

Women's
Entrepreneurship
in Serbia

10
years later

CLIMATE CHANGE
AND WOMEN'S
ENTREPRENEURSHIP



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SeConS
development Initiative group

ABBREVIATIONS

GHG	Greenhouse Gases
SBRA	Serbian Business Registers Agency
UN WOMEN	United Nations Entity for Gender Equality and the Empowerment of Women
UNFCCC	United Nations Framework Convention on Climate Change

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1 INTRODUCTION

This report was created based on the study *Women's Entrepreneurship in Serbia – ten years later*. The report presents data from the study related to the perception of the impact of climate change on the business of female entrepreneurs and the "greening" of women's businesses.

The data were obtained by applying mixed research methods – by analyzing secondary sources (desk analysis) and conducting original survey research. The survey research was conducted on a representative sample of 559 active women entrepreneurs, derived from the Serbian Business Registers Agency (SBRA) database on the criteria that women are registered entrepreneurs or that they are simultaneously (co)owners and directors of a registered company.

Background and purpose

The first study on women's entrepreneurship in Serbia was published in 2012 based on research conducted by SeConS, an organization for applied research and policy analysis, at the initiative of the then Ministry of Economy and Regional Development of the Republic of Serbia, with the support of UN Women. The baseline study¹ also contained a large number of recommendations aimed at informing the policies to encourage the development of women's entrepreneurship and close the gender gap in entrepreneurship and beyond, in economic participation or employment. In 2021, the Ministry of Economy of the Republic of Serbia launched a new initiative to review the state of women's entrepreneurship after a little more than ten years and to identify changes, achievements, challenges, and the potential of women's entrepreneurship that future policies should focus on. This new research was carried out by the organization SeConS with the support of UN Women as part of the project *Key steps to gender equality*, to provide the Ministry of Economy with the findings necessary for the formulation of policies focused on encouraging women's entrepreneurship.

The design of the new research questionnaire was largely developed in complementarity with the questionnaire used in the *Baseline Study on Women's Entrepreneurship in Serbia* from 2012, to ensure comparability in key aspects. However, unlike the previous study, this time the survey included a completely new set of questions to gain insight into "green business" and questions that will reveal women's awareness and perception of the possibilities of transitioning to green business and their experiences in such ventures.

1 Babović, M. (2012). *Polazna studija o preduzetništvu žena u Srbiji*. Beograd: UN Women. Available at: <https://secons.net/wp-content/uploads/2022/01/87-publication.pdf>

1.1 Gender aspects of climate change – analysis of secondary sources

The gender aspects of climate change, the circular and green economy, represent relatively new policy areas for which adequate gender-sensitive data are not yet available that would enable clear insights into the state of gender equality in these areas. However, the inequalities and differences that generally exist in the position of women and men can influence the strategies that women and men resort to adapting to or mitigate the consequences of climate change.

Climate change disrupts the natural balance by increasing temperature and modifying precipitation patterns, resulting in numerous consequences such as rising sea levels, melting glaciers, reducing terrestrial and aquatic biodiversity, increased risks of coastal erosion and the occurrence of extreme weather events, and reduced available water resources. The United Nations Framework Convention on Climate Change (UNFCCC) is a fundamental international treaty that aims to “stabilize the concentration of greenhouse gases (GHG) in the atmosphere at a level that will prevent adverse impacts on the climate system.”²

The main two responses to climate change involve mitigating the impact of climate change (mitigation) and adapting to climate change (adaptation).

Mitigation is taking actions or measures to reduce and/or prevent the emission of greenhouse gases, while adaptation means finding the best ways to overcome the consequences of climate change that have already occurred and reducing risks to avoid additional negative consequences of climate change.³

Taking successful actions aimed at mitigation and adaptation is closely related to the performance of economic decision-making roles, as well as the possibilities of entrepreneurship development. Due to lower access to resources, lower employment and higher poverty rates, women have lower capacities for adaptation to climate change, especially women from vulnerable groups. It should also be noted that household energy consumption is often more under the control of women, who are mainly responsible for household maintenance and family care, and who bear a greater burden of saving money in times of scarcity. In this sense, their choices of technologies and practices of consumption and domestic work are significant from the point of view of the impact on the climate, because it is households that are the main source of short-term pollutants (particles PM2.5 and PM10, black carbon, and carbon monoxide).⁴ However, women have limited opportunities to make decisions about larger investments and thereby implement changes in household consumption practices that can mitigate the impact on the climate. Therefore, the transition in consumption patterns can represent a far greater burden for women than for men, if it is not accompanied by a gender redistribution of responsibilities in the household.

