



RESULTS OF THE RESEARCH: "AN ASSESSMENT OF THE GREEN FINANCE MARKET IN THE KYRGYZ REPUBLIC"

FINAL REPORT

ANNOTATION

This review was prepared under the coordination of the expert Mr. Talant Omuraliev and the technical support of ISR Consult in cooperation with the Ministry of Economy and Commerce of the Kyrgyz Republic and the Association of Legal Entities "Union of Banks of Kyrgyzstan", commissioned by the United Nations Development Program (hereinafter UNDP).

Bishkek 2023

Brief information:

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The study (Assessment of the Green Finance Market in the Kyrgyz Republic) was prepared on the basis of in-depth interviews with participants and market players in the Kyrgyz Republic.

Special thanks go to the panel of experts involved in this study.

About the project:

The global community has recognized that the transition to a green economy is closely linked to the development of sustainable finance, that is, "in order to maintain sustainable growth, it is necessary to develop principles for sustainable financing and mobilize the necessary financing."

Implemented practice of "green" finance within the G20 and the concept of greening the financial system to the global level. An increasing number of countries around the world are implementing various kinds of programs in the field of sustainable financing to achieve carbon neutrality, taking into account that this type of financing is one of the fundamental conditions for sustainable development. Ambitious goal "a low greenhouse gas future by 2050" delivered; however, there is a significant gap in climate finance.

Annual commitments of developed countries in the amount of 100 billion US dollars, made ten years ago, remain at the same level. The UN 2030 agenda calls for transformational change and innovation.

Financing is a fundamental condition for the implementation of the actions necessary to achieve the goals of the Kyrgyz Republic (KR) of the National Strategy for Sustainable Development. Investing in climate-resilient infrastructure and a low-carbon future, including jobs in the low-carbon welfare sector, can lead to significant job creation in the short term while boosting socioeconomic and environmental sustainability. A green recovery can also open up opportunities for women and youth to gain access to new skills and better jobs, while increasing women's labor market participation and reducing informal employment.

A key milestone in the transition of the Kyrgyz Republic to an inclusive green economy was the adoption by the Kyrgyz Parliament in 2019 of the National Green Economy Program (NPGE). In addition, the Government has approved an Implementation Action Plan to encourage investment in environmental protection, human development, clean technologies and use tax incentives and incentive mechanisms to finance a green economy. A significant increase in green investment is required to achieve the green development goals of the Kyrgyz Republic as one of the pathways to its broader National Sustainable Development Program until 2040 and the implementation of its National Defined Contributions (NDC) in accordance with the Paris Climate Agreement. In order to effectively move towards sustainable banking and financial practices, financial institutions need to

put in place a national green finance framework that provides the right economic incentives to support and invest in green projects.

The main problems with green finance include lack of equity for projects, lack of clear definition and criteria for green projects, low capacity to evaluate green projects and knowledge of local disbursement channels, and lack or little experience of local project developers.

Responding to these needs, the Ministry of Economy and Commerce of the Kyrgyz Republic and the Union of Banks of Kyrgyzstan, with the technical support of the Green Economy Action Partnership (PAGE) and expert support from the Global Green Growth Institute (GGGI), in 2021 began to develop the National Financing Facility (NFV). to stimulate financing for sustainable green development. The National Financing Facility provides more opportunities to support developing countries in the implementation of their NDCs, and to develop and strengthen NFVs as a means for countries to access international climate funds and pool public, private and bilateral funding sources to achieve development goals and implement climate control measures. climate change. After a study tour to Mongolia, in June 2022, organized by the Mongolian office of the GGGI with the support of UNDP, to study the experience of establishing the Mongolian Green Financial Corporation, the plans were to create an interdepartmental working group under the Ministry of Economy and Commerce of the Kyrgyz Republic with the participation of representatives of the Union of Banks and other interested parties, Thus, it is planned to create the Kyrgyz Green Financing Facility, which will perform the functions of NFV.

The main objectives of the NFV will be: i) Providing medium-term and long-term credit resources for financial market participants with subsequent sale of financial products on the market; ii) Encouraging the provision of affordable blended finance for end borrowers; iii) Providing a risk-sharing mechanism to participating banks and microfinance institutions; and iv) Supporting the development of a project portfolio of sustainable green projects.

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Terms and abbreviations

ESG	(Environmental, Social, Governance) principles - the principles of the company's activities based on the protection of the environment, the creation of favorable social conditions, a conscientious relationship with employees and customers, and good corporate governance.
GGGI	Global Green Growth Institute
IFC	International Finance Corporation
KGFF	Kyrgyz Green Finance Facility
NDC	Nationally determined contributions
NFV	National funding mechanism
GEC	Green economy concept
LA	Legal act
NGEP	National Green Economy Program
NDS	National Development Strategy
OSCE	Organization for Security and Cooperation in Europe
DNC	Definable National Contribution
NDC	Nationally Determined Contribution
GEDP	Green Economy Development Program in the Kyrgyz Republic
UNDP	United Nations Development Program
SPC	Sustainable public procurement
SDG	Sustainable Development Goals

I. GENERAL RESUME

As part of an assessment / market research project to assess the supply and demand for lending to green projects in the Kyrgyz Republic, a desk study was conducted to take into account the characteristics of the supply and demand of green finance, as well as an in-depth interview, including a survey of a group of 60 respondents from the supply and demand side of green finance.

The key findings of the desk research show that «green finance» is an extremely narrowly focused and poorly covered topic in the Kyrgyz Republic, the available open access materials are narrowly segmented and there is no synergy in the strategic documents of the Kyrgyz Republic on the transition to a green economy, also due to the lack of metrics and standards, there is no statistically collected indicators of green finance in Kyrgyzstan.

In general, a review of publications on the topic of green finance in Kyrgyzstan shows a stable connection of the term only with environmental topics and environmental indicators. At the same time, the review shows the absence of a single glossary and strategies in the discussion of green finance. The concept of «green finance» is an extremely narrowly focused and little-covered topic in the Kyrgyz Republic. The concept of «green finance» in Kyrgyzstan is covered at the level of 27-50 data sources on the Internet, a number of sources and publications are mainly devoted to coverage of events related to events and memorandums on the topics of «green finance».

A small number of publications (6 publications) are devoted to segment work within the framework of the concept of sustainable development and the principles of "green finance". Lack of a unified approach to promoting the topic of green finance in the financial market of the Kyrgyz Republic. The variety of approaches to promoting green finance is determined by private goals and tasks of the participants themselves, without pursuing the common goal of fulfilling the obligations of the Kyrgyz Republic to the international community.

Based on the results of an in-depth interview, the green finance market capacity was estimated, which ranges from \$150.6 million according to demand-side estimates, and the potential market capacity for the banking portfolio is estimated at \$415 million in the next 5 years.

The interview results showed a high level of respondents' awareness of green economy issues, at the same time, respondents are confident in the future growth in demand for green finance, taking into account global trends, the majority of respondents believe that financial sector entities are ready to implement green finance initiatives.

The main sectors of the economy, which, according to respondents, have the greatest potential in green financing are energy, transport, waste processing, and agriculture.

High levels of general awareness on the topics of "green economy" and "energy efficiency" is associated with frequent publications in the media on this topic, at the same time, a more substantive discussion of the issue shows low awareness on the part of respondents on the issue under discussion. There is a high need for outreach and educational activities aimed at explaining the principles and approaches associated with "green finance".

Expert opinion, taking into account the results of the conducted survey on the assessment of volumes from the demand side, are estimated from 150 to 500 million US dollars in the future until 2027.

Estimated volumes of funding from the supply side in the comparable period are estimated at 20-40% of the banking sector's loan portfolio, or USD 460-950 million. Differences in assessment from the supply and demand side are due to the difference in the approach to the term green finance, as well as the lack of a methodology for assessing the demand side. In contrast to the evaluation by demand, supply assessment is based on existing products and methodology of financial institutions, which allows for a more accurate assessment of market potential.

Expert assessment of the volume of financing from the demand side is connected and with the implementation of specific projects in certain sectors of the economy, including taking into account direct financing, through banks, as well as using securities market instruments:

- Hydropower;
- Electric transport;
- RES;
- Waste recycling;
- Construction;
- Agriculture;
- Tourism.

The respondents' choice of the energy, transport and processing sectors as key sectors for green finance is generally in line with society's expectations, however, the increase in funding in these sectors is directly related to the economic incentives that the state will create.

The overall findings of the study show that the green finance agenda is in the process of transformation and border formation. Additional efforts are needed to create incentives and provide guidance that will stimulate the introduction of green finance products and services and also increase the involvement of businesses and the population of the Kyrgyz Republic in the green economy agenda.

II. INTRODUCTION

Objective of the project: «Conduct an assessment / market study to assess supply and demand for lending to green projects in the Kyrgyz Republic, and explore issues related to the definition of green loan criteria».

- Reflect the current situation with green finance in the financial market and develop measures to create an enabling environment for the establishment of the Kyrgyz Green Finance Facility (KGFF);
- The results of the market assessment will provide evidence and complement the feasibility study for establishing KGFF in the Kyrgyz Republic.

2.1. Key tasks of the project:

1. Identification and evaluation of key players in the local financial market, their niche (competitive advantages), success factors;
2. Identification of the problems faced by the financial sector and opportunities for the introduction of green finance, as well as the development of proposals for their solution;
3. Mapping and analysis of existing financial products and services for green finance in the Kyrgyz Republic, including products provided by development partners;
4. Identification of potential demand and existing supply of the financial sector to implement the principles of green finance. Develop a proposal for a roadmap/path to meet the identified supply and demand;
5. Conduct market assessments of potential supply and demand for green financial products and services by sector and sub-sector. At least 3 key sectors should be selected in consultation with the Ministry of Economy and Trade, the Union of Banks and UNDP. Develop a proposal for green financial products and services for each of these sectors;
6. Analysis of regulatory requirements for financial institutions, literature, existing standards, guidelines, roadmaps and identification of gaps in the financial sector in terms of relevance / with reference to the Standards and Principles in the field of risk assessment and financing (such as the Equator Principles, IFC Performance Standards), UN Principles for Responsible Investment, Climate Bond Initiative, etc.). Develop measures and action plan to address identified gaps;
7. Exploring potential green finance mechanisms. Development of a proposal for new green finance mechanisms by the financial sector;
8. Conduct at least 2 round tables in physical and/or hybrid mode (online and offline) to collect information for the assignment and validate/represent the results of the assignment to relevant stakeholders outside of UNDP. The list of participants must be agreed with UNDP. Match all reviews and suggestions;
9. Preparation of a consolidated report with the conclusions/results of the market assessment, conclusions and developed proposals/recommendations. The structure and content of the report should be determined in consultation with UNDP. The report should be revised in accordance with the comments provided by UNDP and its partners;

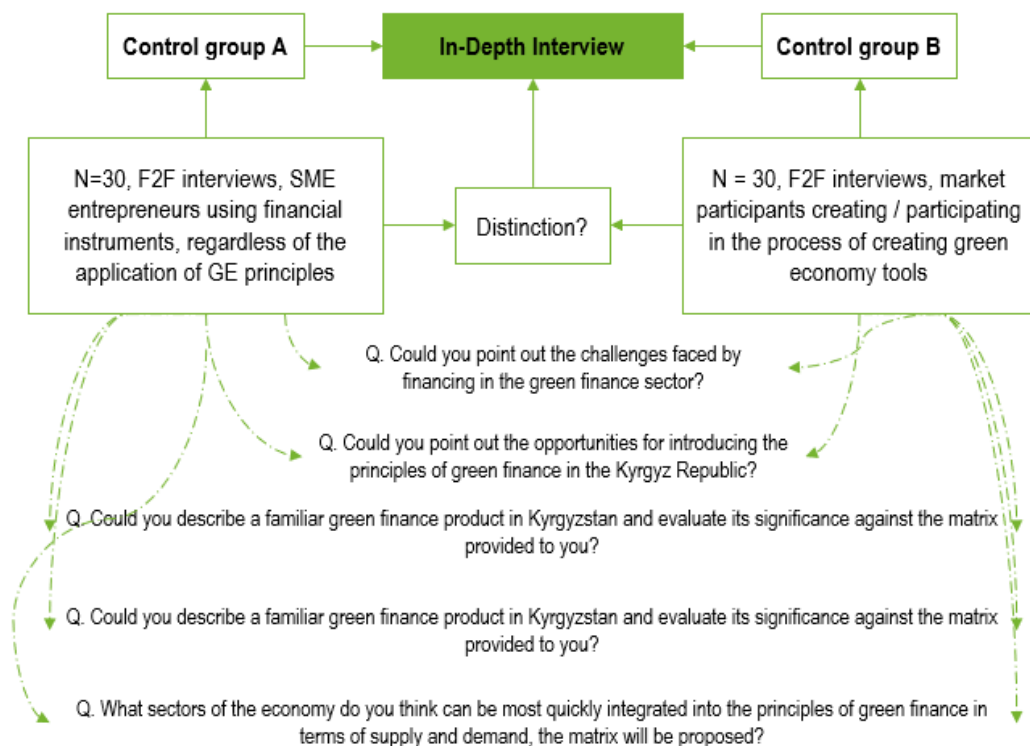
10. Development of a concept note. Develop at least 2 concept notes on the introduction of new green finance mechanisms and green financial products and services for certain strategic sectors in Kyrgyzstan.

2.2. Research methodology:

The research team in this study divided the research methodology into several phases:

1. **Desk research**– the need for this study was dictated by the extremely narrow focus of the issues of «supply and demand for green finance lending» and «green finance principles», taking into account the peculiarities of the first study to determine the supply and demand for green finance lending in the formed conditions;
2. **In-depth interview**– due to the fact that the market of the Kyrgyz Republic in lending to green finance is relatively small and is at the stage of initial development based on the results of desk research, two groups of respondents were formed, including players and participants in the green finance market, both current and potential.

Thus, it was possible to form two types of questionnaires: questionnaire A (control group A) - from the side of current and potential participants in demand, and questionnaire B (control group B) - from the side of potential participants in the proposal and players forming proposals.



Formation of the final report based on the technical report – based on the results of the analysis of data obtained as part of 60 in-depth interviews on two groups of questions, a technical report was generated, which was subsequently optimized by the expert of the working group.

2.3. Methodology and principles for calculating indicators:

60 respondents participated in the formation of the market assessment. In the process of conducting in-depth interviews, the working group took into account the answers of respondents according to the following matrix within the scope of the market, supply and demand.

Index	Sector economy	n1		n2		n3-60	
		min	max	min	max	min	max
Market volume	Sector 1	•			•		
	Sector 2		•	•		•	
	Sector 3	•	•		•		•
Demand	Sector 1		•	•			
	Sector 2	•				•	
	Sector 3		•		•		•
Supply	Sector 1	•			•	•	
	Sector 2		•		•		•
	Sector 3		•		•	•	

Table 1. Methodology for calculating indicators

The specific calculation of indicators was based on the following formula (the sum of the average indicators of all the minimum and maximum values / estimates), the formula for indicators: market capacity, supply and demand, presented in table No. 1. Intermediate values of this formula allow you to determine the corridor of minimum and maximum values.

$$Indicator = \frac{\frac{\sum_{60}^n min}{\sum actual responses received} + \frac{\sum_{60}^n max}{\sum actual responses received}}{2}$$

2.4. Expert review:

This report contains additional sections highlighted in green boxes. The selected sections are the expert assessment of Mr. Talant Omuraliev, the blocks were formed on the basis of the current involvement in the issues of Mr. Talant Omuraliev and the research data provided.

Usage knowledge and peer review, along with the data obtained through in-depth interviews, desk research, made it possible to form concept notes:

1. Concept note on the introduction of green finance mechanisms in the Kyrgyz Republic;
2. Concept note on the Green Finance Fund;
3. Concept note on green products and services for certain strategic sectors in the Kyrgyz Republic;
4. Concept note: "Energy as the main industry for the implementation of the principles of "green" finance in Kyrgyzstan.

III. DESK STUDY:

As part of this study, a desk study was carried out to study the key objective of the study «Conducting assessment / market research to assess the supply and demand for lending to green

projects in the Kyrgyz Republic, as well as to study issues related to the definition of green loan criteria».

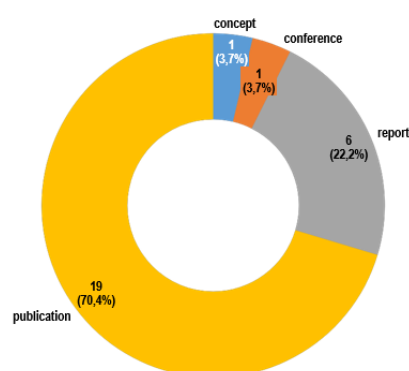
It is important to note that within the framework of this study, desk research is an supportive method for forming the basis of the study; in general, the terms of desk research were ranked no more than 10 days «green financing» which includes any materials and references within the framework of indexing by the Google search service in the Kyrgyz network. Also, when using this method, it is important to take into account the error of this method: the time of indexing new materials, local search, search languages and other parameters. At the same time, it is important to note that the use of this method is an assessment of the trend and trends in the time period and may not include non-indexed sources.

The methodology and format of conducting desk research, as noted earlier, plays a key role in research, this methodological approach implements key areas and principles. In the desk study, the main language was used - Russian, due to the low level of indexing of the Kyrgyz language and English in search engines in the area of the Kyrgyz-speaking Internet.

The principle of finding and posting materials on the Internet for users of the current market of Kyrgyzstan: principles of «green finance» in Kyrgyzstan, «green finance» in Kyrgyzstan, sustainable development goals in Kyrgyzstan, «green economy», products of «green finance» in Kyrgyzstan, green finance projects in Kyrgyzstan, completed green finance projects in Kyrgyzstan, green finance instruments in Kyrgyzstan.

The thus formed pool of keywords that a potential client can enter into the search engine may look like in the above list. The analysis of articles and materials will reveal penetration (the level of penetration of this topic into the Internet only for the market of the Kyrgyz Republic), will provide an understanding of the issues and the level of saturation with information on the subject of «green finance» and «principles of green finance» in the Kyrgyz Republic.

- ☐ During the desk research, about 27 data sources were identified that form the concept and provide an understanding of "green finance" in the Kyrgyz Republic;
- ☐ It is important to note that as part of the desk research on the methodology used, about 27 active sources were formed and allocated, as of October 20, 2022, exclusively as part of the ongoing desk research as part of the key goal of the study: "to carry out research to obtain an understanding of the situation with the supply and demand of green investments and preparation of green projects in the Kyrgyz Republic";
- ☐ Thus, out of 100% or 27 articles, the nature of 70.4% or 19 articles is aimed at covering partnership agreements, memorandums, membership, exchange of experience and, as a rule, devoted to highlighting activity;
- ☐ 6 articles or 22.2% are presented as system reports, 1 concept 3.7% and 1 conference 3.7%.



3.1. Publications and sources within the term «green finance» in Kyrgyzstan

At the time of the desk research, data was collected in open sources, about 27 sources that post information regarding the integration of “green finance principles in Kyrgyzstan” are guided by the concept and forecasts in the perspective of integration moments and have the character of information orientation, memorandums of cooperation and cooperation.

Thus, 11 out of 27 sources of information are aimed at the concept of «principles of green finance in the Kyrgyz Republic»¹, the overview «Green finance and its prospects in the context of Kyrgyzstan» reflects key messages about sustainable and green finance and its prospects in the context of Kyrgyzstan. The article details the concept of green finance – «Green finance involves raising funds to solve climate and environmental problems, on the one hand, and improving the management of financial risks associated with climate and the environment, on the other. In turn, «sustainable finance» takes into account environmental, social and governance issues and risks in order to increase long-term investments in sustainable economic activities and projects». The publication also looks at Mongolia's experience as a leader in the region in sustainable green finance.

The concept of green economy in the Kyrgyz Republic «Kyrgyzstan is a country of green economy»² is one of the three system materials in the network approved in 2018, the material includes the prerequisites for the development of the green economy of Kyrgyzstan and highlights the following areas of development:

1. Green transport in a green city;
2. Green energy and energy saving;
3. Green agriculture;
4. "Green" industry;
5. Green waste recycling;
6. Public policy, green public procurement and payments for ecosystem services;
7. Protection of biological diversity;
8. Green thinking, green education, green education;
9. Green investment and sustainable finance to promote a green economy;
10. Indicators for a green economy.

Publication of the Ministry of Economy and Commerce of the Kyrgyz Republic³ on the topic: «Green funds of the Kyrgyz Republic: trends and prospects for the development of sustainable financing», reveals the key goal of the conference, which was to determine the role and position of the financial sector of the Kyrgyz Republic in the mechanism of sustainable financing, in terms of international and regional experience, as well as promoting sustainable economic development of the republic, by facilitating a more active participation of the country's financial and business sectors in the development of sustainable financing and the implementation of the principles of the "Green Economy" and organizing a platform for dialogue between stakeholders.

¹ [Green finance and its perspectives in the context of Kyrgyzstan, 12/06/2022, United Nations Development Program;](#)

² [The concept of green economy in the Kyrgyz Republic "Kyrgyzstan is a country of green economy";](#)

³ [Green funds of the Kyrgyz Republic: trends and prospects for the development of sustainable financing;](#)

The Green Finance Center is developing a taxonomy of green projects for the Kyrgyz Republic, following the meeting of the Green Finance Center (GFC) Aidar Kazybaev with the Minister of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic Dinara Kutmanova, a Framework Cooperation Agreement was signed, which fixes the issues of GFC development assistance green finance in the Kyrgyz Republic through the development of a taxonomy of green products⁴.

Publication on the integration of energy conservation principles into the national policy of the Kyrgyz Republic and the results of the joint discussion of the analysis «Sustainable consumption and production (SCP) in the housing sector of Kyrgyzstan with a focus on energy efficiency» with the participation of representatives of government agencies, businessmen, academia, architects and designers in the Ministry of Economy and finance of the Kyrgyz Republic. During the discussion, the President of Unison Group, Nurzat Abdyrasulova, during a joint discussion of the analysis «Sustainable consumption and production (SCP) in the housing sector of Kyrgyzstan with an emphasis on energy efficiency» noted: «In our country, population growth and energy consumption increase by 3% every year - 5%. At the same time, the growth in consumption outstrips the growth in new capacities, and there is an increase in deferred demand for energy. At the same time, the energy deficit is 2.3 billion kWh, the need for energy during the heating period is 9.8 billion kWh, and the possible generation of Kyrgyzstan is 7.5 billion kWh. Thus, the need to modernize buildings is long overdue in Kyrgyzstan. 2/3 of the building stock was built 50 years ago, less than 1% of the public building stock has been renovated. About 75% require extensive energy renovation, the rest of the premises are to be replaced»⁵.

With the assistance of the EDB and the Green Finance Center, a center for the development of sustainable finance and ESG was established in Kyrgyzstan. GFC Bishkek aims to promote sustainable finance services throughout Kyrgyzstan, including supporting the issuance of sustainable (green, social, sustainability-related and ESG) bonds and loans; consulting support to companies and organizations of the Kyrgyz Republic on the issuance of «green» bonds, as well as the introduction of ESG practices, the development of strategies in the field of sustainable financing; provision of services for verification of issues of «green» bonds, etc., available in the publication of the EDB⁶.

