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ANALYSIS OF FINANCIAL INCENTIVES AND NON-FINANCIAL BARRIERS TO RENEWABLE ENERGY DEVELOPMENT IN KOSOVO

FINAL REPORT

Prepared by: Deloitte Consulting LLP under sub-contract to Advanced Engineering Associates International, Inc. (AEAI)

August 2013

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Final Report

USAID KOSOVO - ANALYSIS OF FINANCIAL INCENTIVES AND NON-FINANCIAL BARRIERS TO RENEWABLE ENERGY DEVELOPMENT IN KOSOVO

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1 ACRONYMS

Acronym	Definition
AI	Administrative Instruction
C/E/T	Construction, Education, Transportation- the group of industries combined for purposes of the Index Kosova survey
DSO	Distribution System Operator
EC	European Commission
EnCT	Energy Community Treaty
ERO	Energy Regulatory Office
EU	European Union
FDI	Foreign Direct Investment
FIT	Feed-in Tariff
GFEC	Gross Final Energy Consumption
GoK	Government of Kosovo
KAS	Kosovo Agency of Statistics
KEK	Korporata Energjetike e Kosoves- Kosovo‘s vertically integrated power utility
KOSTT	Kosovo Electricity Transmission, System, and Market Operator
KPRES	Kosovo Plan on Renewable Energy Sources
Ktoe	Kilotonne Oil Equivalent
MAFRD	Ministry of Agriculture, Forestry, and Rural Development
MC	Ministerial Council of the Energy Community
MED	Ministry of Economic Development
MESP	Ministry of Environment and Spatial Planning
MoF	Ministry of Finance
MW	Megawatt
MWh	Megawatt Hour
NREAP	National Renewable Energy Action Plan
PAK	Privatization Agency of Kosova
PPA	Power Purchasing Agreement
RES	Renewable Energy Source
SME	Small and Medium Enterprise
TAK	Kosovo Tax Authority
TSO	Transmission System Operator
UNDP	United National Development Programme
UNDP HDR	UNDP Human Development Report
USAID	U.S. Agency for International Development

2 EXECUTIVE SUMMARY

The energy strategy of the Republic of Kosovo is detailed in *the Energy Strategy of Kosovo 2009-2018 (*the Energy Strategy*')*, which specifies the use of renewable energy sources (RES) within the context of Kosovo's energy policy objectives. The Energy Strategy is further based on the RES policy of the European Union and obligations that arise from the Energy Community Treaty (EnCT). The Ministry of Economic Development has recently developed a draft of the National Renewable Energy Action Plan 2011-2020 (NREAP), which specifies how Kosovo intendes to fulfill its EnCT obligations.

In light of the Republic of Kosovo's mandatedrenewable energy targets and desire to diversify its energy generation portfolio, the Ministry of Economic Development (MED) requested technical assistance from USAID to assist with identifying effective and appropriate measures that the Government of Kosovo (GoK) may take to facilitate private sector investment in renewable energy generation.

To assist the MED, USAID tasked Deloitte Consulting to undertake an evaluation three areas of study interest:(1) implications of the Ministerial Council decision for the adoption of RES in Kosovo and an evaluation of the renewable energy targets in light of existing and planned renewable capacityto meet the targets; (2)existing financial incentives and fiscal measures as provided by the Energy Regulatory Office (ERO) and the GoK for stimulating private sector investment in renewable energy and compare them to similar incentives successfully adopted in other countries; and, (3)existing Kosovo electricity market design and administrative issues to identify non-financial barriers that impact the adoption of RES technologies.

To address these objectives, Deloitte developed the following report, which is divided into five sections:

1. An introductory discussion of Kosovo's obligations to fulfill its RES targets and an evaluation of Kosovo's ability to meet its target as a signatory to the Energy Community Treaty (EnCT) in scenarios assuming different renewable energy capacities and sources;

2. A discussion of potential project risks faced by RES developers and suggested mitigation measures available to the GoK that might mitigate such risks in order to motivate private sector investment in RES projects to allow the GoK to attain its strategic objectives regarding the utilization of RES;

3. An overview of the current electricity market design mechanisms designed to encourage the development of RES projects in Kosovo;

4. An examination of the financial incentives currently available in Kosovo to facilitate the development of new RES projects;

5. An analysis of the various RES approval processes, including a summary of key barriers and process impediments.

Key Findings:

Kosovo is pursuing two renewable energy obligations as incorporated in 1). the Decision D/2012/04/MC-EnC of the Ministerial Council of the Energy Community adopted on October 18, 2012 implementing Directive 2009/28/EC and amending Article 20 of the EnCT), and 2). the Energy Strategy

- The EnCT establishes a target of 25 percent (419.2 ktoe) of total energy consumed in 2020 from renewable energy sources (to include both grid connected technologies and heating sources)[1].

- The Energy Strategy establishes a target of 7 percent of net installed generating capacity from renewable energy sources by 2016. Further, the NREAP specifies a significant amount of gird-connected RES vs. current installed levels.

The wide variance between the two targets is principally attributable to the inclusion of biomass consumption (essentially wood-burning for residential heating) in the baseline that was used to set Kosovo‘s EnCT target of 25 percent, while the Energy Strategy‘s 7 percent target is directed at increasing the amount of grid-connected electricity generated from renewable sources.

Deloitte analyzed the ability of the GoK to achieve the targets identified above.

- Kosovo is able to meet the EnCT 2020 target, but doing so will require that Kosovo continue to rely on the consumption of biomass and wood for space heating. Forecasts of wood utilization for heating vs. EnCT 2020 RES targets indicate that Kosovo‘s EnCT obligations can be met almost in their entirety by continued utilization of wood for space heating – a strategy which appears inconsistent with current EU environmental and sustainability guidelines.

- Kosovo‘s commitments as outlined in the Energy Strategy and the NREAP will require substantial new investment in grid-connected RES projects if Kosovo‘s 2020 targets are to be met. Ensuring an environment that is supportive of grid-connected RES project development will be critical in this endeavor.

GOK & Regulatory Support for RES Projects:

To fulfill GoK‘s EnCT obligations and strategic goals for development of differentiated power sources utilizing RES projects, the GoKand ERO have incorporated components aimed at supporting the development of RES projects into Kosovo‘s primary energy laws, market design and regulatory structures.

In implementingthe provisions of Kosovo‘s three primary energy laws that pertain to RES projects, the ERO has developed a number of detailed regulatory instruments, referred to as ―Rules”[2]. These Rules regulate the authorization process and provide for the admission of

[1] While the Ministerial Decision mandates that RES utlilzation in Kosovo will be 25% of total final energy consumption in 2020, Kosovo‘s draft ‗National Renewable Energy Action Plan 2011-2020‘ stipulates that Kosovo will aim for a target of 29.47%.

[2] These ‗Rules‘ primarily include i). the Rule for the Establishment of a System of Certificates of Origin for Electricity Produced from Renewable Energy Sources, From Waste and Co-Generation in Combination with Heat

RES generation units into the Support Scheme[3], which regulates access tofiscal incentives such as the feed-in tariff (FIT), the primary mechanism for financial support for RES projects.

Other measures of support are also provided, including:

- the separation of the obligations of the MED to develop Kosovo's short- and long-term strategy in RES projects from the obligations of the ERO to provide transparency in the manner in which RES project support structures are structured and enacted;
- the development of a rational electricity market design with defined market rules and regulatory structure;
- the obligation of the Public Supplier to purchase, on a priority basis, all electricity generated from RES projects that have obtained a Certificate of Origin from the ERO;
- the right of a RES project which has obtained a Certificate of Origin to enter into a long-term Power Purchase Agreement with the Public Supplier;
- preferential access to the grid;
- limited exposure to market balancing costs associated with forecast electricity generation from intermittent RES projects;
- Feed in Tariffs (FIT), associated with electrical energy for which a Certificate of Origin has been obtained, that provide tariff certainty over the designated period of regulatory support; and,
- Tax incentives, including a reduction in customs tax on imported equipment used for the generation of electricity from RES.

Key Issues & Areas Support:

While the GoK and ERO have developed structures and processes to motivate RES project development and implementation, to date only a limited number of RES projects have been developed.

During the course of its review of policies aimed at supporting RES projects and associated authorization procedures, Deloitte has identified issues that impede deployment of RES generation projects in Kosovo (see Table ES-1).

The RES project impediments listed in Table ES-1 illustrate key areas where the GoK and ERO might effectively improve the investment environment for RES by mitigating impediments to investment.

The subsequent sections of this report evaluate the key issues, best practices, and mitigation options for the GoK to support grid-connected renewables development.

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in a Single Generation Unit,' and ii). Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures for Admission to the Support Scheme'.

[3] Support Scheme' means the set of provisions for the support of electricity produced from renewable energy sources in Kosovo required to meet the Indicative Targets, as defined in the Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures for Admission to the Support Scheme.

