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ANALYSIS OF IDENTIFIED ISSUES AND BARRIERS ADDRESSING TO RENEWABLE ENERGY DEVELOPMENT

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ACRONYMS

CEO	Chief Executive Officer
CO2	Carbon Dioxide
DIgSILENT	Power System Software and Engineering Company
DSO	Distribution System Operator
EE	Energy Efficiency
EIA	Environmental Impact Assessment
EnCT	Energy Community Treaty
ESCO	Electricity Market Operator / Electricity System Commercial Operator
EU	European Union
FiT	Feed-in Tarif
FS	Feasibility Study
GEDF	Georgian Energy Development Fund
GGU	Georgia Global Utilities Group
GNERC	Georgian National Energy and Water Supply Regulatory Commission
GoG	Government of Georgia
GREDA	Georgian Renewable Energy Development Association
GSE	Georgian State Electrosystem
HPP	Hydro Power Plant
kV	Kilovolt
kW	Kilowatt
LCR	Local Content Requirement
MoESD	Ministry of Economy and Sustainable Development of Georgia
MoF	Ministry of Finance of Georgia
MW	Megawatt
NREAP	National Renewable Energy Action Plan
PPA	Power Purchase Agreements
PPP	Public-Private Partnership
PV	Photovoltaic
RES	Renewable Energy Sources
TSO	Transmission System Operator
TYNDP	Ten Year Network Development Plan
USAID	United States Agency for International Development
VAT	Value-Added Tax
VRE	Variable Renewable Energy
WPP	Wind Power Plant

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INTRODUCTION

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

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

The purpose of the USAID Energy Program is to:

1. Support energy market development in Georgia per the country's obligations under the EnCT;
2. Build the GoG's capacity to evaluate the fiscal and long-term impacts of regulatory changes;
3. Promote energy investment, especially in variable renewable energy development;
4. Support the integration of non-hydro renewable energy into Georgia's power system;
5. Provide strategic advisory services to the GoG to increase Georgia's energy security.

The goal of this program is to enhance Georgia's energy security by improving the legal and regulatory framework for the energy market and increasing investments in the energy sector. Ultimately, the expected outcome of this program will be the implementation of a legal and regulatory framework that complies with the EnCT and other applicable EU requirements, encourages competition within the energy market, and galvanizes private sector investment.

Under the contract AID-OAA-I-13-00018, task **3.1.1. Collect and Analyze the Barriers**, USAID Energy Program provides a report on identifying and addressing specific challenges to energy sector investment and analyzes for those issues. USAID Energy Program evaluates the renewable energy project development and investment process and proposes possible improvements.

EXECUTIVE SUMMARY

To improve national energy security, one of the main directions is the diversification of supply sources and efficient utilization of local energy potential. Local demand for electricity shall be satisfied by own energy resources, through replacing imported energy carriers' step by step.

The development of renewable resources is key to tackling climate change and deploying cleaner sources of energy. Georgia is remarkably rich in the potential of Renewable Energy Sources (RES), which can be used for the creation of additional capacity by means of domestic and foreign investments. To achieve this goal, it is vital to improve investment climate through the creation of a stable, transparent and non-discriminatory legal basis; through deepening strong and stable trading relations with neighboring countries' energy markets; through the development of corresponding domestic and cross-border infrastructure.

By signing the Protocol Concerning the Accession of Georgia to the Treaty Establishing the Energy Community, on October 14, 2016; ratified by the Parliament of Georgian on April 21, 2017, Georgia has committed itself to a series of transformation in the energy sector. The main objective of the market opening is to entitle each eligible customer in Georgia to a free choice of the supplier and its change. In order to meet the obligations under the treaty, and comply with relevant EU Acquis, Georgia has to fully deregulate and liberalize energy market. The Liberalized Market will ensure the security of supply, efficient market competition which provides electricity to customers at fair, transparent and cost reflective prices.

