





SCOPING STUDY ON PRIVATE SECTOR ENGAGEMENT FOR ADVANCING "GREEN FINANCE" IN ARMENIA

"Scaling up green finance practices in the Republic of Armenia" project

Final Report

Local Consultant: BSC Business Support Center International Consultant: PwC Czech Republic





September, 2021

Table of Contents

1.	EXECUTIVE SUMMARY	3
2.	ROUND TABLE DISCUSSIONS WITH THE PRIVATE SECTOR	6
3.	SCOPING STUDY ON PRIVATE SECTOR ENGAGEMENT	11
4.	COLLECTION AND ANALYSIS OF POTENTIAL INVESTMENT PROJECTS	20
5.	SELECTED PROJECTS AND JUSTIFICATION	29
	5.1. Project 1: Establishment of Agro College and Innovation Center	29
	5.2. Project 2: Gogol Apartments: Sustainable living ecosystem in suburb of Yerevan .	31
	5.3. Project 3: Establishment of Tire recycling plant	32
	5.4. Project 4: Expansion of Biofuel Production	.34
	5.5. Project 5: Wastewater removal and joint treatment system in Lake Sevan basin	36
	5.6. Project 6: Expansion of the production of continuous basalt fiber	37
	5.7. Project 7: O2 Gardens	.39
	5.8: Project 8: Production of natural spirulina	.41
	5.9. Project 9: Green construction technologies for professionals	.42
	5.10. Project 10: EcoIntAgro	.44
6	CONCLUDING REMARKS	46

1. EXECUTIVE SUMMARY

Background

Within its strategy to promote enabling framework for introducing environment resilient practices, the Government of Armenia plans to significantly scale up the utilization level of green finance instruments and to secure a more pro-active participation of the private sector in implementing interventions in climate adaptation and mitigation domains.

Within that overall strategy, the Government of Armenia through the Ministry of Environment (Designated National Authority) has requested support of Green Climate Fund (GCF) within the framework of "Readiness and Preparatory Support Programme" to implement comprehensive assessment of the constraints for further expansion of "green finance" practices, mapping of available instruments and to come up with comprehensive set of methodological, awareness raising and capacity building interventions. The Readiness Project will design a Green Finance Roadmap, as key political document outlining current state, existing impediments for green finance development and establishing comprehensive vision for green finance strategy contributing to implementation of Armenia's NDCs and Paris Agreement. The Roadmap and further activities aimed at implementation of the activities proposed will benefit from Repository of "Green Finance Instruments" that will be compiled during project execution stage and further handed over to Central Bank for maintenance and updates upon completion of the Project.

The main objective of the Readiness Project is to achieve paradigm shift in design and utilization of "green finance" instruments through incorporating into policies, operational modalities of national banks and non-banking financial institutions the climate-resilient approaches and guidelines, as well as regulatory simplification and introduction of policy incentives for designing respective on-lending facilities. To achieve this objective, interrelated chain of activity clusters, including assessment of baseline, regulatory review and

simplification, assessment of best international practices, design of methodological baseline and further capacity building activities will be implemented.

"Armswissbank" CJSC has been awarded the contract for implementation of "Scaling up Green Finance Practices in the Republic of Armenia" Project. Under the project BSC Business Support Center LLC and PwC Czech Republic have been sub-contracted by Armswissbank for provision of services described below.

<u>Legal Disclaimer by PwC</u>: This report has been prepared for ARMSWISSBANK CJSC and for the purpose and on the terms agreed with ARMSWISSBANK CJSC in the Agreement dated July 6, 2021. The report contains information obtained or derived from a variety of sources including project proposal applications by private sector representatives. PwC has not sought to establish the reliability of those sources or verified the information so provided. Accordingly no representation or warranty of any kind (whether express or implied) is given by PwC to any person (except to ARMSWISSBANK CJSC under the Agreement) as to the accuracy or completeness of the report.

Assignment Objectives

Within the framework of the current assignment, BSC Business Support Center in cooperation with international consulting company PwC Czech Republic; represented by Mr. Vincent Santamaria carried out the following main activities to support the main goals of the project:

- 1) Implementation of activities aimed at increasing awareness of private sector entities operating in priority sectors of the "GCF Armenia Country Cooperation Programme" about the project, green finance practices and financing opportunities made available by climate funds;
- 2) Carrying out comprehensive screening and identifing potential projects in climate change mitigation and adaptation domains for inclusion into the "GCF Armenia Country Cooperation Programme";
- 3) Designing recommendations to the Ministry of Environment of the Republic of Armenia on updating "GCF Armenia Country Cooperation Programme" with the new private sector opportunities.

In line with the objectives, BSC undertook the following main actions with mentorship from international consultant:

- S Implementing 5 round table discussions aimed at increasing awareness of private sector entities operating in climate adaptation and mitigation on the NDC framework, priority sectors of the "GCF Armenia Country Cooperation Programme" and financing opportunities made available by climate funds;
- S Designing methodology and checklist, on-going mentorship and final per-review of scoping study on private sector engagement (exploring interest, assessing capacity, bankability and readiness etc. for activity);
- S Implementing scoping study on private sector engagement (exploring interest, assessing capacity, bankability and readiness for activity)
- S Designing special screening templates for preselection of (minimum 50) potential projects, finalization of selection for recommended investment projects (minimum 10), as well as provision of justification for their selection, including compliance with GCF Investment Criteria;
- S Drafting recommendations to the Ministry of Environment of the Republic of Armenia on updating "GCF Armenia Country Cooperation Programme" with the new private sector opportunities and implement series of consultations with the Ministry and other relevant stakeholders;

2. ROUND TABLE DISCUSSIONS WITH THE PRIVATE SECTOR

The first deliverable within the current assignment was organization and implementation of five round table discussions with private sector representatives. The aim of round tables was raising the awareness of private sector entities about green finance practices, the NDC framework and of the benefits and support available through the "GCF Armenia Country Cooperation Programme".

The round tables were organized offline and were composed of three main parts: 1) presentation by the moderator; 2) Q&A session, discussion; 3) filling in scoping study questionnaire by the participants.

The duration of each roundtable was around 2 hours.

The roundtables were moderated by Local Consulting firm; BSC Business Support Center and held in Armenian language to maximize the involvement of the participants. The international expert was joining the meetings online to address possible questions on green finance and the project.

The presentation made by the local expert included the following main information:

- Presentation of "Scaling Up Green Finance Practices in RA" project, activities and goals
- Information provided on Green Finance; products, benefits and opportunities
- Presentation of GCF investment opportunities, strategic directions and investment criteria
- Presentation of practical examples of green projects financed by GCF

The presentation was followed by Q&A session and discussion with the round table participants. During this part of the meetings personal project examples of participants were discussed, questions regarding the project were addressed, discussion was held concerning challenges and development prospective of green finance in RA.

It was decided to organize round tables by economic sector; as follows: agriculture and food processing, manufacturing, construction and real estate, services and transportation, financial sector and relevant organizations (such as relevant NGOs, international organizations and funds).

BSC has implemented active promotional activities to engage large number of potential stakeholders and to raise awareness about the project among larger group of private sector representatives. The following promotional activities were held:

- Dissemination of information through membership organizations. BSC is a member of 11 unions such as American Chamber of Commerce, British Chamber of Commerce, Agricultural Alliance, Mantashov entrepreneurs union, Employers Union of RA, Chamber of Commerce of Yerevan, SME Union, etc. The information about the project and round tables were shared with the member organization of the mentioned unions by means of e-mailing, social media, closed groups and chats, membership events.
- Dissemination of information among BSC partner companies, former and current clients, stakeholders of previous projects implemented by BSC via means of personal invitations, calls, e-mailing, etc.
- Dissemination of information among stakeholders of related organization. BSC has
 contacted those organizations which have ever implemented projects in green
 economy or other relevant spheres and potentially have stakeholders who can be
 interested in the current project.
- Dissemination of information through Social Media channels, such as official Facebook and Linkedin pages of BSC, related closed social media groups.
- Dissemination of information via mass media channels, such as article published by Banks.am.
- Personal Invitations to the state level stakeholders, such as Ministry of Environment of RA, Central Bank of RA, Ministry of Economy of RA. During the round tables BSC hosted representatives from Ministry of Environment of RA in the face of Deputy Minister Anna Mazmanyan and Secretary of the Board for the program Ani Khachaturyan.