The lack of economic power of women is reflected in their lower representation among entrepreneurs and managers. In other words, women are less represented in roles where economic decisions are made and resources are managed. It can be expected that the transition to a low-carbon economy will have a stronger impact on large companies in sectors that predominantly employ male labor - in the mining and quarrying sector, 87% are men, in industrial production the male workforce is 60.9%, in the energy, gas and steam supply sector 79%, in construction 91.5%, in water supply and waste management 79.4% and transport and storage 80.3%. In addition to the fact that the low representation of women in these sectors indicates their lower chances of contributing to the reduction of harmful effects of the climate and climate change, there is also a potential for the development of small businesses, and therefore female entrepreneurship in the fields of renewable energy sources and the circular economy.

2 UNFCCC. Climate Get the Big Picture. Available at: <https://unfccc.int/resource/bigpicture/>.

3 Babović, M., & Petrović, J. (2019). Gender Sensitive Data and Indicators for Project: Establishing Transparency Framework for The Republic of Serbia. Belgrade: UNDP. Available at: <https://www.klimatskepromene.rs/wp-content/uploads/2020/08/Gender-and-Climate-Change-monitoring-framework-DRAFT-18122019.pdf#page=6&zoom=100,53,161>.

4 Malley, Ch., Stojiljkovic, D., & Michalopoulou, E. (2020). Assessment of short-lived climate pollutant mitigation in Serbia. UNDP. Available at: <https://www.klimatskepromene.rs/wp-content/uploads/2021/05/SLCPs-Report-Serbia.pdf>

2 GREEN ECONOMY AND CLIMATE CHANGE – RESEARCH FINDINGS

KEY FINDINGS

- Women entrepreneurs are aware of the importance of action against climate change, but they do not have enough specific knowledge to be able to adequately assess how climate change affects their businesses, and how they could improve their businesses so that they reduce the harmful effects on the environment or become better adapt to climate change.
- In addition to knowing, following, and respecting the basic environmental regulations, women entrepreneurs apply some of the green business practices in a small percentage. Most often, these are practices that reduce waste, save energy or increase energy efficiency, use ecological packaging or green procurement, and very few are engaged in true green business, i.e. the one that produces ecological products or provides ecological services.
- The most important reason for the weak application of green practices is insufficient knowledge of the possibility to transition to green business through these different practices and contribute to the development of a low-carbon economy.
- In the majority of cases, they are ready for new knowledge and changes.

2.1 The impact of climate change on business

The perception of the impact of climate change on business depends on the development of awareness of what are the manifestations of climate change and how these manifestations affect various aspects that are important for business, such as raw materials, technologies, market needs, working conditions, and workforce capacity and alike.

The findings of the research show that although a very high percentage of women entrepreneurs know that the challenges associated with climate change are present, and on a more general level they know what climate change is, they do not have enough specific knowledge about it and cannot more accurately assess and predict the impacts on business, nor resort to the introduction of technologies and practices in their business that would increase the adaptability of business to the harmful consequences of climate change and that would contribute to the reduction of greenhouse gas emissions and other harmful effects on the environment.

As can be seen from the following chart, the overwhelming majority of respondents agree with the statements that the temperature has changed on a global level, that climate change is happening right now, and that human activity is the cause of global warming.

A slightly smaller percentage of women entrepreneurs also agree with the statement that climate change is a serious threat to life and business **(Chart 1)**

Women entrepreneurs are aware that their knowledge of climate change is not at a high level, so on a scale of 1 to 5, they rated various aspects of climate change with average grades **(Chart 2)**.

On average, they gave the highest rates to their knowledge of extreme climate events, such as floods and droughts, which have the most immediate consequences, and in the recent past (2014 and 2017) when Serbia was affected by floods, they could also gain direct experience. They gave lower grades to their knowledge of nature, sources and consequences of greenhouse gas emissions, and the consequences of climate change related to deforestation, loss of biodiversity, and impact on seas and oceans.

