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SURVEY RESULTS AND CONSENSUS ON SELECTED SUPPORT SCHEMES FOR RENEWABLE ENERGY

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18 January 2019

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DATA

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Practice Area: Renewable Energy Development Support

Key Words: Renewable Energy, Support Scheme, Survey Results and Consensus

ACRONYMS

EnCT	Energy Community Treaty
EU	European Union
GoG	Government of Georgia
USAID	United States Agency for International Development
MoESD	Ministry of Economy and Sustainable Development of Georgia
CFD	Contract for Difference
CPPA	Corporate Power Purchase Agreement
FiT	Feed in Tariff
GoG	Government of Georgia
GPPA	Government Power Purchase Agreement
IPP	Independent Power Producer
PPA	Power Purchase Agreement
PPP	Public Private Partnership
REC	Renewable Energy Certificate
ROC	Renewable Obligation Certificate
VAT	Value Added Tax
VRE	Variable Renewable Energy

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INTRODUCTION

In October 2016, Georgia signed the Energy Community Treaty (EnCT) signaling the country's commitment to direct future energy planning and market development towards approximation with the European Union (EU). This step commits Georgia to enhancing the security of energy supply by promoting the development of relevant infrastructure, increasing market integration and gradual regulatory approximation towards key elements of the EnCT, and promoting the use of renewable energy sources. In order for Georgia to meeting its strategic commitments in the energy sector, the United States Agency for International Development (USAID) is providing technical assistance and policy advice on legal, regulatory and institutional reform issues, including facilitating investment and deal structuring, engineering and environmental analyses, financial planning, and outreach, and other consulting. This technical assistance, ("USAID Energy Program") is being rendered by Deloitte Consulting LLP, under a USAID contract, AID-OAA-I-13-00018.

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

The purpose of USAID Energy Program is to: (1) support Georgia in energy market development per Georgia's obligations under the EnCT, (2) build the capacity of the GoG and relevant institution(s) to evaluate the fiscal and long-term impacts of regulatory changes, (3) promote energy investments, primarily in variable renewable energy development, (4) to support integration of non-hydro renewable energy into the power system, and (5) provide strategic advisory services to the GoG to increase Georgia's energy security.

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 ultimate expected outcome of this Program is an energy market legal and regulatory framework that complies with European requirements and encourages competitive energy trade and private sector investments.

USAID Energy Program is tasked under its contract, AID-OAA-I-13-00018, to assist the Ministry of Economy and Sustainable Development of Georgia (MoESD) in developing a support scheme for encouraging investment in electricity generation infrastructure to promote the development of energy generation from a diversified source of native resources.

"USAID Energy Program will survey and form a consensus of Renewable Energy developers and other stakeholders on the preferred support schemes".

Accordingly, USAID Energy Program is providing these survey results.

SUMMARY

USAID Energy Program supports the MoESD in the identification of transition countries with relevant experience related to the implementation of Renewable Energy. USAID Energy Program team prepared a proposal for renewable energy support schemes to the GoG. USAID Energy Program supports the MoESD and / or other public entities to implement the selected support schemes, assist the counterparts in developing an enabling environment and promote the new schemes upon identification.

SURVEY RESULTS AND CONSENSUS

USAID Energy Program developed reports on the “Renewable Energy Support Schemes”, and “International Best Practices on Support for Renewable Energy Schemes”. The reports provide a general framework of incentives for renewable energy support including Tax, Financing, Contractual and Regulatory, Operational, Land and Network incentives. The documents envisage need for the optimal utilization of renewable energy resources. The aim of the incentives is to promote the development of non-hydro renewable projects and respond to challenges of a new energy market.

In order to assist the MoESD and / or other public entities to implement the selected support schemes, support counterparts in developing an enabling environment and promote the new schemes upon identification, USAID Energy Program held several meetings with various stakeholders and discussed the possible incentive schemes that might be reflected in the relevant primary / secondary legislative acts. In view of stakeholders’ feedback, the Program developed a shortlisted Incentives Schemes for Renewable Energy Development which were presented to the Investor Advisory Group Members.