As a result, BSC has received **167 registration** for the participation in the round tables, out of which **136 actually participated in the meetings**.

Moreover, the representatives of ArmSwissBank have participated in the round tables. Among the participants were Ara Makaryan, Deputy Head of Lending Department and Karen Sukiasyan, Deputy Head of Business Development Department.

Mr. Makaryan has made welcoming notes at the beginning of the round tables and was assisting in addressing the questions of round table participants.

The below table summarizes the distribution of five round tables by sector, number of participants per each round table and the date of implementation.

Table 1: Summary of the round tables

N	Sector	Number of participants	Date
1	Representatives of Agriculture and	43	July 27, 2021
	food processing sectors		
2	Representatives of manufacturing	24	July 29, 2021
	sector		
3	Representatives of Construction and	18	August 3, 2021
	Real-estate sectors		
4	Representatives of Service providers	25	August 5, 2021
5	Representatives of Financial Sector	26	August 10, 2021
	and relevant organizations		
Total number of participants		136	

Below are presented some photos from the round tables:









3. SCOPING STUDY ON PRIVATE SECTOR ENGAGEMENT

The round table participants who represented private sector were asked to fill in specially designed questionnaire after the meetings on a paper based format.

The main purposes of the questionnaire were as follows:

- Accessing maturity level and previous experience of beneficiaries in regards to green finance practices.
- Exploring interest, assessing capacity, bankability and readiness for activity of the beneficiaries in regards to green finance practices.
- Collecting feedback from the private sector on green finance.
- Identify private sector participants who want to be engaged in green finance projects.

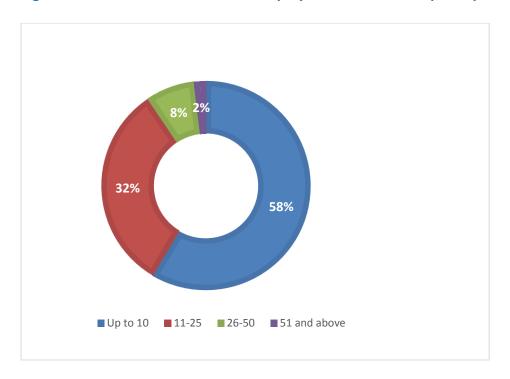
The questionnaire included the following main informational parts:

1) general information & company description; 2) green finance maturity level and previous experience with green finance instruments; 3) future plans with respect to Green finance.

As a result, 58 filled in questionnaires were collected. The responses were digitalized and analysed. The analysis of the survey is presented further.

Figure 1 represents the distribution of number of employees of the respondent companies. It is visible from the chart that the large proportion of round table participant companies have up to 10 employees (58%). The second highest proportion goes to companies who have from 11 to 25 employees (32%).

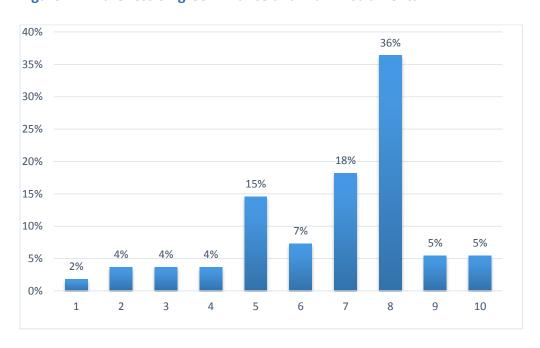




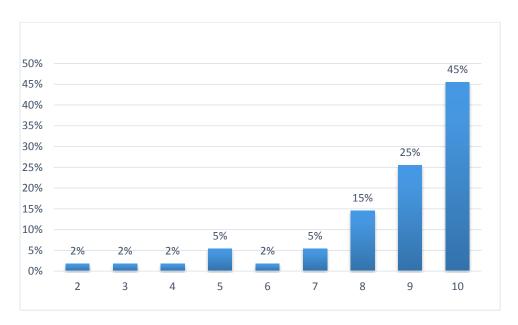
Further, the respondents were asked to rate their awareness level on green finance and its instruments from 1 to 10 scaling range, also taking into account their participation in the current round table (1 being the lowest and 10 being the highest level of awareness).

As seen from the above represented figure around 46% of round table participants ranked their knowledge on green finance as high (from 8 to 10 points).

Figure 2: Awareness on green finance and main instruments

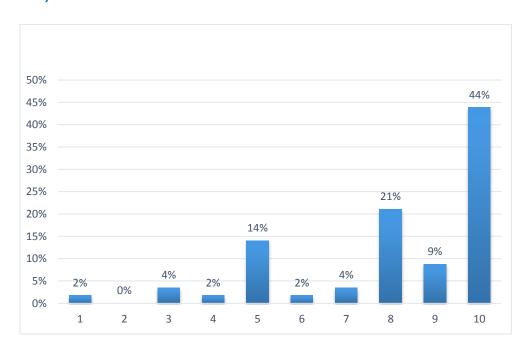






The respondents were asked to rank the degree of their company's concern on the environmental issues. As seen from the chart above, the large proportion of round table participants (45%) who filled in the questionnaire marked their degree of concern as highest (10).

Figure 4: Interest of respondent companies in green finance instruments (loans, leasing, etc.)



The above chart pictures that 44% of respondents are highly interested in green finance instruments such as green loans, leasing, etc. 30% of respondents ranked their interest high

as well (8, 9). This results shows that there is a huge potential and demand in the private sector in regards to development of green finance practices in Armenia.

On the other hand, just 16% of the respondents have already consumed green finance instruments as figured in the below chart, which shows the gap in the market and need of development of green finance market in Armenia.

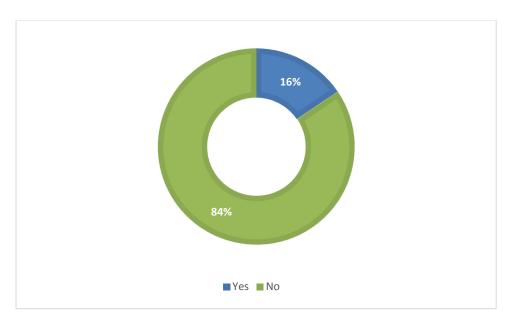
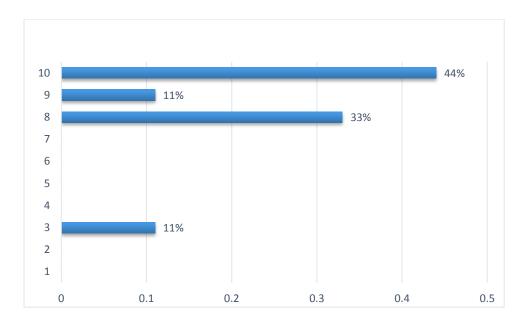


Figure 5: Experience in green finance

The respondents who had experience in green finance were asked to evaluate their level of satisfaction on the used instruments.