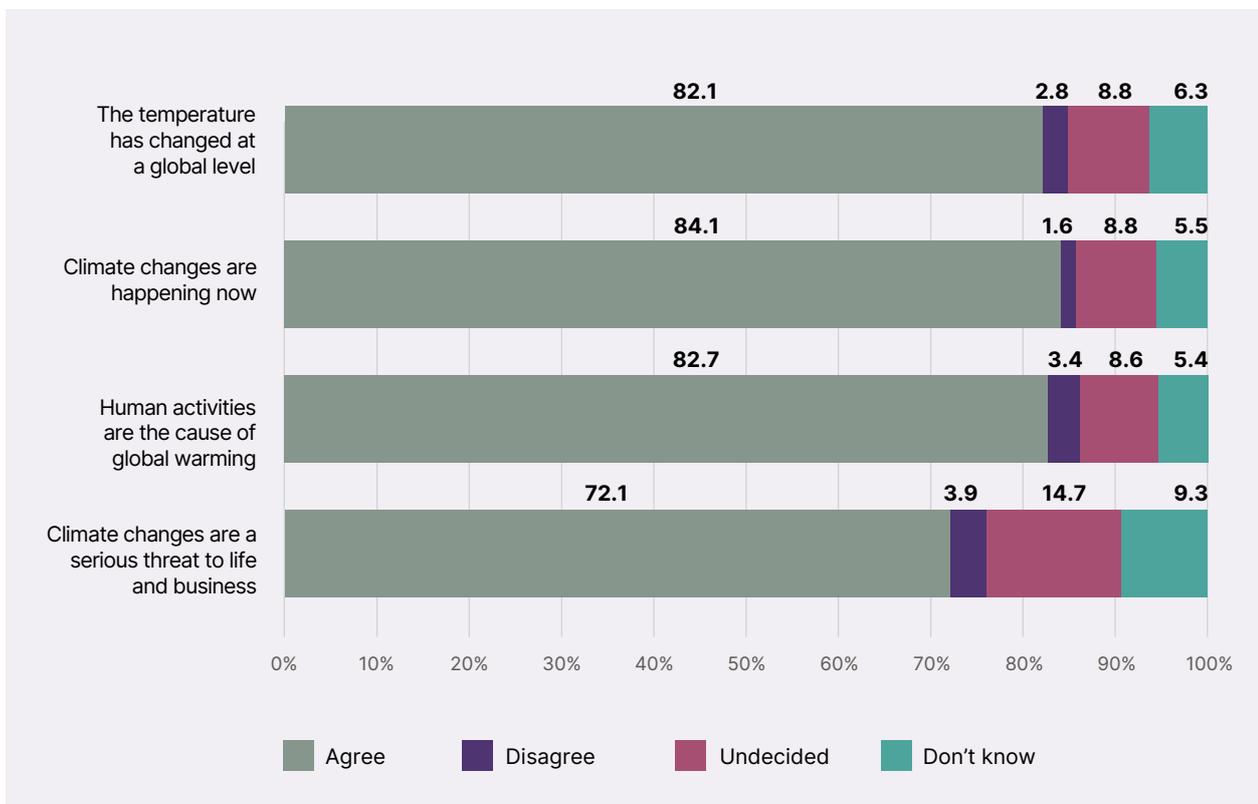


Chart 1: Agreement with attitudes on climate change (%)

It is a very important finding that, on average, they rated their knowledge of decarbonization with low grades, i.e. the ways how to act and what mitigation measures to use to reduce the harmful effects on the climate, which can be of great importance for their businesses.

As many as 70.1% of women entrepreneurs claim that climate change does not affect their businesses at all.

Those who consider that they still have an influence, on average rate the influence as minor, with a score of 2.05 on a scale of 1-10. However, among them, there is a small number of those who were able to state more precisely how this impact manifests

itself, while 59% were unable to explain how climate change affects their business. Among those who were able to state more precisely how climate change affects their businesses, they most often said that it was difficult to perform work due to bad weather (32%), reduced workload due to bad weather (9%), increased workload (4%), increased prices of raw materials and products (17%), crop failure (9%), etc.

