



UPDATED LIST OF VARIABLE RENEWABLE ENERGY BUSINESSES TO RECEIVE USAID ENERGY PROGRAM TECHNICAL ASSISTANCE

INTRODUCTION

The objective of the USAID Energy Program (“Program”) is to support Georgia’s efforts to facilitate increased investment in power generation capacity as a means to increase national energy security and facilitate economic growth. The Program will have a significant impact on the energy market reform efforts of the Government of Georgia (GoG) to comply with the country’s obligations under the Energy Community Treaty (EnCT). The investment objective will be achieved through the provision of technical assistance to a variety of stakeholders in the energy sector.

The ultimate goal of this Program is to enhance Georgia’s energy security through improved legal and regulatory framework and increased investments in the energy sector. The expected outcome of this Program is an energy legal and regulatory framework that complies with European requirements and encourages competitive energy trade and private sector investments.

BACKGROUND

According to the contract, Task 3 has to support energy projects to become eligible for financing. The contractor shall provide technical assistance to no less than ten (10) eligible businesses that plan to construct and operate small and medium-size renewable energy generation projects, primarily Variable Renewable Energy (VRE) generation projects. Accordingly, in the first year (May 2018), the Program selected Ten Non-Hydro Renewable Energy Businesses to receive USAID Energy Program technical assistance.

The Program identified 48 non-hydro renewable energy projects. Out of 48 projects, the Program received detailed information from 21 projects. USAID Energy Program developed selection criteria as guidance in terms of selecting the 10 projects for further technical assistance. Those 10 VRE projects intended to receive further assistance are listed below.

#	Project Name	Developer	Installed Capacity
1	Tkibuli Wind Farm	Georgian Renewable Power Company (GRPC)	90 MW
2	Tbilisi Wind Farm	GRPC	100 MW
3	Marneuli Solar Plant	GRPC	50 MW
4	Kaspi Solar Plant	GRPC	50 MW
5	Gardabani Bio-Mass Cogeneration	Alternative Energy (AltE)	9 MW
6	Imereti Wind Farm	Infinite Energy	150 MW
7	Kvernaki Solar Plant	Solar Jam Jama; LKS	14 MW
8	Nigoza Wind Farm	Calik Eneji, Georgian Energy Development Fund (GEDF)	50 MW
9	Udabno Solar Plant	GEDF	5 MW
10	Gareji Solar Plant	Solar House	15 MW

In addition, the Program selected four (4) alternative options. In case any of the top priority 10 projects no longer require the Program’s support, it will be replaced by one of the four alternatives to fill the void.

#	Project Name	Developer	Installed Capacity
1	Plavi Solar Plant	Solar Jam Jama; LKS	14 MW
2	Martkopi Wind Farm	GRPC	100 MW
3	Kaspi Wind Farm	GRPC	50 MW
4	Plevi Wind Farm	GRPC	NA

UPDATES AND NEXT STEPS

The USAID Energy Program continues supporting the developers to make the selected VRE projects eligible for financing and technically feasible. The Program offered assistance to the selected businesses in technical, economic, financial, environmental, and regulatory issues.



Since 2018, the USAID Energy Program identified several additional possible viable VRE projects, moving forward but in need of assistance. The performed studies and consultations revealed that some developers made significant modifications in the technical specifications of their projects. Accordingly, USAID Energy Program updated list of VRE projects. The list of selected projects was extended up to twenty (20). Some of them were already included in the list of four alternative projects noted above.

The updated 20 VRE projects, selected to receive support from USAID Energy Program are listed below.

#	Project Name	Developer / Investor	Installed Capacity
1	Imereti 1 WPP	Infinity Energy	100
2	Nigoza WPP	GEDF; Calik	50
3	Tbilisi WPP	GRPC	54
4*	Kaspi WPP	GRPC	54
5*	Taba WPP	Anadolu Group	20
6*	Zestaponi WPP	GEDF, Geokraft	50
7	Udabno Solar PP	GEDF, Solar Power Georgia	5
8*	Borjomi Hybrid Biomass	New Technology Center (NTC)	10
9	Gardabani Bio Gas Project	Alt Energy	2
10	Kvernaki Solar Power Plant	LKS Solar	14
11*	Karaleti Solar Power Plant	LKS Solar	2
12*	Plavi Solar Power Plant	LKS Solar	7
13*	Ruisi WPP	Chero Consulting, GEDF	12.6
14	Tkibuli WPP	GRPC	50
15	Marneuli SPP	GRPC	50
16	Kaspi SPP	GRPC	50
17	Gareji SPP	LLC Solar House	15
18*	Off-grid Soalr PV Project	MRDI, UGT	0.3
19*	5MW SPP in Udabno	Alternative LTD	5
20*	Marneuli SPP	LKS Solar	50
Total in MW			600.90

*Note: projects marked by * were added to the initial selected 10 projects.*

The precise nature of support to be provided by USAID Energy Program depends on the requirements of the projects and the Program's ability to provide needed support. Certain type of assistance provided by the Program brings benefit to the overall renewable energy sector.

Direct support to the selected projects is distinct, depending on numerous factors such as the capabilities and knowledge of developers and the development stage of the project.

The developers requested USAID Energy Program to help in the technical, economic, financial, environmental, and regulatory issues. Assistance in the requested fields is essential not only for these particular developers but also for other projects.