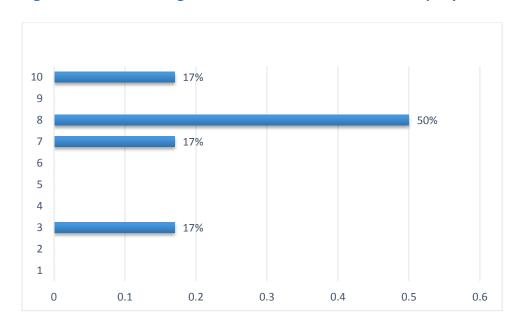
As the number of respondents who have consumed green finance instruments were small, thus the sample size of following two questions were relatively small, however from that sample size it can be noted that the satisfaction level of green finance instruments is high (respectively, 44%- 10 points, 11%- 9 and 33%- 8).

Figure 6: Satisfaction level on green finance instruments



Further was analysed the value/the level of usefulness bought by the consumed green finance instruments to the company. Below chart represents that the half of respondents (50%) ranked the factor with 8 points.

Figure 7: Value of used green finance instrument for the company



The next figure pictures distribution of respondents who have consumed green products (solar panels, solar water heaters, smart irrigation systems, etc.) in the last 5 years. As seen from the chart the large percentage of round table participants have invested in green products (71%).

Figure 8: Investments made in green products during the last 5 years

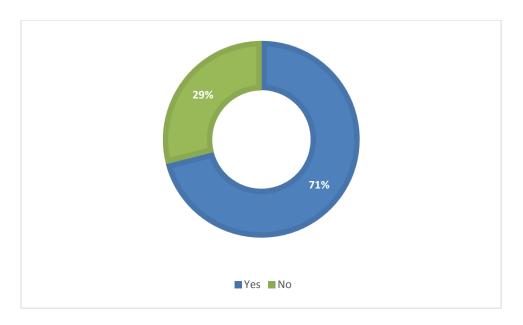
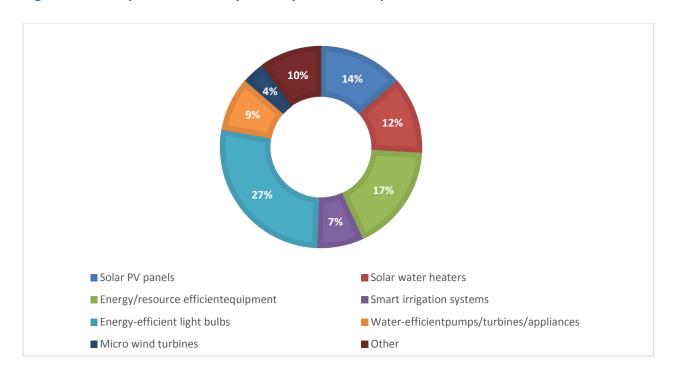


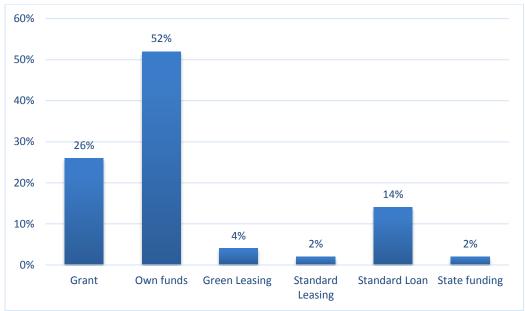
Figure 9 summaries the types of green products consumed and their distribution.

Figure 9: Green products used by the respondent companies



The largest share has energy efficient light bulbs (27%), followed by energy/resource efficient equipment (17%), solar PV panels (14%) and solar water heaters (12%). The smallest percentage has micro wind turbines (4%).

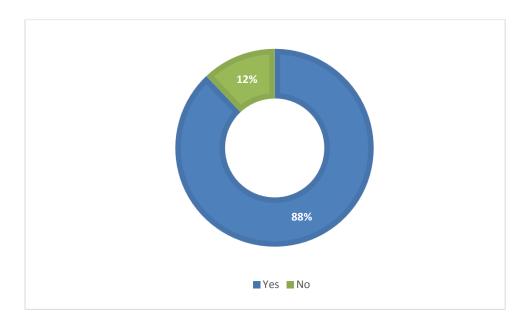
Figure 10: Source of funding of green products



Green products acquired by the respondents were financed by own funds in 52% of cases. On the second place as a source of financing are various grant programs (26%).

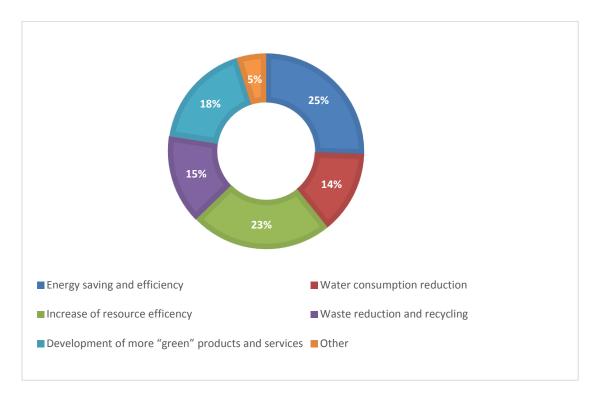
Further, future planned consumption of green products or implementation of green projects by the respondents were analysed. Remarkable that huge share of the respondents (88%) stated about their plans on future consumption of green products.

Figure 11: Future consumption of green products or implementation of green project



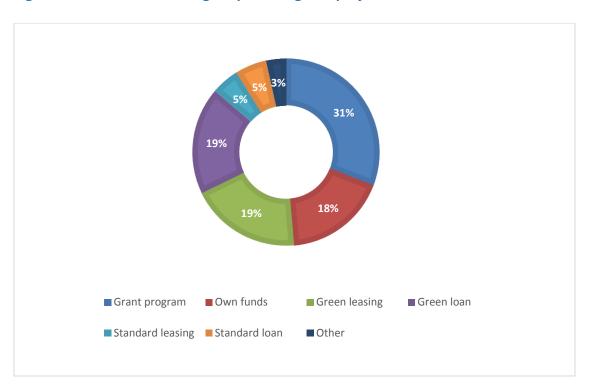
25% of the planned projects concerned energy saving and efficiency, followed by project associated with the increase of resource efficiency (23%).

Figure 12: Planned green project direction



Below are presented the planned sources of future projects.

Figure 13: Source of financing for planned green project



The largest share has grants and grant programs (31%) followed by green leasing and green loan (19% each) and own funds (18%).

Worth mentioning that 85% of the respondents stated that they plan to present a project within this current project financed by Green Climate Fund.

4. COLLECTION AND ANALYSIS OF POTENTIAL INVESTMENT PROJECTS

Under the assignment, for the screening phase of potential projects the following documents were developed:

- Screening template/ application form
- Application Form Guideline
- Evaluation methodology and criteria

The screening template (application form) consisted of 3 main section:

Section 1: Company Information

Section 2: Project Description and Rational

Section 3: Project Budget and Investment Plan

The 1st section basically included questions related to the company record, data, experience and expertise to assess the maturity and relevance of the applicant. The second section consisted of 11 open ended questions to describe the project from different prospective such as environmental, economic, business and social, to assess the risks, sustainability, innovativeness of the presented project. The last section referred to the budget amount, structure and breakdown, financial indicators and investment plan.

The application form guideline document provided details to potential applicants on all the conditions and terms of call for proposal and has described the procedure for application process.

For selection of 10 recommended investment projects evaluation criteria was developed. For evaluating each aspect of the project 1 to 10 scoring scale was used, and each aspect/ question had its own weight of coefficient based on the importance. Points received for each

question/ aspect was multiplied with the weight coefficient to calculate the points for each question. The maximum possible score was 360.

In the table below are presented the factors for evaluation and its weight.