To select the best support mechanisms, USAID Energy Program surveyed the participants of Investor Advisory Group meeting, held on December 28, 2018 on Renewable Energy Support. The survey revealed the most imperative incentives in view of the developers which comprise the Improved Net Metering Regulation (8 scores); Network Connection (8 scores); Tax Exemptions (7 scores); and Feed in Tariffs (7 scores).

Annex 1 – Renewable Energy Incentives Scheme Survey.

Annex 2 – Renewable Energy Incentives Scheme Survey Results.

RENEWABLE ENERGY INCENTIVES SCHEME SURVEY

Please rate each incentive from 0 to 5 (0 = low importance, 5 = high importance)

#	Type of Incentives	Description	0	1	2	3	4	5	Comment
Tax Incentives									
1	Tax exemptions (Value Added Tax (VAT), Import duties for Renewable Energy)	Tax exemption generally refers to a legal exception to a general rule rather than the mere absence of taxation in particular circumstances, otherwise known as an exclusion. Tax exemption also refers to removal from taxation of a particular item rather than a deduction. e.g. 10-year tax exemption for non-hydro investments will allow to survive projects better.							
2	Property tax financing	All resident organizations pay a tax on assets recorded as the principal means on its balance, uninstalled equipment, uncompleted construction, as well as leased property. Non-resident enterprise on the property being in the territory of Georgia pay a tax on assets recorded as the principal means on its balance, uninstalled equipment, uncompleted construction, as well as leased property.							
Financial incentives									
3	Soft Loan	Loan with a below-market rate of interest. This is also known as soft financing. Sometimes soft loans provide other concessions to borrowers, such as long repayment periods or interest holidays. Soft loans are usually provided by governments to projects they think are worthwhile. E.g. if offer a state debt instrument for 15 years plus with an interest rate below 5 % this will allow the investors to invest and encourage local investments.							
4	Loan guarantees	Loan guarantees are examples of a public instrument, they offer protection to financiers against risks and make it possible to mobilize commercial financing for the necessary terms and at acceptable costs. If Georgia offer Loan Guarantees to local players, this will enable local developers to explore smaller projects along with larger units. Globally this has been very effective in kick starting small scale solar rooftop schemes, small scale bio gas and bio mass schemes.							
Contractual & Regulatory Frameworks									
5	Feed in Tariffs (FITs)	A FIT is a predetermined price for every unit of electricity generated by a Renewable Energy power plant, paid through a long-term contract. Typically, projects must meet certain eligibility criteria and receive authorization from a government body to receive the FIT (and usually preferential grid access as well).							
6	Feed-in premiums	Producers (above a certain installed capacity) will be required to sell their renewable electricity directly on the energy market and will receive a certain premium over the market price.							
7	Corporate Power Purchase Agreements (CPPAs)	Corporate PPAs are contracts that contain the commercial terms of the purchase of renewable energy, such as the contract period, point of delivery, delivery date/times, volume, price and product. CPPAs generally referred to the private sector chain, this is very effective tool to promote investments.							
8	Government Power Purchase Agreements (GPPAs)	Government PPAs are contracts that contain the commercial terms of the purchase of energy, such as the contract period, point of delivery, delivery date/times, volume, price and product. GPPAs are regulated within the conditions of the Law of Georgia on Public Private Partnership (PPP).							
9	Public Private Partnership	PPP model is a profitable agreement between a public sector and a private party, in which the private party assumes substantial financial, technical and operational risk in design, financing, building and operation of a project.							
10	Reverse Auction and tender system	Reverse auctions for Independent Power Producers (IPPs) involve the competitive procurement of energy, whether at a specific site or without specifying where a new plant must be built							
11	Green Fee (The Renewable Energy Charge)	A fee paid by electricity consumers to finance the subsidy paid to renewable energy producers. E.g. the Renewable Energy Charge will be paid by all consumers in proportion to their consumption, and / or all tourist to pay 1 USD per day per person.							