Only 3.4% of women entrepreneurs said that they had losses due to climate change and extreme weather conditions in the last 10 years. Among them, 21.1% of women entrepreneurs (N=19) claim that they have adjusted the way they do business or the equipment they use in response to the losses they suffered during the last 10 years due to extreme weather events.

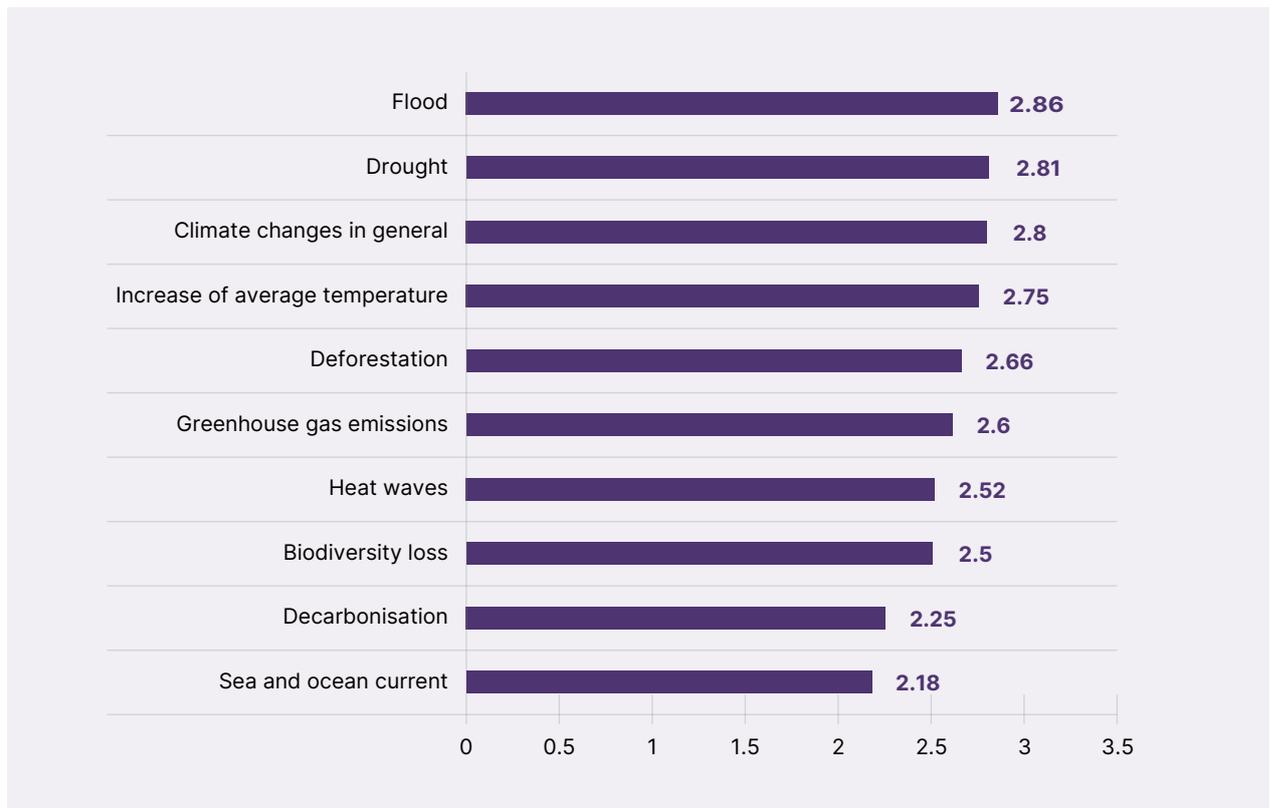


Chart 2: Self-assessment of knowledge about different aspects of climate change

2.2 Practices toward moving to green business

In addition to examining knowledge about climate change, the research also sought to examine the extent to which women entrepreneurs apply practices in their work that contribute to the reduction of greenhouse gas emissions, and more broadly, harmful effects on the environment.

Data indicate that more than half of women entrepreneurs take into account environmental regulations, but other aspects of “green business” are relatively poorly represented.