Table 2: Evaluation template and criteria

Criteria	Description	Weighting
Maturity of the applicant	The previous experience, expertise, financial data and record of the company	2
Project Description	Project executive summary, rationale, objective and approach	5
Duration and lifespan	Estimated duration of the project and its lifespan	1
Mitigation impact	Contribution of the project to the GCF climate change mitigation goals	5
Adaptation impact	Contribution of the project to the GCF climate change adaptation goals	5
Other impacts	Any other positive contributions of the project on social or environmental agenda	1
Economic	Project's impact on a company from the business point of view	2
Innovation	Any innovative components, research & development components	1
Sustainability	Long-term sustainability of the project	1
Project management	How will applicant manage and deliver the project and its project-management capabilities	1
Risk management	Description of the main risk areas of the project and mitigation strategies	2
Budget and rationale	Details on budget, its structure and breakdown, investment plan and justification for GCF funding request	5
Financial indicators	Estimated financial payback of the project and other financial indicators	2

Overall	quality	of	the	The	maturity	level,	quality	and	3	
application	on			profe	ssionalism o	f the app	lication			

BSC has carried out active promotional activities to raise awareness about call for proposal opportunity and collect potential investment projects. The list of promotional activities was mainly the same as presented in the heading 2 (plus mailing to all round table participants). Due to these activities BSC has received applications not only from the round table participants, but from the representatives of other companies.

Call for proposal was announced on August 12 with a deadline until September 12, thus the interested entities had 4 full weeks for development of application form. Before the deadline for submitting the applications, BSC had a prior deadline for registration (August 30), meaning that the private sector representatives who intend to present a project, should register according to the guideline. BSC has received total of **69 registrations** for project proposals from different companies and PEs.

Even though the high number of project registrations, eventually **43 project applications** were submitted.

The consultants of BSC have contacted the representatives of private sector representatives who have registered but eventually have not presented an application for clarifying the reasons behind. Among the responses answers such as lack of time, lack of information, the project's scope's irrelevancy to their idea and other reasons could be found. However, based on the analysis of responses the main conclusion made by the consultants is that most of the private sector representatives have project ideas, however it is just a concept, and when it comes to formulating, modelling the project, presenting concrete calculations and justifications, here comes the difficulties for them. Another important reason was that most of the round table participants when registering did not imagine that the GCF funds are intended for larger scale projects with large project budgets, and as most of the round table participants where SME's their project ideas where irrelevant to GCF funding requirements.

During the one month period given for submission of the projects, BSC provided full support to the interested applicants assisting them with their technical questions related to the application form and presenting information on the project. Communication channels included e-mailing, social media and phone calls.

In the table below the summary of submitted 43 applications is presented

Table 3: Summary of projects

N	Legal Name of the applicant	Project Short Description	Total Project Budget (USD)
1	"Armen Stepanyan" PE	The project aims at building and developing towns /villages located along the historically important Silk Road, as well as development of tourism sector in the target area.	133,2 mln
2	Zohrab Hovhannisyan PE	Revolving Loan and insurance Schemes for three sectors of Armenia's Economy. Through that program to finance The development of Armenia in three directions 1. The construction of new Stations of Public Underground (Metro) Subway Transportation (regarded as a Clean Transport) 2. Modernization and development of Metal mining Industrial plants for reducing the emissions into atmosphere which means reducing the pollution of the environment 3. Through Revolving Credit and Insurance to finance the gardens and Orchards of a Small farmers and crop production for increasing the arable land	3 billion
3	PROFAL LLC	New manufacturing plant for Production of aluminum, metal, glass structures. The mission of the project is to further develop capacities for glass processing and production of aluminum windows and doors, and support better management and business practices in building and construction sectors that benefit people, nature and the climate.	23.8 mln
4	PROFAL LLC	The O2Gardens project is to create a horticultural/agriculture business including landscape design and architecture, plants production, and irrigation in the Republic of Armenia which will be unique in region and beyond the borders of the country.	21.4 mln
5	JINJ LTD	Establishment of wastewater removal and joint treatment system for Vardenik and Tsovinar settlements in lake Sevan basin.	
6	Status Holding LLC	Indoor green fodder production plant. The aim of the project is to grow ecologically clean, green fodder crops in a hydroponic manner, with a year- round cycle, which, regardless of the weather conditions, will provide the green fodder needed by the livestock population.	88,500
7	Status Holding LLC	Extraction of synthesis gas from organic waste. Gas supply to apartments, kindergartens, schools.	54,200

8	Eco Solution LLC	Production of natural spirulina by utilizing carbon	23 mln
		dioxide and releasing pure oxygen. The mission is	
		to discover and adopt technologies for	
		more environmental friendly food production for	
		climate responsible future.	
9	Galar Vines LLC	Establishing of high-value nature vineyard	29,000
		farmland, increasing	,
		agricultural resilience through water security, soil	
		regeneration and	
		carbon sequestration.	
10	Consortium Hart LLC and	Gogol Apartments: Sustainable living ecosystem in	3,5 mln
	Storaket Architectural	suburb of Yerevan. Objective 1. Change the status-	
	Studio (Legal name: Ket	quo of what residential buildings should be like by	
	Architect CJSC)	creating a building that fosters a community of	
		forward-looking individuals who value energy	
		efficiency, functionality and aesthetics.	
		Objective 2. To adapt cutting edge European	
		technologies to solve energy saving problems in	
		Armenia. Green solutions in construction.	
11	Vigen Nerkararyan PE	Solar energy for better water management and	4,3 mln
		food security for the Northern regions of Armenia.	
		Transform the existing fish farm into full	
		environment friendly farming business and make	
		it an alternative to harvesting of wild fish from	
		endangered water resources of Armenia and lake	
		Sevan in particular. 1. Solar panel station with the	
		capacity of 800 KW is installed. 2. 90 % of water	
		resources of the fish farm is recycled	
		3. Air pollution of the farm's operation is decreased by 2 times	
12	Armon LLC	Industrial Production of Fodder and Biofuels in	10 mln
12	Allion LLC	Armenia. The primary goal is to turn rocky, barren	10 111111
		lands into cultivated lands of agricultural	
		significance through mechanical and reclamation	
		works. Introducing smart irrigation systems,	
		building reservoirs where	
		Snowmelt and rainwater can be stored, later using	
		it for irrigation, using it for industrial fodder and	
		animal feed production.	
13	Consortium Shirak	Development of traffic management and ICT	49,9 mln
	Technologies and Armon	infrastructure to mitigate harmful ecological	
	LLC	impact on environmental condition in the country.	
		The Main objective of the Project is to create	
		Smart Traffic Management system to minimize	
		pollution and harmful environmental impact that	
		mainly focus at the core locations of growing	
		traffic – the main cause of polution. It is intended	
		to build a smart traffic management and control	
		system by building necessary infrastructure	
		smartly manageable, energy – efficient, highly	
		interactive, and configurable.	

