of plastic waste

91%
of local authorities use containers on the waste collection platform

14%
also place containers in public places

Respondents with separate collection of plastic waste introduced, %



EPR system (legislated in 2016)

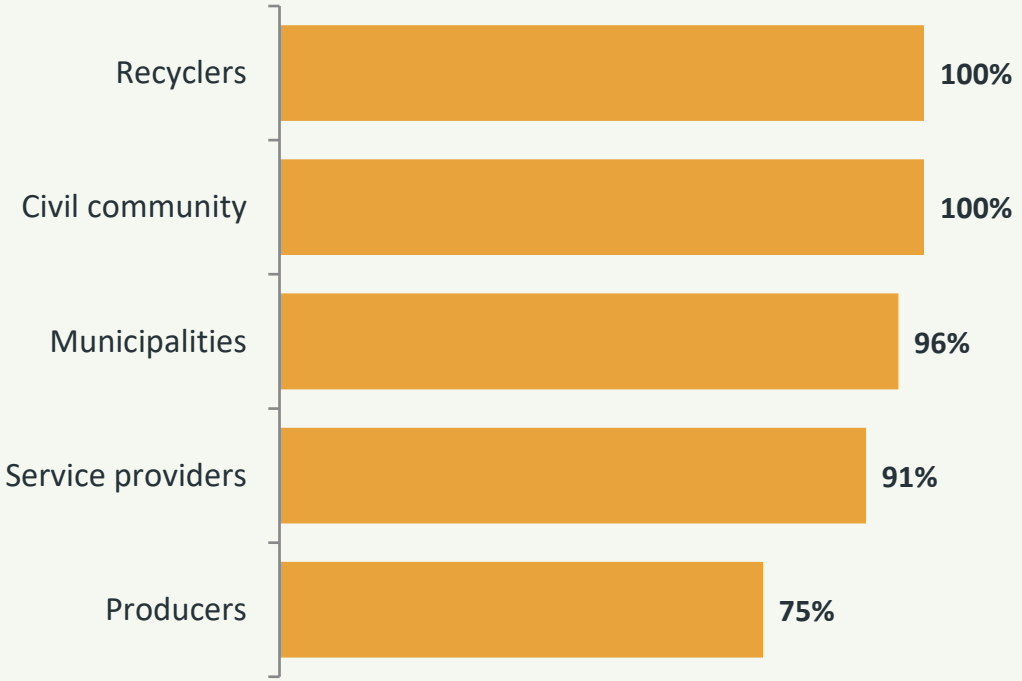
Respondents who do not contribute to the EPR system, %



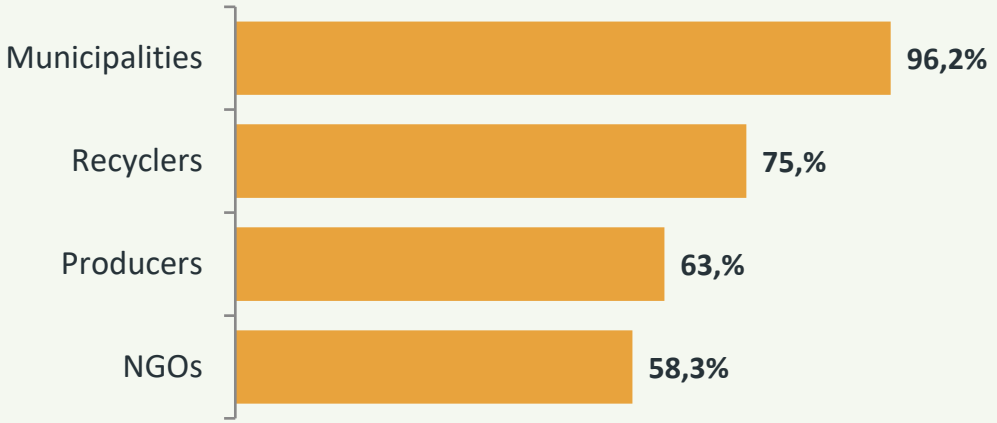
Only enterprises authorized to manage waste contribute to the EPR system

Perception of the legislative framework on plastic waste: a pessimistic one

Believe that there is no effective legislation that would improve the waste situation, %