Article dedicated to the webinar «Sustainable financing tools to support the transition of the EAEU countries to a «green» economy»⁷, held by the Union of Banks of Kyrgyzstan, where the Speakers of the session shared their experience in developing roadmaps for the development of sustainable financing, issuing green and social bonds, introducing an quota trading system, and discussed key green finance instruments, criteria for green projects, international initiatives in this

⁴ [The AIFC Green Finance Center will develop a taxonomy of green projects for the Kyrgyz Republic.](#)

⁵ [UNISON CF, "In Kyrgyzstan, there is an urgent need to integrate the principles of energy conservation into the national policy of the country";](#)

⁶ [With the assistance of the EDB and the AIFC Green Finance Center, a center for the development of sustainable finance and ESG was established in Kyrgyzstan;](#)

⁷ [The Union of Banks of Kyrgyzstan took part in the webinar "Tools for sustainable financing to support the transition of the EAEU countries to a green economy";](#)

area, and also ways to develop further cooperation between the EAEU countries in the development of the «green economy».

Dos-Credobank's internal publication on becoming a member of the Green Alliance Bank, within the framework of the DCB Green project from Doscredobank, the Bank actively offers green lending for electric vehicles, the installation of gas equipment and the introduction of energy-saving green technologies in the field of tourism and much more. Most recently, Doscredobank opened the first electric car filling station, where drivers can use it completely free of charge.⁸

The article of the financial portal «Akchabar» mentions the cooperation «GFC Bishkek and the Ministry of Finance of Belarus will cooperate on the issuance of green bonds», the presentation of the Green Finance Center Bishkek company, created jointly with the Green Finance Center of the Astana International Financial Center, CJSC "KSE", OJSC "Aiyl Bank" and ALE "Union of Banks of Kyrgyzstan". The main goal of creating GFC Bishkek is to promote the best practices and principles in the field of sustainable financing, support for the issuance of green, social bonds and loans aimed at implementing investment projects taking into account environmental aspects.⁹

In review: «Inclusive Green Financing of the Regulatory Environment» mentions how financial inclusion increases climate resilience, for example, the review notes that higher savings can help the poor spread consumption more evenly after unexpected shocks and withstand the financial burden of incremental increases in spending. In Guatemala, Mauritania, Angola, Peru, Gabon, Morocco, Colombia, the Kyrgyz Republic, the Democratic Republic of the Congo, Mongolia, Niger and El Salvador, an increase in the savings rate could reduce the welfare impact of climate change by 4.5- 7.6 percent¹⁰.

An important fact should be noted that the «Action Plan for the Implementation of the Green Economy Development Program in the Kyrgyz Republic for 2019-2023» consisting of 59 implementation tasks fell on the period of the COVID-19 pandemic, thus 32 tasks (54%) fell to be implemented directly for the period of the pandemic and «lockdown» / quarantine.

In the review of the current state of the Kyrgyz Republic on the implementation of sustainable public procurement (SPP), the experience of other countries was considered and specific proposals were made, the key point in the implementation of the principles of SPP is the change in legal acts, correction and synergy in the goal-setting of strategic documents:

1. *National Development Strategy of the Kyrgyz Republic for 2018-2040 (NDS-2040), approved by Decree of the President of the Kyrgyz Republic No. 221 of October 31, 2018;*
2. *The concept of «green» economy in the Kyrgyz Republic «Kyrgyzstan is a country of «green» economy» (GGE), approved by the Resolution of the Jogorku Kenesh of the Kyrgyz Republic No. 2532-VI dated June 28, 2018;*

⁸ [Doscredobank became a member of the "Green Alliance" of Kyrgyzstan;](#)

⁹ [GFC Bishkek and the Ministry of Finance of Belarus will cooperate on issuing green bonds.](#)

¹⁰ [Inclusive Green Finance: An Overview of the Regulatory Environment;](#)

3. *The Program for the Development of the «Green» Economy in the Kyrgyz Republic for 2019-2023 (PRZE-2023), which is at the stage of approval by the Government of the Kyrgyz Republic.*

Although the green finance market is in its infancy, the OSCE study «Accessing and Using Green Finance in the Kyrgyz Republic: Evidence from a Household Survey» states that about 30% of households (in Kyrgyzstan) took out a loan or a loan to finance one or more climate change mitigation or adaptation activities over the past five years.

No.	Keyword	header
1	Principles "green funding" in Kyrgyzstan	<u>Green finance and its perspectives in the context of Kyrgyzstan</u>
2		<u>CONCEPT of green economy in the Kyrgyz Republic "Kyrgyzstan is a country of green economy"</u>
3		<u>Green funds of the Kyrgyz Republic: trends and prospects for the development of sustainable financing</u>
4		<u>The AIFC Green Finance Center will develop a taxonomy of green projects for the Kyrgyz Republic</u>
5		<u>In Kyrgyzstan, it is urgent to integrate the principles of energy conservation into the national policy of the country</u>
6		<u>With the assistance of the EDB and the AIFC Green Finance Center, a center for the development of sustainable finance and ESG was established in Kyrgyzstan</u>
7		<u>The Union of Banks of Kyrgyzstan took part in the webinar "Tools for sustainable financing to support the transition of the EAEU countries to a green economy"</u>
8		<u>Doscredobank became a member of the "Green Alliance" of Kyrgyzstan</u>
9		<u>GFC Bishkek and the Ministry of Finance of Belarus will cooperate on the issuance of green bonds</u>
10		<u>INCLUSIVE GREEN FINANCING: REGULATORY ENVIRONMENT OVERVIEW</u>
eleven		<u>REVIEW OF THE CURRENT STATUS OF THE KYRGYZ REPUBLIC ON THE IMPLEMENTATION OF SUSTAINABLE PUBLIC PROCUREMENT (SPP)</u>
12	"green finance" in Kyrgyzstan	<u>Banks recommended to implement ESG standards to attract green finance</u>
13		<u>Action plan for the implementation of the Green Economy Development Program in the Kyrgyz Republic for 2019-2023</u>
14		<u>Kyrgyzstan: ESG-dossier</u>
15		<u>Will Chinese investments in Kyrgyzstan</u>
16		<u>IAC "Kabar". Sustainable bonds as a driver for the development of the green economy in Kyrgyzstan</u>
17		<u>Accessing and Using Green Finance in the Kyrgyz Republic: Evidence from a Household Survey</u>
18		<u>"Green" innovations in tourism in Kyrgyzstan: benefits and prospects</u>
19	Goals sustainable Development in Kyrgyzstan	<u>Sustainable Development Goals</u>
20		<u>Statistics of the Sustainable Development Goals in the Kyrgyz Republic</u>
21		<u>Bishkek hosted the Green Economy 2021 forum and the Green Expo 2021 exhibition. At the event, which was held at the end of the 26th UN Climate Summit in Glasgow, various issues on the green agenda of Kyrgyzstan were raised.</u>
22	Green Economy Kyrgyzstan	<u>Obstacles in the development of a green economy and ways to solve them</u>
23		<u>PROSPECTS FOR A GREEN ECONOMY IN THE KYRGYZ REPUBLIC</u>
24		<u>Supporting Clean Urban Public Transport and Green Investments in Kyrgyzstan</u>
25		<u>Green technologies will become a priority, officials promise</u>
26	Green products financing" in Kyrgyzstan	<u>Kazakhstan green bonds market: experience and best practice</u>
27		<u>Kyrgyzstan will be saved by "green" money. Umbriel Temiraliyev how to restore the economy</u>

Table 2. Data room within desk research

The material prepared by the Directorate for ESG, PJSC Sberbank mentions the necessary funding to achieve carbon neutrality in the Kyrgyz Republic by 2050: «There is no exact estimate. The total estimated cost of implementing mitigation and adaptation measures under the NDC is about \$10 billion».

Article «Will Chinese investments in Kyrgyzstan become «green»»? considers «green» projects through the prism of Kyrgyzstan's investment relations, «Green» projects and environmental aspects of cooperation remain at the margins of the discourse on economic benefits for Kyrgyzstan and China. The Kyrgyz authorities, in pursuit of investment, turn a blind eye to the environmental situation, remembering it only during election campaigns in order to win over the electorate. Lacking a solid legal framework to deal with these issues, state institutions do not agree on their positions on environmental issues, and corruption and shortsightedness, coupled with Kyrgyzstan's focus on "brown" projects, only makes things worse. Such a background leads to negative environmental consequences and even to the disruption of planned bilateral projects.¹¹

In the article: «IAC Kabar», «Sustainable bonds - a driver for the development of the green economy of Kyrgyzstan», sustainable bonds were considered within the framework of the mechanism «green financing», the Kyrgyz Stock Exchange organized a dialogue platform on the topic «Sustainable bonds - a driver for the development of the green economy of Kyrgyzstan». The event was attended by representatives of the Office of the President of the Kyrgyz Republic, the Service for Regulation and Supervision of the Financial Market under the Ministry of Economy and Commerce of the Kyrgyz Republic, Development Funds, international organizations and professional participants in the securities market¹².

Study: «Access and Use of Green Finance in the Kyrgyz Republic¹³», conducted by the Organization for Economic Co-operation and Development (OECD) in 2019, found that 30% of households took out a loan or credit to finance one or more activities aimed at climate change mitigation or adaptation in the last five years. 40% did not know if they took out a loan or credit to fund any of these activities, indicating a lack of understanding of green finance; 70% didn't know if they were interested in it in the near future.

Article posted on the American University of Central Asia website¹⁴, «Green» innovations in tourism in Kyrgyzstan: benefits and prospects, reveals the potential of the «green» economy and what is the potential of renewable energy in the Kyrgyz Republic, the author notes that the practical use of renewable energy in Kyrgyzstan is less than 1%, although according to the State Committee of Industry, energy and subsoil use:

- the potential of solar energy in the country is estimated at - 490 million kWh / year
- small hydropower can produce 5-8 billion kWh/year, and the country's total hydropower potential is 142.5 billion kWh/year
- wind energy potential is 44.6 million kWh/year
- the possibility of using universal bioenergy is equal to - 1.3 billion kWh / year

Information posted online regarding the sustainable development goals is posted on the website of the Cabinet of Ministers of the Kyrgyz Republic, where the sustainable development goals are a set of 17 goals and 169 tasks facing the international community, designed to help eliminate poverty and inequality in the next 15 years, achieve social integration, stop global climate change

¹¹ [Will Chinese investments in Kyrgyzstan become "green"?](#)

¹² [IAC "Kabar". Sustainable bonds as a driver for the development of the green economy in Kyrgyzstan;](#)

¹³ [Accessing and Using Green Finance in the Kyrgyz Republic.](#)

¹⁴ ["Green" innovations in tourism in Kyrgyzstan: benefits and prospects;](#)

and build a world where our descendants have enough resources to lead a decent life. The Goals are measures aimed at ensuring equal progress in the three main dimensions of sustainable development: economic growth, social inclusion and environmental protection. They are global and universal in nature; however, they allow for the possibility of a differentiated implementation depending on the local context.¹⁵

The material of the article posted on the website of the Union of Banks of Kyrgyzstan contains a recommendation by the participants of the conference «Prospects for the development of a green economy by the private sector in Kyrgyzstan» regarding the creation of expert groups that will initiate project ideas and develop project proposals for the GCF; and raise public awareness of the need to increase tariffs for electricity, coal, as well as promote healthy organic products and develop eco-labels in all sectors of the green economy¹⁶.

Publication: «Supporting Clean Urban Public Transport and Green Investments in Kyrgyzstan», posted on the website of the Organization for Economic Cooperation and Development (OECD) in the section: «1. Creation of conditions for the Green Public Investment Program»¹⁷ addresses issues related to air pollution and climate change. The publication highlights recommended actions for the Kyrgyz Republic under the United Nations Partnership for Action for Green Economy (PAGE), which include the introduction of processes at the national level to implement economic modeling to organize the transition to a green economy and sustainable development.

The key principle in the formation of the desk research data room was to find material using previously approved keywords, reflected in table No. 2, taking into account the previously described desk research errors.

The first part of the report on monitoring SDG indicators «National Voluntary Review of the Achievement of the Sustainable Development Goals in the Kyrgyz Republic» was considered¹⁸ prepared by the National Statistical Committee of the Kyrgyz Republic, including SDG statistics in the Kyrgyz Republic. It is important to note that this document is the first collection containing statistical data for monitoring the achievement of 16 Sustainable Development Goals, characterizing the main socio-economic indicators of the population's life for 2010, 2014-2020. The collection was prepared on the basis of data received by the statistical authorities from enterprises, organizations, population, as well as administrative sources. It is important to note that the nature of the data reflected in the report is of a calculated / methodological nature, due to the lack of hardware data collection, which opens up the topic of taxonomy and data collection to gain knowledge about the effect of the principles of «green finance» and the green economy in general.

In general, a review of publications on the topic of green finance in Kyrgyzstan shows a stable connection of the term only with environmental topics and environmental indicators. At the same time, the review shows the lack of a unified glossary and approach to the discussion of green finance. The lack of a single glossary leads to inconsistencies and arbitrary interpretation of the term green finance.

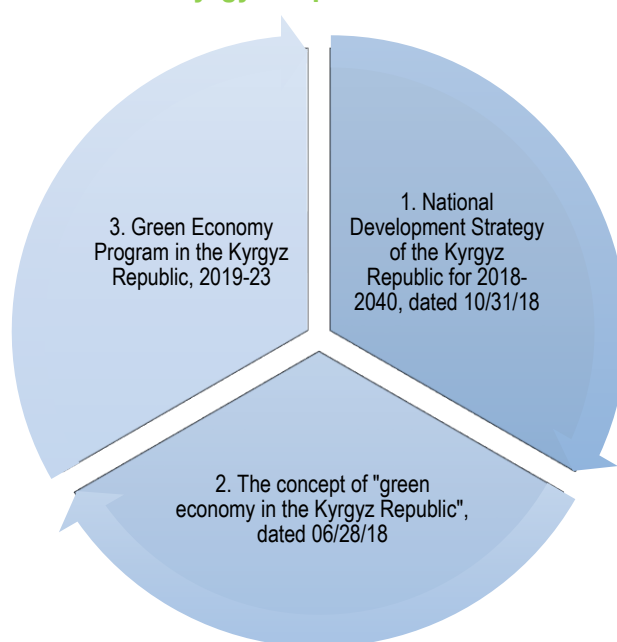
¹⁵ [2023, Cabinet of Ministers of the Kyrgyz Republic;](#)

¹⁶ [Obstacles in the development of a green economy and ways to solve them, Union of Banks of Kyrgyzstan;](#)

¹⁷ [Supporting Clean Urban Public Transport and Green Investments in Kyrgyzstan;](#)

¹⁸ [Statistics of the Sustainable Development Goals in the Kyrgyz Republic.](#)

3.2. Strategic documents of the Kyrgyz Republic on the transition to a «green» economy



Drawing 1. Strategic documents of the "green economy" of the Kyrgyz Republic

The key strategic documents approved in the Kyrgyz Republic are those presented in Figure 2.

The green economy development program in the Kyrgyz Republic for 2019-2023 conceptually reflects the concept of a green economy: "In the Kyrgyz Republic, the understanding of a green economy is defined as an economy that leads to an increase in the well-being of people and strengthening social justice while significantly reducing risks for environment that preserves and enhances natural capital, efficiently uses resources and stimulates the preservation of the country's natural ecosystems.

The program highlights the following key areas for the development of the "green economy" in Kyrgyzstan:

1. "Green" energy;
2. "Green" agriculture;
3. "Green" industry;
4. Low-carbon and environmentally friendly transport;
5. sustainable tourism;
6. Municipal waste management;
7. "Green" cities.

The program provides support for the transition to an inclusive green economy, support is reflected in four areas: «sustainable financing», «fiscal stimulus», «sustainable public procurement» and «capacity and awareness building».

The recorded results of 2019 were a closely related presentation: «On the measures of the Government of the Kyrgyz Republic to promote a green economy in the republic».

Key findings from the desk study:

1. The concept of “green finance” is an extremely narrowly focused and poorly covered topic in the Kyrgyz Republic;
2. The concept of "green finance" in Kyrgyzstan is covered at the level of 27-50 data sources on the Internet, a number of sources and publications are mainly devoted to coverage of events related to events and memorandums on the topics of "green finance";
3. A small number of publications (6 publications) are devoted to segmental work within the framework of the concept of sustainable development and the principles of "green finance";
4. The studied materials within the framework of the conducted desk research can be classified as multi-level and narrowly segmented, due to the lack of specific synergy in the strategic documents of the Kyrgyz Republic on the transition to a "green" economy;
5. Demand, supply and assessment of the KR market in the “green finance” segment was not carried out due to the low level of research on the issue, the lack of standards and metrics in the form of statistically collected indicators.

Lack of a unified approach to promoting the topic of green finance in the financial market of the Kyrgyz Republic. The variety of approaches to the promotion of green finance is determined by the private goals/tasks of the participants themselves and is not united and does not pursue the common goal of fulfilling the obligations of the Kyrgyz Republic to the international community. The financial market is in the early stages of building understanding and developing proposals for green finance. The assessment in this study covers the demand for green finance from the private sector, provided there is a sustainable cost-benefit model for such projects.

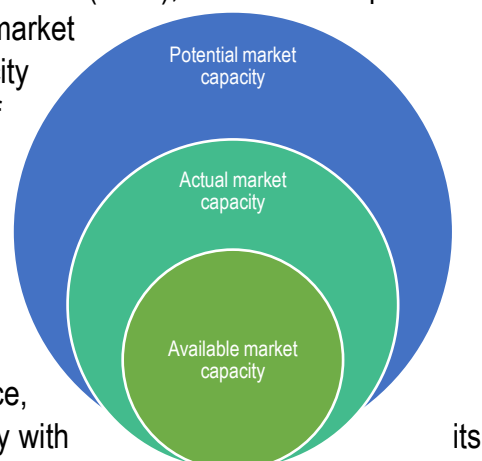
IV. KEY FINDINGS OF THE IN-DEPTH INTERVIEW:

4.1. Current market situation with green finance¹⁹ in the financial market of the Kyrgyz Republic

The market of «green finance» in the Kyrgyz Republic is at the stage of formation, where, on the one hand, approaches, industries and directions for integrating the principles of green finance are obvious, and on the other hand, both players and other participants that form this market act quite «intuitively», relying on «bonuses» or «preferences» within the framework of the application of the principles of «green financing» or «ESG», formed by current circumstances.

In the process of studying control groups A (n=30) and B (n=30), a number of questions were formed that assess the component of three types of market assessment: available market capacity, actual market capacity and potential market capacity. In fact, all three types of market capacity represent a different aggregation and create an understanding of the dynamics of the market development.

Based on the definition of available market capacity, it is considered the size of the market that a company can claim with its product and its characteristics (distribution, price, audience) or the level of demand that a company can satisfy with resources.



Actual or real market capacity - the size of the market, based on the current level of development of demand for a product or service among the population. The actual market capacity is determined based on the current level of knowledge, consumption and use of the product among consumers.

Potential market capacity - the size of the market, based on the maximum level of development of demand for a product or service among consumers. The maximum level of demand means that the culture of using the product has reached its maximum: consumers consume the product as often as possible and use it constantly. Potential market capacity is the maximum possible market size, which is determined on the basis that all potential consumers know and use the product category.

¹⁹ It is important to accept the fact of the heterogeneity of understanding of the concept of "green finance" by the participants of the study due to the lack of a "green taxonomy" and the initial level of development of this market;

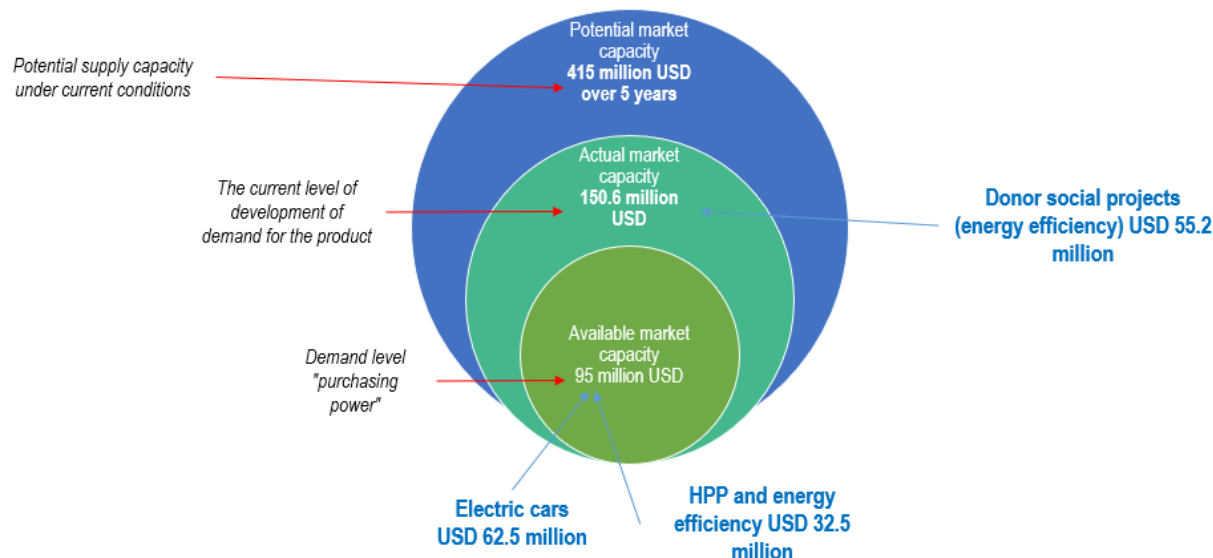


Diagram 1. Market assessment of current demand and potential supply.

The potential demand level of «purchasing power», estimated by the respondents at **95 million USD**, which includes two reflected directions by the respondents who participated in the demand questionnaire, these are projects with a combined average estimate of 62.5 million USD and the hydroelectric sector and energy efficiency of US\$32.5 million. As previously noted, the indicator of available market capacity is considered to be the size of the market that a company can claim with its product and its characteristics (distribution, price, audience) or the level of demand that a company can satisfy with its resources.

The actual market capacity or market size based on the current level of development of demand for a product or service among the population is **150.6 million US dollars** and is the sum of the available market capacity of 95 million US dollars and the average assessment of respondents of social projects of donors directed towards energy efficiency.

The potential market capacity for the banking portfolio of **USD 415 million** is calculated based on the question of the respondents representing the participants of the proposal «B14.1. What do you think, what share of the organization's portfolio will be green finance in the next 5 years?», according to the average estimate of the respondents, the average growth will be 21.8%.

^{AQ1}. Over the past year, how often have you come across the concepts

Characteristics of the general level of involvement (estimated by the respondent on a 5-point scale and is subjective, like all other results of the study) and understanding of the respondents in the segments of the "green finance" topic is provided in Diagram 1.

QA.1.1. How often have you come across the following concepts over the past year?