Around a quarter of women entrepreneurs apply production or service provision practices that

reduce waste generation, and/or use ecological packaging, and/or save energy, i.e. increase energy efficiency. Close to a fifth of women entrepreneurs apply “green procurement”, i.e. they acquire raw materials, semi-finished products, equipment and means of work from companies that apply the principles of “green business”, and/or apply the principles of the circular economy or otherwise strive to reduce water, soil and air pollution.

Other practices, such as “green marketing” or public relations, “green distribution” using channels with reduced carbon dioxide emissions, are less prevalent, and the share of companies producing “green products” (such as organic food, ecological products such as clothing from organic cotton, organic cosmetics, or ecological equipment such as solar panels, biofuels, etc.) or provide “green services” (such as ecological tourism, environmental education, training on environmental regulations, etc.) is very small (**Chart 3**).

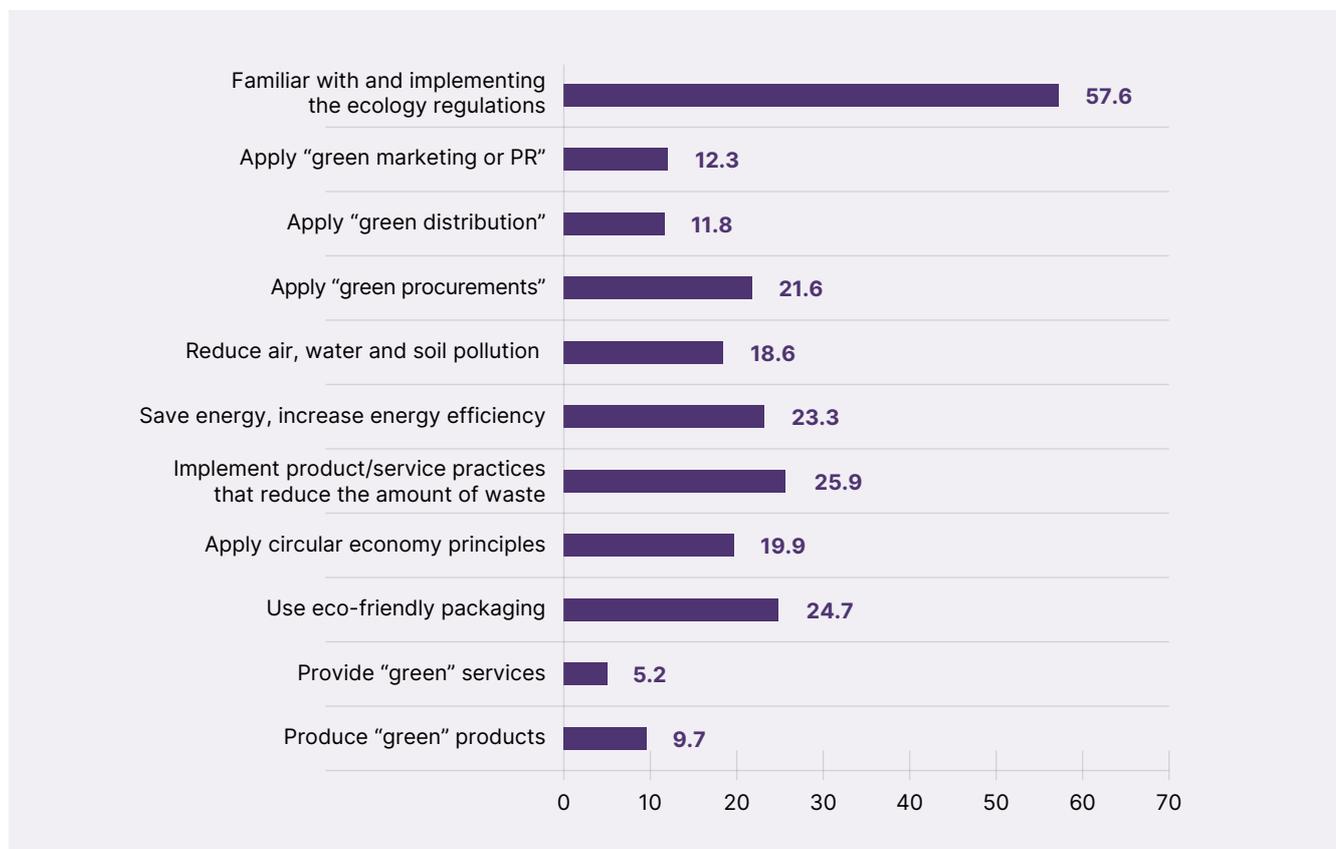


Chart 3: Percentage of companies that apply elements of “green business”

On average, the companies from the sample apply 2-3 environmental practices, and to differentiate the companies in terms of the degree in which they are environmentally oriented, i.e. how strong is their orientation to business that takes care of environmental protection, an index of green business was created that classifies companies according to the number of different practices they apply.

