

## GREEN BANKING TRANSITION AS A FACTOR OF SUSTAINABLE DEVELOPMENT

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**Abstract:** Sustainable banking incorporates environmental and social criteria for the purpose of achieving sustainability goals and customer loyalty. As banks are important intermediaries in the national economy, the objective is to explore bank customer current views in regard to green banking initiatives in the Republic of Serbia. The research was carried out in September till December 2023 in the Republic of Serbia. The findings show that bank customers have high environmental consciousness and carefully monitor the bank green initiatives. For enhancing the loyalty of customers, the banks need to align their business strategy with the principles of sustainable business and expand the range of the green banking products in the future.

**Keywords:** sustainable development, green banking, environmental consciousness, customers

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## INTRODUCTION

The banking sector plays an important role in the traditional financial systems (Čavlin, Vapa-Tankosić & Egić, 2021). Sustainable banking incorporates environmental and social criteria for the purpose of achieving sustainability goals and customer loyalty. The application of green technologies implies a change in business strategy and a turnaround in business. According to OECD data (2019), the „green” financial sector is becoming gradually present also in developing countries. The European Investment Bank (EIB) significantly increased its investments in 2019, directing almost 1/3 of the amount to finance climate protection projects. By 2025, they should make up half of the EIB's total investments, and by 2030, the bank wants to encourage investments in „green” projects with a total value of 1,000 billion euros. According to the new credit policy, the EIB will no longer accept requests for financing the use of conventional (fossil) fuels (SEEbiz, 2020).

The EU, in cooperation with the EIB and the European Central Bank, established the „Green Bank” to finance the transition to norms, methods, new technologies and a sustainable economy, which will ensure economic growth. This bank will provide support to Poland, the Czech Republic and Hungary, members of the Union. International financial institutions encourage the initiative by financing the green transition in developing countries. Thus, the first Green Transition Programmatic Development Policy Loan for the green transition to Serbia has been approved (World Bank, 2023). In March 2022, the World Bank assisted the Republic of Serbia in achieving its strategic goals of decarbonizing the economy and involving a greater number of citizens in the energy transition, in the amount of USD 50 million for the Scaling Up Residential Clean Energy (SURCE) project (World Bank, 2022).

Banking activities carry an important role in environmental protection activities in order to minimize climate risks and approach the financing of projects in sectors that apply „green” technologies and trends. The objective of this paper is to explore the bank customers’ opinions in regard to green banking initiatives in the Republic of Serbia. The authors shall present the literature review followed by the findings and conclusion, stemming from the research.

## GREEN BANKING

Application of the concept of „green” banking stems from defined business strategy. Banks whose business strategy includes “green” aspects of business can better meet the needs of environmentally conscious clients, have a positive image and are more competitive on the market (Goel, Khatik and Thakur; 2017). Green banking (Rajesh & Dileep, 2014; Bhardwaj & Malhotra, 2013; Stojanović, 2020; Grdinić, Lekić, Vapa Tankosić, 2023) needs to enable the introduction of the environmental business practices for current and future generations. Banks must proactively improve the environmental performance (Tarkhanova, 2018). Although banks are not treated as primary „polluters” of the environment, this does not mean that they do not have a business relationship with companies, investments or projects that pollute it (Bhardwaj & Malhotra, 2013).

Banks operating on the domestic market can pay more attention to „green” aspects of business, as one of the modern market trends. Green finance provides a link between the financial industry, environmental protection and economic growth. Conventional banks become “green” banks by directing business activities towards environmental protection, and the development of inclusive banking strategies ensures significant economic development and the promotion of environmental practices.