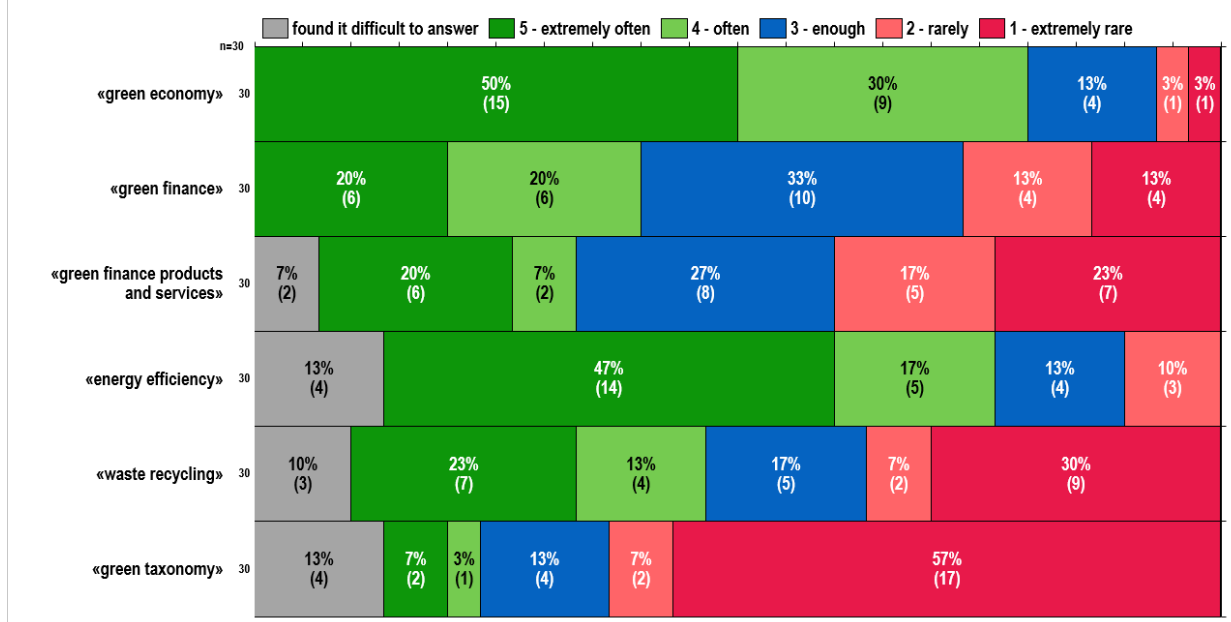


Diagram 2. General level of awareness of terms and concepts

Sufficiently high levels of awareness among respondents are observed within the framework of the concepts of "green economy" and "energy efficiency", the aggregate ratings of "extremely often" and "often" are 80% and 64%, respectively, the average values are attributed to the concepts of "green financing", "products and green finance services" and "waste recycling", with the following aggregate values respectively of 40%, 27% and 36%.

The concept of "green taxonomy" has a significant gap in the use of respondents, about 57% of respondents encounter this concept extremely rarely, and about 10% of respondents in total encounter this terminology "very often" and "frequently".

High levels of general awareness on the topics of "green economy" and "energy efficiency" is associated with frequent publications in the media on this topic, at the same time, a more substantive discussion of the issue shows low awareness on the part of respondents on the issue under discussion. There is a high need for outreach and educational activities aimed at explaining the principles and approaches associated with "green finance". The lack of information and understanding among the majority of respondents on the issue of green taxonomy indicates a superficial understanding of the issue of green finance, both by representatives of the demand side and the supply side (financial institutions).

⁸Q8: Who do you know in the Kyrgyz market who has already invested in green economy projects? How many market participants have invested in green projects with the above products/services offered in Kyrgyzstan?

The cumulative assessment showed the TOP-3 of the most well-known market participants investing in green projects in Kyrgyzstan.

Q^B.8. Who do you know in the Kyrgyz market who has already invested in green economy projects?

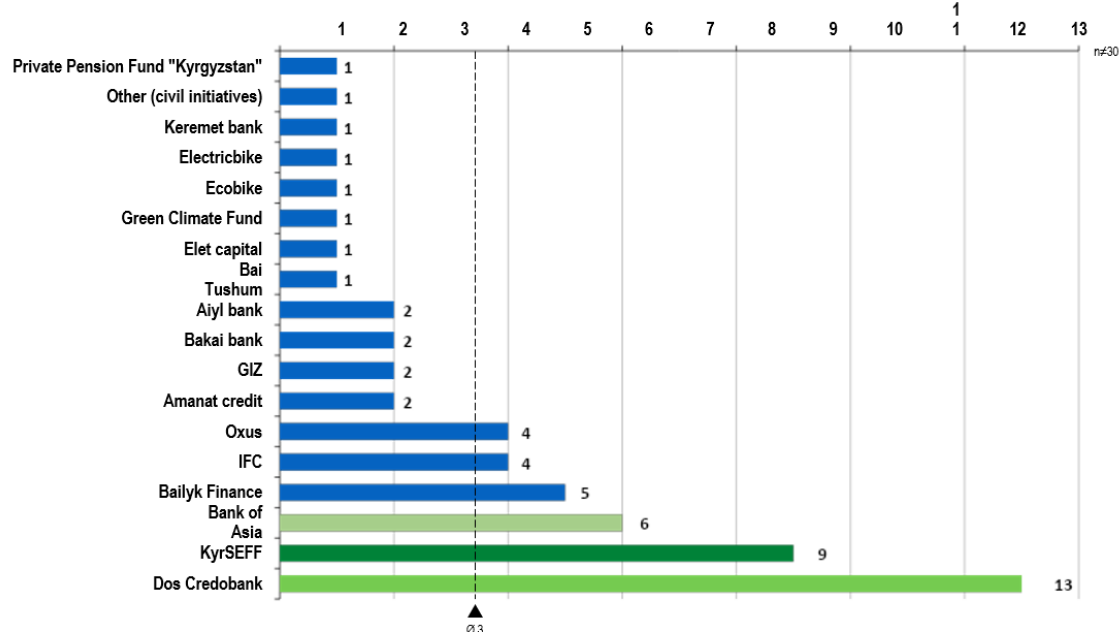


Diagram 3. Respondents' knowledge of market participants who have already invested in green economy projects

Dos-Credobank, KyrSEFF, Bank of Asia, received high scores on the level of awareness of companies that have already invested in green economy projects from respondents representing the supply side, in fact, 1/3 of the respondents reflected a value of 13 for Dos-Credobank, 9 and 6 mentions were received by KyrSEFF and the Bank Asia. In aggregate estimates, the values were: Dos-Credobank 23%, KyrSEFF 16%, Bank of Asia 11%.

Q^B.8. Who do you know in the Kyrgyz market who has already invested in green economy projects, %?

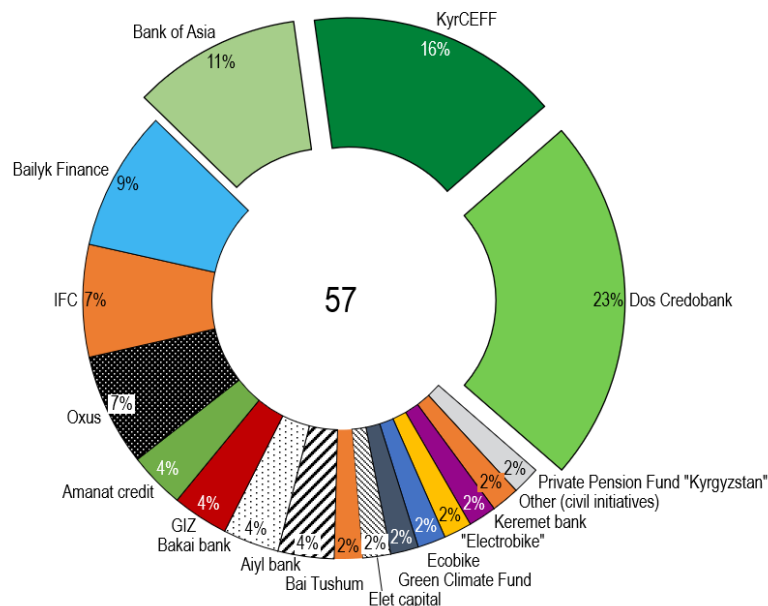


Diagram 4. Respondents' knowledge of market participants who have already invested in green economy projects in percent, %

The top 3 players in the market, according to respondents, were Dos-Credobank 23%, KyrSEFF 16% and Bank of Asia 11%, out of all 57 aggregate ratings. The actual gap in respondents' ratings for these three players exceeds the average ratings by 2-4 times.

The remaining market players in the amount of 14 out of 17 players have from two to one mention by the respondents.

It should be noted that according to the respondents, the main players are banks, although in the world practice "green financing" is mainly implemented through stock market instruments, including "green bonds". "Green finance" projects are relatively new for Kyrgyzstan and are well-known isolated projects that have been replicated in the media.

4.1.1. Mapping and analysis of existing financial products and services for green finance in the Kyrgyz Republic

The experience of Kyrgyzstan in promoting "green finance" shows the presence of several areas:

- Funding from international development institutions
- EBRD (KyrSEFF)
- GIZ (technical assistance)
- UNDP (Women's Entrepreneurship)
- IFC (credit lines and technical assistance)
- USAID (small grants for green finance projects)
- Stock market instruments
- Requirements of the Kyrgyz Stock Exchange for issuers of green securities
 - Gender bonds (Bank of Asia)
 - Green bonds (ZAO Microfinance Company OXUS)
- banking products
 - Green loans (Dos-Credobank, Bakai bank, KICB bank, Demir bank, Optima bank)
 - Electric transport
 - RES
 - energy saving
 - resource saving
 - Green deposits

More active promotion of green finance by financial market participants is limited by weak technical expertise, lack of methodology for evaluating green projects, with the exception of financing under KyrSEFF (there is a staff of technical consultants for project evaluation). Also, the lack of a unified methodology and reporting limits the ability to consolidate demand from the financial sector and the limited assessment of the total contribution of the sector to achieving emission reduction targets or other commitments at the country level.

(Information based on the results of desk research)

⁹Q11: What do you know about successful²⁰companies that have received green financing, are they successful? What is the level of success of green projects / companies in Kyrgyzstan, what is the reason for this?

According to the respondents, the cumulative score showed the most successful companies that had already received green financing. The vast majority of respondents found it difficult to answer, about 17%, KyrSEFF mentioned about 37% and Dos-Credobank about 20% of respondents out of 30 total ratings.

²⁰It is important to note that within the framework of this study, all answers of respondents since the survey were carried out as part of the statement of the key goal of the study: "Your experience and recommendations are extremely important for our study and understanding of the issue of green investments in Kyrgyzstan. The purpose of this study is to obtain an understanding of the situation with the supply and demand of green investments and the preparation of green projects in the Kyrgyz Republic."

Q^B.11. What successful companies do you know that received green financing, are they successful?

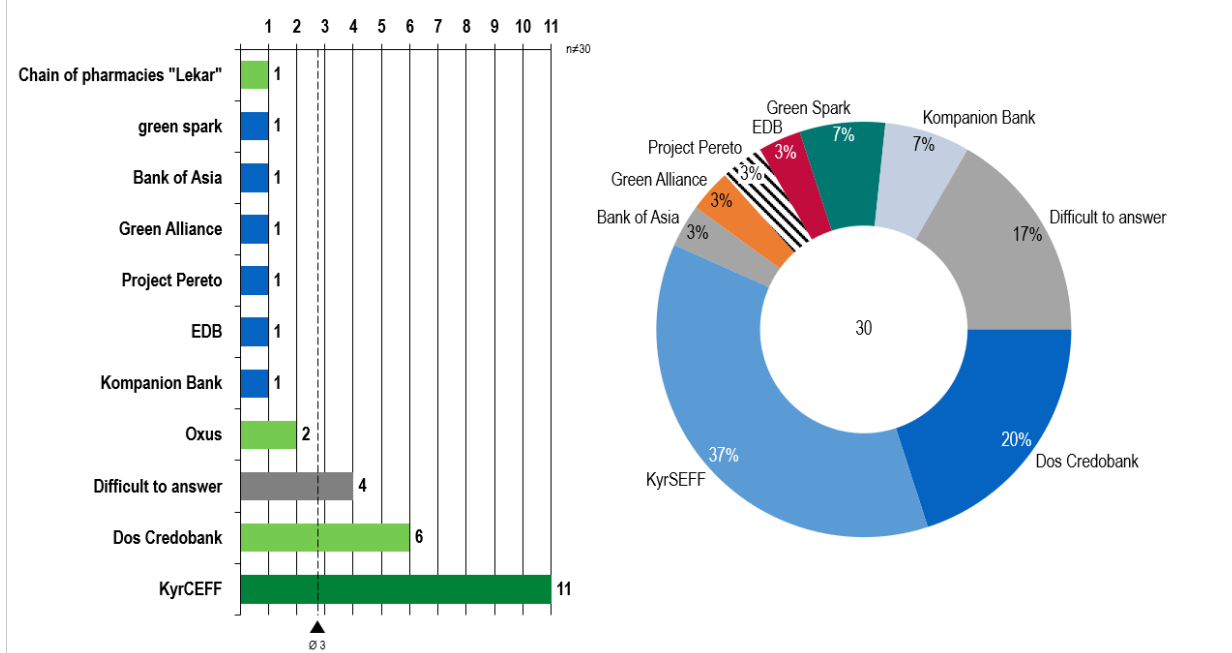


Diagram 5. Successful companies that have already received green financing in the Kyrgyz Republic

The success and citation of KyrSEFF is ensured by the systematic work of the project in the following areas:

- Promotion and PR - KyrSEFF products are widely covered in the media, as well as specialized events are held to popularize the products of the program, as well as replicate successful projects funded under the program
- Technical support and consultations - the presence of consultants allows you to accompany each funded project from the moment of application from the client to the moment of acceptance of the finished results and assessment of the quality of the work performed
- Supplier control and product quality - the work of the program for pre-selection and quality control of products offered on the market allows customers to feel more confident in the selection of a supplier without worrying about the quality of the delivered work and goods.
- Financing and Grant Program - selection of the most prepared financial institutions/banks allows to cover almost the entire country with the services of the KyrSEFF program, and the availability of grants is an additional incentive for clients when choosing green financing from KyrSEFF.
- Employee incentive system - the KyrSEFF program additionally provides a system for encouraging and stimulating employees of financial institutions to attract customers. Such a scheme allows to increase the interest of employees of financial institutions in the active promotion of green products of the KyrSEFF program

The KyrSEFF program has gone through more than a decade of project implementation experience and has gained good experience and outreach in the Kyrgyz Republic.

Other green finance players in the country including Dos-Credobank, Oxus, Bank of Asia are at the beginning of their journey and have their own way to go.

(expert opinion based on the study of materials and reports of KyrSEFF)

The success and citation of Dos-Credobank is due to the bank's systematic work in the direction of green finance. The Bank was the first in Kyrgyzstan to join the Green Investment Principles as part of the Belt and Road Initiative, which were announced during the 2nd Belt and Road Initiative Forum in Beijing on April 25, 2019. The document was developed by the Green Finance Committee of China and the City of London in cooperation with reputable international organizations.

Within the framework of the stated goals, the bank implemented and planned activities in several areas:

- green loans (ecohouse, ecotourism, ecocar, women in green, ecoagro),
- green infrastructure (network of electric charging stations),

- implementation of green office standards (separate waste collection, eco-labeling, installation of solar panels),
- environmental literacy (enlightenment),
- air monitoring.

Thus, by implementing a set of measures on the principles of green investment, the bank is among the first in Kyrgyzstan and thus fills the information space on green finance, which leads to the highest citation in the information space of Kyrgyzstan on the subject of green finance.

(Expert opinion on the results of studying information on the Internet and information on the bank's website)

4.1.2. Potential Demand and Existing Supply of the Financial Sector under Green Finance Principles in the Kyrgyz Republic

In this study, the green finance needs assessment and its estimates are calculated using the following assumptions:

- green financing based on the principles of payback and repayment. Projects that require government funding or have no apparent payback are not included in the needs assessment.

Expert opinion, taking into account the results of the conducted survey on the assessment of volumes from the demand side, are estimated from 150 to 500 million US dollars in the future until 2027.

Estimated volumes of funding from the supply side in the comparable period are estimated at 20-40% of the banking sector's loan portfolio, or USD 460-950 million.

Differences in assessment from the supply and demand side are due to the difference in the approach to the term green finance, as well as the lack of a methodology for assessing the demand side. In contrast, supply-side assessments are based on available products and methodologies from financial institutions, allowing for a more accurate assessment of market potential.

Q1. A. How often have you encountered concepts over the past year? B. What projects are you familiar with? C. What do you think is the estimated cost of the projects? D. How many such initiatives do you think?

This section presents the mapped results of a series of questions in the questionnaire aimed at a target audience representing participants from the demand side. The results reflect the frequency, level of awareness, knowledge of specific projects, the estimated cost and quantity of these initiatives or projects according to the respondents participating in the survey.

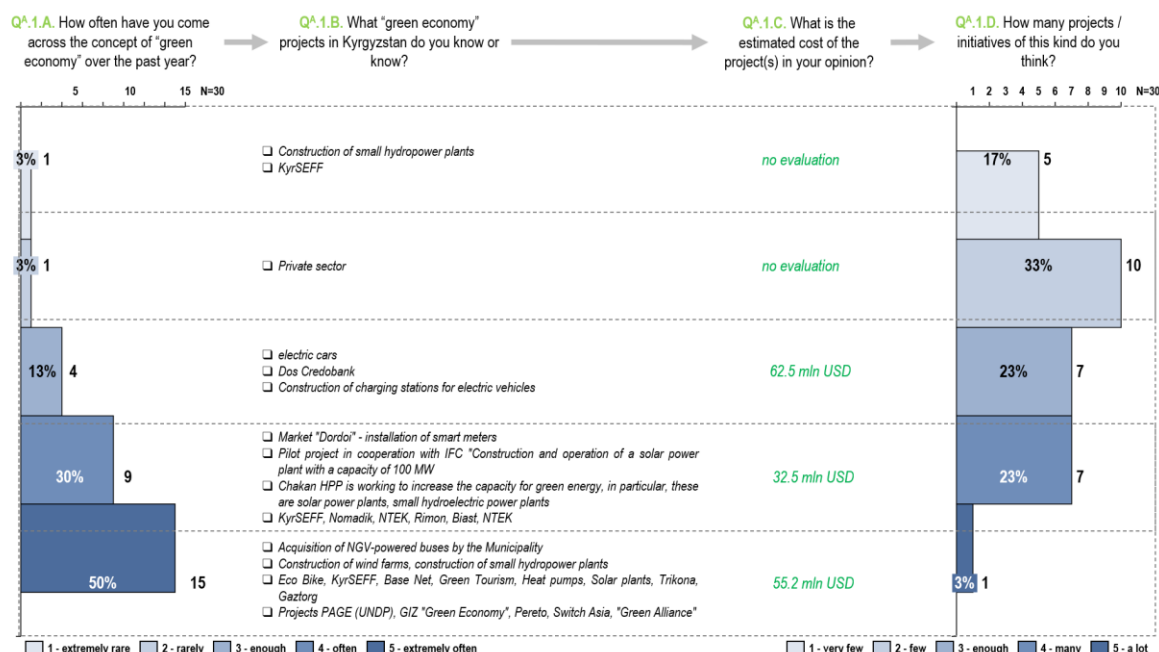


Diagram 6. Mapped Results of the Green Economy Questionnaire Series

Diagram 7. Mapped Results of the Green Finance Questionnaire Series

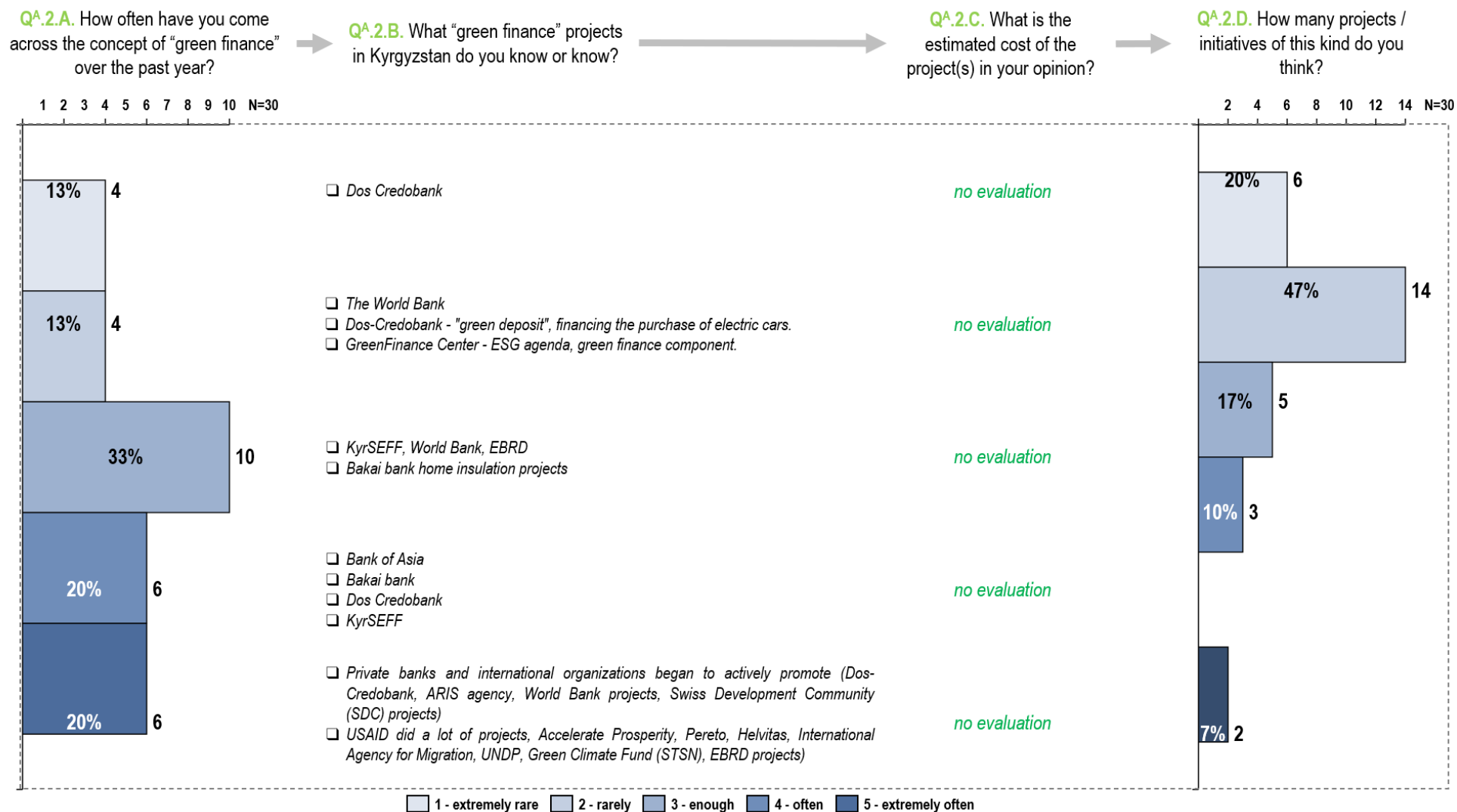


Diagram 8. Mapped Results of the Green Finance Products and Services Questionnaire Series