			1
14	Consortium of "Indicum" LLC (food production)- lead organization and "Armenian Forests" Environmental NGO	Reducing green housing gas emission, promotion of healthy life and protection of the ecosystems through the changing of the dietary. Production of vegan food and delivery in environmentally friendly lunch boxes to the organizations, as well as awareness raising and advocacy of healthy vegan food and tree planting.	680,000
15	GREENDISH	Production of 100% eco disposable Tablewares. It is offered from ecologically clean raw materials (especially wheat bran, straw, grain husk and stem parts) which is obtained as a result of high pressure, heat treatment, to produce disposable tableware, which wil be used instead of plastic.	300,000
16	ECOWARM LTD	Biofuel Development Project. The company currently produces PINI KAY biofuel (200-250) kg per year (468-500) tons. Within the framework of the program, it is planned to increase production volumes by ten times. When producing new products, the waste will be used more efficiently, we will have thermal energy with effective solutions. The company will also establish its own nurseries near the workshop and uncultivated mountainous-field lands belonging to the community. The seedling will be a Swedish fast-growing tree (energy willow).	2,3 mln
17	METAPHOR LLC	The objective of the project is to implement three climate-smart food production systems in the same location in Khachardzan so the three subsystems would form one system as a synergistic whole. The three components are the following: aquaponics, intensive mushroom production, polyculture agroforestry.	1 mln
18	AirWorker LLC	Fixed wing UAV with a load capacity of 500 kg AW_7T. The AW_7T UAV is a standard aerodynamic scheme, fixed-flying aircraft. It has two electric or hybrid engines on top of wing. The implementation of the project will allow short-distance cargo transportation by electric-powered vehicles, thus reducing the use of vehicles with harmful emissions.	8 mln
19	Association of Young Journalists NGO	The aim of the presented program is to promote the introduction of green technologies in the neighboring communities of Koghb and to raise the living standards of the community through social entrepreneurship.	42,000
20	"Astghik Galstyan" P/E Brand - TEAYAN	The project envisages the creation of a complex, which will include a tea production, a teahouse, a	1,5 mln

		shop and showroom, and most interestingly, a	
21	MERSARER Holding LLC	plant museum. The company is specialized in traditional organic beekeeping and honey production. The main objective of this project is to introduce professional pollination services all over Armenia. A lot of new intensive orchards have been introduced recently and for proper yield, farmers will need pollination from honeybees. This service is not available in Armenia. Bees as pollinators play a crucial part in every aspect in our ecosystem. Introducing large number of beehives will benefit the natural ecosystem. With more honeybee pollination, farmers will be able to receive better quality fruits and vegetables and in larger quantities. Hence our project on the long run, will benefit the health of people and insure food socurity.	975,000
22	Armavir Fermerner LTD	insure food security. Establishment of Pavlovnia tree plantations as a business.	10,9 mln
23	Strategic Development Agency NGO	A new mobile app to help farmers in developing countries navigate through this new reality. The app builds its users a profile with information they input about their farm, including location, climate and crops. It gauges how resilient their farms are to climate change, then connects farmers to a number of technical farming practices that will help them overcome particular hurdles that traditional farming knowledge can't address.	90,000
24	Ecoline technology	Energy management and auditing for SME's. Consulting services to SME's on energy efficiency and other environmentally friendly solutions.	10,000
25	Engineer League CJSC	The overall objective of the project is to identify the main challenges and problems of waste management system in Armenia, as well as the opportunities for the development of circular economy in Armenia. Research and consulting project on increasing the waste management practices in RA	530,000
26	Arsen Chachoyan	The project implies purchase of recycling machine which is capable to recycle the old garment and make from it a new clothes. There is no need of water supply for this entire process which is needed in all other garment recycling processes.	1 mln
27	Patriotner LLC	The company plans to establish a Factory complex which will produce tea, coffee, spices, dried fruits, which will also include a greenhouse and a guest house separated by an ecologically clean recreation area. As a result of the project company plans to produce more ecologically clean products by using less water and energy.	15 mln

28	Brenmark LLC	Distribution and development of the use of biogas	1,2 mln
		plants in rural areas of the Republic of Armenia.	
29	Narine Harutyunyan PE	The program envisages the following events: 1. Establishment of energy forests, willow and	8,3 mln
		poplar plantations in Tavush region.	
		2. Production of fuel from the received raw	
		materials: pellets	
		3. Provision of pellet stoves for potential buyers.	
30	Vardan Karyan PE	The presented program, named EcoIntAgro, is a start-up project. It is a new tipe of farm with	1,3 mln
		agroecological solutions managed by innovative	
		technologies. This is a system where synergies are	
		created between livestock and crop units, that the	
		system works wasteless, the amount of feeder	
		components imported into the system is minimized, water and soil conservation are	
		paramount, and the innovative solutions	
		integrated in the system with this project, lead to	
		easy and operational management of the system.	
		The system will use solar and geothermal energy	
		sources, which makes the project more	
24	DAD Es alatin Es	ecologically friendly.	72.7
31	DAR Foundation For Regional Development	The Establishment of Agro College and Innovation Center (ACIC Project) in Gegharkunik Province.	73,7 mln
	And Competitiveness	The initiative is planned to be implemented under	
	7 ma competitiveness	a community development project (Gagarin	
		Project) undertaken by DAR Foundation	
32	Green Pik LLC	Manufacturing of innovative, new generation Eco-	50,8 mln
		friendly, low emission, energy saving heating and	
		cooling systems: "radiators". It is estimated that the innovation system will reduce the use of fuel	
		and water by 70%.	
33	Ibari LLC	Building Green factory as umbrella for Intensive	2 mln
		orchards and bee hives or Climate-Smart	
		Agriculture approach. The main purpose of the	
		project is to found 20 ha intensive orchards with	
		drip irrigation systems, 2,500 bee families in Aragatsotn, Armavir and Ararat regions of RA and	
		create a Green factory in Ashtarak which will use	
		the harvest of these orchards and produce jams,	
		preserves, honey and wine.	
34	AirWorker LLC (applying	Design and construction of a 10 Megawatt wind	12,3 mln
	in consortium with ArEG-	farm, as a source of ecologically clean electro	
25	ARS LLC)	energy.	10 E mln
35	Artcon LTD	Expansion of production of building structures/ technologies and provision of construction	10,5 mln
		services	
36	"DAR" Foundation For	RURBAN GAGARIN: Spatial Planning for	5 mln
	Regional Development	Sustainable Rural Community	
	And Competitiveness	Development in Gagarin settlement and	
		surrounding communities	

37	DAR Foundation for Regional Development and Competitiveness	Sustainable Water Resource Management under Climate Change in Armenia (SuWaMa). The goal of the project is to establish sustainable climate adaptive systems for management of water resources and their reuse in Gegharkunik Marz Gagarin district for ensuring the sustainable development of the target area.	95,3 mln
38	VAHAKRIS LLC	Recycling of used tires, production of rubber tiles, preparation of floors for sports and playgrounds	2,6 mln
39	ARMBASALT CJSC	Expansion of the production of continuous basalt fiber. Basalt fiber can be described as high performance non-metallic fiber, which does not contain any other additives in production. Due to its nature and properties, basalt fiber can be considered the material of our future with the perspective of green and sustainable development. They do not have any toxic reaction with water or air.	72,2 mln
40	GIG LTD	Waste management and recycling, development of biofuel from it.	145 mln
41	Daniel Varkhatyan PE	Solar Panels for a cluster of guesthouses in Lori region	600,000
42	Green Pik LLC	Reproduction of Californian worms, awareness raising, training activities about the benefits of it for the agricultural sector, ands sales	1.2 mln
43	Surik Sargsyan PE	Construction of hydroelectric power station.	2.3 mln

As a first stage of selection of potential projects, BSC shortlisted 23 projects based on the evaluation criteria. The shortlisted projects were sent to PwC, which were evaluated both by the international consultant from PwC and the local consultants from BSC. Based on the average score of PwC and BSC evaluation, 10 projects were selected. In the next chapter the selected projects will be describe in more details including justifying remarks for the selection.