To satisfy the growing demand for electricity in the country, numerous measures need to be implemented. The measures at the same time should correspond to the commitments undertaken within the scope of cooperation between EU and Georgian Government in the energy sector. As required by Directive (2009/28/EC) and based on consultations with Energy Community Secretariat, Georgia is going to set the national target as 30% of renewable energy in energy mix by 2020[1]. Construction of new renewable power plants will increase the share of clean energy in the energy mix, decrease import dependence and create more opportunities for integration with neighboring systems.

Georgia wants to facilitate the utilization of the country's clean energy potential and enable the country to become a regional platform for clean energy trading.

In order to meet the demand GoG has a solid position in creating strong and stable climate for investments. Consequent to the EU harmonization process the Parliament of Georgia just adopted the Law on Public-Private Partnership (PPP). With the support of USAID Energy Program the Ministry of Economy and Sustainable Development of Georgia (MoESD) is working on developing secondary legislation on Support Mechanisms for promoting renewable energy in Georgia.

Despite its significant benefits, the integration of non-hydro renewable energy into the Georgian power system is one of the big challenges for power system stability. More than 80% of consumption covered by "Clean energy" produced almost by Hydro Power Plants (HPP). On the other hand, due to small system size (low inertia constant) and radial layout of Georgian system, security of supply is important challenge. The implemented measures should ensure both power reserves and stability.

As for integration of renewables (solar, wind), it's restricted. A recent study by DIgSILENT showed that by 2020 up to 460 MW (130 MW Solar, 330 MW wind), of Variable Renewable Energy (VRE) could be added on the Georgia electricity system without requiring any additional operating reserves. VRE stations were divided into 4 geographical regions: west, central west, central east and east. The VRE integration capacity doubles in 2025 – 920 MW (260 MW solar, 660 MW wind), and by 2030 the maximum VRE integration capacity reaches – 1850 MW (520 MW solar, 1330 MW wind).[2]

USAID Energy Program is supporting wind and solar farm developers and Georgian State Electrosystem (GSE) (Transmission System Operator (TSO)) in integrating new VRE plants into the electricity grid.

[1] MoESD -Draft of National Renewable Energy Action Plan (NREAP)
[2] GSE – Ten Year Network Development Plan (TYNDP) 2019-2029

IDENTIFIED ISSUES AND BARRIERS ADDRESSING TO RENEWABLE ENERGY

Investor Advisory Group Meetings

To assist the GoG in creating an enabling environment for new generating facilities and favorable investment climate, USAID Energy Program initiated Investor Advisory Group establishment, aimed to identify and address specific challenges to energy sector investment, analyze those issues and deliver results to the energy investors and stakeholders. USAID Energy Program holds quarterly meetings with the representatives of the MoESD and line ministries, Georgian National Energy and Water Supply Regulatory Commission (GNERC), Electricity Market Operator (ESCO), GSE, energy sector business leaders, investors, renewable energy developers, members of the financial community and other relevant civil sector organizations. Beyond the working group meetings, the individual meetings were conducted with VRE developers / investors, Government officials and other energy stakeholders.

During the consultations, Georgian energy sector stakeholders and renewable energy developers shared views and debated on the existing issues and challenges related to the VRE development in Georgia.

Considering the judgement of interested parties, USAID Energy Program evaluated the main issues and barriers which may negatively affect the development of renewable energy projects in Georgia.

- Absence of renewable energy support mechanisms;
- No Opportunity to obtain Power Purchase Agreements (PPAs);
- Unclear pricing for variable renewable energy in Georgia;
- Difficulties in grid connection;
- Limitations set for VRE generation integration into the grid;
- Unclear market structure;
- Gaps in the existing legislation;
- Delay in the adoption of new Law of Georgia on Energy and Water Supply;
- Delay in the adoption of Law of Georgia on Promoting the Production and Use of Energy from Renewable Sources;
- Absence of the country's energy strategy;
- Ambiguity in the Law of Georgia on Public Private Partnership (PPP);
- Ambiguity in the decree on Approval of The Rules of Developing and Implementing PPP Projects;
- Lack of transparency into the existing legislation;
- Environmental restrictions for Wind Energy Development;
- Bureaucracy in the GoG which interrupts project development process; etc.