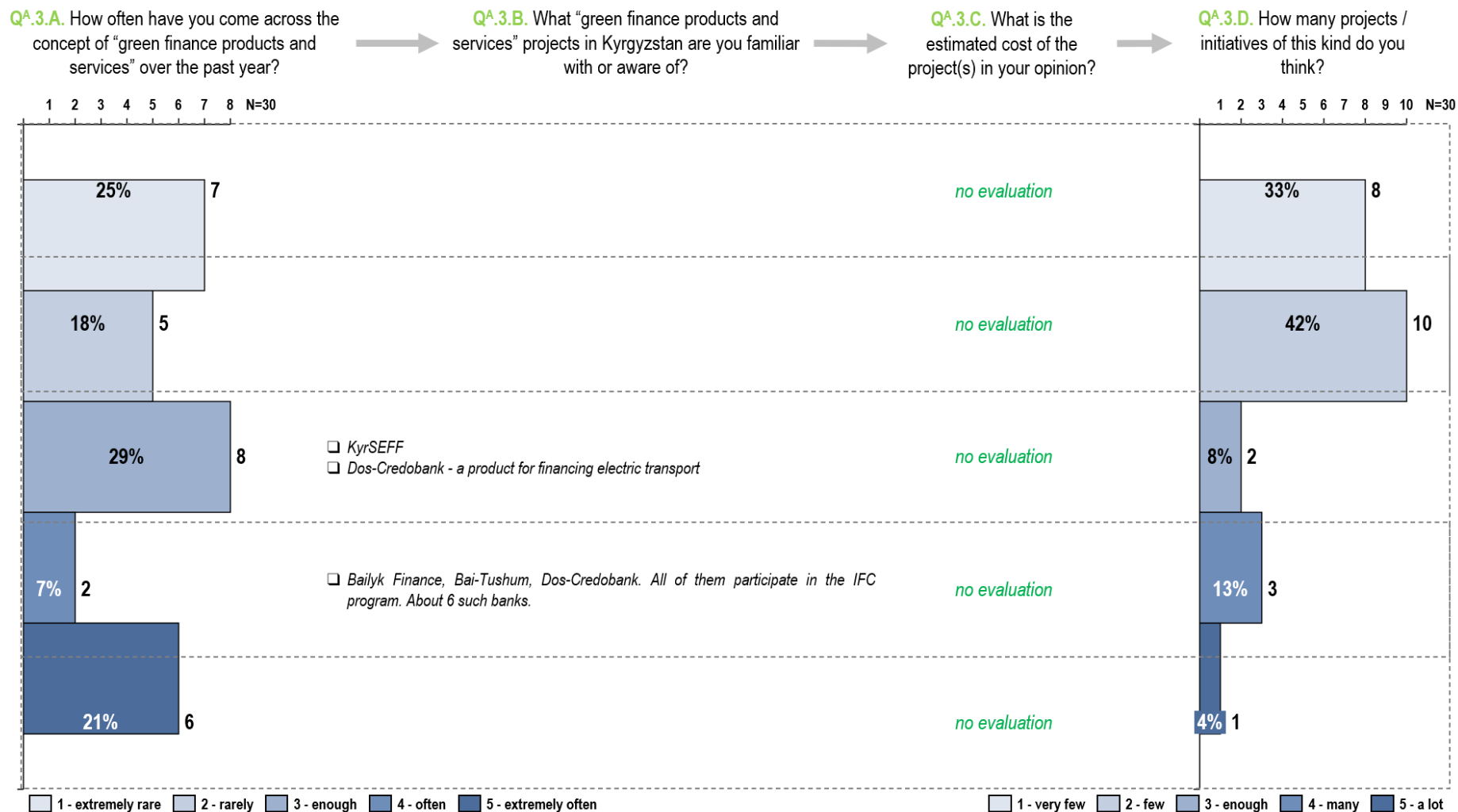


Diagram 9. Mapped results of a series of questions of the questionnaire "energy efficiency"

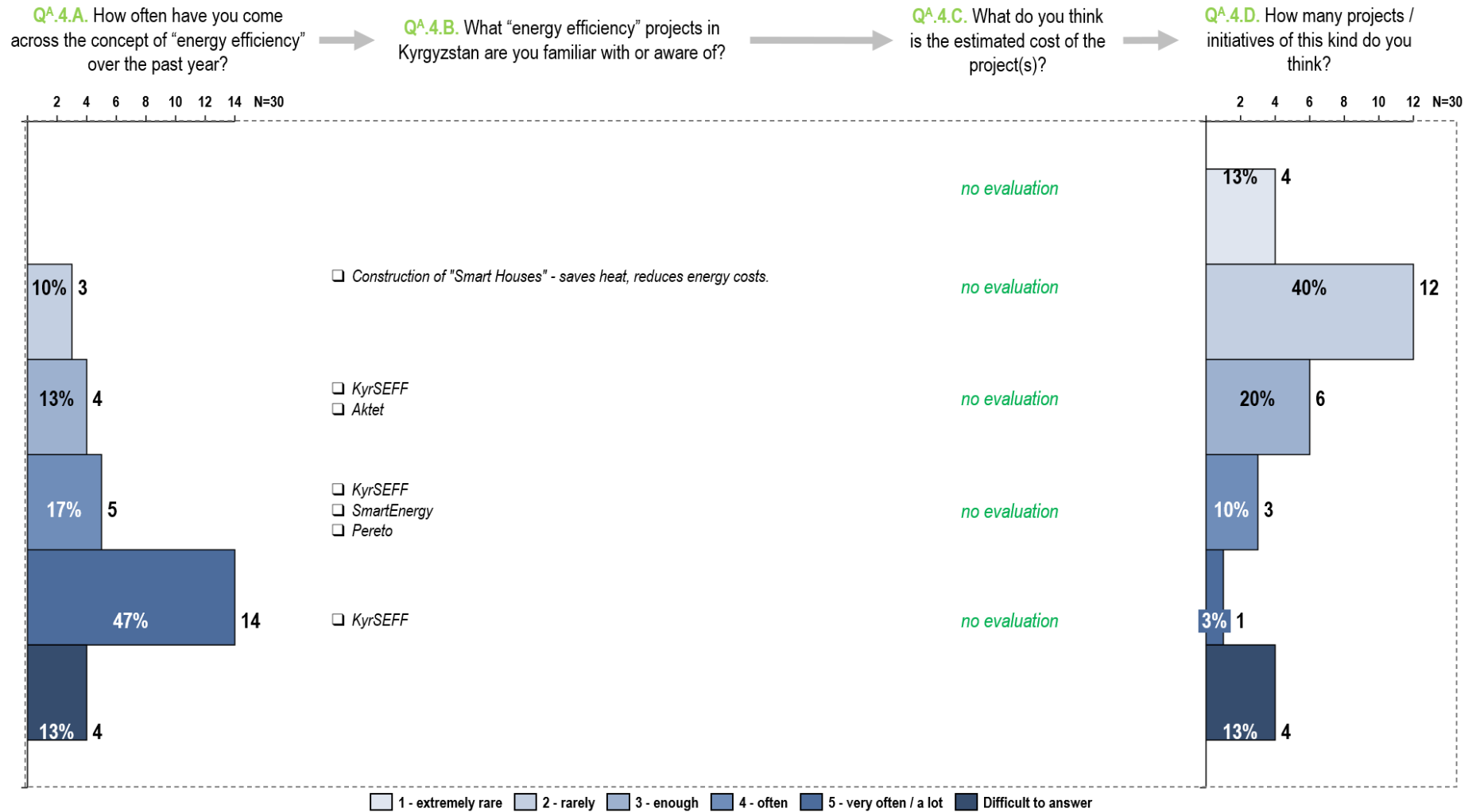
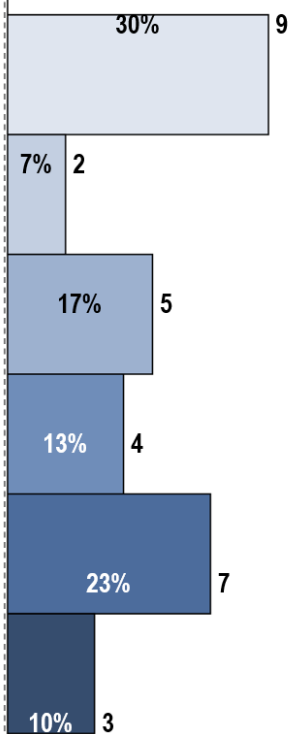


Diagram 10. Mapped results of a series of questions of the questionnaire "waste recycling"

QA.5.A. How often have you come across the concept of "garbage recycling" over the past year?

1 2 3 4 5 6 7 8 9 N=30



QA.5.B. What "garbage recycling" projects in Kyrgyzstan do you know or know?

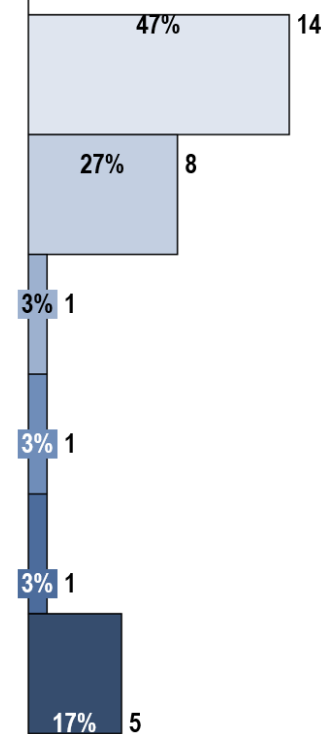
- ☐ TazaApp within GIZ
- ☐ WasteNet
- ☐ MoveGreen
- ☐ Ecostep - tire recycling and site construction
- ☐ Begreen
- ☐ Project Tazar
- ☐ EBRD
- ☐ ADB

QA.5.C. What do you think is the estimated cost of the project(s)?

no evaluation
0.3 – 0.5 mln USD
no evaluation
no evaluation
no evaluation

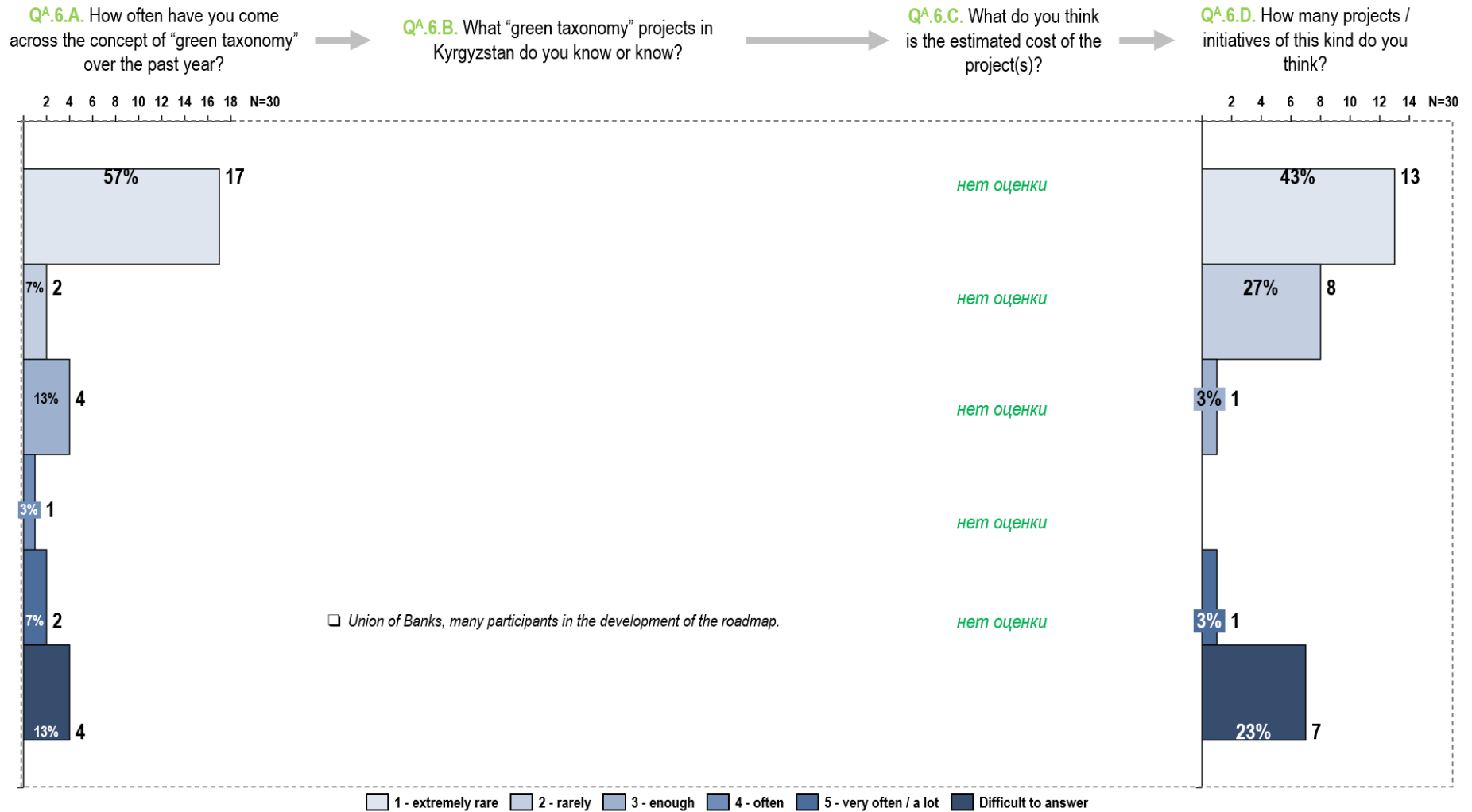
QA.5.D. How many projects / initiatives of this kind do you think?

2 4 6 8 10 12 14 N=30



1 - extremely rare 2 - rarely 3 - enough 4 - often 5 - very often / a lot Difficult to answer

Diagram 11. Mapped Results of the Green Taxonomy Questionnaire Series



^BQ3: Is there a demand for these initiatives in the Kyrgyz Republic? To what extent do you think financial sector entities are ready to implement the above initiatives? With what it can be connected?

Assessment of the level of potential demand among respondents representing the supply side, the supply creation segment shows about 53% of assessments of the presence of demand "there is a demand", 13% of respondents believe that the demand for initiatives in the financial sector is large, only 3% of respondents believe that there is no demand.

Respondents' key responses are presented below their respective response segments. About 43% of respondents believe that financial sector entities are ready to implement the above initiatives. Only a third of the respondents were able to identify the reasons for the readiness of the financial sector to implement the above initiatives, while the answers of the respondents are placed in approximately the same number as: the influence of the demand market itself, the trend, access to financing and obtaining "long money".

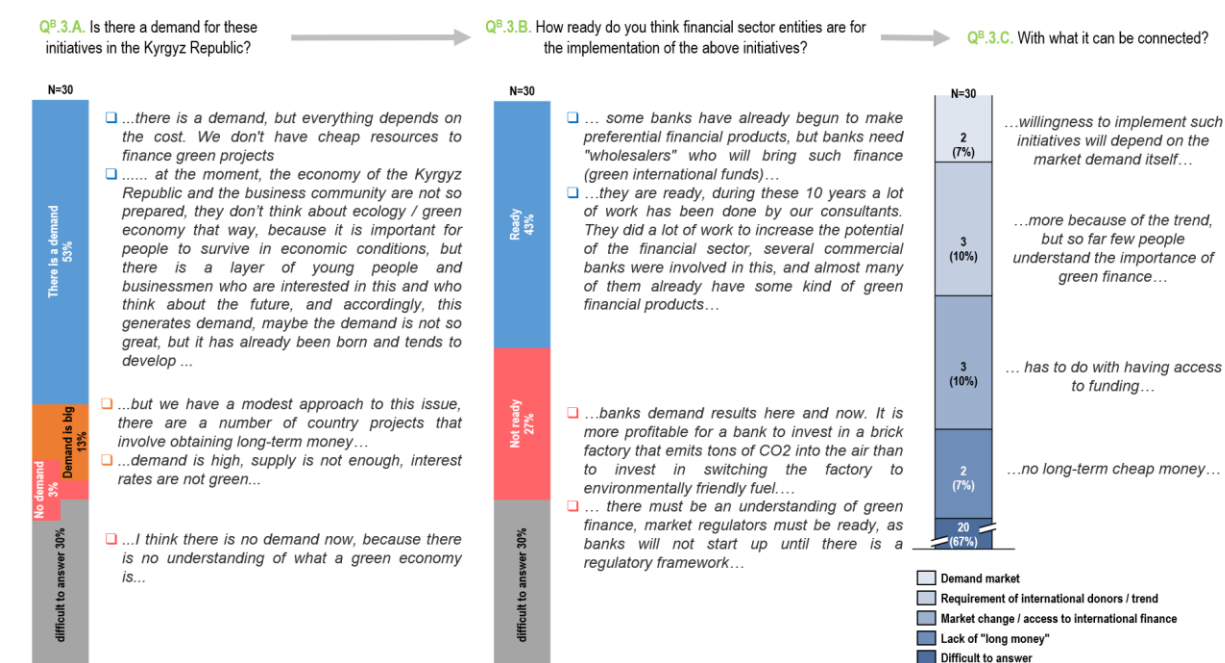


Diagram 12. Summary diagram for assessing the qualitative parameters of demand and readiness of financial market entities

There is a demand for financing in sectors that see an advantage in the implementation of green projects with benefits in terms of savings, process / production efficiency improvements or investor requirements for concessional financing. To increase the demand for green finance, incentives are needed in the form of low interest rates, access to advisory assistance, long financing terms, and additional incentives will be tax deductions or other incentives. At the same time, in the long term, the demand for a green agenda is shaped by a change in consumer behavior and demand for products with a green component.

4.1.3. Market assessment of potential demand (potential demand) and supply for green financial products and services by sectors and sub-sectors

An expert assessment of the volume of financing from the demand side is associated with the implementation of specific projects in certain sectors of the economy, including taking into account direct financing, through banks, as well as using securities market instruments:

- Hydropower;
- Electric transport;
- RES;
- Waste recycling;
- Construction;
- Agriculture;
- Tourism.

Cumulative Estimated Demand: \$415 – \$1,050 million on the demand side until 2030 is based on respondents' responses and expert judgment, taking into account the forecasts of financial sector participants.

^{AB}Q2. Could you single out THREE priority sectors of the economy of the Kyrgyz Republic that are in dire need of the implementation of the mechanisms and principles of "green financing", could you describe what your choice is connected with. BQ2: Could you reflect the top priority industries/sectors of the Kyrgyz economy most in need of development in terms of integrating financially sustainable projects on the supply and demand side of green finance?

Comparative analysis of the responses provided by the two groups of respondents from the supply and demand side of the green finance market. The data provided by respondents in the energy sector has a significant gap in estimates, 15 estimates from the supply side versus 29 estimates from the demand side, the gap in estimates is about 50%. Agriculture has "mirror" proportions of 17 assessments against 6 on the demand side. The direction of waste processing was 10 against 8 on the demand side.

^{QA}B.2. Could you reflect the priority sectors / sectors of the economy of Kyrgyzstan most in need of development in terms of integrating financially sustainable projects from the supply and demand side for "green" financing?

Number of answers, n≠30

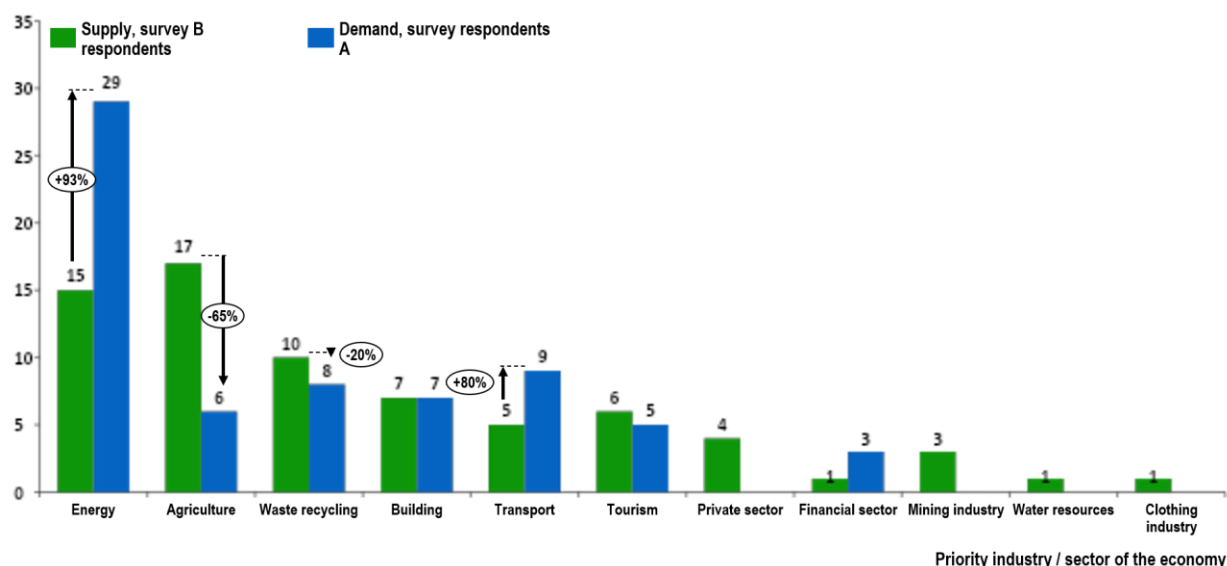


Diagram 13. Comparative analysis of estimates of priority sectors for two groups of respondents

AQ2A-D: A. What problems might arise in the implementation? B. How big is the demand for these projects? C. What will be the incentive to implement the "integration" of these projects? D. Do you think it will be in demand?

Comparative analysis of the responses provided by the two groups of respondents from the supply and demand side of the green finance market. The data provided by respondents in the energy sector has a significant gap in estimates, 12 estimates from the supply side versus 29 estimates from the demand side, the gap in estimates is about 59%. Agriculture has "mirror" proportions of 13 assessments against 6 on the demand side. The direction of waste processing made equilibrium estimates at level 8.

QA.2. What THREE sectors of the "green economy" in Kyrgyzstan would give the fastest financial result (financially effective) within the framework of the implementation of the principles of "green finance" and are quickly paid back, could you describe what your choice is connected with?