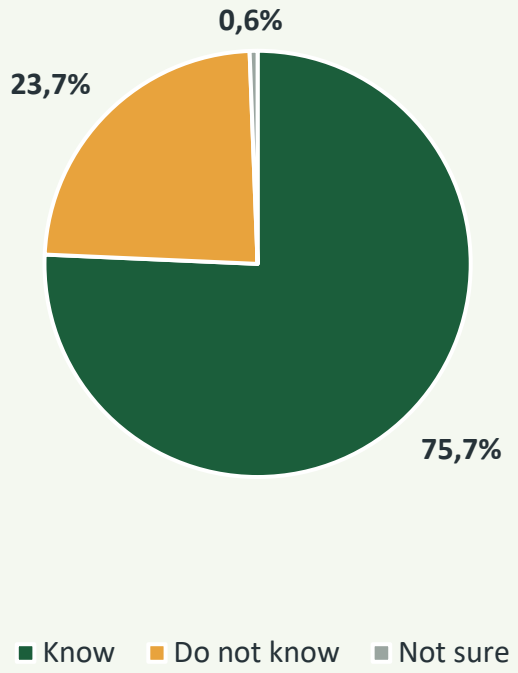
Regulation on packaging and packaging waste (GD 561/2020): believe it will not improve separate collection and recycling of plastic packaging, %



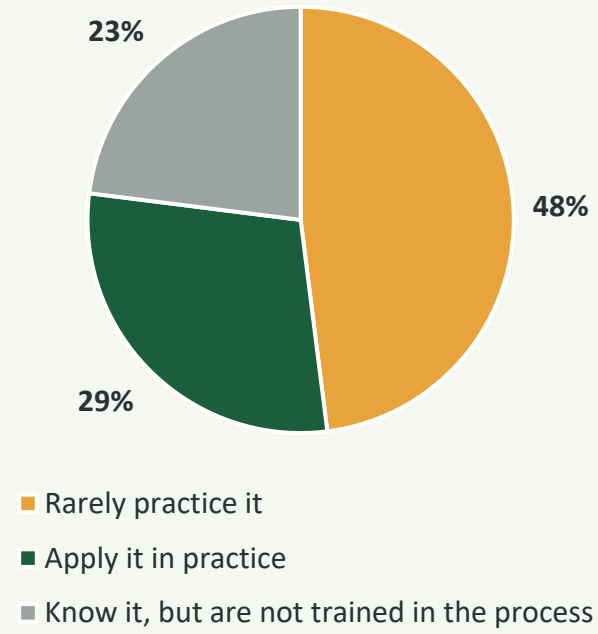
82% of food service providers believe that this regulation will improve the conditions

Final consumers: awareness and practice of selective waste collection

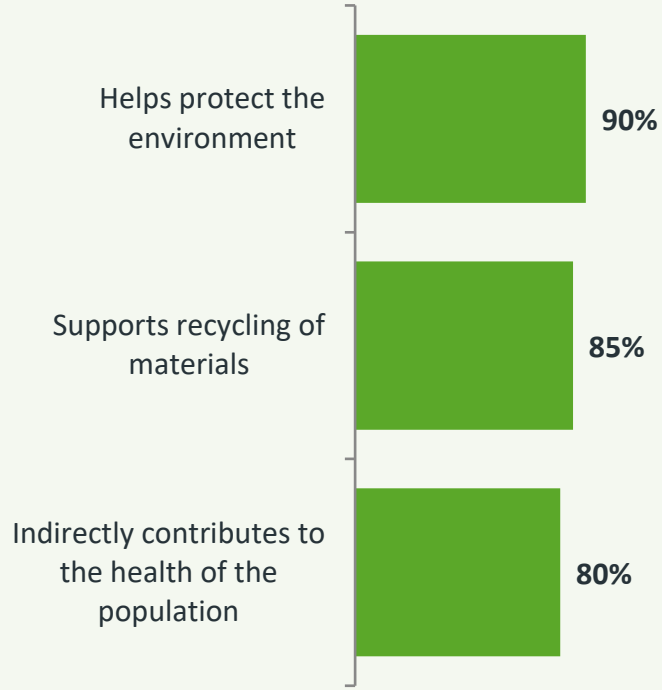
Know about selective waste collection, %