Mostly selected projects are not in a late stage of the development, therefore require further support in analyzing project designs and feasibility studies. The USAID Energy Program will help selected businesses in the technical, economic, financial, environmental, and regulatory issues. At a subsequent stage, the Program will ensure the required support for financial closing.

Georgia can decrease energy imports by introducing more local renewable energy projects. Pushing construction of wind projects at an advanced stage will result in more than \$ 300 million in direct foreign investment, which will significantly strengthen Georgian Lari (GEL). These Projects will create employment for 2500 people, including permanent jobs for 375 individuals, let alone the multiplier effects and upstream supply chain effects.

For this reason, USAID Energy Program offered developers appropriate guidance and individual recommendations. Moreover, the Program will continue providing common recommendations and assistance to the project developers.

Annex of this document describes the list of updated selected VRE Projects that continuously are assisting through Task Three of the USAID Energy Program.

Annex 1: List of Selected VRE Projects with Technical Specifications.

ANNEX 1: LIST OF SELECTED VRE PROJECTS WITH TECHNICAL SPECIFICATIONS

#	Project Name	Developer / Investor	Installed Capacity (MW)	Estimated Annual Generation (Net GWH)	Estimated investment (USD)	Region	Project Status	PPA	Tariff	Access to the Network	Concept Note	MoU Signing date (planned year)	Date of Commence (planned year)
*1	Imereti 1 WPP	Infinity Energy	100	400	\$ 150,000,000.00	Imereti	Feasibility Study - Done ESIA - Submitted	Approved from MoF	Under the negotiation with GoG	Approved by GSE	Approved by GoG	Q 3-4 2020	2021
2	Nigoza WPP	GEDF; Calik	50	258.75	\$ 70,000,000.00	Shida Kartli	Feasibility Study - on the final stage ESIA - February 2021	Approved from MoF	Under the negotiation with GoG	Under the negotiation with GSE	Approved by GoG	October 2020	2021
3	Tbilisi WPP	Georgian Renewable Power Company (GRPC)	54	199.94	\$ 66,500,000.00	Qvemo Kartli	Feasibility Study - Done ESIA - Submitted	Approved from MoF	Under the negotiation with GoG	Approved by GSE	Approved by GoG	Q 3-4 2020	2021
4	Kaspi WPP	Georgian Renewable Power Company (GRPC)	54	204.8	\$ 71,500,000.00	Shida Kartli	Feasibility Study - Done ESIA - Submitted	Approved from MoF	Under the negotiation with GoG	Approved by GSE	Approved by GoG	Q 3-4 2020	2021



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5	Taba WPP	Anadolu Group	20	60.77	\$ 20,500,000.00	Mta-Sabueti	Feasibility Study	Under the negotiation with GoG	Under the negotiation with GoG	Under negotiation with GSE/MOESD			2020-2021
6	Zestaponi WPP	GEDF, Geokraft	50	162	\$ 6,500,000.00	Imereti	Pre-Feasibility Study	Under the negotiation with GoG	Under the negotiation with GoG	Under negotiation with GSE/MOESD			2021-2022
7	Udabno Solar PP	GEDF, Solar Power Georgia	5	6.9	\$ 4,800,000.00	Kakheti	Feasibility Study	Under the negotiation with GoG	Under the negotiation with GoG	Approved by GSE			
8	Borjomi Hybrid Biomass	New Technology Center (NTC)	10		\$ 10,200,000.00	Samtskhe-Javakheti	Final Feasibility Study; Under the negotiation with MOESD and GEDF						
9	Gardabani Bio Gas Project	Alt Energy	2	25.9	\$ 4,100,000.00	Gardabani	Pre-Feasibility Study						
10	Kvernaki Solar Power Plant	LKS Solar	14	19.84	\$ 708,000.00	Gori	Pre-Feasibility Study						



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11	Karaleti Solar Power Plant	LKS Solar	2	2.87	\$ 2,051,495.00	Gori	Pre-Feasibility Study						
12	Plevi Solar Power Plant	LKS Solar	7	10.36	\$ 7,180,229.00	Gori	Pre-Feasibility Study						
13	Ruisi WPP	Chero Consulting, GEDF	12.6	63	\$ 16,000,000.00	Kareli	Feasibility Study	Under the negotiation with GoG	Under the negotiation with GoG	Under negotiation with GSE/MOE SD			2020-2021
14	Tkibuli WPP	Georgian Renewable Power Company (GRPC)	50	321	\$ 69,990,250.00	Imereti	Pre-Feasibility Study						
15	Marneuli SPP	Georgian Renewable Power Company (GRPC)	50	67	\$ 49,084,875.00	Kvemo Kartli							



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16	Kaspi SPP	Georgian Renewable Power Company (GRPC)	50	66	\$ 49,084,875.00	Shida Kartli							
17	Gareji SPP	LLC Sun House	15			Kakheti							
18	Off-grid Soalr PV Project	MRDI (EPC contractor - UGT)	0.3	0.08	\$ 1,150,000.00	Off grid villages in Georgia	Operating	NA	NA	Off grid	Approved by GoG	April, 2019	2019-2020
19	Solar Power Plant in Udabno	Solo / Alternative Energy	5			Kakheti		N/A	N/A				
20	Marneuli SPP	LKS Solar	50	68.75	\$ 36,000,000.00	Kvemo Kartli	Pre-Feasibility Study			Under negotiations		2022	2023
Total			600.90	1,937.96	\$ 635,349,724.00								

*Note: Projects marked by * were added to the initial selected 10 projects*