Developers and government officials unanimously agree that in order to survive renewable energy projects in Georgia and enhance investment conditions, it is vital to implement various measures and procedures. A significant issue is to enact renewable energy support mechanisms as soon as possible. Another important matter is the reference prices to support the development of VRE in Georgia. To make project development procedures clear and transparent are the prerequisites for the project implementation.

- A representative of the company 'Solar Jam Jama', Mr. Alexander Bakhutashvili declared that the country already had a shortage in power generation, which would damage its economic growth and development. The fastest route to liquidate this shortage and mitigate the gap between base consumption of power versus peak consumption is to build solar power stations. The main obstacle is the uncertainty of the incentives to the renewables and

consequently of tariffs to be applied to the financial models of the projected power stations. Renewable Energy Incentives have to meet 2 main interconnected goals: Guarantee of the stable income for 10 years of the loan period; and to be bankable, in other words, comfortable to a loan provided by a bank. Both of them also require a guarantee of the power purchase. Concerning power condition of the grid, Photovoltaic (PV) stations should be dispersed in all regions of Georgia and their capacity should not exceed 20 MW.

- Chief Executive Officer (CEO) at 'Georgian International Energy Corporation' and Chairman of Board of Georgian Renewable Energy Development Association (GREDA) Mr. Levan Vepkhvadze introduced the Local Content Requirement (LCR), as a possible prerequisite for the RES's state support. LCR can be seen as a form of market intervention and represents one of the protectionist measures restricting and contradicting the principles of free trade between nations. Renewable energy technologies, in turn, has its tremendous positive influence on the global decarbonization development. Hence, the rationale of market intervention can be found in the attempt of national governments to achieve green sustainable growth of their countries.
- Mr. Mikheil Tavberidze, Deputy General Director, GSE informed that, GSE is supporting not only renewable energy development and environmental restrictions, but also the development of new technologies, such as batteries storages. The immediate absorption of renewable energy into the network will damage the grid. That's why GSE is gradually preparing the infrastructure. Using Feed-in Tariff (FiT), rather than a fixed tariff will motivate renewable energy developers.
- Mr. Irakli Darchiashvili, Head of Unit, GSE made a remark that currently the level of VRE development was limited up to 330 MW. To support larger scale of VRE development, it is necessary to ensure reserve capacity development, such as storage hydro, pump storage.
- Developer Mr. Levan Kobakhidze from 'Sun House' highlighted the necessity to support further development of the small-scale residential projects and smart grids.
- Mr. Nugzar Beridze, Head of Electricity Department at GNERC noted that Net Metering Regulation was enforced in 2016. Due to the high prices of technologies, the trend of customs was low, but it is increasing gradually. Currently, there are 66 small scaled solar farms in Georgia, which are connected to the net metering system, in total 700 kW. Due to technical issues, GNERC carefully approaches to the changes. They are studying practices on settlement period. GNERC is currently working on the improvement of the regulation, specifically group metering system. The next step of the improvement will be the regulation on virtual metering system. Mr. Beridze advised supporting reservoir and storage technologies.
- Ms. Mariam Chachua, Business Consultant from 'PMO Business Consulting' inquired, whether the existing legislation on PPP provided a detailed list of qualification requirements regarding the energy projects. Also, she was interested if there was a list of projects already identified as in PPP framework. In addition, she was interested in measures to ensure the transparency of the PPP process.
- Mr. Giorgi Gvantseladze, Technical Manager from 'Georgia Global Utilities Group (GGU) was interested in the duration of support mechanisms in the EU and USAID Energy Program recommendations in that regard.
- Ms. Margalita Arabidaze, Deputy Head of Energy Policy Department at MoESD, stressed the significance of enacting the support mechanisms for renewable energy development. However, noted that various conditions, appropriate to the Georgian legislation should be considered during the drafting regulation on support mechanisms, such as e.g. "According to the existing Tax Code, the goods are not sorted clearly, it is not possible to separate goods by technologies, e.g. the Energy Efficient (EE) Led bulbs and general non-energy efficient bulbs bears the same code, and it's impossible to support EE led bulbs with exemption from Value-Added Tax (VAT). The VAT exemption for renewable energy technologies can be faced with the same difficulties.