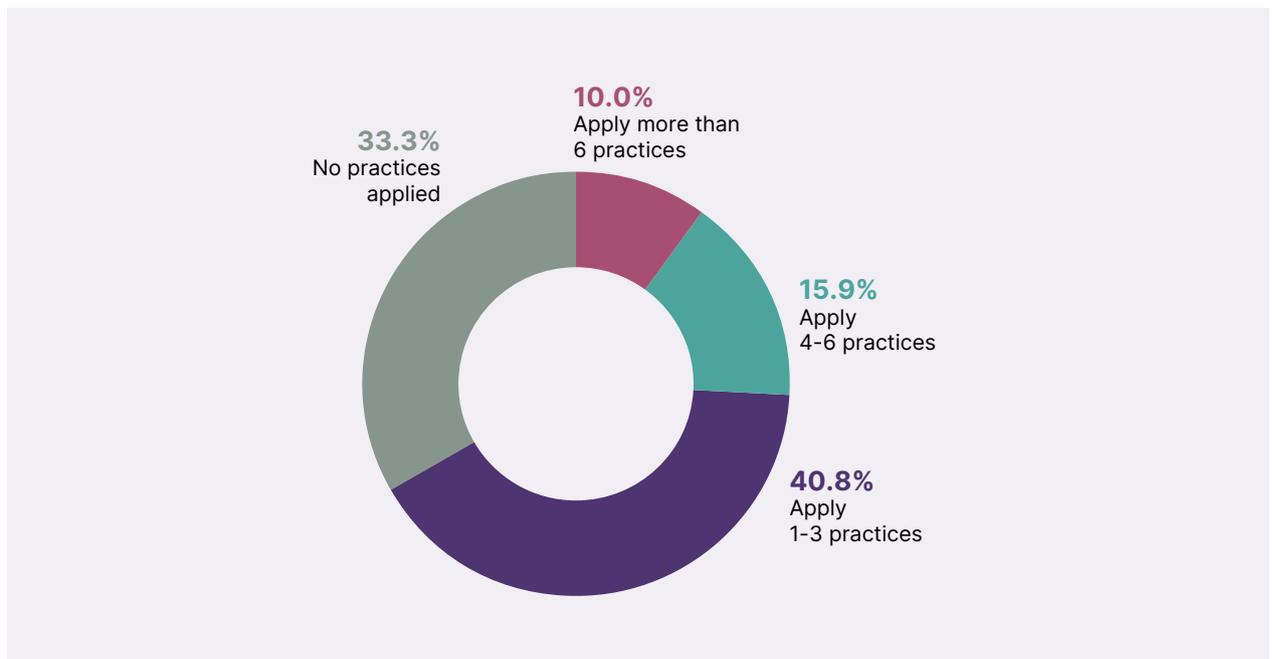
From the following chart, it may be seen that a third of the companies do not apply any of the mentioned ecological practices, i.e. "green business" practices, the largest share of companies applies 1-3 practices, while every tenth company applies more than 6 practices.

The lack of knowledge about the importance and ways in which it is possible to change practices in business so that they respect ecological principles and contribute to the reduction of harmful effects