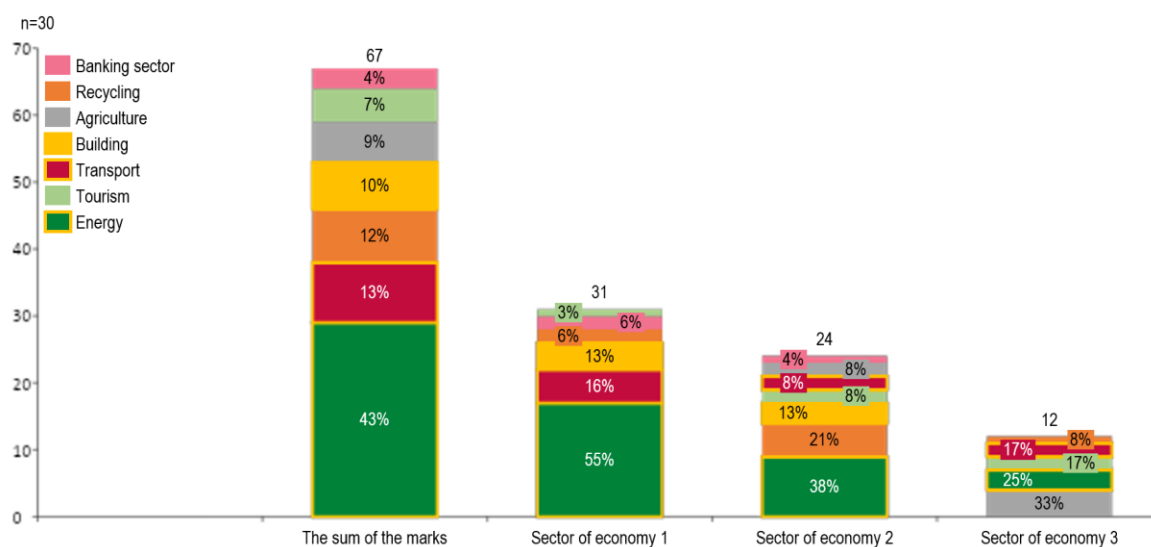


Diagram 14. The most priority sectors / sectors of the economy by demand representatives

Consideration of the aggregate values for the choice of priority sectors of the economy, provided by respondents on the demand side, clearly shows a weighted assessment in three key areas: energy, transport and processing. Particular attention should be paid to the increase in estimates for the energy sector in the sectors of the economy 1, 2 and 3.

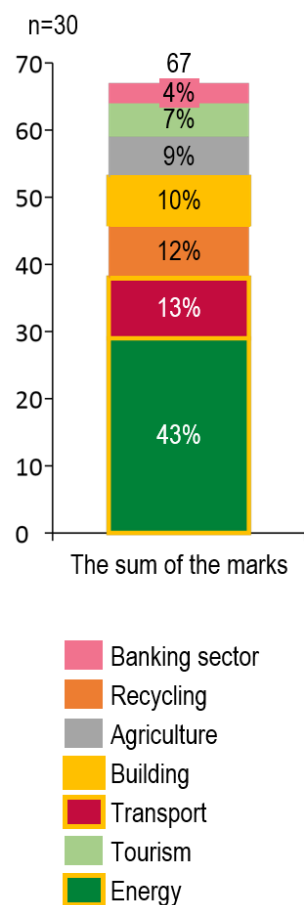
The respondents' choice of the energy, transport and processing sectors as the key ones for green financing generally coincides with the expectations of society, however, the increase in financing in these sectors is directly related to the economic incentives that the state will create.

In particular, investments in the energy sector are associated with an increase in tariffs to ensure the payback of projects.

Investments in transport projects are also associated with the revision of tariffs for imports or production of electric vehicles in the Kyrgyz Republic.

Recycling projects also depend on the implementation of measures to create clear and transparent rules for the regulation of processors in order to create incentives to finance new projects or expand existing ones.

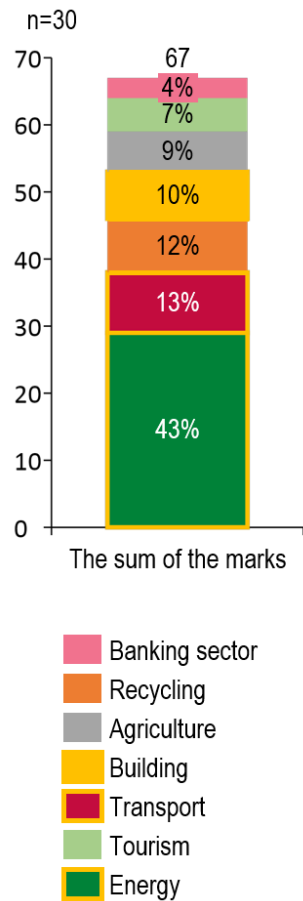
Q^A.2. A. What problems might arise in the implementation? B. How big is the demand for these projects? C. What will be the incentive to implement the "integration" of these projects? D. Do you think it will be in demand?



Sector of the economy / direction	Q2.A. What problems might arise in the implementation?	Q2.B. How much demand is there for these projects?	Q2.C. What will be the incentive for the implementation of the "integration" of these projects?	Q2.D. Do you think it will be in demand?
Banking sector	The country's credit rating affects the cost of loans from partners. High collateral requirements.	Low demand, not all banks have an understanding of green finance, investments and also this is due to stringent requirements for obtaining and tracking the financing chain.	The tax code	Everything depends on support and stimulation from the state.
Recycling	Bureaucracy can be a problem, with a strong desire of entrepreneurs to implement certain projects, they face difficulties in approving these projects at the state level and at the level of local governments.	I think at the moment the demand is minimal, because perhaps this area does not seem profitable or commercially viable for entrepreneurs, so these are more such charitable initiatives.	The incentive will be a common ideology and show the commercial component of such projects, profitability for entrepreneurs.	We are slowly moving towards demand.

Diagram 15. Pivot Chart: Challenges, Demand, Stimulus and Potential in Banking and Refining

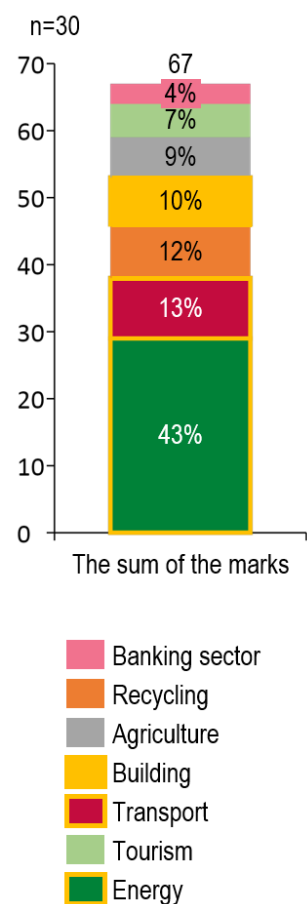
QA.2. A. What problems might arise in the implementation? B. How big is the demand for these projects? C. What will be the incentive to implement the "integration" of these projects? D. Do you think it will be in demand?



Sector of the economy / direction	Q2.A. What problems might arise in the implementation?	Q2.B. How much demand is there for these projects?	Q2.C. What will be the incentive for the implementation of the "integration" of these projects?	Q2.D. Do you think it will be in demand?
Tourism		There is a demand Within the framework of Pereto, support was provided to tourism entities	. Business works where it is profitable. Business is interested in this. Making a profit is the main incentive. Clear rules of the game, clear requirements and laws. Subsidies, preferences, business incentives.	Yes it will
		There will be strong growth	Incentives: offsetting to the tax, what the state cannot do, but entrepreneurs do, then take it to offset	Yes it will

Diagram 16. Pivot Chart: Challenges, Demand, Motivation and Potential in Tourism

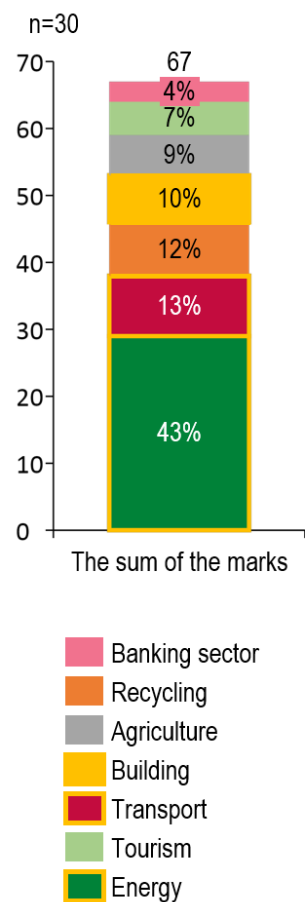
QA.2. A. What problems might arise in the implementation? B. How big is the demand for these projects? C. What will be the incentive to implement the "integration" of these projects? D. Do you think it will be in demand?



Sector of the economy / direction	Q2.A. What problems might arise in the implementation?	Q2.B. How much demand is there for these projects?	Q2.C. What will be the incentive for the implementation of the "integration" of these projects?	Q2.D. Do you think it will be in demand?
Agriculture	Corruption Bureaucracy	High demand	Tax incentives Subsidizing "Cheap money"	Yes it will
	Legislative solutions	Will be big	Financing	Yes it will
	At the heart of all industries, education is a common problem. If we do not have personnel, then we will not be able to develop any of the industries.	There is a demand	Raising awareness and education of the population. Consolidated government policy and less bureaucracy. Stable political situation in the country	Yes it will

Diagram 17. Pivot Chart: Challenges, Demand, Motivation and Potential in Agriculture

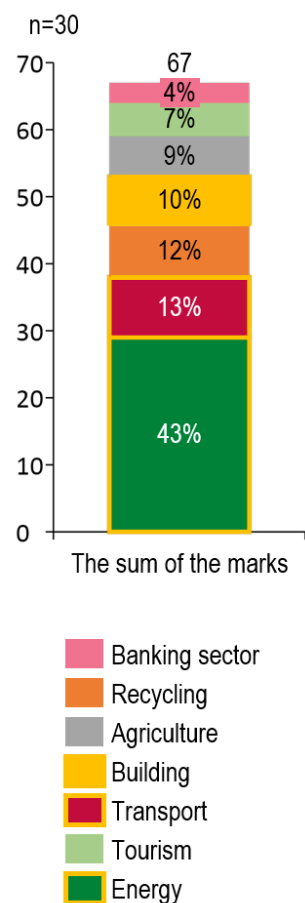
QA.2. A. What problems might arise in the implementation? B. How big is the demand for these projects? C. What will be the incentive to implement the "integration" of these projects? D. Do you think it will be in demand?



Sector of the economy / direction	Q2.A. What problems might arise in the implementation?	Q2.B. How much demand is there for these projects?	Q2.C. What will be the incentive for the implementation of the "integration" of these projects?	Q2.D. Do you think it will be in demand?
Building	High cost Complexity of technologies Lack of education	There will be growth	Promotion	Yes it will
	Problems with legislation, reduce the scaling of projects	The demand is great, but Kyrgyzstan has its own peculiarity. KR is a mountainous country. And our hydro potential in the country is used only at 0%. We have a lot of water, but little land.	. Clear legislation and changes in electricity tariffs Microgeneration Law Financing of industries from the state for energy efficiency	Yes, it will, if there is a clear land legislation. There are problems with obtaining a permit for the construction of a hydroelectric power station from different owners of houses / plots through which the canal passes from point A and point B.
	Disposal of production waste (textile production) Utilization of solar panels, batteries of electric vehicles.	There will be demand.	Access to cheap loans, to subsidies.	Demand will be used, but only with the support of the state.

Diagram 18. Pivot Chart: Challenges, Demand, Motivation and Potential in Construction

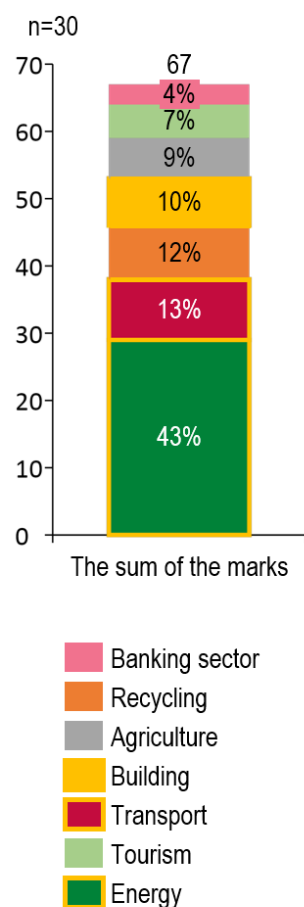
QA.2. A. What problems might arise in the implementation? B. How big is the demand for these projects? C. What will be the incentive to implement the "integration" of these projects? D. Do you think it will be in demand?



Sector of the economy / direction	Q2.A. What problems might arise in the implementation?	Q2.B. How much demand is there for these projects?	Q2.C. What will be the incentive for the implementation of the "integration" of these projects?	Q2.D. Do you think it will be in demand?
Transport	For Electric Vehicles: lack of infrastructure (capacity in networks, technical infrastructure, physical sites)	The demand is very high		The need is there, the demand will rise
	No government support			
	No motivation (encouragement, motivational program)	Demand for electric cars is very high	Creation of preferences for companies importing electric vehicles Access to finance Public awareness of electric vehicles	Demand will rise
	No funding			
Transport	Electric vehicles: Underdeveloped infrastructure Problems at customs when importing electric cars. We pay for VAT, but we do not pay customs duty until 2024. Restrictions for the Kyrgyz Republic import without duty of 5,000 electric vehicles Most of the population cannot afford electric cars	Difficult to answer		
	Border duties			

Diagram 19. Pivot Chart: Challenges, Demand, Motivation and Potential in Transport

QA.2. A. What problems might arise in the implementation? B. How big is the demand for these projects? C. What will be the incentive to implement the "integration" of these projects? D. Do you think it will be in demand?



Sector of the economy / direction	Q2.A. What problems might arise in the implementation?	Q2.B. How much demand is there for these projects?	Q2.C. What will be the incentive for the implementation of the "integration" of these projects?	Q2.D. Do you think it will be in demand?
Energy	<p>Regulatory framework, working legislative framework.</p> <p>Financing, financial part of the population, access to finance.</p> <p>Difficulties in implementation in the private sector, due to the construction of additional boilers.</p> <p>Investor Guarantee Issues.</p> <p>Bureaucracy. Legislative obstacles. Local government sets its own conditions and the investor cannot understand or scale the investment.</p> <p>The problem is batteries, batteries at our tariffs do not pay off. Therefore, as long as the state does not take over and give back, it will not work.</p>	<p>There will be demand. If the state is ready to subsidize entrepreneurs to re-equip production or to equip safer and more efficient equipment.</p> <p>Demand is not yet high, as not everyone can afford.</p> <p>Demand is small because the price of electricity is very low.</p> <p>Demand is low, but depends on the state, which can stimulate the market</p>	<p>Access to cheap loans, to subsidies.</p> <p>Government funding-show savings, expenses- state bills.</p> <p>Reduce import duties on green materials/technologies VAT should not be charged.</p> <p>Other tax incentives.</p> <p>Structural approach for project implementation.</p> <p>Efficient Tariffs for RES Development</p>	<p>Demand will be greater if customers are provided with financial instruments to insulate their homes in installments.</p> <p>If the state provides conditions, then in the future, companies can provide more options for the population than now.</p> <p>Hydroelectric power plants are now definitely in demand, everyone is trying to finance, I can't say for sure about the rest.</p> <p>Yes, if there are more instruments such as KyrCEFF, Dos-Credobank and the EBRD SME support program, there will be even more choice and demand</p>

Diagram 20. Pivot Chart: Challenges, Demand, Motivation and Potential in Energy

Q7: What types of green finance products/services does your organization plan to introduce in Kyrgyzstan in the near future?

Q^B.7. What types of green finance products/services does your organization plan to introduce in Kyrgyzstan in the near future?

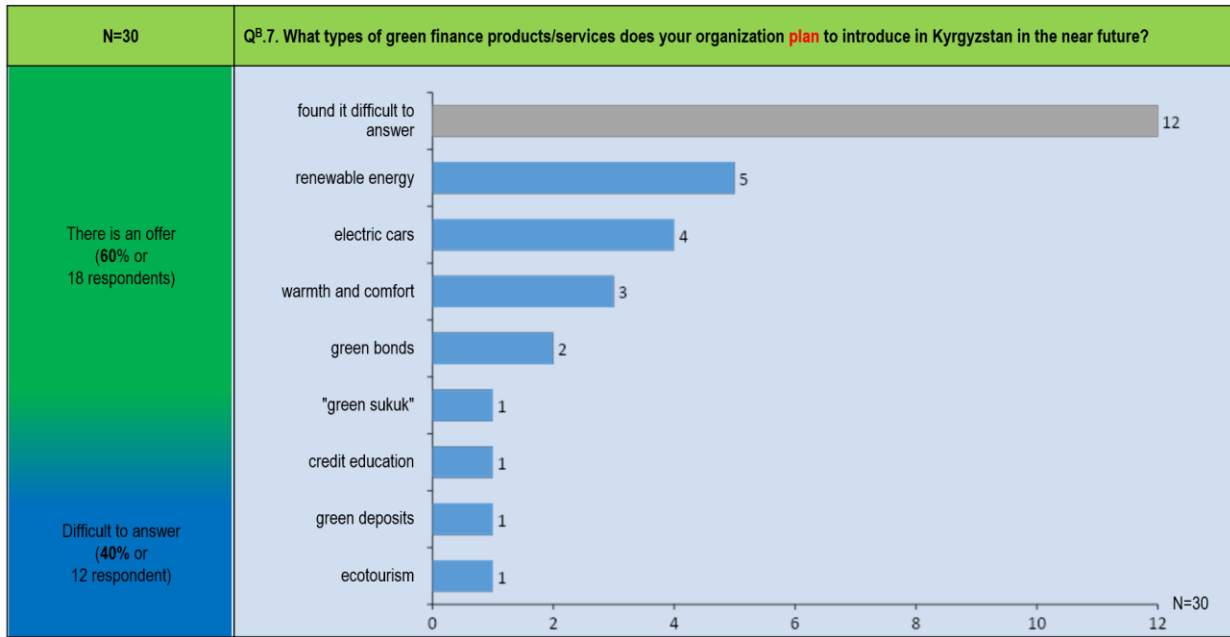


Diagram 21. Planned types of green finance products/services in Kyrgyzstan

About 40% of respondents currently have no plans to introduce green finance products or services. 18 respondents or 60% reflected the diversified directions of implementation of the planned green finance products and services.

It should be noted that the green finance agenda is in the process of transformation and border formation. Additional efforts are needed to create incentives and provide guidance that will stimulate the introduction of green finance products and services and also increase the involvement of businesses and the population of the Kyrgyz Republic in the green economy agenda.

Q14: Do you think that five years from now the Kyrgyz financial sector will have more focus on environmental, social and governance (ESG) issues than today? What do you think, what share of the organization's portfolio will be green financing in the next 5 years?

In recent years, the global trend towards responsibility and environmental friendliness has spread to the sphere of investment and finance. As a result, the concept of ESG has emerged, closely related to the green economy. The abbreviation ESG can be deciphered as "environment, social policy and corporate governance". In a broad sense, this is the sustainable development of commercial activities, which is based on the following principles:

- responsible attitude to the environment (English, E - environment);
- high social responsibility (English, S - social);
- high quality of corporate governance (English, G - governance).

In its modern form, ESG principles were first formulated by former UN Secretary General Kofi Annan. He suggested that the leaders of large global companies include these principles in their strategies, primarily to combat climate change.

A business that claims a good ESG score must meet development standards in three categories: social, managerial and environmental.

Environmental principles determine how much a company cares about the environment and how it tries to reduce the damage that is caused to the environment.

For example, shoe brand Timberland has partnered with tire manufacturer Omni United to make boot soles from recycled tires.

Social principles show the company's attitude towards staff, suppliers, customers, partners and consumers. To meet the standards, businesses must work on the quality of working conditions, monitor gender balance or invest in social projects.

For example, the American outerwear brand Patagonia does not own the factories that make its products, so it cannot influence the wages of workers. To remedy this, the brand is channeling a portion of the proceeds from product sales to factories as part of its Fairtrade program to raise employees' wages to a living wage.

Management principles affect the quality of company management: transparency of reporting, management salaries, a healthy environment in offices, relations with shareholders, anti-corruption measures.²¹

The sustainable development agenda and limiting the consumption of resources is becoming dominant on the global agenda, it influences and will continue to influence the future development of the Kyrgyz Republic. Being a part of the world economic community, Kyrgyzstan cannot remain aloof from these processes. Green economy projects, the trend towards the implementation of ESG standards, gender and social equality initiatives are adapted projects of donors, financial institutions for the implementation of the sustainable development agenda in the Kyrgyz Republic.

²¹ [ESG principles: what they are and why companies should follow them;](#)

Q^B.14. Do you think that five years from now the financial sector in Kyrgyzstan will have more focus on environmental, social and governance (ESG) issues than today?

N=30	Do you think that five years from now the financial sector in Kyrgyzstan will have more focus on environmental, social and governance (ESG) issues than today?
There is an offer (100% or 30 respondents)	«Yes, this is an emergency, not even in five years, but in 2 years»
	«Definitely, in 5 years more attention will be paid to ESG issues in the country's financial sector than now.»
	«Yes, but it depends on how effective the work will be, + the necessary assistance from the state, it depends on how much it will be stimulated, educational work is needed, it's not a fact that in 5 years we will go far ahead, but based on the given environmental situation, we have already begun to move in this direction»
	«Yes, we expect that most financial institutions should already implement it next year, because in 2025 an assessment will already be carried out, if implemented, then we will continue to work, if not, then we will have to suspend cooperation until they bring their systems into line».
	«I think much earlier. Five years from now, ESG will be a given...»

100% or 30 respondents have an understanding that in five years in the financial sector of Kyrgyzstan more attention will be paid to environmental, social and governance issues (ESG) than today. The key theses and answers of the respondents are presented in the table.

Q^B.14.1. What do you think, what share of the organization's portfolio will be green financing in the next 5 years?

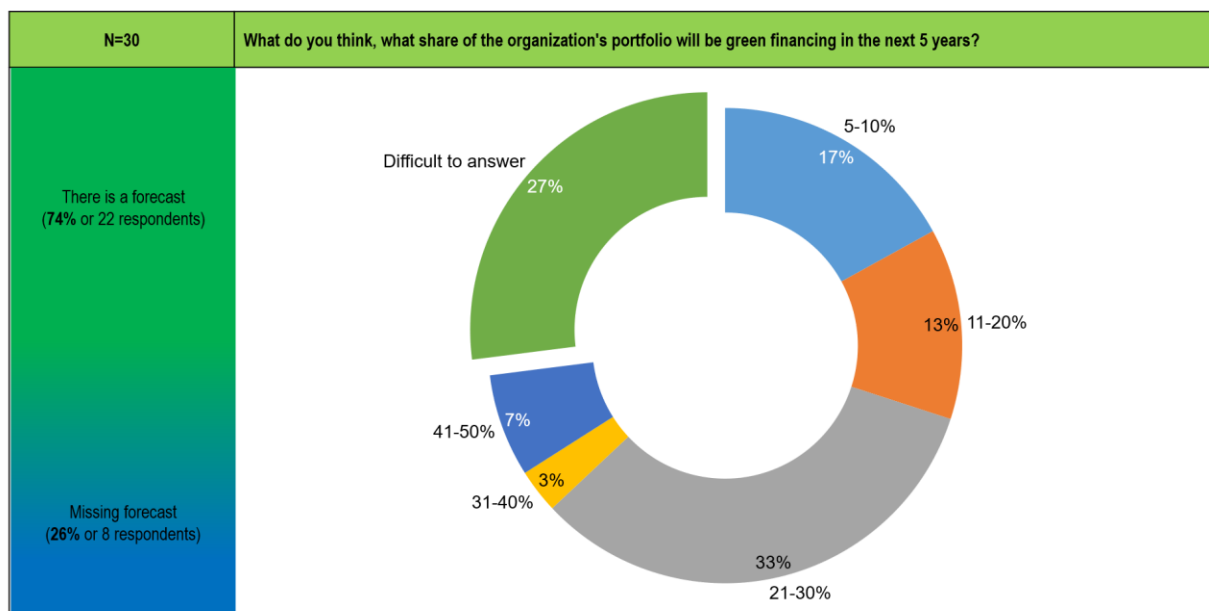


Diagram 22. The Importance and Forecast of the Share of ESG in the Product Portfolio

About 74% of respondents provided a forecast of the share in the portfolio in the next 5 years.