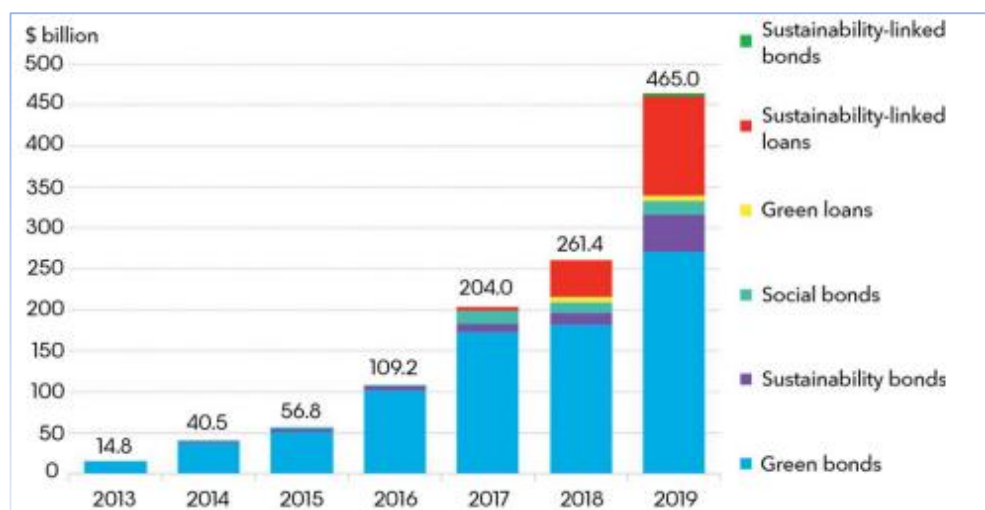
The application of „green” trends in the financial sector can bring savings for capital expenditures and increased competitiveness. The banks operating on the domestic market need to introduce green product/service offer. For the implementation of environmentally friendly business, banks can adopt appropriate environmental business standards such as, for example, Rulebook on social and environmental policy. One of the ways in which banks can contribute more actively to the protection of the environment is to create „green” products. The banks, by creating „green” products, can significantly influence the behaviour of consumers/clients and thus redirect the flow of financing towards projects that do not adversely affect the environment. Some of the examples of creating innovative „green” products are e.g. „green” home loans, „green” car loans, „green” savings and the like. How banks will use „green” trends to promote their own products, for environmentally conscious clients, depends on whether their strategic commitment is the implementation of the concept of „green” marketing

or „green” technologies/trends. The banks need to promote environmental trends and positive practices in this area.

## GREEN FINANCING

According to the UNFCCC (2015) definition, „green finance” means „green economy financing” or „green transition financing”, with the goal of increasing the level of financial flows towards green investments. Figure 1 shows green financing, which has significantly increased in the period from 2013 to 2019 through various financial instruments. It should be noted that social bonds do not directly contribute to green finance, but that they have an indirect positive effect on the environment.

**Graph 1.** *Annual issuance of global sustainable debt (bonds and loans), 2013-2019*



Source: BloombergNEF (2020)

Green financing instruments are (Spinaci, 2021):

- Green bonds –for financing environmental or climate projects.
- Sustainability bonds – for financing green and social projects.

- Bonds related to sustainability – with financial or structural characteristics (e.g. the coupon rate) that may vary depending on the achievement of the issuer's sustainability goals.
- Green loans – loans that are intended for green projects and relate to environmental importance.
- Sustainability linked loans – variable rate credit instruments linked to a selected sustainability performance indicator, such as carbon emissions.
- Blue bonds – bonds issued by states, development banks or others, with the aim of financing maritime and oceanic projects.
- Social bonds – for financing social projects, as well as helping vulnerable groups after natural disasters, as well as alleviating unemployment caused by socioeconomic crises.

Real gains for socially responsible business are also evident. In this way the banks encourage sustainable customer behaviour. For example, banks can offer „green“ savings and other „green“ products for clients who want their savings to be used exclusively for financing projects that are not harmful to the environment; the inclusion of „green“ positive practices in the system of annual reports on environmental protection can be an integral part of the socially responsible operation of banks. Even the financial market, i.e. agencies for measuring credit ratings such as S&P, have improved their standards by adding the factor as one of the risks environmental risks (S&P, 2014).