ANALYSIS AND PROPOSED POSSIBLE IMPROVEMENTS

To meet the challenges mentioned above, USAID Energy Program experts performed various activities. USAID Energy Program provided recommendations, analysis, international examples, also ensured trainings to the Government officials, renewable energy investors, TSO, Distribution System Operator (DSO) and other energy stakeholders. Each analysis suggests possible solutions and mitigation measures to facilitate renewable energy development in Georgia.

RENEWABLE ENERGY SUPPORT MECHANISMS

Under the support of the GoG in the identification of transition countries with relevant experience related to the implementation of renewable energy, the respective team prepared a proposal on renewable energy support mechanisms for the MoESD. The team developed reports on the "Renewable Energy Support Schemes" and "International Best Practices on Support for Renewable Energy Schemes". Reports provide a general framework of incentives for renewable energy support including Tax, Financing, Contractual and Regulatory, Operational, Land and Network Incentives. Documents envisage the 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 the challenges of a new energy market.

To select the top support mechanisms, the renewable energy developers and other energy stakeholders were surveyed. 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).

Despite the survey results, the Program experts developed an analysis on incentive mechanisms and provided respective recommendations. The paper details the description of various renewable energy supporting mechanisms and full justification for each recommendation. The report incorporates the analysis and recommendations on 17 support mechanisms. The team revealed 'Highly Recommended', 'Recommended' and 'Not Recommended' support mechanisms. The top three 'Highly Recommended' incentives which were proposed by the experts are: Tax exemptions (VAT, import duties for renewable energy); Net Metering Improvement; and Network Connection.

The reports, as well as workshops on respective results, were delivered to the government officials, investors and stakeholders. The Parties agreed to assist the MoESD and other Public Entities to Implement selected support scheme, once the renewable energy scheme(s) are agreed upon.

As a result, the MoESD is working on drafting regulation on Renewable Energy Support Mechanisms. 12 months after the adoption of the Law of Georgia on 'Promotion of Renewable Energy Development', the secondary legislation on 'Support Mechanisms to Promote Renewable Energy in Georgia' should be enacted. The document will give clear regulations on supporting mechanisms for clean energy development in Georgia. This document will strengthen guarantees on selling generated electricity under the conditions of bilateral contracts, either on the free electricity marker. The support mechanism will significantly improve the energy investment climate, reduce investor's risk and ensure investment friendly environment.

LEGAL PROCEDURES AND GUIDANCE

To assist renewable energy investors / developers in the guidance of initial steps for the project implementation and for the preparation of documents for its bankability, USAID Energy Program described detailed procedures and rules on the project implementation process, based on the existing legislation.

On May 4, 2018, the GoG adopted the Law on PPP, which defines the PPP model as an agreement between a public-sector institution / municipality 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. The law admits the selection of a private partner through direct negotiations only in the energy sector.

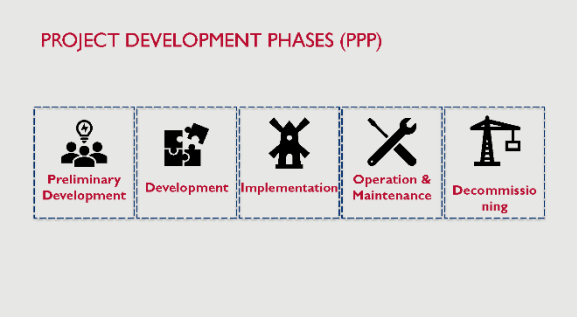
The decree N426 dated August 17, 2018, on 'Approval of the Rules of Developing and Implementing Public-Private Partnership Projects', sets detailed instructions for identification, initiation, preparation,

implementation and post-implementation stages of PPP project. The PPP Law and corresponding by-law N426 are applicable for energy projects as well.