Of those who know: application in practice, %

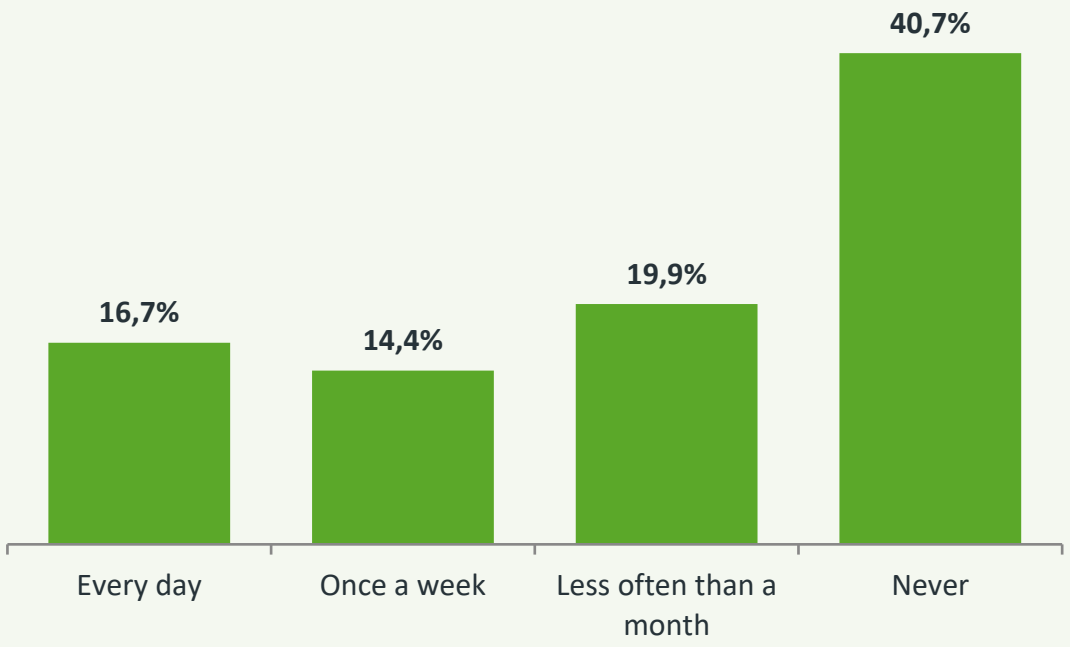


What selective collection means for respondents, %

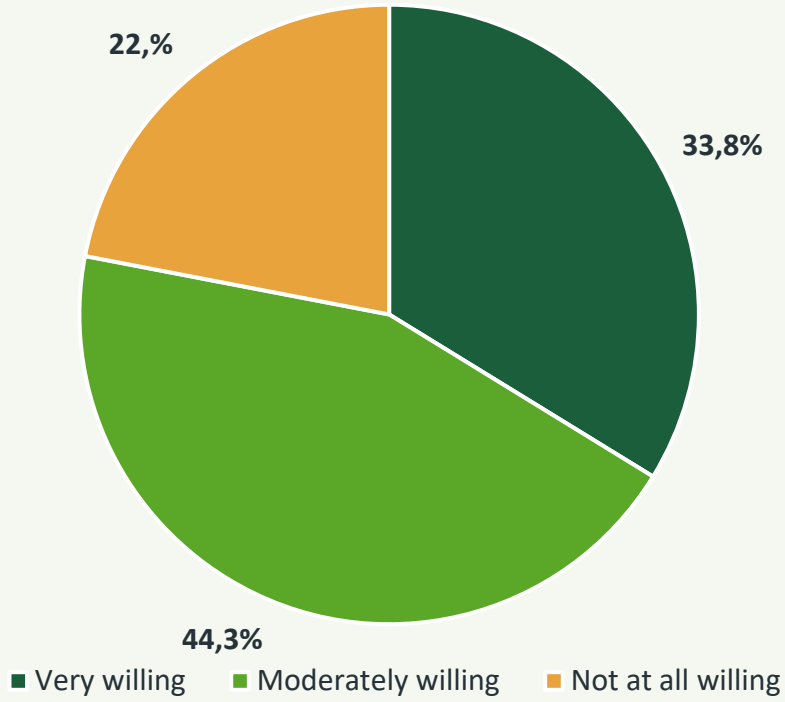


Final consumers: frequency of selective collection and motivation

How often do respondents collect waste separately, %



Willingness to start selective waste collection, %



Key findings

Citizens' attitudes (survey, 1,419 respondents)

61.3% regularly use reusable products

31.8% never take part in environmental clean-up activities

56.5% are not willing at all to invest in the energy efficiency of their homes

76.7% point to stricter regulations with penalties as a measure that could encourage environmentally friendly behavior

Plastic waste study (six target groups)

13.4% share of plastic in municipal waste in 2022 (11.3% in 2016)

76.5% of producers (importers) do not contribute to the EPR system

100% of recyclers and civil society respondents see no effective legislation on plastic waste

78.1% of consumers are very or moderately willing to start selective waste collection (33.8% + 44.3%)

Waste management in the Republic of Moldova: a situation similar to emerging economies

Waste generation is influenced by numerous factors, such as:

- **Types of economic activity**
- **Difficult macro-financial situation**
- **Low incomes**
- **Consumer behavior**
- **Degree of responsibility**
- **Level of awareness of the problem among all actors involved**





Solutions and next steps

Starting January 1, 2027, the Republic of Moldova will implement this system, aiming to reduce pollution, promote recycling, and support a sustainable circular economy.

Deposit-Return System (DRS)

The Deposit-Return System (DRS) is an economic and ecological mechanism implemented in many countries, which involves collecting single-use packaging (such as PET, glass, and aluminum) through an additional fee paid at the time of purchase. This fee can be refunded when the empty packaging is returned.

FROM



TO



Thank you for your attention!

Questions and discussion

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Erasmus+ project EDU-2024-CBHE 101179344

"PubCirEco – Critical role of PUBlic employees in CIRcular ECOnomy implementation: Embedding circular economy thinking in HEIs"

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