Table ES-1

Key Issue:	Potential Mitigation:
Electricity Market Design, Regulatory Support & Technical Issues	
The timing of when RES projects are admitted to the Support Scheme places significant risk on RES investors and inhibits the use of project financing.	Amend applicable „Rule" to ensure RES projects are admitted to the Support Scheme once all authorizations required by ERO have been granted.
A RES project is not admitted to the Support Scheme until after Commercial Operation has been achieved, significantly increasing project risk.	Amend applicable „Rule" to ensure RES projects are admitted to the Support Scheme once all authorizations required by ERO have been granted.
The ERO has yet to approve the template Power Purchase Agreement (PPA) developed KEK.	The ERO and KEK should agree the template PPA so that RES project investors have confidence as to the terms of the PPA that they will enter into.
The template PPA is not complete; for instance, acceptance tests are not sufficiently defined to provide transparency for grid interconnection	Define all terms and conditions in order that the obligations and rights of investors under the PPA are clear and unambiguous and use industry standards.
The „deep charging" methodology used by KOSTT increases RES project costs, increase risk and reduce transparency.	Utilize a „shallow charging" methodology. Donor support for network enhancements required for the interconnection of RES projects would provide a basis for KOSTT to employ a „shallow charging" method for network enhancements associated with RES projects.
RES projects utilizing intermittent resources are exposed to imbalance charges; as such projects are required by the Market Rules to cover 25% of the costs associated with project imbalance charges.	Within the Market Rules, provide that imbalance charges from intermittent RES projects are a system cost, which would allow such costs to be an obligation of all users of the transmission system.
Limitations on the amount of RES projects able to be connected to the KOSTT system due to system instability caused by RES projectintermittency.	GOK should seek donor support for transmission system upgrades required to incorporate intermittent RES projects onto the transmission system.
Financial Support Mechanism and Fiscal Incentives Issues	
The ERO decision on Feed in Tariffs (Decision V_359_2011) does not provide investors comfort that the level of FIT will not be reduced during the period when the RES project is in the Support Scheme.	ERO to take a decision providing the period over which the Feed In Tariff provided for in Decision V_359_2011 is applicable.
The current FIT scheme provides for only a 10 year term of support under the Support Scheme, which exposes the RES investor to debt refinancing risk.	ERO to take a decision providing for a period of greater than 10 years for which the Feed In Tariff is applicable under the Support Scheme.
There are currently few tax incentives provided to encourage RES investment.	Increase tax incentives to include i). Investment tax credits, ii). Accelerated depreciation, etc.
Renewable Energy Project Authorization Process and Impediments	
Lack of clear, harmonized, and comprehensive legal framework resulting in subjective and inconsistent interpretation of the laws intent	Reform legal framework such that the authorization and permitting processes are better coordinated.
Lack of transparency in application and evaluation criteria resulting in unclear investor guidance.	Incorporate transparent criteria for application evaluation. Publish all criteria for application and evaluation in a centralized, accessible location.
Absence of institutionalized processes and available resources resulting in discretionary practice	Increase the capacity of GOK agencies to evaluate RES project authorization applications. Authorize a „onestop-shop" technical body (under the auspices of the ERO) to undertake all authorization evaluations.
Arbitrary application review and revision timelines resulting in increased investor risk	Define application review timelines and potential „deemed" authorization procedures and appropriate enforcement mechanisms. Authorize a „one-stop-shop" technical body (under the auspices of the ERO) to undertake all authorization evaluations.
Permitting processes do not account for the size of the projects.	Define limited authorization procedures for micro- and small generation projects.
Lack of proactive spatial planning for energy purposes resulting in extensive re-zoning procedures	Develop spatial planning for RES projects to minimize need for re-zoning by RES investors.

3 INTRODUCTION AND SCOPE

The Ministry of Economic Development (MED) has made a request to USAIDfor technical assistance to perform three research/analytical activities in support of MED's current effort to identify effective and appropriate measures that the GOK may take to facilitate private sector investment in renewable energy generation in Kosovo.The following is a general summary of these three activities and the work Deloitte has performed with respect to each.

Activity 1 –Discussion of Renewable Energy Targets and Evaluation of Available Renewable Sources

MED requestedassistance in determining howKosovo canworktowardsachieving its renewable energy targets.To comply with this request, Deloitte has:

- ReviewedKosovo'sEnCT obligations, the renewable energy targets established by Kosovo's Energy Strategy for 2009-2018, the relevant aspects of Kosovo's legislative framework,the annual renewable energy production targets for the period 2013-2020 as issued by the MED's –Administrative Instruction on Renewable Energy Sources, and the draft NREAP;
- Estimated the amount of grid-connected RES required by 2020 to allow Kosovo to meet its EnCT obligations and national targets; and,
- Undertaken a brief assessment of applicable renewable energy resources available to meet these production targets (see Appendix VII).

Activity 2 – Assessment of Financial Incentives

Deloitte has conducted an evaluation of existing financial incentives and fiscal measures for stimulating private investment in the renewable energy sector to determine if such incentives and measures are generally in line with similar incentives within the EU and the surrounding region.The focus of this analysis was aimed at assisting MED to assess whether existing incentives (FIT and other fiscal support) are sufficient to attract sufficient private sector investment to achieve its EnCT obligations and Energy Strategy objectives.

In carrying out this activity, Deloitte:

- Conducted an evaluation of feed-in tariffs (FIT) and other simulative measures across regional markets for select renewable energy investment alternatives and comparedthese measures to the existing financial incentives and fiscal measures that exist in Kosovo today; and,
- Reviewed various simulative measures that are used in comparable markets (FIT levels, customs and excise tax exemptions, production tax credits, accelerated depreciation, etc.), and identified issues which might restrict private investment in viable energy projects in Kosovo.

Activity 3 – Analysis of Potential Non-Financial Barriers to Investment

Deloitte identified and assessedthe most significant non-financial barriers that may currently be inhibiting more rapid development of renewable energy projects in Kosovo.

Deloittedocumented the existing authorization and other required permitting processes for RES projects at both the central government and municipal levels, and compared the identified barriers with best practice in the EU and the region, thus providing MED with an understanding of how similar issues are more successfully being addressed elsewhere.By examiningKosovo‘s current policies, approval procedures and investment conditions and contrasting these with EU and regional best practice, Deloitte was able to highlight areas where the GoK might implement actions to remedy issues impeding RES project development.

In conducting the assessment of the non-financial barriers impeding the development of renewable energy projects, Deloitte:

- Identified and analyzedsignificant existing bureaucratic constraints at the central government level that complicate private investment in the renewable energy sector;
- Met with representatives of the municipalities of Peja (where a pre-authorized wind project is being considered) and Deqan (where a pre-authorized small-scale hydro project is being considered);[4]
- Created process maps for the most significant processes, i.e. the authorization process, environmental consent process, water permit process, construction permit process, land acquisition process, and the Support Scheme admittance process;
- Developed a gap analysis to highlight areas for improvement in the overall institutional and regulatory framework for private renewable energy projects in Kosovo;

4 STUDY LIMITATIONS

The following are a list of limitations that pertain to the study.

- Kosovo laws relating to the energy sector – the law on energy, the law on electricity and the law on energy regulator – are taken as ‗given.‘ Therefore, obligations/rights under law that are provided to certain institutions (such as the ERO) are also taken as given. This limits the range of options that were considered available to the GOK/MED for increasing/modifying support for RES projects;
- The study assumes that ERO Decision V_359_2010 which defines the level of feed-in tariffs as given; and have not examined the ‗appropriateness‘ of the level of feed in tariffs.

[4]ERO‘s Rule on the Authorization Procedure for the Construction of New Generation Capacities” of 29 August 2011 uses the term —Preliminary Decision”. However, the practice at ERO is to refer to this as—Preliminary Authorization”.

- The legislative/regulatory regime is still unstable and subject to frequent changes, therefore the legal narrative and the process maps are representative of our understanding of the process during the study period[5].

- The legal review and process maps are based principally on the written content of the legislative/regulatory regime; however, actual administrative practice at times deviates from what is provided by the written rules. The legal review narrative discusses the deviations we have identified; the process maps diagram the process as prescribed by law as opposed to what may be done in practice.

- On certain issues, the legislative/regulatory regime prescribing a process is vague or entirely absent, therefore the legal review at times cites oral explanations provided by officials implementing the process to fill in these grey areas and gaps.

- In the absence of clear written rules, administrative practice and interpretations can change abruptly. Additionally, when an unclear written process is to be implemented by more than one agency (as in the case of a process to be implemented by municipalities), administrative practice can vary widely from one municipality to the next. The process is described in the report based on the information collected from the due diligence and the legal review.

- Given the various risks faced by project developers, and the uncertainty of approval granted through the authorization process, the study evaluates the feasibility of Kosovo meeting its 2020 target based on government furnished projections – and does not estimate expected future renewable energy installed capacity.

5 ASSESSMENT OFKOSOVO'S RENEWABLE ENERGY TARGETS AND ENCT OBLIGATIONS

5.1 EVALUATION OF KOSOVO'S ENCT TARGET

This section addresses:

- Kosovo's obligation under the EnCT[6], as recently amended by the Ministerial Council's decision of 18 October 2012, to ensure that by 2020 at least 25 percent of Kosovo's gross final energy consumption derives from RES; and

- the RES target established by the MED in its Energy Strategy for 2009-2018 and as further developed in its draft National Renewable Energy Action Plan 2011-2020.

[5] The draft „National Renewable Energy Action Plan 2011-2020" indicates a number of legislative/regulatory amendments that are currently under consideration for revision in order to better harmonize legislation.