5. SELECTED PROJECTS AND JUSTIFICATION

5.1. Project 1: Establishment of Agro College and Innovation Center

(Application # 31)

Title of the project	Establishment of Agro College and Innovation Center (ACIC Project)				
Sectorial Area	Environmental education, Science, Agriculture Strategic Pillar III – Agriculture, pastures, forestry – Adaptation				
Applicant	"DAR" Foundation For Regional Development And Competitiveness				
Project Location	Between Tsaghkunk and Ddmashen communities of Gegharkunik Province				
Executive Summary of	Establishment of Agro College and Innovation Center (ACIC				
the project	Project) in Gegharkunik Province. The initiative is planned to be				
	implemented under a community development project (Gagarin				
	Project) undertaken by DAR Foundation. Main goal of the project				
	is to improve the knowledge of environmental farming within				
	current and following generations of Armenian farmers in order				
	to mitigate the negative effects of agricultural activities on the				
	climate, as well as to lay the foundations for the development of				
	green agriculture.				
Contribution to	Forestry, land use and carbon sinks				
climate change mitigation	Other; Cattle Industry				
Contribution to	Health and well-being, food and water security				
climate change	Resilience of people and communities				
adaptation	Resilience of natural ecosystem and ecosystem services				

Financial aspects	Total amount of the project budget	73,730,000 USD
	Total amount of the GCF funding requested	14,000,000 USD
	Financial instrument(s)	Grant, Loan, Concessional loan,
	requested for the GCF funding	for example IDA terms
	Total amount of the other	59,730,000 USD
	source of financing	
Application Score	311	
Justification for selection	programme for the Re improve Armenian agri creation of a vocational e The applicant has a long The facility is part of a brough ("Project Gagarin") who reduction of emissions be the target area of the procession of the procession of the car impact of the Armen improving yields. The applicant will contribute from its own resources. The project is located development indicators as this procession of the project of the pro	history of operation in Armenia. oader rural development project ose climate targets are - 45% y 2030 and net zero by 2050 in oject. The agricultural practices with a bon footprint and environmental ian agricultural sector while oute 80% of the project's budget in a region of Armenia which are below the national average. The project file.
Areas for deeper consideration	·	of the climate adaptation and ributions of the project. More
	qualitative justifications of	

5.2. Project 2: Gogol Apartments: Sustainable living ecosystem in suburb of Yerevan

(Application # 10)

Title of the project	Gogol Apartments: Sustainable living ecosystem in suburbs of Yerevan	
Sectorial Area	Green Constructions and Architecture, Sustainable ecosystems Strategic Pillar I - Energy - Mitigation; Advancement energy efficiency	
Applicant	Consortium of Hart LLC and Storaket Architectural Studio (Legal name: Ket Architect CJSC)	
Project Location	Yerevan, Armenia	
Executive Summary of the project	The project consists of an extens project using modern technolo impact. The project includes set technical solutions for off-grid g temperature regulation and sma	gies to reduce climate change everal innovative and advanced generation of renewable energy,
Contribution to climate change mitigation	Energy access and power genera Urban development: buildings, in Waste management Forestry, land use and carbon sir	ndustries and appliances
Contribution to climate change adaptation	Resilience of infrastructure and built environment Health and well-being, food and water security Resilience of people and communities	
Financial aspects	Total amount of the project budget	3,522,000 USD
	Total amount of the GCF funding requested	2,500,000 USD
	Financial instrument(s) requested for the GCF funding	grant, loan
	Total amount of the other source of financing	1,022,000 USD
Application Score	302	
Justification for selection	 The project is in line with the Strategic Pillar I of the GCF programme for the Republic of Armenia. High-quality application with a strong argumentation how to respond to a changing climate by acting as a model for sustainable urban living. 	

	 The applicant will contribute 29% of the project's budget from its own resources. The residential building project is already in construction process proving high probability to become successfully finished. The project aims to be a pioneer of sustainable architecture in Armenia, where very few construction firms offer sustainable solutions, thus has the potential of increasing awareness and interest in sustainable buildings. Both the short-term impact (such as awareness raising of the public about successful model of sustainable urban living), as well as the long-term impact (such as the green and sustainable solutions of the green apartments) are presented in the project.
Areas for deeper consideration	 Limited quantification of the climate adaptation and climate mitigation contributions of the project in the application. The contributions are described in a qualitative way only. Only photo voltaic panels capacity (47 KW) is described.

5.3. Project 3: Establishment of Tire recycling plant (Application # 38)

Title of the project	Establishment of tire recycling plant	
Sectorial Area	Recycling Strategic Pillar VI – Technology transfer – Cross cutting; Technology centres	
Applicant	"VAHAKRIS" LLC	
Project Location	Yerevan, Armenia	
Executive Summary of the project	Project of the defective tire processing plant, where it will also produce rubber tiles, playground materials, flooring materials for sports grounds, and other parts. Strong contribution to the circular economy and reuse of waste.	
Contribution to climate change mitigation	Waste management Energy access and power generation Industrial processes	

Contribution to	Health and well-being, food and water security	
climate change adaptation	Resilience of natural ecosystem and ecosystem services	
Financial aspects	Total amount of the project	USD 2,620,000
	budget	
	Total amount of the GCF	USD 2,000,000
	funding requested	
	Financial instrument(s)	Grant, Other: loans or leasing
	requested for the GCF funding	
	Total amount of the other	USD 620,000 own investment
	source of financing	
Application Score	286	
Justification for selection	programme for the Re introduce circular econor the recycling of discarded new materials not yet profess. • From the sustainability aspect is that the project technology that it consulprocess. • The project plans to in produce renewable energy requirements of the plan. • The project is comprehent collection of the waste warehouses across Arme. • A positive impact for the reduction of abandoned landscape, as further was environment, but will be stations.	point of view another positive proposes to use "cold recycling" mes less energy in the recycling stall a solar power system, to gy that will fully meet the energy t. sively designed, in particular the tired through 10 tire storage
Areas for deeper consideration		has minimal track record of nenia.

 The project does not bring quantitative data about its environmental benefits, i.e. GHG emissions saved, etc. The contribution to the GCF's climate adaptation and climate mitigation objectives are described in a qualitative way only.
 Project management and risk consideration could be described more in detail.

5.4. Project 4: Expansion of Biofuel Production

(Application # 16)

Title of the project	Expansion of Biofuel Production		
Sectorial Area	Strategic Pillar I - Energy – Mitiga energy from renewable resource		
Applicant	"ECOWARM" LTD	"ECOWARM" LTD	
Project Location	Vanadzor, Lori Region, Armenia		
Executive Summary of the project	Biofuel project extension towards more efficient and sustainable production that will be braced by usage own planted innovative Swedish fast-growing tree as a source of thermal energy. The company will also establish its own nurseries near the workshop and uncultivated mountainous-field lands belonging to the community. The workshop will be powered by own solar power plant.		
	Within the framework of the p production volumes by ten times	•	
Contribution to	Energy access and power generation		
climate change mitigation	Forestry, land use and carbon sinks		
Contribution to climate change adaptation	Resilience of natural ecosystem and ecosystem services		
Financial aspects	Total amount of the project budget	2,300,000 USD	
	Total amount of the GCF funding requested	1,654700 USD	
	Financial instrument(s) requested for the GCF funding	grant, loan	
	Total amount of the other source of financing	645,300 USD	

Application Score	271
Justification for selection	The project is in line with the Strategic Pillar I of the GCF programme for the Republic of Armenia.
	 The project aims to finance the extension of current biofuel production facility towards more efficient and sustainable production. It plans to introduce in Armenia specially bred fast-growing tree species as its source of biomass.
	 The project will also establish its own nurseries of a Swedish fast-growing tree near the workshop and uncultivated mountainous-field lands belonging to the community.
	 Within the framework of the project, it is planned to create a solar power plant (370 kW) in the workshop and provide free heating to NGOs in several communities.
	28 % of the projected budget will be covered from own funds in the form of real estate and equipment.
	 The project will have a long-term impact on the local communities, lowering the carbon footprint and environmental impact of the domestic heating in Armenia.
	 Already Successfully operating company which reduces the project implementation risks.
Areas for deeper consideration	Detailed quantitative data and information about the climate benefits of the project are missing. The contribution towards climate mitigation and climate adaptation is only presented at a high level.