3.2. Key players in the financial market, competitive advantages and success factors in the framework of "green finance"

Q6: What types of green finance products/services does your organization currently offer in Kyrgyzstan?

Q^B.6. What types of green finance products/services does your organization currently offer in Kyrgyzstan?

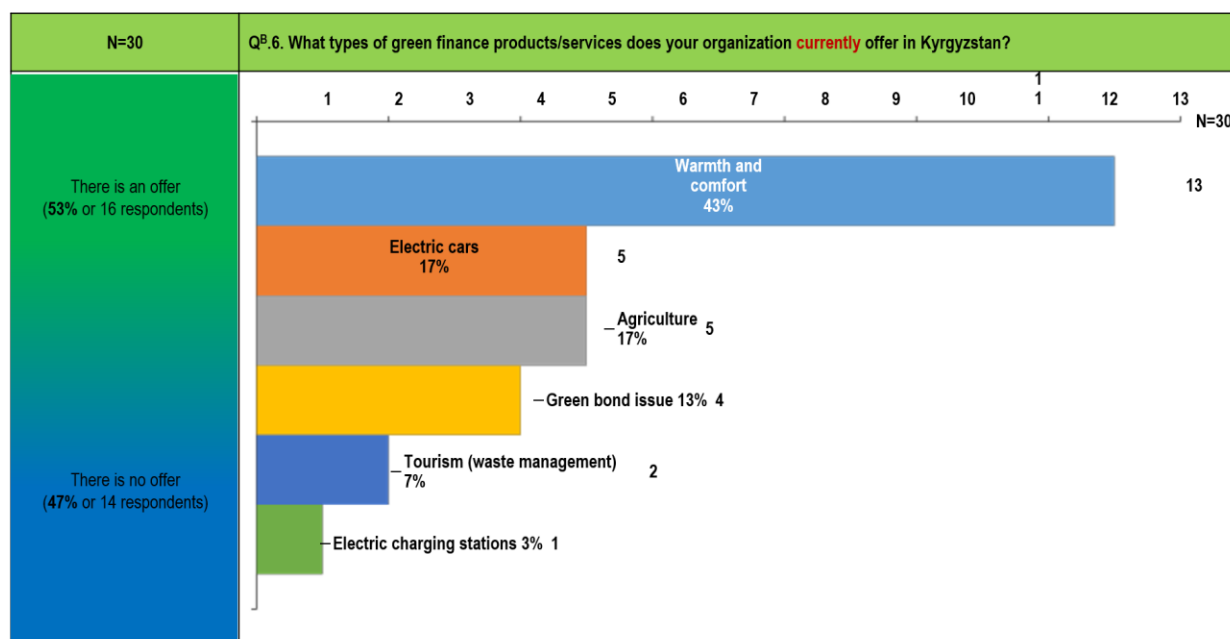


Diagram 23. Current green finance products and services

53% of the respondent, supply representatives reflected the availability of green finance products and services, out of 16 respondents, 43% have products and services in the “heat and comfort” segment, 5 respondents 17% have offers in the electric vehicle segment and similar data are observed in the green bond issuance segment.

The volume of supply of green financial products partially does not coincide with the estimates of respondents on the demand side for the most demanded sectors of the economy.

The current supply of green financial products in Kyrgyzstan is limited to KyrSEFF products (heat and comfort, waste management), Dos-Credobank / Bakai Bank / Aiyl Bank / Bai-Tushum Bank (electric transport, electric charging stations), Dos-Credobank / Oxus / Bank of Asia (green bonds/gender bonds), SENTI (green bond brokerage).

At the same time, demand-side respondents expect green financial instruments in the areas of energy, waste recycling, green agriculture, etc.

Thus, Banks and financial institutions will have to expand the range of green products to cover the expected demand.

4.3. Challenges facing the financial sector and opportunities for introducing green finance in the Kyrgyz Republic

The problems of the financial sector in the implementation of green finance can be combined and classified in the following areas:

- Regulation - it is necessary to develop regulations setting out recommendations for green finance products, minimum requirements for green products including reporting, disclosure, methodology and verification.
- Education - joint efforts of the financial sector, the state are needed in disseminating basic information on green finance, green economy, principles for evaluating green projects, the need for benefits from green projects.

- Technical support - assistance in the education and training of consultants and experts to support green finance projects.
- Reporting and verification - assistance is needed in unifying reporting on green financing, as well as the creation of an institution for verifying reports in order to exclude financing of greenwashing projects.
- Financing - assistance is needed to create mechanisms for the formation of green financing funds, including through fees and duties from "dirty industries" and importers.
- Stimulation - it is necessary to create incentive mechanisms for green finance projects, including through tax deductions, a facilitated mechanism for obtaining permits and approvals, access to concessional funds from green finance funds.

Based on the above, limited funding is not the main problem limiting the spread of green finance, and therefore it is necessary to combine the efforts of the state, the financial sector, regulators (NBKR, Government financial control) to systematically address existing problems and develop a roadmap for the financial sector in order to develop green finance in the Kyrgyz Republic. Republic.

^BQ1: To what extent do social and environmental issues affect the business risks of your institution or client?

Q^B.1. To what extent do social and environmental issues affect the business risks of your institution or client?

N=30	To what extent do social and environmental issues affect the business risks of your institution or client?
Have an impact (90% or 27 respondents)	«affect social inequality»
	«may affect the value of investments in securities and other financial instruments of the bank's portfolio, as well as foreign exchange rates, which leads to currency risks»
	«extreme weather events can affect clients' business, which also increases the risk of loan defaults»
	«Affect directly. In our work, we face these risks all the time. When financing our clients recently, we consider those clients that have the least impact on the environmental impact»
	«competition in export markets also considers the impact of a green economy, but we understand that if they do not meet these standards, they will lose export markets, which negatively affects their financial situation and, accordingly, us»
	«today, social and environmental problems do not particularly affect, in principle - ESG is more the prerogative of developed countries / world economies, and in our part, social and environmental risks / problems make more economic sense»
Have no effect (10% or 3 respondents)	«1. Events in Batken due to which loans cannot be repaid, 2. Political instability, 3. Influx of returned migrants, I cannot repay loans, 4. Natural disasters, 5. There is no plan for the development of agriculture for balanced market coverage with products.»
	«We have never provided loans to companies that have any significant environmental consequences, damage, or some kind of social, we even had a whole list of areas where we do not consider lending / financing. This is familiar to us, and we are well aware that yes, it can carry not only environmental, but also social, and where social there is reputational risk.»
	«difficult to answer because to date we have not had any case studies or case studies on impact assessment»

Diagram 24. Impact of environmental issues on business risks

90% of respondents believe that social and environmental issues affect the business risks of your institution or client. The key theses and answers of the respondents are presented in the table.

^BQ12: What are the main barriers/challenges to implementing green finance principles in your institution?

Q^B.12. What are the main barriers/challenges to implementing green finance principles in your institution?

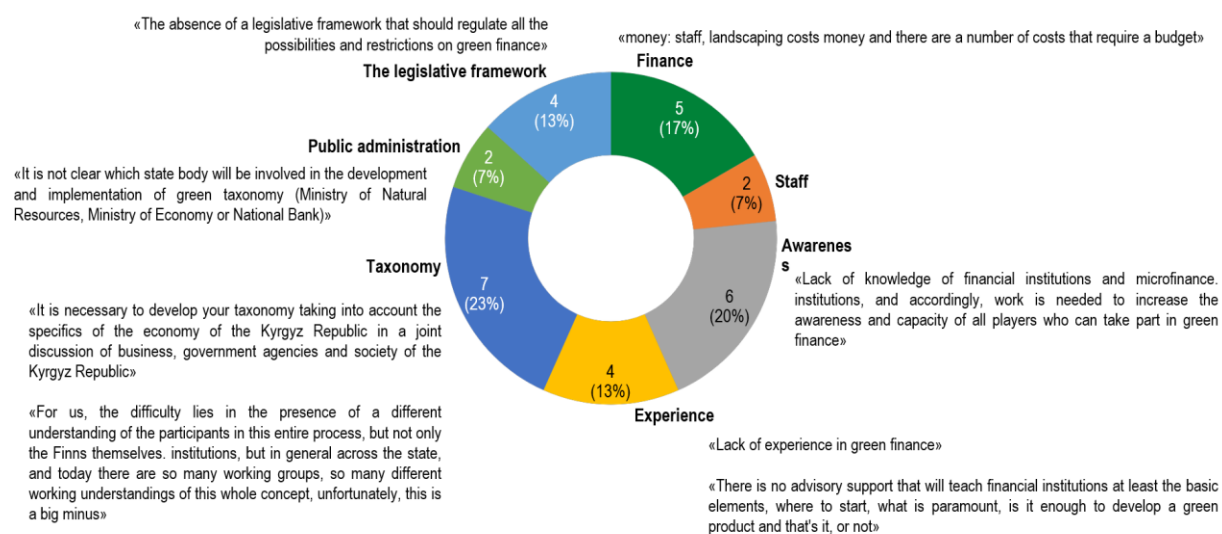


Diagram 25. Barriers/challenges to implement green finance principles

The largest share in the problems / obstacles for the implementation of the principles of green finance respondents consider taxonomy question 7 respondents or 23% of the total number of respondents.

Awareness ranks second in terms of the number of responses received, 6 respondents or 20% of the total number of respondents' answers.

Legislative framework and lack of experience took 13% or 4 respondents noted this difficulty as an obstacle to the implementation of green finance principles.

V. SUGGESTIONS AND RECOMMENDATIONS:

5.1. Potential Green Financing Mechanisms and Proposals for the Financial Sector

^AQ4. What financial products and services do you know?

^Q^A.4. What financial products and services do you know?

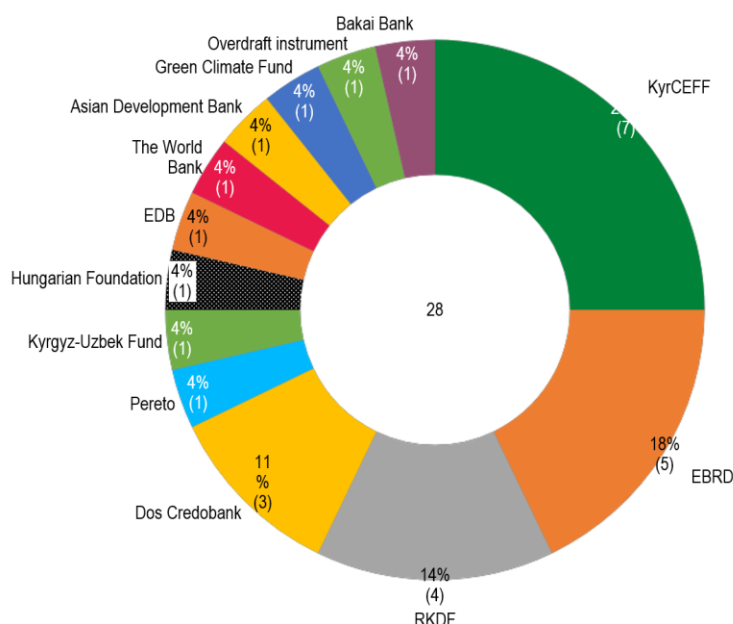


Diagram 26. Well-known financial products and services to demand representatives

As part of the study, the key topics of the survey were the principles of green finance, the market and demand. An important feature of this question is the perception of this issue within the target group - respondents from the demand side. Thus, the respondents first of all characterized this question as: "If I have a potential "green" product or service, which organization can I go to for support", this is also due to the low level of informativeness on this topic reflected in the question, QA3, 25% of respondents encounter products very rarely and 33% of respondents believe that green finance products and services are extremely scarce.

^AQ4.1. What products and services do you think would be suitable for green finance in the Kyrgyz Republic, including products provided by development partners.

QA.4.1. What products and services do you think would be suitable for green finance in the Kyrgyz Republic, including products provided by development partners?

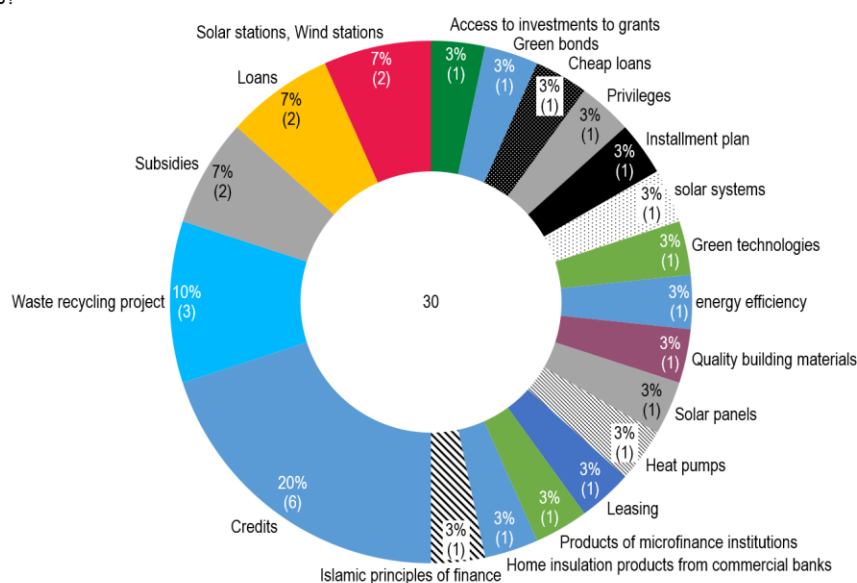


Diagram 27. The most suitable products or services according to demand market participants

Confirmation of the data of the previous question / block is the results presented in Diagram 26. characterized a significant number of products and services, which may indicate high application parameters or opportunities for integrating green finance principles.

INQ15: Do you think that the growth of Islamic finance provides more opportunities to develop green finance products and services and invest in green projects?

QB.15. Do you think the rise of Islamic finance provides more opportunities to develop green finance products and services and invest in green projects?

N=30	Do you think the rise of Islamic finance provides more opportunities to develop green finance products and services and invest in green projects?
Have an impact (66% or 20 respondents)	«Yes, since this type of instrument is based on religious affiliation, it is also flexible and business needs diversification to raise funds, it is also necessary, yes»
	«Perhaps yes, this can stimulate the development of projects»
	«Of course, Islamic and green finance go hand in hand, they are very related to each other. Both have huge financial opportunities. If they go together, then the prospects are huge»
	«There is a lot of potential in this area. As an example, Sukuk is the issuance of securities under Sharia law. Now Uzbekistan is actively developing in this direction»
Have no effect (34% or 10 respondents)	«Difficult to answer», «Not really, it's not the same thing, it doesn't support the other, but it doesn't exclude either»

Diagram 28. Islamic finance in green finance

66% of respondents believe that the rise of Islamic finance provides more opportunities to develop green finance products and services and invest in green projects. The key theses and answers of the respondents are presented in the table.

5.2. Recommendations to meet the identified supply and demand

^AQ3. Previously, you reflected THREE priority sectors for the integration of green finance, could you reflect an effective integration algorithm:

^{QA}3. Previously, you reflected THREE priority sectors for the implementation of the "integration" of green finance, could you reflect an effective integration algorithm:

№	A	B	C
1	Prescribe laws and administrative procedures so that businesses have an incentive. State support, since the money we receive is very expensive	Regulatory legal acts, control over the implementation of laws, the judicial system should work objectively	
2	State support	Government funding	Available grants
3	Educated personnel who will lead these projects	Funding and benefits	State support
4	State support	Privileges	
5	Provide access to green resource	Increasing human resources	
6	Thoughtful, good measures for those who are switching to energy efficiency	Normal tariffs for RES development	
7	Develop clear legislation to understand who is responsible for what		
8	Raising capital	Of course, there are some regulatory frameworks that need to be simplified.	
9	Main model: development through B2B, creating an environment not for the end consumer, but for service companies	Creation of a favorable environment in all aspects for service companies	
10	Availability of material base / technologies (alternative energy sources)	Transition to energy efficiency agriculture sector	Make the price of electricity more than the cost
11	Create a fund that can issue installment payments for households and businesses	Include energy-saving components in the list exempt from VAT	Create a fund and open access to finance is all that is required
12	The state should give us «the green light»	And we can come up with an algorithm ourselves between banks	
13	Law on RES. Law on microgeneration to be included in the law	Allow the surplus to be given to power plants, but not the right to sell, but on the principle of barter: given / taken, taking into account losses, of course	Determination of power plants to receive electricity

Diagram 29. Recommended algorithms of respondents, demand-side players

Chart 29 reveals the overarching algorithm proposed by respondents across all sectors, thus arranging the implementation steps into three ABC steps to realize a more successful integration of green finance.

^AQ6. Could you point out the potential positive effects from the introduction of green finance principles in the Kyrgyz Republic?

QA.6. Could you indicate the potential positive effects from the introduction of green finance principles in the Kyrgyz Republic?

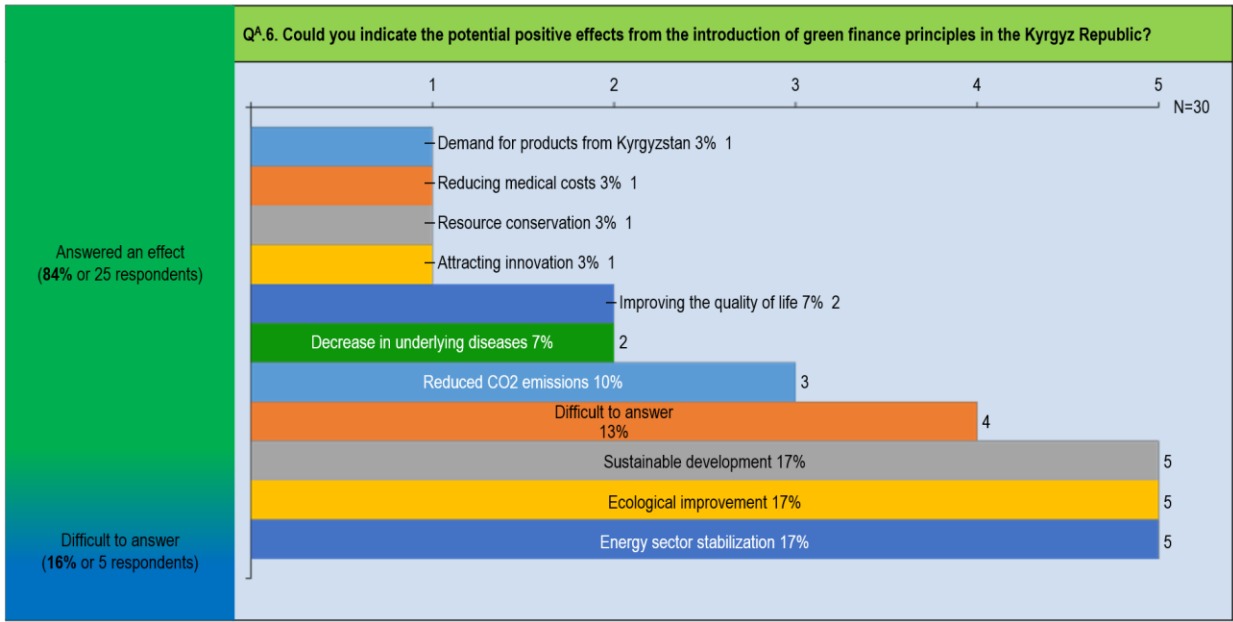
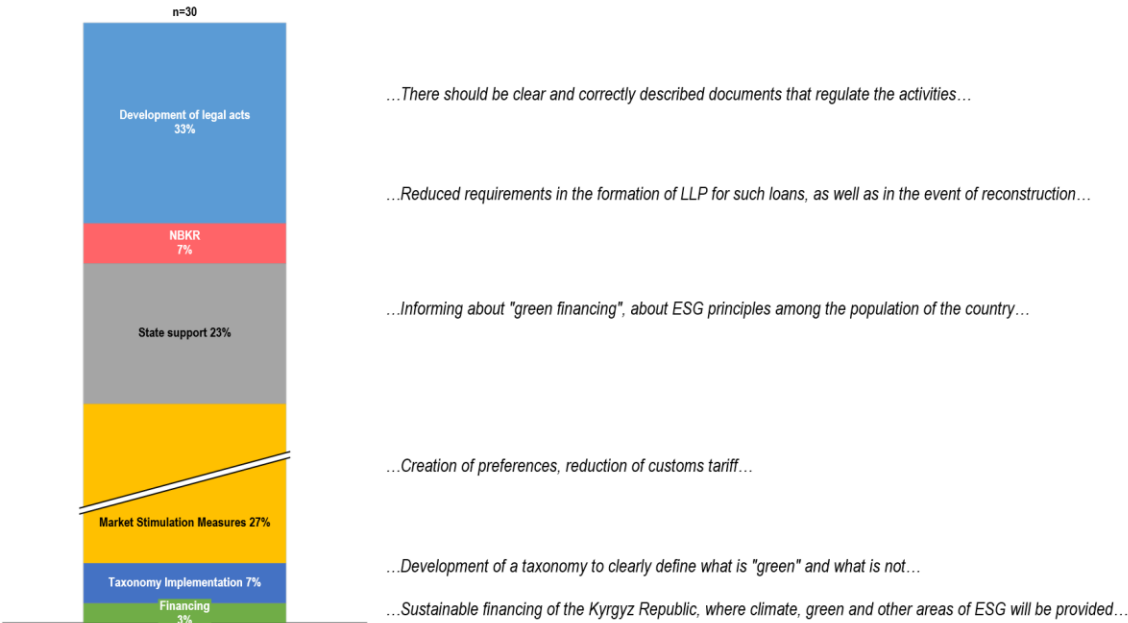


Diagram30. Potential positive effects from the introduction of green finance principles in the Kyrgyz Republic

The wide range of reflected potential effects that respondents see on the demand side speaks to the deep diversification of the effects from the introduction of various methods, and the results in the principles of green finance, the key answers are the group of answers that scored 17% each: sustainable development, environmental improvement and stabilization of the energy sector.

INQ16: What type of support or assistance from the government and market regulators is most needed to develop green finance practices in Kyrgyzstan?

QB.16. What type of support or assistance from the government and market regulators is most needed to develop green finance practices in Kyrgyzstan?



The largest number of respondents reflected the key types of support: the development of legal acts 33%, measures to stimulate the market 27% and government support 23%.