[6] The EnCT has been binding on Kosovo since October 2005.The Energy Community's Ministerial Council adopted a decision (D/2012/04/MC-EnC) that amended Article 20 of the EnCT to require the contracting parties to implement the EU's 2009 directive on renewables (Directive 2009/28/EC) and to bring their domestic legislation into compliance with that directive (—as adapted" by the decision) by 1 January 2014.Among other things, the MC's decision requires each contracting party to ensure that, by 2020, a specified minimum percentage of its gross final energy consumption comes from renewable sources.For Kosovo the specified minimum percentage is 25%.

A variety of studies were reviewed as part of the assessment.[7]

EnCT Targets:

The determination of Kosovo's renewable energy target is based on the requirements and methodologies found in Directive 2009/28/EC.The directive sets a binding overall RES target of 20 percent, which is to be achieved within the EU by 2020.To take into account the various energy mixes and renewable energy potential of each EU member country, the overall EU target was translated into individual member country targets that each state is required to reach by 2020 (ranging from 10 percent for Malta to 49 percent for Sweden). These targets, which were set for each of the 27 European member states, are specified in Annex I of the Directive.

The following table illustrates 2009 energy data for Kosovo and other regional nations which the Energy Community Secretariat used as the baseline for establishing certain 2020 national targets.

Table 1:2009 Gross Final Energy Consumption (GFEC) Balances for Energy Community Treaty Signatories[8]

Kilotons Oil Equivalent (ktoe)	AL	BA	MK	MD	ME	RS	UA	Kosovo
TFC	1,869.5	3,579.5	1,800.5	1,948.0	719.6	8,292.6	61,911.5	1,164.3
+ losses / own consumption	108.1	257.2	187.8	94.0	71.8	857.4	6,631.0	136.1
GFEC	1,977.6	3,836.9	1,988.4	2,042.0	791.4	9,150.0	68,622.5	1,300.4
Hydro (unadjusted)	449.8	536.5	109.2	4.6	178.3	906.1	1,019.0	10.3
Wind	-	-	-	-	-	-	-	-
Biomass	213.4	798.0	318.7	237.0	62.5	1,054.1	2,936.5	234.7
Biofuels	-	-	1.9	-	-	-	-	0.1
Geothermal	-	-	8.7	-	-	4.9	-	-
Solar	6.7	-	-	-	-	-	-	0.6
Total Renewables	699.9	1,325.5	438.5	241.6	240.8	1,965.1	3,955.5	245.7

Table 1 indicates that 18.9 percent (e.g. 245.7/1300.4) of Kosovo's GFE was provided by renewable energy in 2009. However, the renewable energy share of 18.9 percent is almost

[7]Various key studies, documents, and presentations were reviewed prior to undertaking this independent assessment of mandatory renewable energy targets and available renewable sources for Kosovo (See Appendix I). Additional information was also utilized in the analysis contained in this section of the report. A brief assessment of potential renewable energy resources as indicated in various multilateral and bilateral donor funded studies funded and potential roadmap scenarios under varying biomass consumption assumptions for meeting the EnCT target is outlined in Appendix VII. A summary of RES projects currently in the ERO's authorization process may be found on the ERO website.

[8]Updated Calculation of the 2020 RES Targets for the Contracting Parties of the Energy Community in the 8th Renewable Energy Task Force meeting of March 6, 2012

entirely attributable (approximately 95% (e.g., 234.7/245.7)) to burning biomass for heating and domestic uses.

The Energy Community Secretariat used the assumptions illustrated in Table 2 to determine Kosovo's 2020 RES target. The targets in the Directive were generated according to a standard methodology based on three components: baseline RES shareof 18.9 percent for 2009 (the benchmark year), a flat rate annual increase of 5.5 percent, and additional residual effort share of 1.5 percent. The mandatory RES requirement is the cumulative of these components (e.g., 25.9%) expressed as a percentage multiplied by total 2020 energy consumption (measured as GFEC in ktoe).

Table 2: Assumptions Used by the Energy Community Secretariat to Develop Their 2020 RES Target for Kosovo[9]

Total RES Target 26%
Baseline RES Share 18.9%
Renewables: 245.5 ktoe (Biomass 234.7, normalized hydro 10.0, others 0.7)
GFEC: 1,300.4 ktoe
Flat Rate Increase: 5.5%
Residual Effort Share 1.5%
Residual effort: 24.7 ktoe (GDP per capita index 9.6%)
GDP growth 2009 → 2020: 60%
2020 forecast GFEC: 1676.9 ktoe (29% growth)

From Table 2, Kosovo's 2020 GFEC forecast is 1676.9 ktoe based upon the assumptions used by the Energy Community Secretariat. In comparison, Table 1 of the MED-developed draft National Renewable Energy Action Plan 2011-2020 provides an estimated GFEC of 1729.82 ktoe for Kosovo in 2020 based upon a forecast of energy utilization[10].

Following a proposal from the European Commission, the Ministerial Council of the Energy Community (MC)adopted a decision on 18 October 2012 that amended Article 20 of the EnCTto require the EnCT contracting parties to implement the EU's 2009 directive on renewables ~~as~~ adapted" by the MC decision, and to bring their domestic legislation into compliance by 1 January 2014.The adaptations are specified in Articles 3-7 of the MC decision.Most noteworthy is Article 4, which requires each EnCT contracting party to ensure that by 2020 a specified minimum percentage of its gross final energy consumption comes from renewable sources.

Kosovo'sinitial EnCT mandated RES target of 26 percent was revised downward to 25 percentin the MC decisionof18 October 2012 that establishedbindingtargetsfor each EnCT

[9]Updated Calculation of the 2020 RES Targets for the Contracting Parties of the Energy Community in the 7th Meeting of December 6, 2011

[10] See National Renewable Energy Action Plan 2011 – 2020 (NREAP) - Draft'. The difference between 2020 GFEC as determined by MED calculations, which are based upon forecast energy usage, and Energy Secretariat calculations is approximately 3%.

Contracting Party. Therefore, based upon a 2020 GFEC of 1676.9 ktoe, RES will be required to provide 419.22 ktoe of energy in Kosovo in 2020 in order that Kosovo is able to meet its EnCT obligations. Note that the MED assumption of 1729.82 ktoe (as contained in Table 1 of the NREAP) will require 432.45 ktoe be derived from RES.

In the NREAP, the MED states that Kosovo will volunteer to achieve a greater share (29.47 percent) of energy from RES in gross final energy consumption than the 25 percent mandated by the EnCT. These values are given in Table 3.

Table 3: Kosovo RES Targets – EnCT Mandatory & Kosovo Voluntary

	Mandatory Target	Voluntary Target
Share of energy from RES in gross final consumption of energy (%, 2009)	18.9%	18.9%
Target of energy from RES in gross final consumption of energy (%, 2020)	25%	29.47%
Expected total energy consumption in 2020 (NREAP)	1729.82	1729.82
Expected amount of energy from RES corresponding to the 2020 target (ktoe)	432.45	509.70

Table 4 provides a comparison of Kosovo's EnCT obligations for RES vs. those of other EnCT signatories to provide context regarding Kosovo's RES obligations.

Table 4: The Energy Community Treaty's RES 2020 Targets for its Contracting Parties[11]

Primary RES	Share of RES in 2009[12]	Target Share of RES in 2020[13]
Albania	31.2%	38%
Bosnia and Herzegovina	34%	40%
Croatia	12.6%	20%
FYR of Macedonia	21.9%	28%
Moldova	11.9%	17%
Montenegro	26.3%	33%
Serbia	21.2%	27%
Ukraine	5.5%	11%
Kosovo*	18.9%	25%

[11] http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/RENEWABLES/Acquis#adoption; Recommendation of the Ministerial Council, No. 2010/01/MC-EnC September 24 2010 —The Promotion of the Use of Energy from Renewable Sources" http://www.energy-community.org/pls/portal/docs/724189.PDF

12 Share of energy from renewable sources in gross final consumption of energy, 2009

[13] Target for share of energy from renewable sources in gross final consumption of energy, based upon 2009 levels.

The MC decision which established Kosovo's target and those of other countries was basedupon the calculations contained in Table 2 and supported by the findings of a biomass study commissioned by the Energy Secretariat in 2010 and completed in the spring of 2012.[14]As the EnCT does not impose limits on the utilization of biomass to meet EnCT obligations, the RES target as established by the EnCT does little to incentivize countries already reliant on biomass to foster their RES targets through grid connected RES technologies; rather,it encourages the continued use of biomass. In fact, in the NREAP, the MED states that biomass in the form of traditional fuel wood will continue to be the most important heating source in Kosovo and such biomass utilization will contribute substantially in meeting Kosovo's EnCT obligations.

5.2 Evaluation of Kosovo's Energy Strategy Target

Kosovo has established its own national targets for RES share of GFEC beyond those mandatory RES requirements established by the EnCT. These national targets are focused on introducing greater amounts of grid-connected RES than are required under EnCT requirements.

In accordance with the Law on Energy, Article 13, the MED is responsible for establishing annual and long-term (10 years) targets for RES.The MED publishes Kosovo's energy strategy. The*Energy Strategy of the Republic of Kosovo for the Period 2009–2018*establishesa goal of7 percentofthe Kosovo's installed net generating capacity to besupplied by RES by 2016.Further, Administrative Instruction No. 1/2013 provides RES targets. Although these projects have not yet been formally adapted, they are presented in Table 5.