5.5. Project 5: Wastewater removal and joint treatment system in Lake Sevan basin

(Application # 5)

Title of the project	Establishment of wastewater removal and joint treatment system	
Sectorial Area	Strategic Pillar IV – Water – Adaptation; Water and Biodiversity	
Applicant	JINJ Ltd	
Project Location	Vardenik and Tsovinar settlemen	its in lake sevan basin, RA
Executive Summary of the project	The project aim is to ensure the cleanness of the Vardenis River, which feeds Lake Sevan, by extending and rehabilitating the wastewater systems of Vardenik and Tsovinar settlements, and by constructing a wastewater treatment plant for the joint treatment of domestic wastewater of the mentioned communities.	
Contribution to climate change mitigation	Not applicable	
Contribution to	Resilience of infrastructure and b	ouilt environment
climate change adaptation	Health and well-being, food and	water security
	Resilience of people and commu	nities
	Resilience of natural ecosystem and ecosystem services	
Financial aspects	Total amount of the project budget	USD 2,880,000
	Total amount of the GCF funding requested	USD 2,304,000
	Financial instrument(s) requested for the GCF funding	Grant
	Total amount of the other source of financing	USD 576,000
Application Score	264	
Justification for selection	 The project is in line with the Strategic Pillar IV of the GCF programme for the Republic of Armenia. It aspires to improve living conditions of local communities and to reduce the problem of wastewater-caused pollution of the rivers that feed the Lake Sevan, the largest freshwater body in Armenia. The project has a potential major contribution towards climate change adaptation. 	

	 The applying company has a strong history in public engineering projects.
	 The project includes a detailed technical description of the planned wastewater treatment activities leading to the restoration of the nitrogen / phosphorus ratio in the lake water, which in turn will contribute to the recovery / restoration of the ecosystem.
Areas for deeper consideration	 The final ownership of the wastewater treatment systems to be built is not clearly stated, as well as the role of the local communities in their management.
	 The applying private sector company does not plan to invest its own financial resources into the project. The remaining 20 % (USD 576,000) of the budget not covered by the GCF is expected to be financed by state/community budgets and other grants.
	 The funding from GCF is expected to be only in the form of grant.
	 The above mentioned 2 statements are connected with the fact that this is the only selected project that does not present a business model, and is a development project.

5.6. Project 6: Expansion of the production of continuous basalt fiber (Application # 39)

Title of the project	Expansion of the production of continuous basalt fiber
Sectorial Area	Strategic Pillar I - Energy - Mitigation; Advancement energy efficiency
Applicant	"ARMBASALT" CJSC
Project Location	Village Argel, Kotayk region, Armenia
Executive Summary of	Expansion of the production of continuous basalt fiber. Basalt
the project	fiber can be described as high performance non-metallic fiber, which does not contain any other additives in production. Due to its nature and properties, basalt fiber can be considered the material of our future with the perspective of green and sustainable development. They do not have any toxic reaction with water or air.

Contribution to	Energy access and power generation		
climate change	Industrial processes		
mitigation	Waste management		
Contribution to	Resilience of infrastructure and b	ouilt environment	
climate change adaptation	Health and well-being, food and	water security	
auaptation	Resilience of people and commu	nities	
Financial aspects	Total amount of the project budget	USD 78,22 million	
	Total amount of the GCF funding requested	USD 61,22 million	
	Financial instrument(s) requested for the GCF funding	Grant, loan, equity investment	
	Total amount of the other source of financing	USD 17 million	
Application Score	258		
Justification for selection	programme for the Repul to increase the energy processes of Armenian ba • The project aims to hav	the Strategic Pillar I of the GCF blic of Armenia. The project aims efficiency of the production asalt fiber. The an environmental, social and as to modern, environmentally	
		echnologies. unt with the reduction of energy and zero production waste or	
	with the perspective development. Basalt fib considered to be an ir	dered the material of our future of green and sustainable er-based filtration systems are mportant step towards solving s at nuclear-power plants (NPPs) s.	
		history of operation in Armenia. the project and its expected d in great detail.	
	from the other resource Fund (USD 4 million),	oute 22% of the project's budget is - Armenian National Interests commercial bank loan (USD 3 any's own investment (USD 10	

Areas for deeper consideration	 Limited quantification of the climate adaptation and climate mitigation contributions of the project. The contributions are described in a qualitative way only.
	 Comparatively low amount of investments directly targeting climate change in the project's budget.
	The requested investment needs further justification.

5.7. Project 7: O2 Gardens

(Application # 4)

Title of the project	O2 Gardens	
Sectorial Area	Agribusiness, Horticulture, Forestry	
	Strategic Pillar III – Agriculture, pastuary, forestry – Adaptation	
		, , , ,
Applicant	"PROFAL" LLC	
Project Location	Yerevan, Armenia	
Executive Summary of	The O2Gardens project is to create a horticultural/agriculture	
the project	business including landscape design and architecture, plants production, and irrigation in the Republic of Armenia which will	
	be unique in region and beyond the borders of the country.	
Contribution to	Energy access and power generation	
climate change	Urban development: buildings, industries and appliances	
mitigation	Forestry, land use and carbon sinks	
Contribution to	Resilience of infrastructure and built environment	
climate change adaptation	Health and well-being, food and water security Resilience of people and communities Resilience of natural ecosystem and ecosystem services	
adaptation		
Financial aspects	Total amount of the project	USD 21.4 million
	budget Total amount of the GCF	USD 16.1 million
	funding requested	030 10.1 1111111011
	Financial instrument(s)	grant, loan
	requested for the GCF funding	
	Total amount of the other	USD 5.3
	source of financing	million
		(Land contribution)
Application score	256	

Justification for The mission of the project is to develop and support better selection land management and business practices in agrobusiness, horticulture, and forestry sectors that benefit people, nature and the climate. The project is in line with the Strategic Pillar III of the GCF programme for the Republic of Armenia. Significant financial investment from the side of the applicant. High level of maturity of the applicant and long-term history. Very precise and mature description of project management The project includes comprehensive sustainability components such as renewable energy generation, energy savings measures, thus contributing to overall energy efficiency. The project considers social aspects such as Women's rights and Women's empowerment, a key aspect of gender integration in horticulture since women account for a large proportion of farmers. Areas for deeper Very detailed, but only qualitative description how the consideration project contributes to the climate mitigation and climate adaptation objectives. The quantitative contribution is absent. The project includes items not directly related to climate change contribution. The project funding needs and budget description could be described in more detail.

5.8: Project 8: Production of natural spirulina

(Application #8)

Title of the project	Production of natural spirulina	
Sectorial Area	Environmentally friendly food production Strategic Pillar III – Agriculture, pastuary, forestry – Adaptation	
Applicant	"Eco Solution" LLC	
Location	Yerevan, Armenia	
Executive Summary of the project	Ambitious project based on own research of innovative technology of vertical multilevel arrangement of photobioreactor spirulina production utilizing carbon dioxide and releasing pure oxygen. Energy supply provided by own solar panels.	
	The mission is to discover and adopt technologies for more environmentally friendly food production for climate responsible future.	
Contribution to	Energy access and power generation	
climate change mitigation	Industrial processes	
initigation	Forestry, land use and carbon sinks	
Contribution to	Health and well-being, food and water security	
climate change adaptation	Resilience of natural ecosystem	and ecosystem services
Financial aspects	Total amount of the project USD 13,100,000 budget	
	Total amount of the GCF funding requested	USD 11,100,000
	Financial instrument(s)	grant, loan, results-based
	requested for the GCF funding Total amount of the other	payment, equity investment USD 2,000,000
	source of financing	2,000,000
Application score	252	
Justification for selection	 The project is in line with the Strategic Pillar III of the GCF programme for the Republic of Armenia. The project has interesting innovative components to produce zero-carbon agricultural production. It also includes significant investments into climate change mitigating components – solar power plant, 	

	 photobioreactors. An additional benefit is to showcase advanced technologies for more environmentally friendly food production in Armenia. Strong long-term oriented aspect of health and wellbeing, food security and water security. Local production reduces carbon footprint of transportation. The advanced self-developed innovative technology of vertical multilevel arrangement of photobioreactors using less space and the rational use of the energy provided by own solar panels. Argumentation based on qualitative as well quantitative data based on already made own research. Projection of utilization of about 6,500 CO2 tons annually and release of 9,400-ton Oxygen annually. The applicant intends to commit significant own funds to the project financing. The prototype of the product is already available. The applicant had small plant.
Areas for deeper consideration	The applying company has been founded only on 2 September 2021 and has no operating history within the current company, however they have been operation under different company, ad as mentioned have a prototype of the product.