## **METHODOLOGY**

The research was carried out in September – till December 2023 on a sample of 687 respondents in the Republic of Serbia. Data collection was performed using an anonymous survey with an aim to explore the consumers' opinions on the green banking, using a questionnaire modelled on Nilsson & Schwerin (2019). The survey used Likert scale (1-5).

## **RESULTS**

From the Table 1 we can see that 55% of the respondents in the survey were male and 45% female.

**Table 1. Gender**

|       |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Male   | 378       | 55.0    | 55.0          | 55.0               |
|       | Female | 309       | 45.0    | 45.0          | 100.0              |
|       | Total  | 687       | 100.0   | 100.0         |                    |

As per the age range (Table 2) we can see that a majority of respondents are in the age range of 35-54 (35.8%), followed by age range of 25-35 and 19-24 of 18.2%, and 55-64 with 18%, and lastly by the range 65+ with 9.8%.

**Table 2. Age**

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 19-24 | 105       | 18.2    | 18.2          | 18.2               |
|       | 25-34 | 146       | 18.2    | 18.2          | 36.4               |
|       | 35-54 | 245       | 35.8    | 35.8          | 72.2               |
|       | 55-65 | 124       | 18.0    | 18.0          | 90.2               |
|       | 65+   | 67        | 9.8     | 9.8           | 100.0              |
|       | Total | 687       | 100.0   | 100.0         |                    |

In regard to respondents education level, 46.6% of the respondents posses a high school diploma, followed by 35.5% Master, PHd and 18.9% professional studies diploma (Table 3).

**Table 3. Education level**

|       |                                                                 | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------------------------------------------------------------|-----------|---------|---------------|--------------------|
| Valid | Master, PHd                                                     | 244       | 35.5    | 35.5          | 35.5               |
|       | Higher educational diploma /BA/ or professional studies diploma | 130       | 18.9    | 18.9          | 54.4               |
|       | High school diploma                                             | 313       | 45.6    | 45.6          | 100.0              |
|       | Total                                                           | 687       | 100.0   | 100.0         |                    |

In the Table 4 we see that the average score of salary satisfaction with the current bank is 4.08, followed by the score 3.96 indicating that for them it is important to have one bank.

**Table 4.** *Individual Bank Preferences*

|                                                                      | Mean      | Std.<br>Deviation | Variance  | Skewness  |            | Kurtosis  |            |
|----------------------------------------------------------------------|-----------|-------------------|-----------|-----------|------------|-----------|------------|
|                                                                      | Statistic | Statistic         | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| I am satisfied with my current bank                                  | 4.08      | 0.67              | 0.44      | -0.09     | 0.09       | -0.75     | 0.19       |
| I have confidence in my current bank                                 | 3.42      | 0.94              | 0.88      | -0.32     | 0.09       | -0.65     | 0.19       |
| I have knowledge of how to switch banks                              | 3.41      | 1.12              | 1.26      | -0.44     | 0.09       | -0.31     | 0.19       |
| I think it is important to have ONE bank for all my banking products | 3.96      | 0.97              | 0.94      | -1.11     | 0.09       | 0.98      | 0.19       |

The highest mean score shown in Table 5 is 3.94 indicating that the respondents rated their environmental consciousness with the highest score.