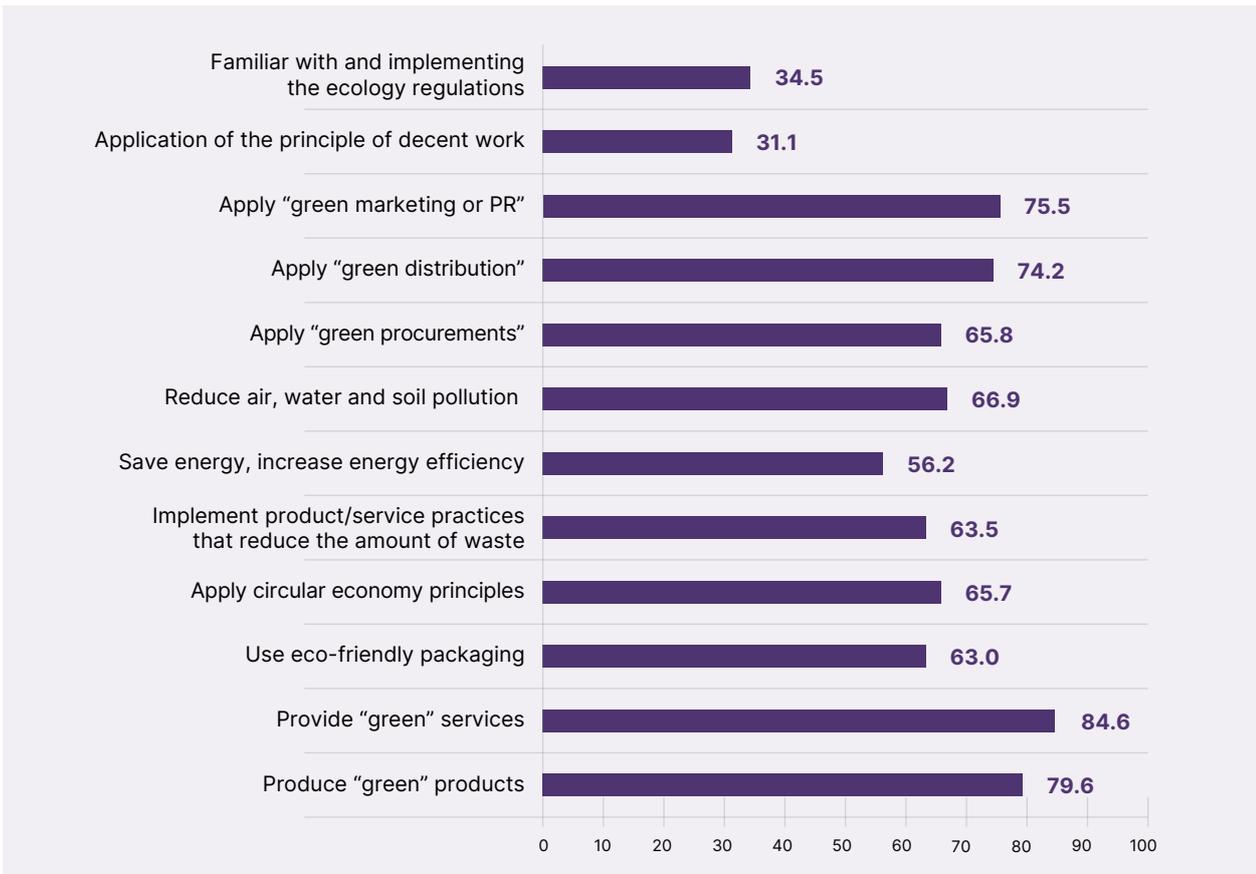
on the environment and climate change is one of the most important obstacles due to which women entrepreneurs have not implemented "green business" practices in a greater percentage.

From the following chart, it may be seen that close to a third of women entrepreneurs do not know enough about environmental regulations and do not know how to familiarize themselves with those regulations. This is also the aspect in which the smallest share of women entrepreneurs expresses a lack of familiarity with the topic. Regarding other aspects of "green business", the majority of women entrepreneurs express insufficient knowledge of practices, which is why they are prevented from applying such practices (Chart 5).