5.9. Project 9: Green construction technologies for professionals

(Application # 35)

Title of the project	Green construction technologies for professionals
Sectorial Area	Strategic Pillar VI – Technology transfer – Cross cutting; Technology centres
Applicant	Artcon CJSC building unit production & construction
Project Location	Yerevan, Armenia
Executive Summary of the project	The project "Depot Innovation District", an original programme, which provides the format in of clusters expected to afford an opportunity to construction professionals to apply up-to-date Green Technologies. The main goal is to boost usage new innovative more sustainable and climate change resistant materials and approaches in construction industry.

Contribution to	Energy access and power generation	
climate change mitigation	Urban development: buildings, industries and appliances	
IIILIgation	Industrial processes	
	Forestry, land use and carbon sinks	
	Other; Application of innovative technologies in construction of buildings	
Contribution to	Resilience of infrastructure and built environment	
climate change	Resilience of people and commu	nities
adaptation	Other; Use of earthquake more resistant constructing materials	
Financial aspects	Total amount of the project USD 10,500,000 budget	
	Total amount of the GCF	USD 8,200,000
	funding requested	
	Financial instrument(s) requested for the GCF funding	Loan
	Total amount of the other	USD 2,300,000 - Private
	source of financing	investments, capital
		investments
Application Score	249	
Justification for selection	 The project is in line with the Strategic Pillar VI – Technology transfer – Cross cutting of the GCF programme for the Republic of Armenia. It aims to improve building construction methods in Armenia toward to new green construction innovations. The applicant has a long history of operation in Armenia now trying to bolster new green innovative approaches. Long-term sustainability influence potential in Armenia due to green innovation hub for sharing knowledge and product innovations and connecting engineers, constructers, innovators, and professionals. Extension of a current technology production towards green technology innovative products. Own developed innovations - "the Simkar" and Rector floor framing technologies that reduce concrete consumption by 25 % and use of earthquake more resistant lighter construction materials. A really nice idea of a revitalization of the old brown field 	
Areas for deeper	 plants into a new modern innovation hub centre. Limited quantification of the climate adaptation and 	
consideration	climate mitigation contributions of the project. Only indirect connection towards climate adaptation and climate mitigation aspects mentioned.	

 Lack of information about project management, potential
risks or long-term sustainability of the project.
 Project proposal document is in a brief format.

5.10. Project 10: EcoIntAgro

(Application #30)

Title of the project	EcoIntAgro	
Sectorial Area	Strategic Pillar III – Agriculture, pastuary, forestry – Adaptation; Agriculture	
Applicant	Vardan Karyan – ecologist, private entrepreneur	
Project Location	Lori marz, Enlarged community Alaverdi, village Tsakhkashat, RA	
Executive Summary of the project	A start-up project intends to create a new type of farm with agroecological solutions managed by innovative technologies. The complex solutions system where synergies are created between livestock and crop units, ensure wasteless operation, water and soil conservation. The project is based on innovative solutions integrated in the system leading to easy and operational management of the system. The system will use solar and geothermal energy sources, which makes the project more ecologically friendly.	
Contribution to climate change mitigation	Energy access and power generation Urban development: buildings, industries and appliances Industrial processes Waste management Forestry, land use and carbon sinks Other; Application of innovative technologies in agriculture	
Contribution to climate change adaptation	Resilience of infrastructure and built environment Health and well-being, food and water security Resilience of people and communities Resilience of natural ecosystem and ecosystem services	
Financial aspects	Total amount of the project budget	USD 1,328,800

	Total amount of the GCF funding requested	USD 1,128,800	
	Financial instrument(s) requested for the GCF funding	Personal investment, capital investment, loan	
	Total amount of the other source of financing	USD 200,000	
Application score	245		
Justification for selection	The project is in line with the Strategic Pillar III of the GCF programme for the Republic of Armenia.		
	climate change mitigate reduction of greenhouse	 The project covers several important components for climate change mitigation and adaptation such as reduction of greenhouse gas emissions, saving freshwater resources, use of alternative energy sources, waste-free activities. 	
		 The project intends to bring innovative technologies to the Armenian agricultural sector to produce ecologically clean foodstuffs. 	
		The farm will use solar and geothermal energy sources to minimize the project's carbon footprint.	
Areas for deeper consideration	climate mitigation cont	 Limited quantification of the climate adaptation and climate mitigation contributions of the project. The contributions are described in a qualitative way only. 	
	record and data, which is	te individual, without company ncreases the project risk. Almost et is requested from GCF sources.	
		potential risks and financial a more detailed description.	

6. CONCLUDING REMARKS

The current assignment within the "Scaling Up Green Finance Practices in RA" was implemented in the planed scope and timeline with all the expected deliverables. Below can be found some concluding remarks and recommendations.

- S Large number of participants in the round table discussions (167 registration, 136 participants) and their active participation shows that there is interest in green finance and green project investment opportunities among private sector representatives. Remarkably, the highest number of participants was hosted from agriculture and food processing sector, which shows development potential in the mentioned industry by using green finance instruments.
- On the other hand, most of the round table participants were representatives of small and medium enterprises. 90% of participants were representing companies which have up to 25 employees. This statistics shows that SME's are more interested in such awareness raising events.
- S 74% percent of the private sector representatives participating in the round tables ranked their interest in green finance instruments such as green loans, green leasing as high (respectively 44%-10 points, 9%-9 points, 21%-7 points, 10 being the highest). On the other hand, just 16% of the respondents have already consumed any green finance instruments. This shows the gap in the market and huge development potential of green finance market in Armenia.
- \$ 71% of respondents have already consumed green products during the last 5 year, however a large proportion of the green products (27%) was energy efficient light bulbs, followed by energy/ resource efficient equipment (17%), solar PV panels (14%) and solar water heaters (12%). Worth highlighting, that 52% of acquisitions were financed by own funds and 26% by grant programs.

- 88% of respondents stated about their future plans and intention to consume green products or implement a green project. The main directions are energy saving and efficiency (25%) and increase of resource efficiency (23%). As a source of product/ project financing in 33% cases grant programs were mentioned, followed by green leasing (19%) and green loans (19%); as well as own funds (18%).
- So of the respondents stated that they plan to present a project within this current project financed by Green Climate Fund. Moreover, BSC has received 69 registrations with an intention to present a project proposal in the frames of current project. This once again proves the high interest of private sector in the green finance investment opportunities. On the other hand, BSC eventually received 43 applications. Based on the analysis, the main reasons behind this are as follows: firstly, as mentioned this type of awareness raising and informative events are more attractive for SMEs and most of the round table participants were representatives of mentioned scale companies. As GCF funds are intended for larger scale, big environmental change driven projects, most of the project ideas became irrelevant to this specific project scope. Secondly, most of the private sector representatives have project ideas, however it is just a concept, and when it comes to formulating, modelling the project, presenting concrete calculations and justifications, and investing time and costs on the development, it becomes challenging for the companies.
- § 10 recommended investment projects are selected based on the developed evaluation criteria and compliance with GCF Investment Criteria and Country Cooperation program. The full applications of selected projects are forwarded to ArmSwissBank to be further passed to the Ministry of Environment of RA for consideration.