**Table 5.** *Environmental consciousness*

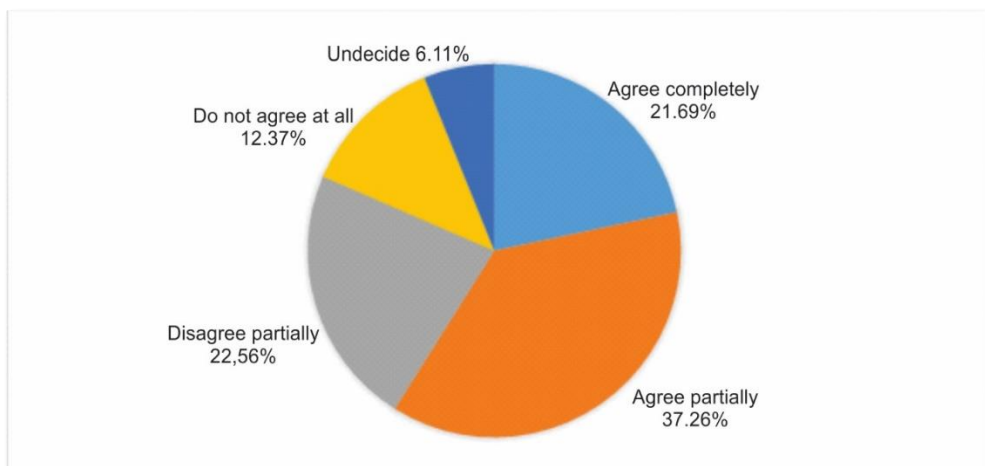
|                                                                                    | Mean      | Std.<br>Deviation | Variance  | Skewness  |            | Kurtosis  |           |
|------------------------------------------------------------------------------------|-----------|-------------------|-----------|-----------|------------|-----------|-----------|
|                                                                                    | Statistic | Statistic         | Statistic | Statistic | Std. Error | Statistic | Statistic |
| I am an environmentally conscious person                                           | 3.94      | 1.21              | 1.46      | -1.02     | 0.09       | -0.08     | 0.19      |
| I choose green products if possible                                                | 3.79      | 1.16              | 1.35      | -0.79     | 0.09       | -0.37     | 0.19      |
| I think it is important that companies take a responsibility in environmental work | 3.61      | 1.24              | 1.54      | -0.74     | 0.09       | -0.48     | 0.19      |
| I have knowledge of how my bank works with green issues                            | 3.80      | 1.23              | 1.51      | -0.88     | 0.09       | -0.26     | 0.19      |
| I have good knowledge of green banking products                                    | 3.74      | 1.11              | 1.23      | -0.94     | 0.09       | 0.23      | 0.19      |
| I would like banks to expand their green product range                             | 3.79      | 1.15              | 1.32      | -0.74     | 0.09       | -0.43     | 0.19      |

The highest mean score is 3.94 indicating that the respondents rated Green Car Financing with 4.25 as the most known green banking product (Table 6).

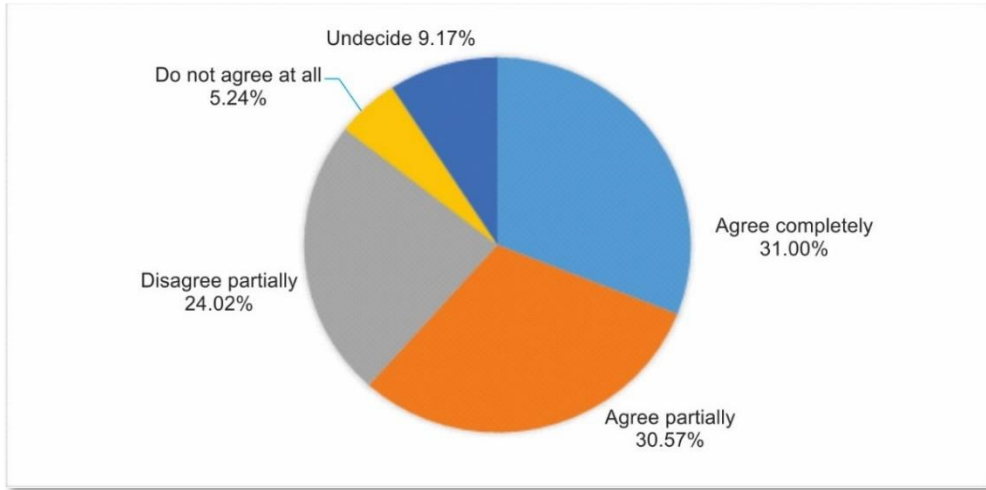
**Table 6.** *Green banking products knowledge*