5.3. Analysis of regulatory requirements for financial institutions, measures and action plan to address identified gaps

AQ5. Could you please indicate the challenges (up to three) that the financial sector faces in implementing green finance?

QA.5. Could you please indicate the challenges (maximum three) faced by the financial sector in the implementation of green finance?

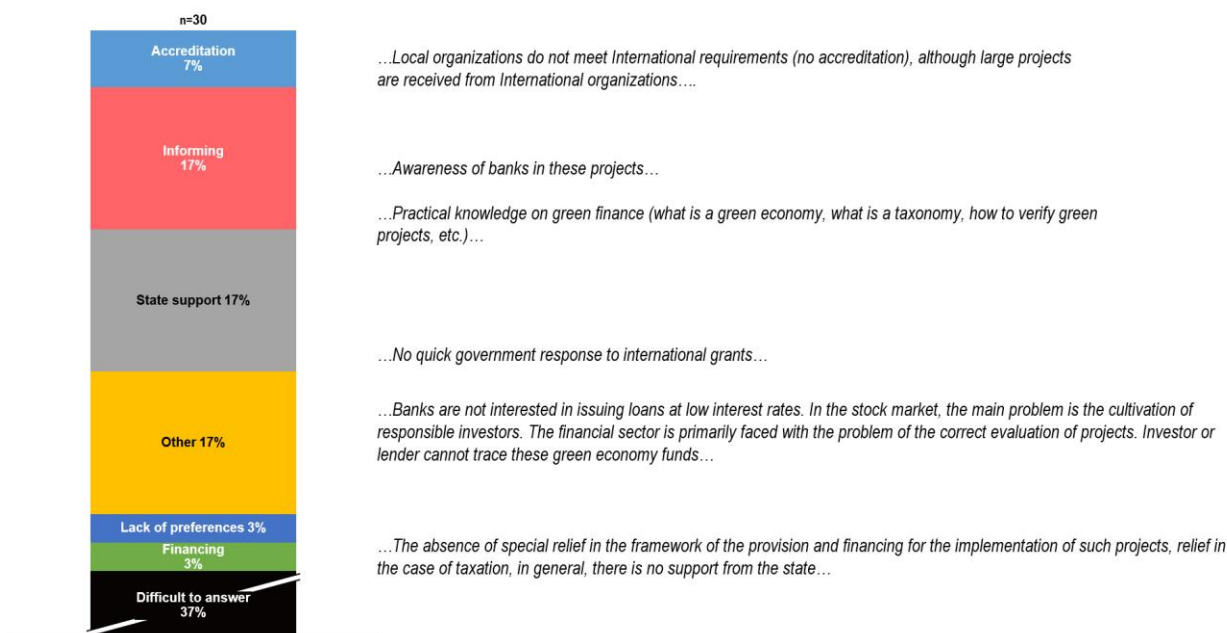


Diagram 31. Challenges faced by the financial sector in implementing green finance

To the answers on the problems faced by the financial sector, respondents from the demand side reflected 17% - informing and an important block is 17% - state support, which is also present in the previous answer.

BQ4: Could you please assess the necessary changes and recommendations in the NLA for the implementation of a specific initiative within the above sectors, in other words, what changes need to be made to existing regulations in order to develop green finance in the sector?

QB.4. Could you please evaluate the necessary changes and recommendations in the Regulations for the implementation of a specific initiative within the above sectors, in other words, what changes need to be made to existing regulations in order to develop green finance in the sector?

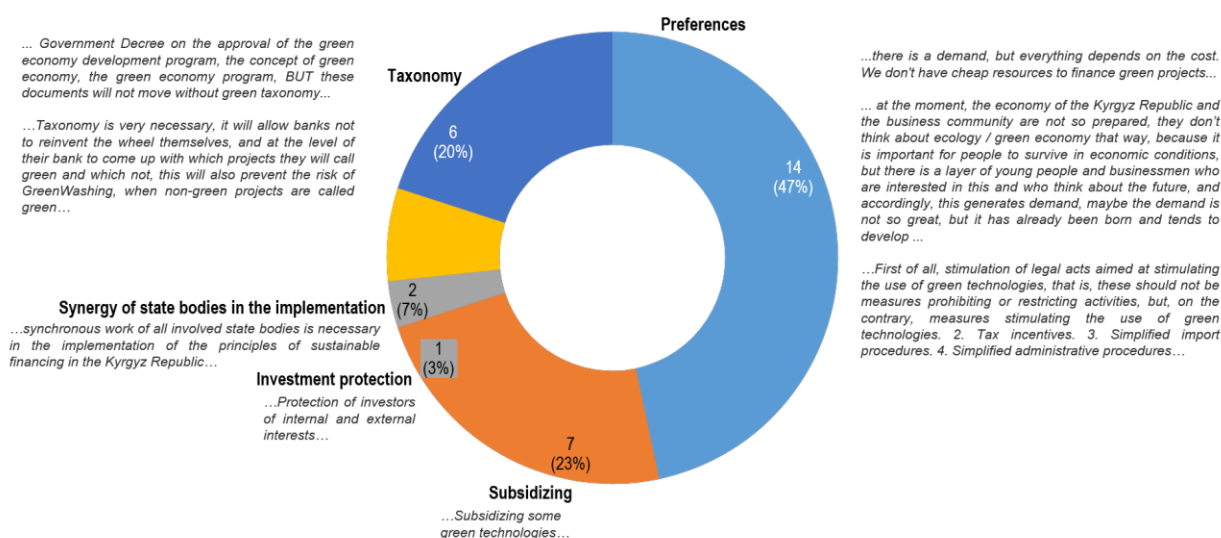


Diagram 32. Necessary changes and recommendations in the NLA for the implementation of a specific initiative

47% of respondents noted preferences as a specific initiative within the framework of inclusion in the NLA for the development of "green financing" in the sectors of the economy. Subsidizing, despite the word close in meaning to preferences, is singled out in a separate block with a total value of 23%, and taxonomy with an important value of 20%.

5.3. Proposals to improve financial literacy in green finance by relevant stakeholders

^BQ9: What are the criteria for identifying green projects and making decisions about investing in these projects?

Q^B.9. What are the criteria for identifying "green" projects and making decisions on investing in these projects?

No	What are the criteria for identifying "green" projects and making decisions on investing in these projects?
1	Verifiers are required, must be carried out by qualified verifiers who are highly specialized and they must work according to international standards
2	There are 17 UN Development Goals, 7 of them are related to the environment
3	No emissions to the atmosphere Lack of water and soil pollution; Gender equality, responsible social policy of organizations, non-use of child labor.
4	For me, green investing is everything that allows you to reduce CO ² emissions into the atmosphere (reducing your carbon footprint)
5	We often face this problem, as there are no green finance specialists, even in our bank. We cannot verify projects as green, so we do not have an accredited, certified green finance specialist.
6	We have developed our intrabank taxonomy based on international standards (30 unique documents regulating the main "green" areas, but it is impossible to take everything because they are made for different geographical latitudes. And what suits China is unlikely to suit Kyrgyzstan.
7	Anything that saves energy and resources. Resources are water, natural resources, fuel, everything that allows saving is called green technologies. To do this, we have a separate policy and there are internal documents that govern all this.

Question and answers in^BQ9: What are the criteria for identifying "green" projects and making decisions on investing in these projects? are highlighted in a separate block. The block clearly shows the significant differences in the definition by the participants of the proposals as a criterion for "green" projects.

Diagram 33. Criteria for identifying "green" projects and making decisions on investing in these projects

^BQ10: What was the reason that prompted you to implement green finance methods? What are the reasons for adopting (or planning to introduce) green finance methods?

Q^B.10. What was the reason that prompted you to implement green finance methods? What are the reasons for adopting (or planning to introduce) green finance methods?

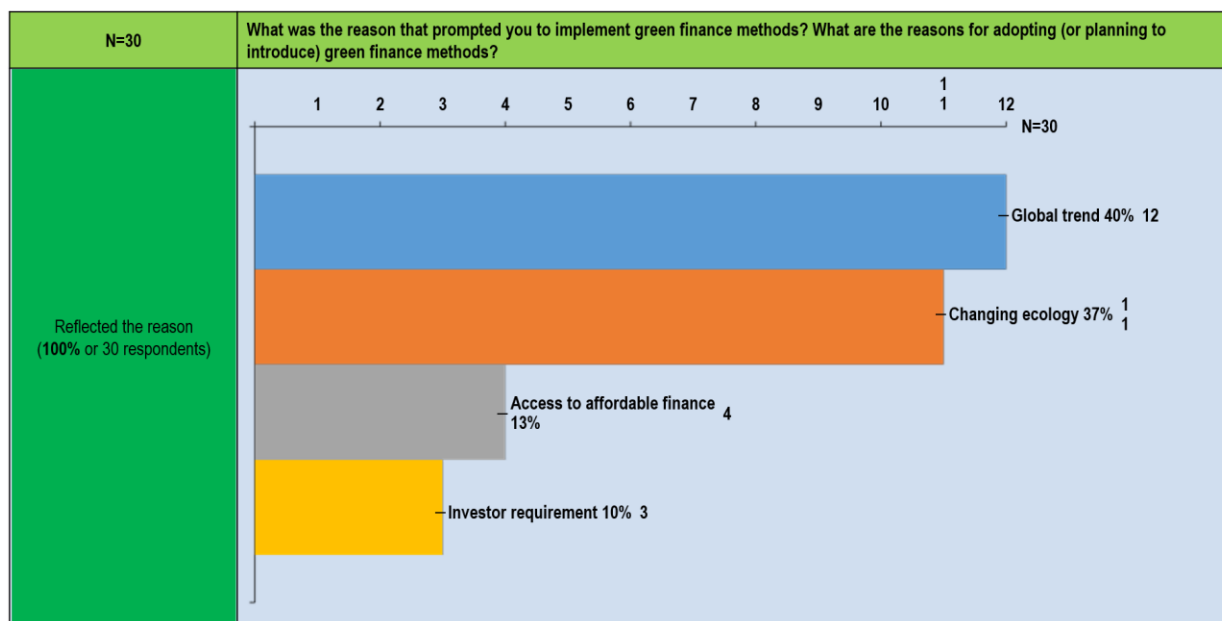


Diagram 34. Reasons for implementing green finance methods

All respondents (100% or 30 respondents) within this question reflected the reason for the implementation of "green finance" methods, 40% - global trend and 37% - change in ecology.

INQ13: In your opinion, how much ESG integration is needed²²principles in your organization?

Q^B.13. In your opinion, how important is the integration of ESG principles in your organization?

N=30	In your opinion, how important is the integration of ESG principles in your organization??
ESG integration is important (100% or 30 respondents)	«This is an urgent need, today you can be left without large partners, since the partners have adopted the principles of ESG - this is important for cooperation.»
	«The integration of ESG principles in our organization is necessary, at this stage our bank is developing regulatory documentation for sustainable financing, next year there are plans to issue "green" bonds»
	«The ESG agenda has always been there. It's just that it was always named differently. ESG is absolutely relevant. We are already in the process of implementing the main parameters of ESG. We are moving towards the Sustainable Development Goals»
	«Absolutely necessary. We are guided by the goals of the Sustainable Development Goals. I would like a good consultation on how to implement ESG»
	«ESG principles are needed in general. We have developed a strategy for implementing ESG in the company, and now the board of directors has it.»
	«This is paramount, according to our international obligations, which we want to take on now, so we will implement ESG, the first thing that will be launched, we plan to sign a declaration on the adoption of ESG following ESG.»
	«They are necessary, of course, these principles need to be implemented, which is good, we have just opened and we can already take all this into account from the very beginning, take it into account in contracts so that our clients comply with these principles.»
	«For our clients, this is a paramount issue, because after 2025 we will stop financing clients who have not implemented ESG standards and principles»

Diagram 35. The need to integrate ESG principles

²²ESG (Environmental, Social, Governance) principles - the principles of the company's activities based on the protection of the environment, the creation of favorable social conditions, a conscientious relationship with employees and customers, and proper corporate governance.

100% of respondents believe that the integration of ESG principles in the organization is necessary. The key theses and answers of the respondents are presented in the table.

5.4. Concept Notes for the Introduction of New Green Finance Mechanisms and Green Financial Products and Services for Selected Strategic Sectors in Kyrgyzstan

^AQ7. Do you have any recommendations or suggestions on this issue?

As part of the interview, the research team encountered a significant number of recommendations from respondents participating in the survey on the demand for green finance products and services, this section contains the most relevant recommendations.

No.	Recommendations
1	It is necessary to use money more efficiently and implement recommendations, first of all, to the state. The green economy is the goal, not the goal of studying market volumes. harmonious development. There should be no questions whether there is a demand, but it is necessary to understand "how the state can make the economy of the Kyrgyz Republic more sustainable development."
2	It is necessary to raise awareness of both the financial sector and the population, access to green finance, cheap loans, subsidies. In this regard, we should work with financial institutions.
3	It is possible to carry out work on the awareness of the population in the process of formation of ecological and economic thinking, starting from childhood. This is due to the understanding of the enduring value of natural resources, with a careful attitude to nature and the created objects of material culture. Increasing the knowledge of green economy decision makers in government.
4	Establish the issuance of green bonds; develop a special tax regime by creating a "Green Technology Park"; ensure maximum awareness of the population through the media about the green economy
5	Transition of a taxi to hybrid cars is necessary. To develop a system of encouraging the population for the transition to "warm houses". Plastic bags should be removed from circulation with a gradual transition to eco-bags or bags made of degradable material. Diesel cars should be removed from popular routes and replaced with gas ones.
6	From a legal point of view, I would like these principles of the green economy to be fixed at the legislative level, a well-thought-out incentive system is needed (at the state level and at the level of financial and credit institutions). Possible penalties or incentives. Working with state-owned enterprises, offering them some projects, for example, to work out the issue of emissions into the environment, their reduction.
7	The recommendation to place a great emphasis on the regions of the Kyrgyz Republic, and open representative offices or centers in order to inform the population that there are such initiatives / products / services, because a lot of people are not aware, that is, the first step is to inform the population of the regions through representative offices through the media, and they will slowly start showing interest.
8	Promotion of platforms such as greenenergy.kg ("The Green Energy Platform is a web platform that will bring together suppliers, manufacturers, experts, educational and financial institutions to develop the market for renewable energy, green technologies and energy efficient solutions). For example, the introduction of solar panels into practice to obtain additional energy.
9	Approach the law very seriously, create legislative, motivational conditions. Because today they talk about green finance, but it is no different from the usual. And when we talk about green finance, it means solving a large number of issues. The issue of ecology for the whole country for the land, for everyone, the solution of this issue will entail changes in the economy. Therefore, it is very important that all this be transferred from words to deeds, so that there are legislative prerogatives and support from the state, as an example, exemption from taxes on transport. For example, in order for the city to switch to electric cars, it is necessary to exempt electric cars from taxes or provide benefits for them for some time and raise them for conventional cars. Allocate funding for taxi companies that are fully electric, creation of infrastructure. To do this, it is necessary to develop a system for its gradual introduction into various sectors of the economy, monitoring its effectiveness with the involvement of experts and support from the state.
10	Open a green finance fund and provide banks with access to cheap money, as well as installment tools for customers who want to insulate their homes. Thus, there will be a demand and an opportunity to provide the whole of Kyrgyzstan with supply. Focus on energy saving, and not on electric vehicles, solar generation,

	and so on. To develop what we have in the Kyrgyz Republic. Houses need to be converted to gas. Providing business with sustainable electricity. Provide a green corridor for electric vehicles at the customs of the Kyrgyz Republic. Carrying out a mass information campaign about the benefits of using electric vehicles rather than cars with internal combustion engines.
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^BQ5: What do you think is the potential effect or rough estimate of the market for green finance products or services in Kyrgyzstan if successfully implemented in the economic sectors and NLAs you described earlier.

- ☐ RZB - has been issuing social bonds and is planning to issue green bonds. If the business finds more projects, then we can pay attention to the big players. The green sustainable bond market will reach \$11.8 million in the next 3 years.
- ☐ Green financing -1.5% of the company's total portfolio - \$800,470 = 68 million soms. Salym Finance. 2. "Heat and comfort" - a sub-product of the housing loan in Salym Finance, occupies 6% of the housing loan.
- ☐ The portfolio of Aiyl Bank amounted to 33 billion soms, in 2021 - 7-8% of the portfolio was directed to green financing, this is \$ 26.961.000
- ☐ Electric buses worth \$50 million 2. Issyk-Kul: Wastewater - \$25 million. 3. GPS
- ☐ The approximate cost of power plants in Issyk-Kul is about 40 million dollars, in Batken about the same cost, and hydroelectric power plants are about 50 million dollars, in the next 2-3 years.
- ☐ As part of the IFC project, our partners, microcredit companies, until June 2022, financed about 20 thousand residents of the Kyrgyz Republic so that they could insulate their homes or improve energy efficiency, within the framework of KyrSEFF about 3,000.
- ☐ HPP "Kulanak", which is being built in the Naryn region (At-Bashi). They were able to get financing through the EDB, like a \$10 million small hydropower plant. (Q11)
- ☐ According to the World Bank - increasing the productivity of milk - the total cost of the project amounted to \$ 12 billion. We fully worked out \$ 2 million each: these were interest-free loans. 2050 farmers received loans. (Q13).

VI. CONCEPT NOTES:

6.1. Concept note on the introduction of green finance mechanisms in the Kyrgyz Republic

Taking into account the global trend of transition to green finance, Kyrgyzstan cannot stand aside and already now one can observe an active movement towards the formation of green finance mechanisms in the Kyrgyz Republic.

Despite the obvious progress in recent years in promoting green finance in the Kyrgyz Republic, the introduction of sustainable finance tools and practices is still at an early stage. At the same time, achieving the goals set in the priority areas of the Green Economy Development Program and achieving the goals of the NDC requires significant financial resources.

Successful introduction of green finance tools and practices and the further sustainable functioning of the green finance system will be facilitated by the creation of the National Financing Mechanism.

The central idea of global cooperation and integration of financial and green issues is to link the procedures for solving global and national natural, climatic and environmental problems with the instruments of modern world financial markets through "Greening". Achievement of the goal of introducing the principles of sustainable green finance in the financial sector will be carried out by solving the following tasks: 1) identifying the potential demand and needs of the financial sector in the implementation of the principles of green finance; 2) preparing the financial sector for the ESG Standards; 3) introduction of a system for evaluating, monitoring and supporting activities in the field of sustainable financing; 4) capacity building and training of personnel of providers of financial products and their consumers; 5) practical implementation of sustainable financing.

Thus, it is planned to create a joint financing mechanism for green sustainable projects, for the successful operation of which a mechanism for the accumulation and refinancing of attracted internal and external funds will be developed.

Financial institutions of the Kyrgyz Republic show significant interest in green investments, but they face a number of internal and external barriers to the large-scale implementation of green finance.

General economic and financial barriers: lack of financial incentives; lack of appropriate policies and procedures; high cost of resources; lack or insufficient access to cheap and long-term financial resources and the uncertainty of the macroeconomic situation.

The Cabinet of Ministers of the Kyrgyz Republic has committed to and set ambitious targets to reduce air pollution and greenhouse gas emissions over the next few decades. However, these ambitious goals will require significant effort and capital investment.

In addressing these issues, the National Financing Mechanism will contribute, which is an optimal model of public-private partnership, and this mechanism will greatly contribute to the elimination of financial, institutional, technical and social barriers that impede the transition of the Kyrgyz Republic to low-carbon and climate-resilient development. The main barriers with proposed solutions are briefly described below.

Key barriers, challenges and potential actions to remove barriers

Barrier type	Description	Solution
Financial and economic		
Lack of concessional funding at scale for NDC funding.	<ul style="list-style-type: none">▪ The total estimated cost of implementing mitigation and adaptation measures is about 10 billion US dollars.▪ Deposit (13-16% per annum) and interest rate on a loan (18-30% per annum).	<ul style="list-style-type: none">▪ Establish a national green finance institution to raise funds at scale, integrate and expand access to green finance.▪ Provision by banks and microfinance companies of affordable long-term financing through the mechanism of blended and debt financing of
High cost of financial resources.		
High upfront costs for low carbon technologies and energy efficiency measures.		

<p>High perceived risk in energy efficiency and real estate lending.</p> <p>Low price incentive to switch to clean technologies due to relatively low coal price and subsidized electricity tariff.</p>	<p>The high cost of funding sources, currency risks and the underdevelopment of the stock market.</p> <ul style="list-style-type: none"> ▪ Low-carbon and resource-saving measures usually require longer-term and more affordable credit. ▪ Businesses/individuals generally prefer to buy/implement the cheapest solution. ▪ Outdated technologies and methods lead to low efficiency and high energy losses. 	<p>environmentally friendly financial products for households and energy-intensive users.</p> <ul style="list-style-type: none"> ▪ Introduction of energy efficient and renewable energy lending through an attractive risk-sharing scheme. ▪ Promoting the adoption of clean and efficient technologies through long-term, low-interest financial products. ▪ Promoting clean technologies and reducing incentives to use obsolete technologies
Social issues		
<p>No investment opportunities enterprises and residents of rural areas</p> <p>Limited capacity of financial institutions and businesses in gender mainstreaming and ESG</p>	<ul style="list-style-type: none"> ▪ The average income of rural residents is 1.25 times lower than the average household income in Bishkek. ▪ Households are constrained by the cost of isolation technologies due to expensive short-term financing with intensive repayment schedules and limited alternatives available on the market. ▪ Those who are limited by income and/or budget use inefficient heating technologies. 	<ul style="list-style-type: none"> ▪ Providing affordable and long-term loans, especially suitable for low income groups throughout Kyrgyzstan. ▪ The activities of the National Financing Facility include a number of practical activities to create new jobs in construction, thermal insulation and related industries, which provide additional social benefits. ▪ The National Funding Mechanism will ensure gender and ESG mainstreaming in the financial sectors of Kyrgyzstan by mainstreaming gender and ESG into its activities, requiring the same from providers of financial products and businesses that benefit from financial products.
Policy and regulation		
<p>Lack of policy framework for green finance</p> <p>Lack of industry norms and standards for green finance</p> <p>Lack of coordination between ministries, departments, regulators and stakeholders</p>	<ul style="list-style-type: none"> ▪ The Kyrgyz Republic lacks a policy framework to define and support green finance, ie. financial or regulatory incentives ▪ The lack of sectoral green regulations, such as green building and energy efficiency standards, is a result of limited technical capacity and coordination among government agencies. ▪ Lack of institutional and human capacity and limited resources for policy implementation. 	<ul style="list-style-type: none"> ▪ It is necessary to develop and implement green finance standards and post-verification systems. ▪ The Advisory Committee of the National Funding Facility, which will include relevant stakeholders to facilitating effective coordination of NDC implementation. ▪ The National Funding Mechanism will act as a tool to facilitate the implementation of ESG policies and procedures by allocating funding to priority sectors of the economy.
Potential and Awareness		

<p>Lack of technical capacity among various stakeholders</p> <p>Lack of trained human resources and capacity</p> <p>Low awareness</p>	<ul style="list-style-type: none"> ▪ The construction and energy sectors are limited by a lack of technical capacity in understanding energy management, green buildings, selection of optimal technologies and thermal insulation, and measurement of energy efficiency. ▪ The implementation of climate change mitigation measures requires building technical capacity among project developers and effective coordination between government, local financial institutions, businesses and households. ▪ Stakeholder ignorance of the benefits of Energy Efficient and Low Carbon Housing Projects hinders the adoption of cleaner technologies. ▪ Lack of capacity and limited knowledge of sustainable financial products among targeted end borrowers, as well as a lack of understanding of economic, environmental and social benefits in general. 	<ul style="list-style-type: none"> ▪ The National Funding Facility will have a dedicated Green Business Development Unit to address technical and capacity issues, and provide training to financial product providers to transfer knowledge and skills. ▪ Capacity building, strengthening knowledge embedded in the activities of the National Funding Mechanism ▪ Training and capacity building of key technical staff on energy efficiency ▪ Training and capacity building for key staff of financial product providers. ▪ Mechanisms for measurement, reporting and verification, as well as mechanisms for monitoring and evaluating mitigation will be developed, followed and disseminated. ▪ Energy efficiency audit of buildings, equipment and transport ▪ Public information campaigns, educational events and trainings for individuals, households, communities, SMEs and energy intensive users.
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By green finance, we mean a mechanism designed to finance projects and enterprises aimed at creating a green and sustainable economy.