Furthermore, the development of power generation projects not meeting the PPP criteria and are developed by the initiative of a developer are subject to decree N515 on 'Rules and Conditions of Submitting to the Ministry of Economy and Sustainable Development and Reviewing the Proposals on Conducting the Construction Feasibility Study (FS), Construction, Ownership and Operation of those Power Plants which are not Public-Private Partnership Projects', dated October 31, 2018.

Most projects require guidance on application, power purchase, interconnection and related technical and procedural requirements. The Project intends to help developers navigate the GoG processes quickly and transparently through providing appropriate legal recommendations and guidance to transverse the development process. For this reason, USAID Energy Program developed a document on 'Legal Procedures Applied to Projects Not Related to PPP Legislation'.

The main findings of the document are useful for the developers willing to construct, own and operate the power plants in Georgia. In addition, the document will provide the main procedures related to obtaining approval from the GoG and the main requirements facing the developers to meet the rules and regulations set by the legislation.



Renewable Energy Investor Guidebook

Another significant document aiding renewable energy project developers to navigate Georgia's project development process, including leading practices and roadmaps to address technical, administrative / regulatory, and financial issues, is 'Renewable Energy Investor Guidebook'. This guidebook provides a detailed description of all necessary procedures for the successful implementation of renewable energy projects in Georgia since the adoption of PPP Law. Investor Guidebook explains all steps from the initiation of the project up to decommissioning based on all existing legislation, including all permits' (environmental, construction and operation) deadlines, fees and procedures. To discuss PPP Law and related secondary legislation, Also, 'Renewable Energy Investor Guidebook', several workshops and were conducted for renewable energy developers.

FAIR PRICES FOR WIND AND SOLAR ENERGY IN GEORGIA

With the request of VRE developers and energy sector stakeholders, USAID Energy Program conducted a study on "Pricing to Support Development of the Variable Renewable Energy in Georgia". The study provides a review of VRE support schemes applicable under the EU Third Energy Package and reference prices on electricity under such support schemes. The research includes legislative analysis, power market comparison, electricity price review for solar and wind projects in EU and Eastern Europe for 2018. This study provides recommendations to the MoESD, the Ministry of Finance of Georgia (MoF) and PPP Agency on the methods for allocation of support schemes and pricing to VRE projects in Georgia. The report provides analysis on the competitive procedures on support schemes and proposes capacity auctions for VRE. As for the support scheme tariff determination, three alternative pricing methods were suggested.

GRID CONNECTION ISSUES

One of the critical challenges of wind power integration is the nature of wind resource, characterized by uncertainty and variability. Although, it is common for precise forecasting to face such challenges at a certain point.

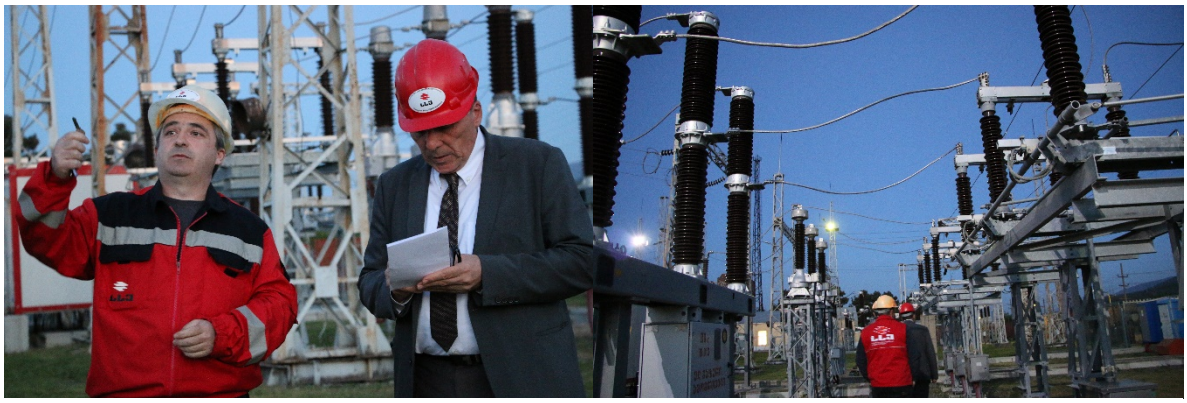
USAID Energy Program is procuring the forecasting services for 7 potential wind farm location for GSE.