|                       | Mean      | Std. Deviation | Variance  | Skewness  |            | Kurtosis  |            |
|-----------------------|-----------|----------------|-----------|-----------|------------|-----------|------------|
|                       | Statistic | Statistic      | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Green Mortgages       | 3.96      | 1.11           | 1.23      | -0.74     | 0.09       | -0.54     | 0.19       |
| Green Loans           | 4.16      | 1.29           | 1.66      | -1.45     | 0.09       | 0.84      | 0.19       |
| Green Investments     | 3.69      | 1.18           | 1.40      | -0.76     | 0.09       | -0.07     | 0.19       |
| Green Car Financing   | 4.25      | 1.18           | 1.39      | -1.22     | 0.09       | -0.05     | 0.19       |
| Green Savings Account | 3.99      | 1.14           | 1.29      | -0.90     | 0.09       | -0.34     | 0.19       |
| Green Bank Cards      | 2.43      | 1.46           | 2.15      | 0.66      | 0.09       | -0.92     | 0.19       |

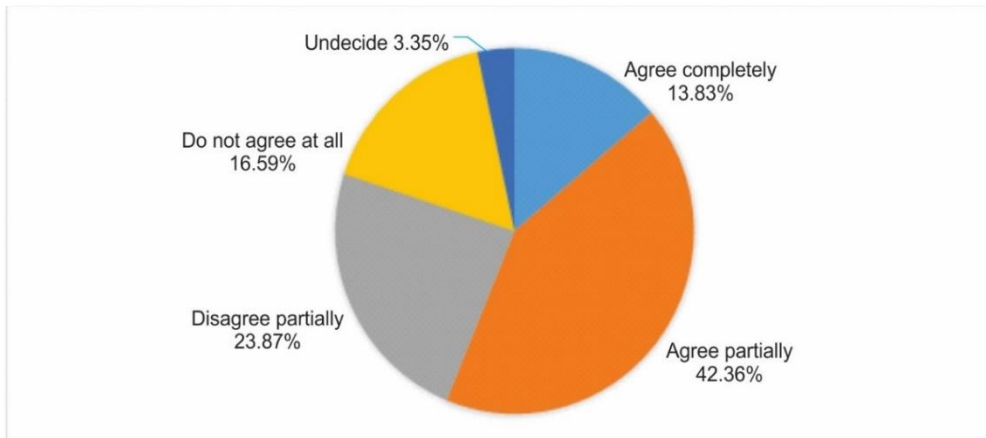
The highest percent of respondents partially agree that they are willing to apply for a banking product if the product is green (37.26%) (Graph 2).

**Graph 2.** *Willingness to apply for a green banking product*

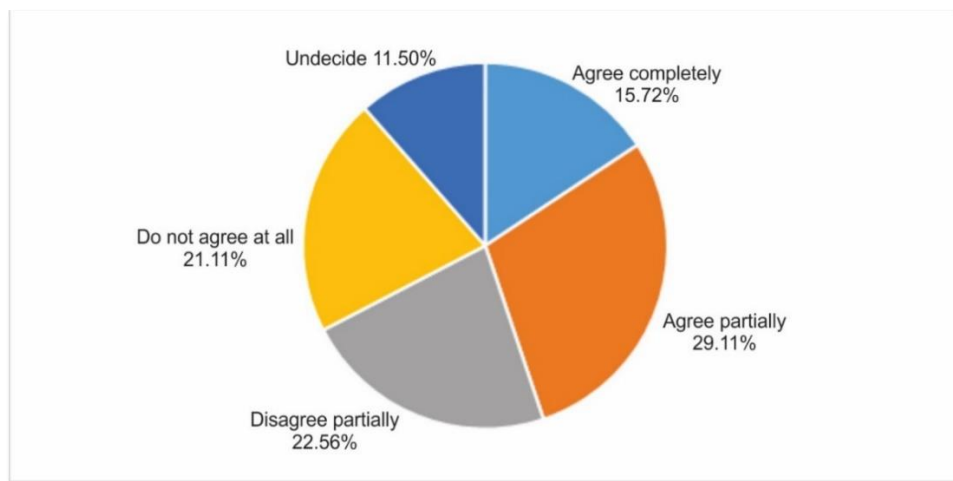
The highest percent of respondents (30.57%) partially agree that they are willing to apply for several banking products in one bank if the product is green (Graph 3).