In the Kyrgyz Republic, where the problems of ecology and sustainable development are relevant, the introduction of a green finance mechanism should become a key strategic task for the coming years. The key ways to promote green finance in Kyrgyzstan can be:

Development of green products in commercial banks

Currently, we can observe that banks are actively starting to implement the principles of ESG and the promotion of green lending and deposit products. The products of banks are targeted at specific groups or funding targets aimed at reducing the negative impact on the environment and sustainable development. Existing green products of banks may include financing of projects related to the use of renewable energy sources, emission reduction or savings in the use of energy and water resources, clean transport, green agriculture, green building and other areas. Funding for gender goals is also being actively promoted. Adaptation of the ESG principles by banks will allow them to attract funding from international financial institutions in the future,

Green bonds and securities

The development and implementation of ESG principles and reporting on the platform of the Kyrgyz Stock Exchange creates a new stage in the development of the securities market in Kyrgyzstan. A methodological framework has emerged for the issuance and placement of green bonds, which is becoming a new way to introduce a green financing mechanism in Kyrgyzstan. Green bonds are a financial instrument that can be used by both the private sector and the

government to attract investment in projects aimed at creating a green and sustainable economy. In Kyrgyzstan, it is already planned to place the first green bonds under the ESG rules by DosCredobank OJSC. Also, at the end of 2022, OXUS Microfinance Company CJSC began placing green bonds for 50 million kgs to finance energy conservation. In the near future, it is expected

Tax incentives and subsidies

Another way to introduce a green finance mechanism in Kyrgyzstan could be to provide tax incentives and subsidies for companies investing in clean technologies and projects. This may include exemptions from income taxes, reductions in property and land tax rates, and the provision of government subsidies for the development of green projects. To activate such a mechanism, the state, on the basis of regulations on the taxonomy of green projects, must determine the procedure for calculating deductions, as well as verifiers who can confirm the reports of companies on green projects.

Green Finance Fund

One of the main tools for attracting the necessary resources for the National Financing Mechanism could be a green financing fund formed by setting an environmental fee (utilization fee) that all manufacturers and importers of goods will have to pay. This fee could be calculated based on the amount of funding required for the disposal of the product, including consumables and packaging, after the end of the life cycle of the product. For example, such a fee could be set for all manufacturers and importers of goods using disposable packaging, as well as any goods requiring subsequent disposal (vehicles, including electric vehicles, equipment, household appliances, production waste, etc.).

Conclusion

The introduction of green finance mechanisms in the Kyrgyz Republic is becoming a key strategic task aimed at creating an environmentally friendly and sustainable economy. The development of green banking products, the introduction of green bonds and the provision of tax incentives and subsidies for companies investing in environmentally friendly technologies and projects, the formation of a green finance fund are key mechanisms for green finance.

Green products of banks will stimulate investments in projects aimed at creating an environmentally friendly and sustainable economy. The introduction of green bonds will allow companies and the government to attract investments in projects related to the use of renewable energy sources, environmentally friendly transport, green agriculture, green construction and other areas. Providing tax incentives and subsidies for companies investing in clean technologies and projects will reduce the costs of developing and implementing clean technologies and projects, which will contribute to their wider dissemination. The formation of a green financing fund will make it possible to make financing available to all participants in the green economy market and an alternative to external borrowing for green projects.

6.2. Concept note: Green finance fund

Green finance fund concept note

The Kyrgyz Republic, within the framework of the UN initiative on sustainable development, has committed itself to reducing carbon emissions. The overall goal of the Kyrgyz Republic is to reduce GHG (greenhouse gas) emissions by 16.63% by 2025 and 15.97% by 2030, under the "business as usual" scenario. With international support, GHG emissions will be reduced by 36.61% by 2025, and by 43.62% by 2030, according to the "business as usual" scenario.

The goals of the NDC (National Determined Contribution) are based on measures and policies covering five sectors. However, the main potential is concentrated in the sectors "Energy", "Agriculture", "Forestry and other types of land use". The sector "Energy" generates about 60% of greenhouse gas (GHG) emissions in the country.

Fulfillment of obligations to the international community requires Kyrgyzstan to implement a set of measures, as well as to create incentive mechanisms for the transition of the Kyrgyz economy to energy and resource saving, reducing emissions and increasing the efficiency of resource use. The total amount of funding for all activities within the framework of fulfilling the obligation, according to the NDC report prepared with the general coordination of the State Committee for Ecology and Climate of the Kyrgyz Republic, is about 10 billion dollars.

Following the world experience, it should be noted that the world community effectively uses the mechanism of subsidizing or setting fees for business in order to fulfill the obligations of the country. In particular, in European countries, from 2023, it is planned to introduce a mandatory fee from all manufacturers and importers of goods and services that do not comply with internal European standards for the production of goods in accordance with the principles of ESG. In case of non-compliance, manufacturers of goods and services will be subject to mandatory fees. The fees will subsidize clean production or measures to introduce new technologies and standards.

An economic policy based on the principles of sustainable development involves active subsidizing of green areas in sectors of the economy and, on the contrary, requires a reduction in public spending, loans and investments in sectors that pollute the environment. The international community must achieve a complete decarbonization of the global economy by 2050. The head of the UN proposed to actively introduce a tax on carbon emissions, as well as abandon coal mining and eliminate fossil fuel subsidies. Most countries in the world have announced their intention to achieve zero emissions by 2050. Thus, as an adaptation of world experience to the Kyrgyz Republic, as well as in order to create a sustainable incentive and financial mechanism to ensure financing of activities aimed at energy saving, waste recycling,

Description of the offer

Promoting green growth requires sound environmental policies to achieve the Sustainable Development Goals without creating an undue burden on the country's economy. It is recognized in OECD countries that economic instruments, such as environmental taxes and fees, can successfully stimulate a shift towards less environmentally harmful forms of production and consumption, while allowing producers and consumers the flexibility to adjust production and consumption. Behavioral changes induced by economic instruments can lead to the creation of new jobs. Investments in new green technologies are an important source of employment and development for companies. When economic instruments generate financial returns,

Product instruments are instruments that regulate the sale and use of goods, not instruments that address the environmental aspects of the production process.

There are four categories of economic instruments in relation to goods:

Product taxes: These include taxes levied on the sale of a single product or group of products with an important environmental aspect of production or consumption. These are both taxes imposed directly for environmental reasons, and a much wider group of taxes, for example, on motor fuels and other energy products, which play a significant environmental role, even if the main purpose of the tax is to generate income. Regardless of the initial motive for imposing a tax, it can have an environmental impact by influencing the behavior of producers and consumers. Some

other environmental taxes on goods are being introduced as a source of funds for environmental purposes (for example, revenues to replenish the environmental damage fund).

Tax differentiation, in which existing taxes are adapted for environmental purposes: higher tax rates are imposed on "environmentally friendly" goods and/or tax rates are reduced on "green" goods to change the nature of the production or consumption of such goods. One example of how this is done is by levying some taxes on fuel based on its polluting characteristics, such as its carbon or sulfur content.

Deposit-refund systems (CRS) used to return product packaging, beverage containers and end-of-life products, especially those that would be hazardous or toxic in the general waste stream. A deposit is charged on the sale of the product, which is then refunded when the used product or packaging is returned, which motivates consumers to return the product.

For example, manufacturers of beverages using single-use containers will have to pay a disposal fee for each unit of the product or arrange for the collection and processing of produced containers in-house. The same principle can apply to importers of cars, motor oils, tires, importers and manufacturers of textiles that are consumed in the domestic market and require subsequent disposal, as well as funds needed for the disposal of consumer electronics, appliances, as well as batteries and batteries. Manufacturers and importers can be exempted from fees if they ensure the recycling or re-exportation of waste products or waste out of the country.

The recycling fee from manufacturers, as well as importers, will be determined on the basis of calculations related to the subsequent processing or disposal of waste associated with the production, operation and subsequent disposal of a product or service after its consumption.

Extended Producer Responsibility (EPR), under which producers, individually or collectively, have certain obligations, for example, to return and recycle end-of-life goods. Manufacturers often fulfill these requirements by creating a "Producer Responsibility Organization" (PRO), typically a not-for-profit company jointly owned by companies in an industry that collects and recycles goods on their behalf.

Financial mechanism

Thus, due to certain economic instruments in relation to goods and services, it is planned to form a recycling fund in the form of a Sustainable Development Fund, from which projects will be financed on a concessional basis, through participating funds, green finance institutions, banks that promote and ensure waste recycling, reduce consumption of fossil fuels and increased energy generation from renewable sources, reduced consumption of clean water and other resources, and modernization of the energy supply system. At the same time, financing of projects by sectors should be directly proportional to the share of fees from each sector and, accordingly, require large investments in recycling and energy saving projects.

The implementation of such a mechanism for the state reduces the state budget expenditures aimed at fulfilling the obligations undertaken to the international community, and also forms a national mechanism for financing sustainable development projects in addition to funding attracted from international donors and investors.

The creation of the Sustainable Development Fund (Green Financing) will provide additional resources to the National Financing Mechanism and form a sustainable national base for financing green projects in the Kyrgyz Republic, as well as form a resource potential for co-financing large green projects with international financial institutions.

The creation of the fund will make it possible to create up to 5,000 jobs on an annual basis, as well as increase the transformation of the national economy through the creation of new environmentally friendly industries.

Conclusion

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6.3. Concept Note on Green Products and Services for Selected Strategic Sectors in the Kyrgyz Republic

In the Kyrgyz Republic, green financial products are just beginning to form on the side of financial organizations such as commercial banks, brokerage firms, and the stock exchange. Financial institutions, through the formation of a request for the goals of a green economy, stimulate businesses and companies in Kyrgyzstan to use environmentally friendly technologies and materials in order to reduce the negative impact on the environment and increase the sustainability of the economy.

In the Kyrgyz Republic, where the problems of ecology and sustainable development are relevant, the development of green products and services can become a key strategic task in a number of sectors of the economy.

Energy

The development of renewable energy sources, such as solar and wind energy, against the backdrop of a growing shortage of energy generating capacities, as well as a deteriorating environmental situation due to the generation of energy by the Bishkek CHP plant using low-quality brown coal, may become a priority task in the energy industry for the coming years. The creation of green power plants, the supply of green energy to the population and businesses, as well as the creation of green technologies for energy efficiency can be important areas of development. Support for this area can be provided through the creation of financial mechanisms and subsidizing projects.

Agriculture

The development of green agriculture can become an important factor in the sustainable development of rural areas in Kyrgyzstan. This may include the creation of environmentally friendly technologies for food production, improving the efficiency of water use, the development of eco-tourism and the promotion of a system for the collection and processing of organic waste, in order to reduce greenhouse gas emissions.

Transport and waste

The development of green technologies in the transport industry can reduce pollutant emissions and improve air quality in the country's cities. This may include the creation of environmentally friendly cars (electricity, gas, hydrogen), bicycles and electric scooters, the development of public transport based on green technologies and the development of a waste management system.

Construction

The development of green technologies in the construction industry can reduce energy consumption and reduce carbon emissions. This may include the creation of green houses, the use of environmentally friendly building materials, the installation of helio and solar panels to ensure the autonomy of energy and heat consumption.

Conclusion

The formation of a request for green products is currently based on a request from international financial institutions (EBRD, IFC, etc.), as well as interest from business and financial organizations. However, the structure of green finance products can be adjusted after the approval of the green taxonomy, as well as regulations governing green finance.

Conceptual ideas for future financial products include:

- Electric transport.
Project: Stimulating the renewal of the vehicle fleet and the transition to electric transport
Market: Plan to achieve the goal of 90,000 electric vehicles by 2030. Kyrgyzstan predicts an annual increase of an average of 22,000 cars
Advantages: Reduced fuel costs (as well as imports of gasoline and diesel fuel), reduced carbon dioxide emissions.

Product: Provision of consumer loans for the purchase of electric vehicles, down payment 30%, interest rate 15-17%, term 8-10 years.

Green business loans for companies to create and expand the infrastructure of charging stations can also be considered and studied.

- Green houses.

Project: Financial product for stimulating energy efficiency and water saving in residential buildings

Market: More than 1 million square meters of living space annually until 2030.

Benefits: Prevention of greenhouse gas emissions from all types of new buildings.

Product: Provision of mortgage loans to persons interested in buying new green apartments, down payment 20%, interest rate 8-10%, term 10-15 years.

Green business loans for construction companies can also be considered and explored.

- Recycling and recycling of organic waste.

Project: Recycling organic food/garden waste and using it to make compost

Market: About 333 legal entities, about 10143 individual entrepreneurs are engaged in the production of food products (general database of the unified state register of statistical data of the Kyrgyz Republic).

Benefits: Reduced methane from waste decomposition, increased efficiency of disposal programs and reduced waste sent to landfill.

Product: Providing loans to enterprises for the purchase of food processing equipment, down payment - 20%, interest rate 10-12% per annum, term 24-36 months.

- Landscaping of the textile market.

Project: Stimulation of "green" practices in the growing textile industry.

Market: 842 garment enterprises

Benefits: Reduced energy and water consumption in the textile industry.

Many products can be adapted for green finance in the textile and value chain, including energy efficiency and hazardous chemicals management, certification and carbon-neutral packaging.

More research needs to be done.

In addition, there are many sectors and opportunities for green finance that warrant further exploration, including:

- Financing solar and wind projects to create renewable energy sources.
- Complementary energy efficiency products in the residential and business sector. Modernization of existing apartment buildings with better thermal insulation and alternative sources of heating and cooling. Installation of heat metering technologies to monitor and adjust energy consumption

There are also great green opportunities in the agricultural sector, which is one of the largest sources of greenhouse gas emissions, increasing land use every year, while reducing the space for CO² absorption mechanisms (forests, pastures, organic soils).

The lack of regulation on green finance projects creates risks of financing projects that in fact may not be green, so the work on the side of regulators should be aimed at greater disclosure of the methodology for identifying green projects, non-financial reporting and verification (confirmation of report data) of green projects and products.

6.4. Concept note: “Energy as the main industry for the implementation of the principles of “green” finance in Kyrgyzstan

Energy as the main industry for the implementation of the principles of "green" finance in Kyrgyzstan

The introduction of a green finance mechanism for the energy sector is a necessary step, as today energy is one of the main sectors that generate a significant share of greenhouse gas emissions in Kyrgyzstan.

At the same time, financing of energy projects is the basis for the development of green finance in the country, and therefore the detailed development of green products is an important element.

The need for the development of energy saving and energy generating projects is also caused by the growing energy shortage, which negatively affects the potential for economic growth in the Kyrgyz Republic. At the same time, subsequent energy projects should be implemented according to green principles.

Given the importance of energy projects for the country and based on national and international practice, it is possible to use the following mechanisms for green financing of energy projects, as well as the renewal of existing energy generating facilities in Kyrgyzstan.

- **Green bonds:** Green bonds can be used to finance new and existing projects to reduce greenhouse gas emissions, improve energy efficiency and increase the share of renewable energy sources. The placement of bonds is possible both on the national and international capital markets. However, given the terms of circulation and the cost of such an instrument, it is possible to attract such financing for small projects with a short payback period.
- **Green Investment Funds:** The establishment of green investment funds can help attract investment in renewable energy and energy efficiency projects. The formation of funds will allow consolidating into one proposal small and scattered projects in the energy sector, including projects aimed at the autonomy of private households or small companies. The functioning of the funds will simplify the interaction of investors with the final recipients, where the funds will take on the function of agents and track the intended use of funds.
- **Green loans:** Green loans can be used to finance renewable energy and energy efficiency projects. Several banks under KYRSEFF (EBRD) offer lending to finance these purposes.
- **Concession agreements (a type of attraction of investments in infrastructure facilities):** The Cabinet of Ministers of the Kyrgyz Republic may enter into concession agreements with private companies in order to attract investments in projects related to the use of renewable energy sources and energy efficiency. Under such agreements, the state can transfer both certain assets and a variant of an energy service contract is possible, when there is private investment in the energy system.
- **Support of the Cabinet of Ministers of the Kyrgyz Republic:** The Cabinet of Ministers may provide support to projects related to the use of renewable energy sources and energy efficiency, such as subsidies, tax incentives or other mechanisms.
- **Partnerships with International Financial Institutions:** Collaboration with international financial institutions such as the World Bank, European Investment Bank, Asian Development Bank, EBRD can help raise financing for renewable energy and energy efficiency projects.

The above options for attracting green finance are the main ones for financing energy projects in Kyrgyzstan and require a more detailed elaboration and detailing of the roadmap for each green finance mechanism to ensure the success and sustainability of these mechanisms.

Application No. 1. Questionnaire A. Demand survey

Questionnaire A (demand side) to conduct an in-depth interview for the study "Research on the supply and demand of green investments and project preparation in the Kyrgyz Republic".

Dear Respondent, thank you for your support in the framework of the study initiated by the UN Development Program, your experience and recommendations are extremely important for our study and understanding of the issue of green investment in Kyrgyzstan. The purpose of this study is to obtain an understanding of the situation with the supply and demand of green financially sustainable investments and the preparation of green projects in the Kyrgyz Republic.

GENERAL BLOCK

Q1. Over the past year, how often have you encountered the concepts of:

No.	concept	Frequency	What projects / types / level "No" in Kyrgyzstan are familiar or known to you?	What do you think is the estimated cost of the project?	How many projects / initiatives of this kind do you think?
1	"green economy"				
2	"green finance"				
3	"green finance products and services"				
4	"demand for green finance services"				
5	"energy efficiency"				
6	"garbage recycling"				
7	"green taxonomy"				

Q2. Which THREE branches of the "green economy" in Kyrgyzstan would give the fastest financial result (financially effective) within the framework of the implementation of the mechanisms and principles of "green financing" and are quickly paid back, could you describe what your choice is connected with.

No.	Sector of the economy	What projects, in your opinion, can be implemented in terms of financial sustainability within the framework of the principles of "green finance"?	What problems might arise in the implementation?	How big is the demand for these projects?	Do you think it will be in demand?	What will be the incentive for the integration of these projects?
1						
2						
3						

Q3. Previously, you reflected THREE priority sectors for the integration of green finance, could you reflect an effective integration algorithm:

Sector 1

A.-G.

Sector 2.

A.-G.

Sector 3.

A.-G.

Q4. What financial products and services do you know? What products and services do you think would be suitable for green finance in the Kyrgyz Republic in terms of financial sustainability, including products provided by development partners.

No.	Notable financial products and services	What projects, products or financial services can be implemented through green finance?	How big is the demand for these projects?	Do you think it will be in demand?
1				
2				
3				
4				
5				

Q5. Could you please indicate the challenges (up to three) that the financial sector faces in implementing green finance?

A.-S.

Q6. Could you point out the potential positive effects from the introduction of green finance principles in the Kyrgyz Republic?

A.-G.

Q7. Do you have any recommendations or suggestions on this issue?

A.-C.

Dear Respondent, Thank you for taking the time to complete this survey by ISR Consult. Your expert opinion will allow the research team to get closer to finding answers and recommendations.

Application number 2. Questionnaire B. Proposal study

Questionnaire B (on the supply side) to conduct an in-depth interview for the study "Research on the supply and demand of green investments and project preparation in the Kyrgyz Republic".

Dear Respondent, thank you for your support in the framework of the study initiated by the UN Development Program, your experience and recommendations are extremely important for our study and understanding of the issue of green investment in Kyrgyzstan. The purpose of this study is to obtain an understanding of the situation with the supply and demand of green investments and the preparation of green projects in the Kyrgyz Republic.

Q1: To what extent do social and environmental issues affect the business risks of your institution or client?

Q2: Could you please reflect the most priority industries/sectors of the Kyrgyz economy most in need of development in terms of integrating financially sustainable projects on the supply and demand side of green finance?

Q3: Is there a demand for these initiatives in the Kyrgyz Republic? To what extent do you think financial sector entities are ready to implement the above initiatives? With what it can be connected? (Crossover question based on sector responses in question B2)

Q4: Could you evaluate the necessary changes and recommendations in the NLA for the implementation of a specific initiative within the above sectors, in other words, what changes need to be made to the existing regulations in order to develop green finance in the sector? (special briefing will be given to the data collection team to make this key issue as easy as possible).

Q5: What do you think is the potential effect or rough estimate of the market for green finance products or services in Kyrgyzstan if successfully implemented in the economic sectors and NLAs you described earlier.

Q6: What types of green finance products/services does your organization currently offer in Kyrgyzstan?

Q7: What types of green finance products/services does your organization plan to introduce in Kyrgyzstan in the near future?

Q8: Who do you know in the Kyrgyz market who has already invested in green economy projects? How many market participants have invested in green projects with the above products/services offered in Kyrgyzstan?

Q9: What are the criteria for identifying green projects and making decisions about investing in these projects?

Q10: What was the reason that prompted you to implement green finance methods? What are the reasons for adopting (or planning to introduce) green finance methods?

Q11: What successful companies do you know that received green financing, are they successful? What is the level of success of green projects/companies in Kyrgyzstan, what is the reason for this?

Q12: What are the main barriers/challenges to implementing green finance principles in your institution?

Q13: How important is ESG integration in your opinion?²³ principles in your organization?

Q14: Do you think that five years from now the Kyrgyz financial sector will have more focus on environmental, social and governance (ESG) issues than today? What do you think, what share of the organization's portfolio will be green financing in the next 5 years?

Q15: Do you think the rise of Islamic finance provides more opportunities to develop green finance products and services and invest in green projects?

Q16: What type of support or assistance from government and market regulators is most needed to develop green finance practices in Kyrgyzstan?

Dear Respondent, Thank you for taking the time to complete this survey by ISR Consult. Your expert opinion will allow the research team to get closer to finding answers and recommendations.

²³ESG (Environmental, Social, Governance) principles - the principles of the company's activities based on the protection of the environment, the creation of favorable social conditions, a conscientious relationship with employees and customers, and proper corporate governance.