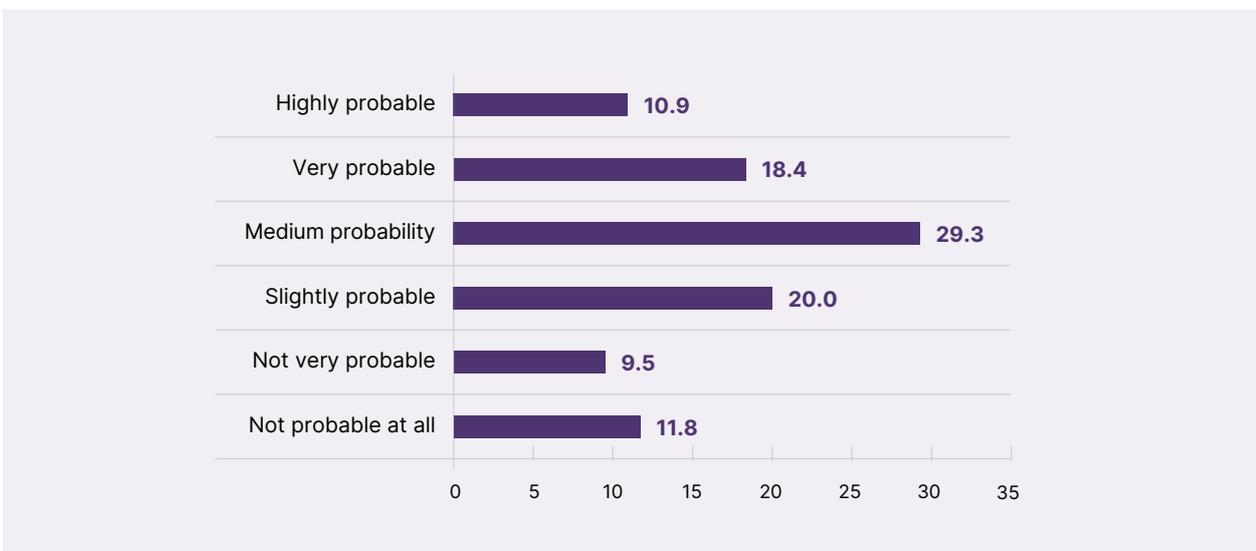
Finally, when asked whether they are ready to improve their business practices to contribute to the reduction of global warming and to contribute to the transition to a "greener" economy, women entrepreneurs showed very divided attitudes, between the almost equal poles of those who are very ready and those who are not ready at all to improve business practices in this way (Chart 6).



↑ **Chart 4:** Women entrepreneurs according to the number of ecological practices in business (%)



↑ **Chart 5:** Percentage of women entrepreneurs who report not implementing certain practices because they do not know enough about them to plan or implement them



↑ **Chart 6:** Given your knowledge of the risks associated with climate change, how likely are you to improve business practices to help reduce global warming? (%)

3

CONCLUSION AND RECOMMENDATIONS

The conducted research identified that female entrepreneurs have little knowledge of climate change and that they have a low potential for the transition to a green economy. The lack of knowledge is seen as the biggest obstacle both in adaptation to existing climate changes, but also in the application of standards and regulations in one's business that could contribute to reducing the negative impact.

In addition, due to a lack of knowledge, female entrepreneurs are not able to see how climate change potentially affects or can affect their businesses. The research showed that only 19 female entrepreneurs could more accurately assess how climate change affects or has affected their businesses. Insufficient knowledge is also reflected in the context of the application of environmental regulations and standards in their business, and female entrepreneurs generally do not apply various elements of green business because they are not sufficiently familiar with it.

However, their awareness of the importance of actions against climate change and their willingness to "green" their business is greater than their real potential, which should be used. In this sense, the main recommendation goes in the direction of investing special efforts for female entrepreneurs to improve their capacities and strengthen the transition towards a green economy.

It is necessary to use various measures to increase the potential of women's entrepreneurship for those forms of business that will contribute to the transition to a low-carbon economy, increase their potential for contributions to the reduction of harmful effects on the climate, as well as resistance to climate change and capacities for adaptation to climate change.

To this end, it is necessary to increase the potential of women's entrepreneurship by various measures for those forms of business that will contribute to the transition to a low-carbon economy, increase their potential for contributions to the reduction of harmful effects on the climate, as well as resistance to climate change and capacities for adaptation to climate change.

It is necessary to:

- increase the offer of information, knowledge, and platforms where experiences can be exchanged regarding the specific impacts of climate change on business in various sectors, so that female entrepreneurs can recognize these impacts and also find out what strategies are available to them in response to these influences;
- in particular, encourage key aspects of the transition to green businesses, such as the production of ecological products and ecological services, recycling practices, energy efficiency improvement practices, etc., through education and the voucher system;
- promote successful practices (benchmarking) that could easily be further replicated.

LITERATURE

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