Table 5:MED Draft RESTargets -Total Net Available Capacity(MW) in Kosovo during the Period 2013 – 2022

Primary Energy Source	Installed Capacity Targets of Electricity from Renewables (MW)									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hydro	46.2	80.2	90.2	111.2	128.2	152.2	466.2	479.2	479.2	479.2
Wind	1.4	2.3	17.3	33.3	63.3	103.3	128.3	148.3	151.3	154.3
PV Solar	-	-	-	-	-	0.5	0.7	0.8	1.0	1.1
Biomass and Biogas	-	1.4	2.6	4.3	6.2	7.7	8.7	9.7	9.7	9.7
Projected RES Capacity Targets (MW)	47.6	83.9	110.1	148.8	197.7	263.7	603.9	638.0	641.2	644.3

More recently, MED has draftedthe NREAP that defines target projections for the period 2013 – 2020. These targets are detailed in Table 7.Note that Table 7 provides that Kosovo's RES penetration was 18.9 percent of total GFEC in 2009, which corresponds to 2009 levels as used by the EnCT. Further, and as previously indicated, Table 7 indicates that Kosovo will aim to achieve a higher target of 29.47 percent of GFEC in 2020, beyond the mandated 25 percent requirement.

[14] http://www.energy-community.org/pls/portal/docs/1378195.PDF

Overall, the contribution to the 29.47 percent RES would be as follows: electricity (10.1), heating & cooling (17.2) and transportation (2.1). Therefore, electricity, heating and transport would provide 34.4%, 58.5%, and 7%, of RES respectively.

The NREAP defines targets for three sectors: electricity generation, transport and heating and cooling.As shown in Table 7, the targets in 2020 are:

- 25.64 percent of RES in gross final consumption of electricity;
- 10 percent of RES in gross final consumption of energy in transport, and;
- 45.65 percent of RES in gross final consumption for heating and cooling.

The target in the electricity sector is responsible for the overall higher percentage of RES in gross final energy consumption (2020) in the voluntary target (29.47 percent RES) as opposed to the mandatory target (25 percent RES). This increase in the target for RES as a percent of FGEC in the electricity sector indicates the Government of Kosovo‘s desire to implement a sustainable solution to the incorporation of RES into Kosovo‘s energy balance.

Table 8 defines the total contribution of each sector (heating & cooling, electricity, transportation) to total RES penetration of GFEC between 2009-2020 in ktoe (kilotons of oil equivalent). Again, values for 2009 RES contribution (245.70 ktoe) are consistent with those used to determine EnCT obligations.

Table 9 provides the total number of MWh that correspond to the levels of ktoe for electricity for both the 25 percent and 29.5 percent targets. The conversion factors used are those specified by the ERO in the ERO Board Decision on Determination of Feed in Tariffs, March 30, 2011 as recreated in Table 6 below:

Table 6: Typical Annual Production Rates (MWh/MW) for Intermittent Generators That Produce Electricity Using Renewable Energy Sources[15]

Primary Renewable Energy Source (RES)	Typical MWh/MW
HPPs (<10MW)	4,758
Wind	2,190
PV Solar	2,059
Biomass and Biogas*	4,980

Table 10 and 11 indicate the amount of RES resource – for hydro, wind, and solar pv - that would be required to meet the RES share of GFEC at both the 25 percent and 29.5 percent levels, respectively. For example, in 2020 the Republic of Kosovo may meet its target RES market penetration within the electricity sector by utilizing either i). 520 MW of RES from wind, OR ii). 240 MW of RES from hydropower, ORiii). 553 MW of RES derived from solar PV.

[15]ERO Board Decision on Determination of Feed in Tariffs, March 30, 2011

Table7 – National Target for 2020 and estimated trajectory of energy from renewable sources in heating and cooling, electricity and transport (from draft National Renewable Energy Action Plan 2011-2020; Table 3)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES – H & C	48.37%	47.54%	44.07%	46.45%	45.22%	44.91%	44.77%	44.84%	45.24%	45.37%	45.53%	45.65%
RES – Electricity												
Target @ 25%	2.25%	2.85%	1.71%	2.16%	2.12%	5.13%	5.62%	6.58%	13.20%	14.42%	14.10%	14.33%
Target @ 29%	2.25%	2.85%	1.71%	2.16%	2.12%	7.34%	13.78%	15.00%	21.60%	23.18%	23.39%	25.64%
RES - Transport	0.03%	0.02%	0.04%	0.00%	0.00%	1.00%	2.00%	3.00%	4.00%	6.00%	8.00%	10.00%
Overall RES Share	18.90%	19.25%	17.65%	18.18%	18.25%	19.29%	19.66%	20.33%	23.20%	24.20%	24.42%	25.00%
	18.90%	19.25%	17.65%	18.18%	18.25%	20.14%	22.80%	23.57%	26.45%	27.58%	28.09%	29.47%

Table 8 – Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe) (from draft National Renewable Energy Action Plan 2011-2020; Table 4a)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES – H & C	235.30	236.96	242.56	244.34	247.68	253.32	259.74	267.06	274.55	282.32	290.21	298.24
RES – Electricity												
Target @ 25%	10.30	13.42	9.02	11.53	11.49	29.12	32.99	39.41	81.17	90.49	94.36	97.89
Target @ 29%	10.30	13.42	9.02	11.53	11.49	41.72	80.84	89.82	132.84	145.51	156.45	175.13
RES - Transport	00.10	00.07	00.13	0.00	0.00	3.27	6.71	10.27	13.80	21.08	28.59	36.33
Overall RES Share	245.70	250.45	251.71	255.87	259.17	285.71	299.44	316.73	369.52	393.88	413.16	432.46
	245.70	250.45	251.71	255.87	259.17	298.32	347.29	367.14	421.19	448.91	475.25	509.70

Table 9 – Calculation table for electricity contribution of total ktoe to final energy consumption (MWh)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES – Electricity												
Target @ 25%	119,795	156,083	104,908	134,101	133,636	338,683	383,694	458,362	944,057	1,052,454	1,097,465	1,138,521
Target @ 29%	119,795	156,083	104,908	134,101	133,636	485,229	940,219	1,044,662	1,545,010	1,692,370	1,819,609	2,036,869

Calculation based upon Table 8 RES electricity target value divided by 0.08598 ktoe/MWh x 1000 toe per ktoe. Ex: (10.30 ktoe)/(0.08598 ktoe/MWh)*(1000 toe/ktoe) = 119,795

Table 10 – Calculation of required MW per type of RES to meet RES target – 25.00 percent Target

RES - Electricity	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Wind	54.70	71.27	47.90	61.23	61.02	154.65	175.20	209.30	431.08	480.57	501.13	519.87
Hydropower	25.18	32.80	22.05	28.18	28.09	71.18	80.64	96.34	198.41	221.20	230.66	239.29
Solar PV	58.18	75.81	50.95	65.13	64.90	164.49	186.35	222.61	458.50	511.15	533.01	552.95

Calculation based upon Table 6: Typical annual production rates (MWh/MW) for intermittent Generators that produce electricity using renewable energy sources as determined by ERO Decision V_359_2011

Table 11 – Calculation of required MW per type of RES to meet RES target – 29.47 percent Target

RES - Electricity	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Wind	54.70	71.27	47.90	61.23	61.02	221.57	429.32	477.01	705.48	772.77	830.87	930.08
Hydropower	25.18	32.80	22.05	28.18	28.09	101.98	197.61	219.56	324.72	355.69	382.43	428.09
Solar PV	58.18	75.81	50.95	65.13	64.90	235.66	456.64	507.36	750.37	821.94	883.73	989.25

5.3 COMPARISON OF THE ENCT TARGET WITH KOSOVO'S ENERGY STRATEGY TARGET

5.3.1 ENCT Target:

Kosovo's obligation under the EnCT requires that 25 percent of Kosovo's gross final energy consumption derives from RES by 2020. As stipulated in the Directive, the EnCT RES target can be met by a mix of renewable sources or through a predominant source, across the three sectors (i.e. heating, transportation and electricity consumption).

The MED projected future biomass consumption (ktoe) in its DraftKosovo Plan on Renewable Energy Sources (KPRES) from December 2011 based on end use consumption. These projections are illustrated in Table 12 as is the RES share of GFEC required to meet Kosovo's EnCT obligations.

Table 12 indicates that Kosovo can meet its EnCT obligation by utilizing biomass as the primary renewable source for heating and cooking, with only a residual requirement for non-wood RES. Thus, any reasonable combination of small-scale hydro and wind projects currently in the ERO Authorization Process pipeline are capable of closing the remaining gap over and above the projections for domestic biomass utilization.

Table 12 – Forecast of Biomass Wood Utilization for Heating and Cooking Utilization vs. RES share of GFEC required to meet EnCT obligation;

Residual RES requirement 2010-2020

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Biomass for Heating & Cooking (ktoe)	314	325	335	346	354	365	376	376	386	396	407
RES share of GFEC to meet EnCT treaty (ktoe)	250	252	256	259	286	299	318	370	394	413	432
Incremental RES required to meet EnCT treaty (ktoe)	0	0	0	0	0	0	0	0	8	17	25

The reliance on biomass as a RES in achieving the 2020 target fosters a counter intuitive approach to diversifying environmentally sustainable energy sources. Moreover, while the EnCT target creates a binding obligation of its signatories to the target, it does little to incentivize countries heavily reliant on biomass to develop private sector investment in grid connected renewable technologies – the more difficult RES options to develop. Finally, this approach is inconsistent withthe GoK goal to diversify their sources of energy supply by incorporating RES into the electricity generation resource mix.