**Graph 3.** *Opinions on several green banking products in one bank*

The majority of respondents in Graph 4 partially agree (42.36%) that they would be willing to make a green investment in the house if there was a specific loan with lower interest rates.

**Graph 4.** *Willingness to make a green investment in the house*

The majority of respondents in Graph 5 partially agree (29.11%) that they would be willing to recommend their bank if it had a green product range.

**Graph 5. Willingness to recommend the bank with green product range**

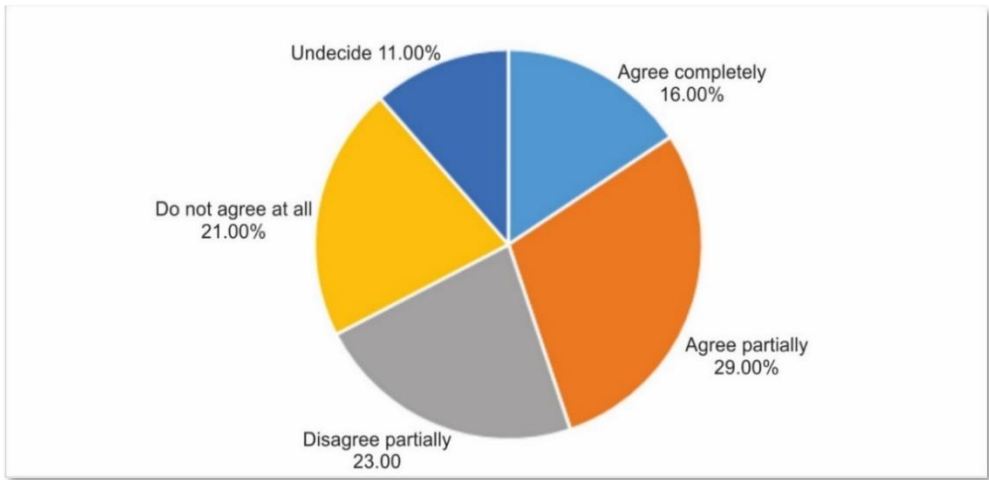
The highest mean score is 4.00 indicating that the respondents have more faith in the new bank (Table 7).

**Table 7. Bank Customer Loyalty**

|                                                                            | Mean      | Std. Deviation | Variance  | Skewness  |            | Kurtosis  |            |
|----------------------------------------------------------------------------|-----------|----------------|-----------|-----------|------------|-----------|------------|
|                                                                            | Statistic | Statistic      | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| I have more faith in the new bank                                          | 4.00      | 1.18           | 1.40      | -0.72     | 0.09       | -1.06     | 0.19       |
| The new bank offers other banking products in addition to my existing ones | 3.69      | 1.00           | 1.01      | 0.05      | 0.09       | -1.24     | 0.19       |
| The new bank offers existing bank products at a lower price                | 3.70      | 1.19           | 1.42      | -0.13     | 0.09       | -1.56     | 0.19       |
| The new bank offers green banking products that interest me                | 3.89      | 1.38           | 1.90      | -0.96     | 0.09       | -0.46     | 0.19       |