With these forecasting services, GSE will know where, when, and how much electricity will be produced by each Wind Power Plant (WPP). This, in turn, helps GSE achieve a more efficient allocation of resources e.g. for unit commitment congestion management and grid stability.

Another challenge is site selection and connection. The traditional approach to site selection and feasibility analysis involves a transmission system–level interconnection studies, which examine power flow, short circuits, voltage harmonic distortion, and transient electromechanical stability (with

detailed or simplified / general models for the plant to be connected). USAID Energy Program considers training on DigSilent Power Factor software module with the focus on network analysis in case of VRE integration.

Overall, technical assistance by increasing GSE capacity will allow better penetration levels of wind and solar power plants to the transmission network of Georgia. Direct beneficiaries from the increased capacity of GSE and environment for high penetration level of wind and solar plants might be perceived as potential developers and investors.



GSE Substation in Gori

The connection of wind generation to electrical power systems influences a system operation point, the load flow of real and reactive power, nodal voltages and power losses. The rising impact of wind power generation in power systems forces system operators to extend grid connection requirements to ensure its accurate operation. USAID Energy Program examines the ability of new Georgian Energy Development Fund (GEDF) - Çalik 50 MW wind farm to be connected to the Gori Substation kV and prepared recommendations for Infinite Energy on the connection of Imereti 1 WPP to Georgian Transmission System. The Program held discussions and workshops with GSE and other stakeholders regarding the connection issues which might be perceived as vital factors for the initiation of amendment to the Network Rules which sets specific limits for new generation unit and consumer active power capacity in case of deep connection to the transmission line. More specifically, with the GNERC decision, enacted on July 25, 2019, the lower limit of connection capacity was set dependent on the voltage of transmission line. This brings clarity to the potential investors and developers of wind and solar power plants as well as to new consumers willing to be connected to transmission line with regard the site selection for plant.

ENVIRONMENTAL PROCEDURES AND RECOMMENDATIONS

With growing attention to climate considerations, alternative VRE sources are gaining prominence. Deployment of VRE sources contributes to meeting growing energy demand in a sustainable way. The latter is associated with many environmental and social benefits.

Though electricity generation form VRE reduces carbon emissions and air pollution, it still may exhibit negative environmental impacts and pose challenges to local communities. Therefore, the development of VRE power should be done in an environmentally and socially sustainable manner.

The national environmental legal framework is designed to ensure the observance of a sustainable pathway. The main act setting requirements for projects with possible impacts on the environment is the 'Environmental Assessment Code'[3]. The code provides procedures for the Environmental Impact Assessment (EIA). It prescribes the rights and responsibilities of developer during the environmental decision-making process.

Apart from the 'Environmental Assessment Code', several sub-legal acts provide environmental quality standards to be met by those projects not falling under the EIA procedure.

With the aim to meet the National Environmental Requirements, USAID Energy Program developed a report on the "National Environmental Requirements for VRE Projects". The document intends to provide an overview of the steps to be undertaken at the initial stage of implementation of VRE

[3] Law of Georgia Environmental Assessment Code of 01 June 2017

projects. Familiarization with the guide, enable any developer to have a clear understanding of environmental regulations that set requirements for the projects having an environmental impact.

The ongoing 50 MW Kaspi WPP, is located close to the Emerald site. The developer requested USAID Energy Program to assist in providing examples of implemented wind energy projects on the sites of the same importance in EU countries.

The study on “Wind Energy and Specially Protected Areas”, provides recommendations of mitigation measures based on the EU examples to minimize the environmental impact of wind energy.

Wind power is the most VRE source currently available (barring hydro power) with an important contribution to mixing the energy sources required to offset over-reliance on fossil fuels with the associated outputs of greenhouse gases, notably carbon dioxide (CO2). However, just as with any form of energy generation, wind energy can also have an adverse impact on the environment which should be avoided or minimized.