5.3.2 Kosovo National Renewable Energy Action Plan Targets:

The GoK Energy Strategy (2009-2018) & National Renewable Energy Action Plan focus on the development of grid-connected RES technologies rather than using wood-based biomass RES to meet targets.Therefore, significantly greater levels of grid-connected RES within the electricity sector are required to meet national targets than are required to meet EnCT targets.

The required levels of grid-connected RES projects that are required to meet 2020 targets of 25 percent and 29 percent grid-connected RES are illustrated in Tables10 and 11, respectively.

At the 25 percent target, Kosovo may meet its self-imposed targets by any of the following (or by a combination of the following technologies):

- 520 MW of wind; or
- 240 MW of hydropower; or
- 553 MW of Solar PV.

At the 29.47 percent target, Kosovo may meet its national targets by any one of the following (or by a combination of the following technologies):

- 930 MW of wind; or
- 428 MW of hydropower; or
- 989 MW of Solar PV.

When comparing current levels of grid-connected RES technologies against the amount of MW required to meet Kosovo‘s 2020 targets, it is apparent that a significant amount of grid-connected RES technologies must be introduced onto the Kosovo transmission and distribution networks over the next 7 years if Kosovo is to meet its national goals as expressed in its Energy Strategy and in the NREAP. The impact on end-user electricity tariffs should be assessed for affordability at the suggested levels of RES adoption.

While challenges exist to deployment of these technologies in Kosovo, the strategies‘ intent creates the impetus for Kosovo to mitigate its market design, regulatory, technical and authorization challenges and evolve these processes into an environment supportive of private sector led growth in grid-connected RES generation projects.

6 PROJECT RISK

Government policies that reduce risks that developers/investors face in developing, constructing and operating renewable energy projects will increase private sector interest in renewable energy projects. Actual and perceived project risk significantly impacts the availability of both the development capital necessary to develop and structure an RES project and the investment capital necessary for construction. The successful management of risk in the development, financing, construction, and operation of renewable energy projects (RES)is an important factor related to motivating private sector investment in RES projects; host country governments play a vital role in appropriate risk allocation.

Where project risks are perceived by developers to be mitigated and properly allocated to the party that is best able to manage the risk, and where developers are able to accurately determine the amount of development expense that will be required to pursue an RES project, RES project developers will be willing to pursue projects as long as the financial incentives for investment are sufficient.The converse is true in situations where project risk is perceived to be substantial and/or not well managed and financial incentives are insufficient to justify taking on that risk.

Risk management is one of the keys to the successful deployment of RES. Government policies that focus on the mitigation of risk will enhance the development of RES projects. Key to government support are policies that reduce the up-front risks of development and ensure the ability to finance projects.The stability of regulatory and legal frameworks over the long-term horizon of a RES project is vital once projects have entered operation.

Tables 13a-c provide an illustrative risk mitigation matrix for grid connected RES projects in the project development, construction and operation stages in a manner consistent with the recognized principles of project risk allocation and sharing among the various sectors and parties involved in any given privately financed transaction. Tables 13 a-c do not intend to cover all risks that a project might encounter, but rather is intended to indicate those areas where risk is either borne or mitigated by a host government.

Table 13a: Risk Mitigation Matrix for Renewable Energy Source Projects during Development

Risk Event	Reason or Cause	Proposed Remedy	Consequence for Lenders	Consequence for Investors	Party Best Able to Accept Risk
Development Period					
Delays in Land Acquisition	Complex land acquisition procedures, that delay site access/control and increase development expense	Government policies that provide basis for developer to access land in reasonable time period.	None	Increased development costs; the risk mitigation available to developer is project abandonment if project development costs and delays are excessive	Investor, provided host country policies ensure control within reasonable time periods
Delays in Site Permitting	Complex authorization procedures that delay permitting approvals and increase development expense	Transparent host country permitting policies that reduce time and cost of obtaining permits & reduce risk	None	Increased development costs; the risk mitigation available to developer is project abandonment if project development costs and delays caused by site permitting are excessive	Investor, provided host country policies provide for transparency in permitting process, clarity of process, defined time lines of approval and simplicity.
Delays in obtaining RES resource authorization	Complex authorization procedures that delay acquisition of necessary RES resources (e.g. water access for RES hydro)	Simplified access to RES resources; host country spatial planning & zoning policies	None	Increased development costs; eventual abandonment of project is mitigation if RES resources are not able to be sourced/controlled within reasonable time and cost	Investor, provided host country policies on RES resource control are transparent, processes are clearly defined and timelines of approval are clear.
Delays in obtaining Off-Take Agreement	Lack of standard Off-Take Agreement	Standard contract with customaryterms; Agreement approved by regulatory bodies	None	Increased development costs; Investor risk if terms are not industry standard;	Investor, provided host country policies promote signature of PPAs in an expedited manner and that PPA reasonably allocates risk within the PPA.
Obtaining Inter-connection Agreement	Lack of standard Interconnection Agreement	Standard contract with normal terms	None	Increased development costs; investor risk if terms are not industry standard	Investor, provided Interconnection Agreement contains industry standard provisions
Obtaining Feed-in Tariff authorization	Complex authorization processes;	Transparent authorization procedures	None	Increased development costs;	Investor, provided authorization process is transparent

Table 13b: Risk Mitigation Matrix for Renewable Energy Source Projects during Construction

Risk Event	Reason or Cause	Proposed Remedy	Consequence for Lenders	Consequence for Investors	Party Best Able to Accept Risk
Construction Period:					
Cost Overruns and/or Completion Delay leading to inc. cost	EPC Contractor fault; not an insured event	EPC contractor Liquidated Damages (LD)	No impact if LD sufficient; Debt cover ratios reduced if stand-by debt used	Returns eroded by servicing of stand-by finance or by increased sponsor equity requirement;	EPC contractor; Investor
	Insured Event	Proceeds from insurance	Debt cover ratios reduced if stand-by debt used	Returns eroded by servicing of standby finance	Investor/Developer; Risk allocated to Insurer
	Uninsured Force Majeure	Draw on Stand-by Finance	Debt Cover Ratios reduced if stand-by debt used	Returns eroded by servicing of standby finance	Investor/Developer and/or end-user depending on off-take contact terms; Host government if Political Force Majeure
	Changes in Law (CIL)or increased taxes	Pass-through event under contract;	If not a covered event, debt cover factors reduced if standby debt used	Cost impact of CIL and Tax events are pass-through if given protection via contract.	Government if covered event; Investor/Developer if not a covered event.
Failure of facilities to meet performance specifications at completion	Facility cannot achieve full power or generate guaranteed capacity output	Redesign and replacement by vendor under warranty clauses	Debt cover ratios reduced if remedy fails to correct the defect or deficiency; credit risk on vendor	Returns reduced if remedy fails to correct the defect or deficiency	EPC contractor; OEM vendor
Increasing market rate of interest	Interest rate increase	Interest rate swap; Stand by finance drawn	Debt cover ratios reduced if interest rate is not swapped prior to construction	Reduced dividend stream if interest rate is not swapped prior to construction	Investor/Developer
Adverse exchange rate movement	Increasing inflation rates	Standby finance drawn upon to cover foreign exchange payments	Debt cover ratios reduced if revenues not indexed to exchange rates	Reduced dividend stream if foreign currency revenues not indexed to exchange rate	Government if covered event; Investor/Developer if not a covered event;
Government Interference	Minor changes in tax, law, customs, environmental, and legal requirements	Standby finance may be drawn upon	Debt cover ratios reduced if costs are not passed-through under tariff	Reduced dividend stream if costs are not passed through;	Government if event is covered under contract; Investor/Developer if not a covered event

Table 13c: Risk Mitigation Matrix for Renewable Energy Source Projects during Operation

Risk Event	Reason or Cause	Proposed Remedy	Consequences for Lenders	Consequences for Investors	Party Best Able to Accept Risk
Operation Period					
Plant operating failure; operating cost increases	As a result of failures by the operating staff	Working capital or else standby finance drawn upon	Potential default	Potential loss of equity	Investor/Developer
Non-performance of regulatory undertakings and obligations	Failure of Regulatory Authorities to perform obligations and honor licenses& FIT	Proceeds from political and/or business interruption insurance from insurers	Potential default if not insured	Potential significant reduction in equity return if not insured	Host government and/or Investor/Developer depending upon terms of contract and availability of insurance
Inflation, exchange rate fluctuations, and interest rates	Changes in macroeconomic variables beyond the control of the owners	Fixed rate financing; Tariff indexation leading to cost pass through	No effect	Possibility of erosion of returns if rate increases do not keep abreast of inflation	Investor/Developer; or end-user depending on terms of Off-Take Agreement
Foreign exchange non-convertibility	Changes brought about by the Government‘s fiscal and monetary policies	Proceeds from currency inconvertibility insurance with either MIGA or U.S. OPIC	Potential default	Significant impact on foreign currency return	Host government
Lack of foreign exchange for dividend repatriation	Adverse host government fiscal and monetary policies	Standby finance may have to be drawn upon	Potential default	Significant impact on foreign currency	Host government
Government Interferences	Minor changes in tax, law, customs, environmental, and legal requirements	Standby finance may be drawn upon	Debt cover factors would be slightly reduced if standby finance is utilized	Returns might be reduced because of timing events	
	Capricious changes in governmental regulations for the energy sector(including no export access)	Proceeds from business interruption insurance from either MIGA or U.S. OPIC	Loans continue to be repaid until issue resolved with Government through negotiation	No effect since investors continue to receive dividends	

6.1 PROJECT RISK & MITIGATION

As indicated in the previous tables, investors in RES projects are willing to accept certain risks, including development risk, financing risk, construction risk and operations risk, as these risks can be mitigated by the investor (or can be avoided if encountered early in a project (e.g., development risk can be mitigated by abandoning a project that does not proceed within reasonable timelines)).