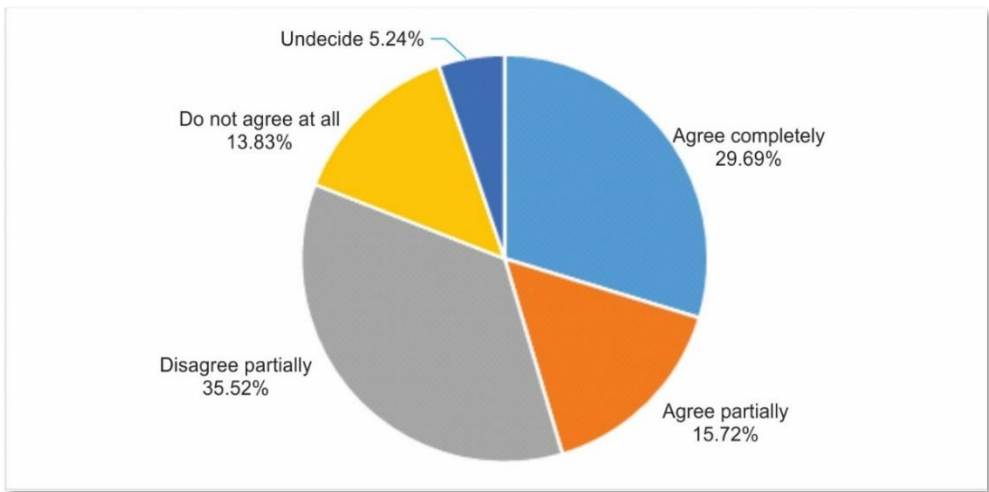
The majority of respondents partially agree (29%) that they would be willing for a transition to the bank with a broad green product range (Graph 6).

**Graph 6.** *Willingness for a transition to the green products bank*



The majority of respondents in Graph 7 partially disagree (35.52%) that they would have higher confidence in a bank that offers a broad green product range.

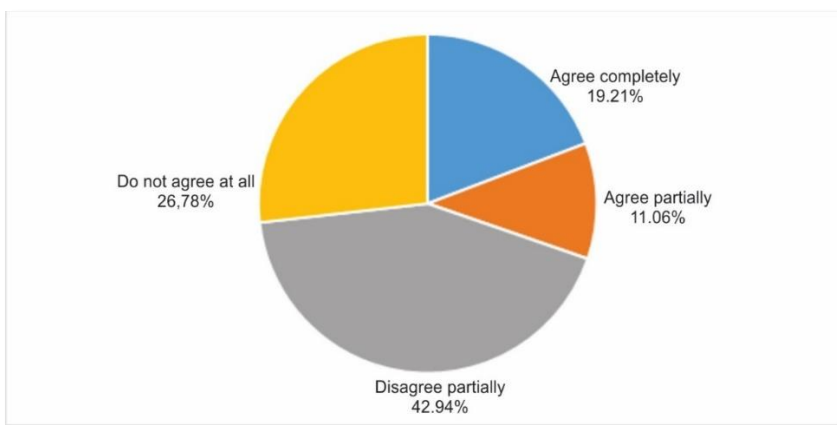
**Graph 7.** *Confidence in a bank with a broad green product range*



Those respondents that partially disagree and do not agree at all that their satisfaction with the current bank is connected to the introduction

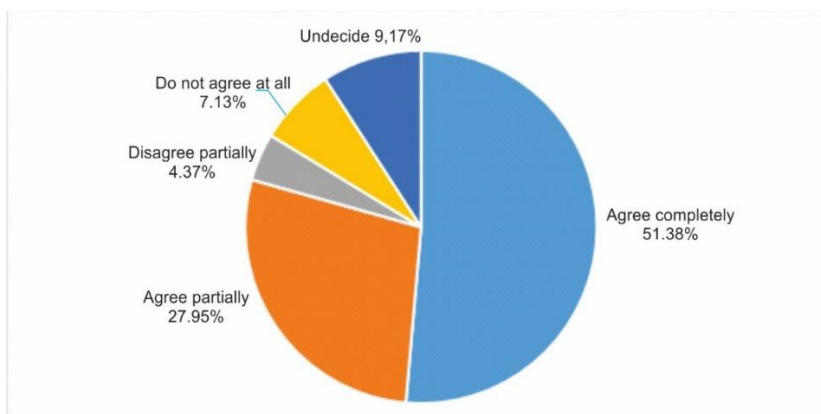
of a broad green product range are hereby represented by a rather high percent of 69.72% (Graph 8).