These documents will help wind power developers to consider relevant environmental issues while preparing EIA for the successful implementation of projects.

TRAININGS AND WORKSHOPS

The IAG meetings and interactions with GSE and MoESD have illustrated the need of capacity building and awareness increase activities VRE utilization and integration topics. In its scope USAID Energy Program contributed to fill this gap via conducting below provided activities. Various workshops and trainings were provided for the representatives of the MoESD, GSE, ESCO, GNERC, renewable energy developers and other stakeholders. The trainings were conducted on the following topics:

- The International Experience in Net Metering;
- EU Policy and Net Metering Technology, Referred to the Topic of Challenges and Solutions for Connection of VRE to the Grid and Innovative Approaches;
- Recent Global Trends of Renewable Energy Pricing and Financing Structures, the Transplantation of Which Requires the Consideration of Political and Social Implications in the Local Context;
- Local Content Requirement in Georgia as a Possible Prerequisite for the RES’s State Support;
- International Experience and Recommendations on Renewable Energy Support Mechanism;
- Improving the Capability of the Regulator to Evaluate and Develop Quotas and Methodologies for Connection into the Grid New VRE Generation;
- General Rules and Procedures for Connection to the Transmission Network with The Focus on Connections Procedures, Connections Offer, Connections Costs and Proposals to Grid Code Amendments;
- The Recommendations for TSO in the Process of Grid Access of New VRE Generation. The Presentation Incorporated Topics Such as a Condition for Access to the National Grid, Issues in Grid Access and Integration of VRE, Processes of Completion of VRE Projects, the Impact of VRE Projects on Grid Stability;
- The Best Approaches of Grid Connection for VRE Projects;
- The Development of VRE Projects in Compliance with Environmental Legislation;
- Transposition of EU Network Code on Establishing a Network Code on Requirements for Grid Connection in Georgia – Technical and Regulatory Requirements;
- The Analysis on Renewable Energy Integration into the Georgian Electrosystem and Introduction of DIgSILENT Study Results;
- Guidebook for VRE Development in Georgia.

USAID Energy Program recommends further discussion on VRE utilization and integration to the grid, emphasizing potential implementation of leading international practices in the Georgian energy sector.

CONCLUSION

With the support of USAID Energy Program, significant steps have been undertaken concerning the renewable energy development and investment climate improvement.

The MoESD has commenced working on the secondary legislation on Support Mechanisms to Promote Renewable Energy in Georgia. The document should be adopted in 12 months after the enactment of the Law of Georgia on Promotion of Renewable Energy Development. The support mechanism will significantly improve the energy investment climate in Georgia and create investment friendly environment for potential investors by minimizing the associated risks.

Renewable energy developers acquired clear instructions and guidance on procedures regarding the development of power generation projects. Also, Renewable Energy Investor Guidebook will greatly aid developers in navigating Georgia's project development process, including leading practices and roadmaps to address technical, administrative / regulatory, and financial issues.

The study on 'Pricing to Support Development of the Variable Renewable Energy in Georgia', helps government officials in identifying the methods for competitive procedures for VRE development and fair pricing under the support schemes for the VRE projects in Georgia.

The discussions held with GSE and energy sector stakeholders on connection issues might provide a basis for the initiation of an amendment to the Network Rules which sets specific limits for new generation unit and consumer active power capacity in case of deep connection to the transmission line. This brings clarity to potential investors and developers of wind and solar power plants as well as to new consumers willing to be connected to transmission line with regard the site selection for the plant.

The 'National Environmental Requirements for VRE Projects' and 'Wind Energy and Specially Protected Areas' will potentially support wind power developers in considering relevant environmental issues while preparing EIA to meet National environmental requirements.

Finally, conducted workshops and trainings enabled the local experts to obtain international experience and familiarize themselves with the essential input to create favorable conditions for new generation capacities and a favorable investment climate.

USAID Energy Program

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