Country- and market-specific risks must be mitigated (via allocation to a party other than the developer/investor) if a project is to receive financing.Such risks include:

- price risk and market risk related to the sale of electricity and the price at which electricity is sold;
- regulatory risk (e.g., the risk that regulations that govern RES projects, including Feed in Tariff levels, might change, etc.);
- legal risk (e.g., the risk that laws that provide certain rights to RES projects might be revoked or changed in a manner that is less favorable to the investor); and,
- political risk.

These risks are not within the ability of the developer/investor to control and therefore must be allocated away from the project. Host government policies are of critical importance.

The following provides a brief review of the key risks inherent in RES projects, how these risks might best be mitigated, and the role of the host government in such risk mitigation.

6.1.1 Planning & Development Risk

The planning and development phase of a RES project can be lengthy depending upon the authorization processes as well as the land acquisition and permitting requirements and processes required. The amount of time necessary and the risks inherent in gaining authorization approval can determine whether a project developer will pursue a project or not. This issue is directly related to administrative policies and laws in a host country. To encourage developers and investors to pursue RES projects, host country authorization processes must be conducive to project realization and should be transparent. RES developers and investors mitigate project development risk by carefully assessing project risk before developing a project and by abandoning a project if the process of development is taking longer than anticipated due to administrative (or other) hurdles. Host country policies are critical to ensure investor interest at this stage.

6.1.2 Resource Identification Risk (and lack of available data)

Data availability regarding the intensity of RES resources is critical in attracting investor interest in RES projects. Lack of data hinders project development.Investors/developers and lenders will require accurate, long-term (at least one year) data. A host country can play a significant role by classifying areas of RES availability by resource intensity by the use of solar and wind maps.

6.1.3 Market Risk

RES projects are generally more expensive (on a delivered cost/MWh) than are conventional generation technologies and are, therefore, unable to compete with conventional technologies if revenues are not protected. Financial support mechanisms are needed in order that RES projects provide sufficient return on investment. Government and regulatory

policy instruments such as feed in tariffs, network priority, and access to long-term off-take agreements provide significant relief to the RES investor from market risk. The long-term stability of regulatory support schemes is critical as is tariff affordability.

6.1.4 Access to an Off-take Agreement (Power Purchase Agreement (PPA))

The legal right of a RES project to sell electricity derived from the project at a declared tariff is of fundamental importance, as this eliminates market and price risk and, ultimately, revenue risk. A PPA provides the terms under which a RES project may sell its output and is a critical component of a lender's security package in project finance. The provision of a standard PPA that incorporates 'industry standard' terms and conditions is an important component of host government support and provides more certain access to project finance.

6.1.5 Grid Access

Access to the transmission and distribution network is one of the key risks for grid-connected RES projects and can vary widely depending upon the status of the existing infrastructure and established rules for grid access. Insufficient grid access is one of the greatest impediments to the deployment of RES.Lead times can be substantial for obtaining existing grid access or the development of grid infrastructure (both shallow and deep connections[16]) necessary to support grid-connected RES projects, and can result in delays in project development. Host country policies that provide for a 'shallow charging' methodology increase transparency and cost certainty of RES project interconnection and lower overall RES project costs.

6.1.6 Financing Risk

A well-structured project is critical to attract lender interest and increase project viability.Host country policies that support private sector investment, the repatriation of dividends, currency exchange, etc. are all vital for ensuring financing.

6.1.7 Construction Risk

Construction risks include: cost overruns, schedule delays (especially those that extend completion beyond a required in-service date), and adverse and unexpected events of force majeure that extend the project beyond a required in-service date or increase project cost. Construction risk is accepted by a project developer/investor/lender, as this risk is often transferred to a 3rd party engineering, procurement and construction contractor (EPC contractor) via contract. As long as a host country has reasonable processes with regard to the import of construction equipment, etc., this issue should not be viewed as a source of impediment for the deployment of RES projects.

However, if admittance to a support scheme requires a firm 'in service' date to be achieved by which electricity must be generated, the reasonableness of the 'in service' date will be a critical risk issue to address as will the length of any 'cure period' provided.

Note that Force Majeure risk is not accepted by an investor and, therefore, the policies of the host country(and any associated PPA) must provide protection to an investor for force majeure risk. This is especially the case where there is a firm 'in service' date obligation placed upon the developer/investor. In the case of Kosovo, the requirement of the ERO that

[16] 'Shallow Charging' refers to the direct costs associated with connecting a RES project to the transmission or distribution system. 'Deep Charging' refers to both the direct and indirect costs (including network upgrades) associated with connecting a RES project to the transmission or distribution system.

a project meet a given in-service date without also providing relief to a developer/investor in the case of project delay due to a force majeure, will be viewed as a significant risk by a RES project developer.

6.1.8 Operation Risk

The O&M strategy employed will have a direct impact upon the production of the plant; this risk is either accepted by the investor/operator or is allocated via a long-term contract to a 3rd party with specific expertise in operating a particular RES technology.Host country policies do not significantly impact project operations, as long as the legal and regulatory environment in which the project was first conceived does not change substantially to the detriment of the RES project (e.g., there is long-term regulatory stability, including stability of FIT for the duration that FIT are provided).

6.2 Risks Requiring Government Solutions and Partnering Support

The following table details perceived risks as compiled from meetings with developers and investors that had expressed interest in exploring RES project opportunities in Kosovo. Suggested GOK mitigation strategies are provided.

Table 14: Perceived Risks that can be Mitigated through Direct Support or Partnering with Government

Unresolved Risks as Perceived by the Developer	Suggested Mitigation Strategies and Solutions
Land Ownership Risks	Implementation of an RESPower Plant Siting Program; Government Acquisition of Viable Sites for Various RES Technologies for Sale through Public Auction on a Modified PPP Basis
Permitting Risks	Creation of a *One Stop Shop* or else in a Board of Investments-type Organization
Resource Availability Risks (including hydrological, wind resource availability, an solar insolation data risks)	Undertaking a Formal Hydro Site Identification and Validation Program including Compilation of Multi-Year Stream Flow and Watershed Rainfall Data; Initiate a Nationwide Wind Mapping Program, Erect Met Towers on the Most Promising Sites, Collect Wind Resource Data for at Least 18 Months, and Make Qualified Sites Available for Sale at Public Auction; Complete Solar Insolation Mapping for the Entire Country and Identify Promising Sites for Future Development as Solar PV Power Projects
High up-front Project Development and Transaction Cost Risks	Creation of an RES and Energy Efficiency Project Development Revolving Fund (targeted primarily at local developers and SMEs)
Uncovered Market Risks: non-payment risk of FITs as well as off take agreements, PPAs with insufficient tenors to qualify for long-term financing, and insufficiency of funds in the Renewable Energy Fund	Design and implementation of a Clean Tech Fund with Multilateral and Bilateral Funding Support Development of a Partial Credit and/or Loan Guarantee Program in Concert with EBRD Acceptance of a USAID Development Credit Authority Program for Local Commercial Banks

6.3 AN EXAMPLE OF SUCCESSFUL BEST PRACTICES

Thailand is seen as having developed one of the most successful RES promotion and implementation program in the world today outside of such EU-27 countries as Germany, Austria, the Czech Republic, and Spain. Thailand's success was achieved through Government implementation of six key supporting mechanisms including investment grants, energy soft loans from a Government-sponsored revolving fund for RES and energy efficiency projects. An overview of this program is presented in the figure below:

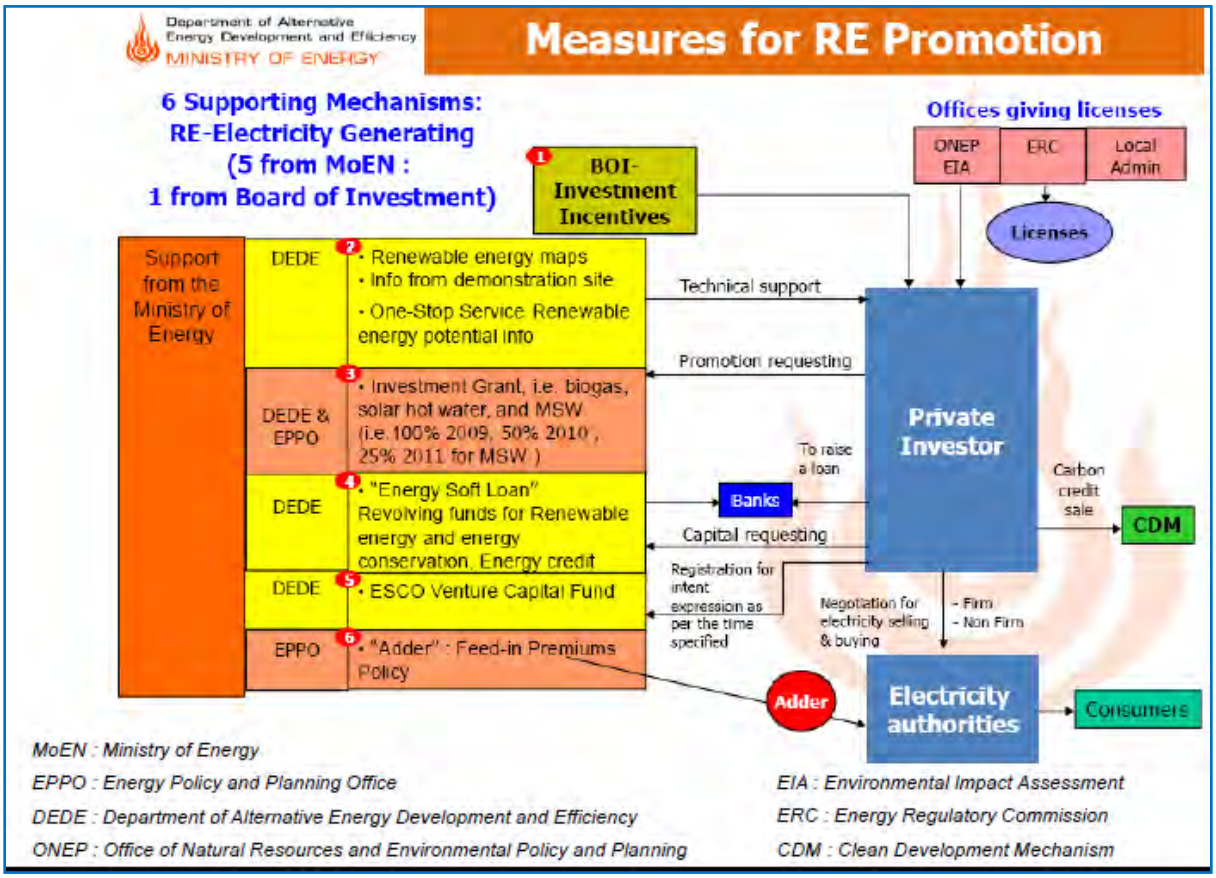

Figure 1: Government of Thailand Measures for Promoting the Development and Investment in Promising RES Projects

The terms and conditions for one of the most successful elements or components of this program are highlighted in the table below:

Table15: Terms and Conditions of Revolving Fund for RE and EE Projects in Thailand

Terms and Conditions	Revolving Fund for RE and EE Projects in Thailand
Size of Revolving Fund	Phase I: USD 60 million (Completed '03-'05) Phase II: USD 60 million (Completed'06-'07) Phase III: USD 60 million (Completed '07-'09) Phase III: USD 28 million (On going '09-'11-addition) Phase IV: USD 12 million (On going '09-'11) Phase V: USD 14 million (On going '10-'12)
Loan Period	Maximum 7 years
Eligible Borrowers	Facility owners, ESCOs and project developers
Eligible Projects	EE improvement or RE development and utilization
Loan Size from RF	Up to 100% of project costs per measure but not more than USD 1.5 million
Interest Rate	Less than 4% p.a., on a negotiable basis
Eligible Investment Costs	▪ Equipment and installation costs ▪ Consulting costs – design, control, supervision, guarantee fees ▪ Civil work, piping, or necessary components specifically and necessary for the project ▪ Associated necessary costs – removal of existing equipment, transportation, taxes, VATs
Not Eligible	▪ Land costs, land improvement costs, building construction, costs not specifically needed for the project e.g. main transformers, substation

The remainder of this study will focus on the financial incentives provided to RES projects in Kosovo as well as the non-financial barriers that might exist. These financial incentives and non-financial barriers should be viewed in the context of risk reduction associated with the deployment of RES projects.

7 ELECTRICITY MARKET DESIGN, REGULATORY SUPPORT & TECHNICAL ISSUES

7.1 ELECTRICITY MARKET DESIGN

7.1.1 Electricity Market Design – General Discussion

Within the context of an electricity market, there are three significant parameters that are necessary for the development of grid-connected RES projects:

1. A rational electricity market with a transparent regulatory framework and defined market rules;

2. The incorporation into the electricity market design and regulatory structure of components that support the needs of grid-connected RES technologies;

3. The separation of market participants and the incorporation of strong regulatory structures and oversight in order that grid-connected RESprojects gain market access as a viable clean-energy, supply-side resource of electricity.

In implementing a restructuring of the electricity sector, the Government of Kosovo has incorporated these parameters to provide a basis for the successful development of grid-connected RES projects.

7.1.2 Electricity Market Design – Kosovo Specific

7.1.2.1 Development of Rational Market with Transparent Regulatory Framework and defined Market Rules

The GoK – with the assistance of international donors -- has made significant gains in its efforts to develop a rational electricity market with a transparent regulatory framework and defined Market Rules.

In 2005, the Republic of Kosovo signed the treaty establishing the Energy Community (the Energy Community Treaty (EnCT). As part of the process of incorporating the obligations inherent in the EnCT, Kosovo has adopted primary energy legislation and has initiated the restructuring of the electricity industry with the objective of increasing private sector investment and competition – both in supply and demand – in the electricity market. Regulatory oversight of the electricity market is performed by the ERO in accordance with the responsibilities and obligations imposed upon the ERO under law.

The re-structuring of the electricity market is in its final stages[17]. Modifications to the market are in accordance with Kosovo's obligations under EnCT and have been structured to facilitate the development of electricity generation projects (including the Kosovo e Re project) and to support the objective of privatizing the KEK Distribution and Supply businesses privatization (KEDS). The Market Rules have been re-drafted to be compatible with the revised marked design and address issues related to intermittent energy from grid-connected RES generators and KOSTT's obligation to procure ancillary services to back-stop RES generation from such intermittent sources of energy.

In October 2012, the Government of Kosovo and the consortium of Calik-Limak signed a Sale & Purchase Agreement for the transfer of KEDS to the private sector. It is anticipated that the SPA will be fully effective on 3 May 2013. The unbundling of KEK into separate businesses – Mining & Generation and Distribution and Supply -- and the subsequent privatization of KEDS aligns the electricity market in Kosovo with EnCT requirements.

The redesign of the electricity market is defined by bi-lateral contracts to be entered into between generators and suppliers. This bi-lateral market requires day-ahead declaration of available capacity and nomination of energy to be supplied under bi-lateral contracts. The bi-lateral market is combined with a balancing mechanism designed to assist the transmission system operator (TSO) to keep the system in balance both on a day-ahead basis and in real time. Transparent market rules and codes have been developed by the Market Operator (MO) and TSO. Parties to the electricity market will accede to the market rules as established by the MO and TSO

[17] The NREAP provides a review of the strategic, legal and institutional framework that supports the electricity market in Kosovo.

7.1.2.2 The incorporation into the electricity market design and regulatory structure of components that support the needs of grid-connected RES projects

Kosovo's primary energy laws, the restructured electricity market, and regulatory structure incorporate components that support the needs of grid-connected RES electricity generation projects. These components include:

- a primary purchase obligation by the Public Supplier to purchase the full output of electricity from grid-connected RESprojects that have obtained a Certificate of Origin;
- the right to enter into a Power Purchase Agreement (discussed below);
- the right to access the grid (both the transmission and distribution networks); and,
- specific arrangements with regard to real-time balancing of electricity and the obligations of intermittent grid-connected RES projects.

A discussion of these components as they pertain to the support of grid-connected RESprojects in Kosovo will follow in the sections that detail the legal rights of grid-connected RES projects, grid access and PPAs.

7.1.2.3 The separation of market participants and the incorporation of strong regulatory structures and oversight in order that grid-connected RES projects be able to access the market as a viable clean-energy supply-side resource of electricity

The MED is responsible for determining the energy strategy of the Government of Kosovo. The ERO is provided the authority under law to oversee regulated entities within the electricity market as well as to develop and administer secondary legislation as it pertains to issues within the electricity market, including issues pertaining to grid-connected RES projects.

The ERO is an independent agency of the Republic of Kosovo, established by the Assembly in accordance with Articles 119.5 and 142 of the Constitution of the Republic of Kosovo. The ERO provides oversight of the regulated portions of the electricity market and is charged with balancing the needs of market participants (including RES generators) and regulated tariff customers. The ERO has a critical role in ensuring that grid-connected RES projects are able to access the electricity market on an unbiased and continuing basis, as well as being responsible for the design of all tariff-related financial incentives such as FITs.

Within Kosovo, the ERO has been given the authority under law to manage the authorization process for grid connected RES projects in conjunction with the indicative targets for grid-connected RESelectricity as set by the MED in accordance with Kosovo's energy strategy. The ERO's independent and unbiased perspective ensures equal access to the electricity market in Kosovo for grid-connected RES projects.