								<i>Please rate each incentive from 0 to 5 (0 = low importance, 5 = high importance)</i>					
#	Type of Incentives	Description	0	1	2	3	4	5	Comment				
12	Improved net metering regulation	Also referred as “behind the meter” pricing, net metering allows the customer to sell electricity back to the grid, typically at the same rate as a utility tariff, and pay only for the net amount of grid power consumed. GoG should increase amount of the determined capacity to connect the distribution network and adopt virtual metering system.											
13	Contract for Difference (CFD)	Is a long-term contract between an electricity generator and customer, when the market price for electricity generated by a CFD Generator is below the Strike Price set out in the contract, payments are made by customer to the CFD Generator to make up the difference. However, when the reference price is above the Strike Price, the CFD Generator pays customer the difference.											
Operational incentives													
14	Renewable "Energy Quota" Obligations and 'Must Take' requirements	A widely used “must take” requirements and / or renewable "energy quota" obligations – because wind and solar provide power only when the resources are available, they are frequently contracted as “must-take” generators, where their output is always used when it is available.											
15	Green Certificate	A green certificate is a tradable asset which proves that electricity has been generated by a renewable (green) energy source. It is also referred to as Renewable Energy Certificate (REC) or Renewable Obligation Certificate (ROC). Renewable Energy power plants will be awarded RECs based on its generated energy or installed capacity.											
Land and Network Connection													
16	Priority dispatching to the grid for Renewable Energy	Renewable energy should have priority dispatching to the grid, meaning that it should be sold first to electricity system operators.											
17	Network Connection	The grid availability is the essential condition for project implementation. If the network is not able to accept power from the Variable Renewable Energy (VRE) plants, may have adverse effects on the economics of the project. The substation and transmission line capacity need to be aligned with the capacity of the plant being developed. Facilitate integration of Renewable Energy into the grid. The capacity limits should be increased for non-hydro renewables to Integrate into the grid.											
18	Land Purchase Price and Exclusive land rights	To promote the Renewable Energy projects, the support mechanism is to provide state land for free or symbolic price on the agreed period, also granting an exclusive right on it. Will be regulated under the Law of Georgia on PPP.											
Other, please specify in any:													