**Graph 8.** *Satisfaction with the current bank on the introduction of a broad green product range*



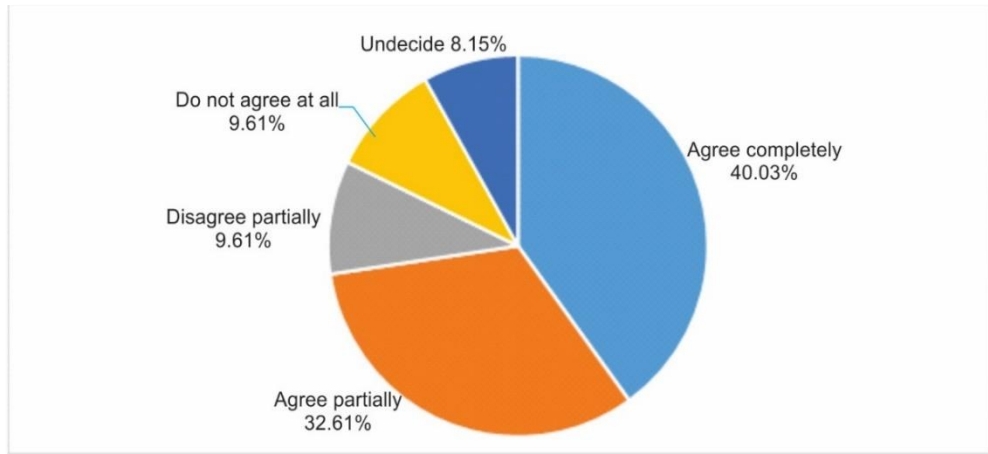
The majority of respondents in Graph 9 agree completely and partially agree that they would be less satisfied with their current bank if it did not offer green banking products while all other banks offered it (79.33%).

**Graph 9.** *Satisfaction with the current bank if it did not offer green banking products*



The majority of respondents in Graph 10 agree completely and partially agree that they would be less willing for a transition from a green banking product to a non-green banking product (72.64%).

**Graph 10.** *Willingness for a transition from a green banking product to a non-green banking product*



## CONCLUSION

The adoption of the principles of the concept of green banking and sustainability the understanding and willingness to apply it in business practice is the task of management and its readiness for change. Sustainability is part of modern ethical business, which, in addition to the correct attitude towards employees, business partners and clients, is also reflected in taking care of the environment. The goal of every successful organization should be to strive to contribute to its preservation and develop green banking products within the limits of its own capabilities, taking into account that its business success cannot be in conflict with ethics in business, but only in cohesion. The sensitivity of climate change and environmental issues with the use of green banking would create new opportunities to stimulate green sustainable investment.

The advantages of applying the concept of „green“ banking is attached also to ecological aspects of business. The application of environmental standards has a direct impact on increasing the awareness of

environmental protection and the possibility of creating innovative financial products that will contain the perspective of environmental protection. As shown in the sample of the bank clients in the Republic of Serbia, there is high environmental consciousness and the willingness of the bank clients to use green products.

The loyalty of bank customers can be enhanced by the wider range of green banking products.

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## TRANZICIJA KA ZELENOM BANKARSTVU KAO FAKTOR ODRŽIVOG RAZVOJA

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**Sažetak:** *Održivo bankarstvo obuhvata ekološke i društvene kriterijume u cilju postizanja ciljeva održivosti i lojalnosti korisnika. Kako su banke važni posrednici u nacionalnoj ekonomiji, cilj ovog rada da istraži trenutne stavove klijenata banke u pogledu inicijativa zelenog bankarstva u Republici Srbiji. Istraživanje je sprovedeno od septembra do decembra 2023. godine u Republici Srbiji. Rezultati pokazuju da klijenti banke imaju razvijenu ekološku svest i pažljivo prate zelene inicijative banke. Radi povećanja lojalnosti klijenata banke treba da usklade svoju poslovnu strategiju sa principima održivog poslovanja i u budućnosti prošire asortiman zelenih bankarskih proizvoda.*

**Ključne reči:** *održivi razvoj, zeleno bankarstvo, ekološka svest, potrošači.*