RENEWABLE ENERGY INCENTIVES SCHEME SURVEY RESULTS

#	Type of Incentives	Description	Top Scores					
			0	1	2	3	4	5
12	Improved net metering regulation	Also referred as “behind the meter” pricing, net metering allows the customer to sell electricity back to the grid, typically at the same rate as a utility tariff, and pay only for the net amount of grid power consumed. GoG should increase amount of the determined capacity to connect the distribution network and adopt virtual metering system.	0	0	3	2	2	8
17	Network Connection	The grid availability is the essential condition for project implementation. If the network is not able to accept power from the Variable Renewable Energy (VRE) plants, may have adverse effects on the economics of the project. The substation and transmission line capacity need to be aligned with the capacity of the plant being developed. Facilitate integration of Renewable Energy into the grid. The capacity limits should be increased for non-hydro renewables to integrate into the grid.	1	0	2	1	4	8
1	Tax exemptions (Value Added Tax (VAT), Import duties for Renewable Energy)	Tax exemption generally refers to a legal exception to a general rule rather than the mere absence of taxation in particular circumstances, otherwise known as an exclusion. Tax exemption also refers to removal from taxation of a particular item rather than a deduction. e.g. 10-year tax exemption for non-hydro investments will allow to survive projects better.	3	3	1	1	1	7
5	Feed in Tariffs (FITs)	A FIT is a predetermined price for every unit of electricity generated by a Renewable Energy power plant, paid through a long-term contract. Typically, projects must meet certain eligibility criteria and receive authorization from a government body to receive the FIT (and usually preferential grid access as well).	3	1	0	0	5	7
3	Soft Loan	Loan with a below-market rate of interest. This is also known as soft financing. Sometimes soft loans provide other concessions to borrowers, such as long repayment periods or interest holidays. Soft loans are usually provided by governments to projects they think are worthwhile. E.g. if offer a state debt instrument for 15 years plus with an interest rate below 5 % this will allow the investors to invest and encourage local investments.	3	2	1	2	2	6
7	Corporate Power Purchase Agreements (CPPAs)	Corporate PPAs are contracts that contain the commercial terms of the purchase of renewable energy, such as the contract period, point of delivery, delivery date/times, volume, price and product. CPPAs generally referred to the private sector chain, this is very effective tool to promote investments.	0	0	5	2	3	6
8	Government Power Purchase Agreements (GPPAs)	Government PPAs are contracts that contain the commercial terms of the purchase of energy, such as the contract period, point of delivery, delivery date/times, volume, price and product. GPPAs are regulated within the conditions of the Law of Georgia on Public Private Partnership (PPP).	1	1	1	5	2	6
9	Public Private Partnership	PPP model is a profitable agreement between a public sector and a private party, in which the private party assumes substantial financial, technical and operational risk in design, financing, building and operation of a project.	0	2	1	4	2	6
16	Priority dispatching to the grid for Renewable Energy	Renewable energy should have priority dispatching to the grid, meaning that it should be sold first to electricity system operators.	2	0	1	2	5	6
18	Land Purchase Price and Exclusive land rights	To promote the Renewable Energy projects, the support mechanism is to provide state land for free or symbolic price on the agreed period, also granting an exclusive right on it. Will be regulated under the Law of Georgia on PPP.	1	1	3	1	3	6
6	Feed-in premiums	Producers (above a certain installed capacity) will be required to sell their renewable electricity directly on the energy market and will receive a certain premium over the market price.	3	1	2	3	2	5

14	Renewable "Energy Quota" Obligations and 'Must Take' requirements	A widely used "must take" requirements and / or renewable "energy quota" obligations – because wind and solar provide power only when the resources are available, they are frequently contracted as "must-take" generators, where their output is always used when it is available.	2	0	3	2	3	5
15	Green Certificate	A green certificate is a tradable asset which proves that electricity has been generated by a renewable (green) energy source. It is also referred to as Renewable Energy Certificate (REC) or Renewable Obligation Certificate (ROC). Renewable Energy power plants will be awarded RECs based on its generated energy or installed capacity.	0	1	2	6	1	5
2	Property tax financing	All resident organizations pay a tax on assets recorded as the principal means on its balance, uninstalled equipment, uncompleted construction, as well as leased property. Non-resident enterprise on the property being in the territory of Georgia pay a tax on assets recorded as the principal means on its balance, uninstalled equipment, uncompleted construction, as well as leased property.	5	3	0	3	1	4
11	Green Fee (The Renewable Energy Charge)	A fee paid by electricity consumers to finance the subsidy paid to renewable energy producers. E.g. the Renewable Energy Charge will be paid by all consumers in proportion to their consumption, and / or all tourist to pay 1 USD per day per person.	3	0	1	3	3	4
13	Contract for Difference (CFD)	Is a long-term contract between an electricity generator and customer, when the market price for electricity generated by a CFD Generator is below the Strike Price set out in the contract, payments are made by customer to the CFD Generator to make up the difference. However, when the reference price is above the Strike Price, the CFD Generator pays customer the difference.	2	0	2	3	2	4
4	Loan guarantees	Loan guarantees are examples of a public instrument, they offer protection to financiers against risks and make it possible to mobilize commercial financing for the necessary terms and at acceptable costs. If Georgia offer Loan Guarantees to local players, this will enable local developers to explore smaller projects along with larger units. Globally this has been very effective in kick starting small scale solar rooftop schemes, small scale bio gas and bio mass schemes.	4	3	0	3	4	2
10	Reverse Auction and tender system	Reverse auctions for Independent Power Producers (IPPs) involve the competitive procurement of energy, whether at a specific site or without specifying where a new plant must be built	1	1	3	4	2	2

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