In addition to providing a regulatory environment that is conducive to the development of RES projects, the government of Kosovo is moving forward with the unbundling of the state-owned electricity company and the development of market rules that facilitate grid access and trading between market participants. The removal of KEK's dominant position via the privatization of KEDS provides a basis for new market participants – including RES generators – to participate in the Kosovo electricity market.

Regulatory Support Schemes – in the form of Feed-In Tariffs (discussed in Section 10.3 of this report) and a purchase obligation upon the Public Supplier – and regulatory oversight as required under law provide a continued basis for ensuring grid-connected RESprojects are able to develop within Kosovo in conjunction with conventional sources of electricity.

7.2 COMPONENTS OF SUPPORT FOR GRID-CONNECTED RES PROJECTS

RES projects require support within the electricity market design in order to incorporate the specific requirements of grid-connected RES projects. The following section describes those specific support mechanisms provided within the electricity market design in Kosovo.

7.2.1 Kosovo Specific

7.2.1.1 Renewable Energy Strategy

The Government (the Ministry of Economic Development) has developed the Energy Strategy of Kosovo2009- 2018in accordance with the requirements of the Law on Energy. One of the objectives of the energy strategy is to stimulate the utilization of sources of renewable energy both to assist in diversifying the mix of sources of energy supply to enhance energy security and to meet Kosovo‘s EnCT obligations.

In the framework of the EnCT, Kosovo has developed both annual and 10-year indicative targets for renewables. MED has also developed a detailed plan for implementation of: i) Directive 2001/77/EC of the European Parliament on the promotion of electricity produced from renewable energy resource, and ii) Directive 2003/30/EC of the European Parliament on the promotion of biofuels or other renewable fuels for transport.Both of the referenced directives were repealed by 2009/28/EC. However, the EnCT was amended to reflect this fact only in October 2012.

7.2.1.2 Laws

Kosovo‘s legal framework provides significant support for the development of RES projects.Each of the three primary pieces of energy legislation (the Law on Energy, the Law on Electricity, and the Law on the Energy Regulator) contain important provisions that provide support for RES projects.

Table 16summarizes the specific clauses in the primary energy legislation thatspecifically relate to the developmentand use of grid-connected RES projects.

Table 16: Relevant provisions of Kosovo energy laws as they relate to rights of RES

The Law On Energy	
Article 12 – Obligations of Energy Enterprises in Relation to RES:	
12.1	When dispatching electricity generation, the TSO has an obligation to give priority to electricity generation from renewable energy resources;
12.2	TSO and DSO are required to establish and publish standard rules on the entity responsible for bearing the cost of technical adaptions to the network necessary to integrate grid-connected RESprojects to the interconnected system;
12.3	TSO and DSO are required to provide any grid-connected RES project with a detailed estimate of the costs associated with connection to the network
12.4	TSO and DSO are required to provide standard rules pertaining to the allocation of costs between all electricity producers that benefit from the cost of system installations pertaining to the network;
12.5	The ERO shall ensure that TSO and DSO fees for connection and for use of the transmission and distributions systems do not discriminate against electricity from RES, including where grid-connected RES projects are located in rural areas.
The Law on Electricity	
Article 9 – Certificates of Origin	
9.3	Provides that the Public Supplier shall give purchasing priority to electricity produced from renewable energy sources for which a certificate of origin has been issued
9.4	The Public Supplier shall be obligated to purchase at a Feed-In Tariff (FIT) determined by the ERO the entire amount of electricity produced from renewable sources that is required to meet the needs of electricity consumption in Kosovo;
Article 12 – Rights and Responsibilities of the TSO	
12.14	Give priority of dispatch of electricity generation from renewable energy resources, subject to limitations regarding network stability as defined in the Grid Code;
12.15	Establishing and publishing standard rules on which entity bears the cost of technical adaptions, such as grid connections and grid reinforcements, necessary to integrate new electricity generation into the interconnected system;
12.16	Providing any new electricity provider wishing to be connected to the transmission system with a comprehensive and detailed estimate of the costs associated with the connection;
12.17	Establishing standard rules relating to the sharing of costs of system installations such as grid connections and reinforcements, between the electricity producers benefiting from them;
Article 16 – Rights and Responsibilities of DSO	
16.1.8	Giving priority to dispatch of electricity generation from renewable energy resources and co-generation, subject only to any limits specified for purposes of system security by the Grid Code, the Distribution Code, and other rules and regulations;
16.1.9	Establishing and publishing standard rules on who bears the costs of technical adaptions, such as grid connections and grid reinforcements, necessary to integrate new electricity generation into the system;
16.1.10	Providing any new electricity provider wishing to be connected to the transmission system with a comprehensive and detailed estimate of the costs associated with the connection, for which the TSO may levy a charge that reflects its reasonable costs;
Article 18 – Public Supplier	
18.6.3	Purchase at a priority any capacity and electricity for which a certificate of origin has been issued by the ERO at the Feed-in Tariff determined by the ERO

The Law On Energy Regulatory Office	
Article 14 – Duties and Powers of the Energy Regulatory Office	
14.1	The ERO shall have the duty to establish and enforce a regulatory framework for the energy sector in Kosovo, ensuring non-discrimination, effective competition, and the functioning of the energy market, consistent with its general responsibilities as specified in this law.
Article 15	
15.1	The ERO shall be responsible for monitoring of the operation of the markets for electricity … to ensure efficient functioning of those markets, and to identify any remedial action that is required. Such monitoring shall include:
15.1.4	The time taken by transmission and distribution operators to make connections and repairs;
Article 28	
28.1.1	The generation of electricity at an electricity site with total capacity not exceeding 5MW

7.2.1.3 ERO Ruleswith Specific Relevance to RES

In addition to the three energy laws, the ERO has issued two sets of rules (‗the Rules') of specific importance to grid-connected RES derived electricity:

1. ‗Rule for the Establishment of a System of Certificates of Origin for Electricity Produced From Renewable Energy Sources, From Waste and Co-Generation in Combination with Heat in a Single Generating Unit', and;

2. ‗Rule for the Support of Electricity for which a Certificate of Origin has been issued and Procedures for Admission to the Support Scheme'

These Rules, which are process mapped in Appendix VI, provide the basis for the grid-connected RES generation project to be admitted to the Support Scheme.

The Rules provide that a RES project that has obtained a Certificate of Origin may beentitled to the prevailing FIT tariff for a period of 10-years from the time when the RES project was first admitted to the Support Scheme. After the completion of the 10-year period, the RES project that has been provided a Certificate of Origin may continue to sell electricity on a priority basis, however, the associated tariff will be the prevailing wholesale market price paid by the Public Supplier.

The ERO Decision V_359_2011 provides the level of FIT for specified RES technologies. While Article 6 of the Rule on the Support of Electricity for which a Certificate of Origin has been issued …' indicates that the ERO may provide tariffs differentiated by time period (time of year, time of day), the FIT provided for in the ERO Decision V_359_2011 is a flat tariff[18].The FIT is further indexed for inflation in accordance with the provisions of Article 6.2 of the Decision.

[18] It is noted that within the EU there is precedent for the profiling of tariffs by time of day to encourage the generation of electricity during peak demand periods by RES generators with non-intermittent energy sources.

Potential Impediment:
A potential impediment to the effectiveness of the Support Scheme derives from the fact that investors in RES projects will only benefit from the FIT once they are admitted to the Support Scheme. While RES projects may be provisionally accepted to the Support Scheme, a RES project will only gain full acceptance to the Support Scheme and benefit from FIT once the project has been commissioned and is in commercial operation. The tiered timing of entry to the Support Scheme places significant risk on the RES investor, as the investor is required to incur development expense, finance the project, construct the project and meet acceptance tests, all prior to admission to the Support Scheme. As MED Administrative Instruction on Renewable Energy Sources Targets places a limit on the amount of RES projects to be admitted to a Support Scheme, it is possible that a project may ultimately NOT be admitted to a support scheme due to achievement of RES Indicative Targets even though a project was provisionally accepted. This risk becomes greater as more applications are approved by the ERO for preliminary acceptance, as each project that has been provisionally accepted increases the total amount of MW of accepted projects closer to the Indicative Target limit set by MED. Uncertainty over whether a project will ultimately be able to access the FIT will act to dampen developer/investor interest, as there is a substantial variation between the FIT and the wholesale price of power at which the RES project would otherwise be compensated. In addition, the ERO provides a two-year period for the project to enter commercial operation after a preliminary authorization has been provided. This period: a). may be too short and is not technology specific (e.g., some technologies may have a longer construction cycle than others).
Impediment Solution:
A potential solution to the impediment caused by the timing of acceptance to the Support Scheme would be for the ERO to provide final acceptance to the Support Scheme (not just provisional acceptance) once all authorizations have been gained rather than final acceptance occurring upon commercial operation, as is currently the case. The ERO should consider whether the two-year period for bringing a project on-line is sufficient and whether different periods might apply to RES using different technologies.

7.2.1.4 PPAsand RES Projects

The Public Supplier is obligated to enter into PPAs with grid-connected RES projects that have obtained a Certificate of Origin from the ERO. The term of the PPA is for 10 years for RES projects that have been admitted to the Support Scheme and 1 year for RES projects that have not been admitted to the Support Scheme (e.g., a project that has obtained a Certificate of Origin but does not benefit from the FIT).

Deloitte has reviewed the standard PPAs for wind and hydro as provided by the Public Supplier. In general, the PPAs provide an allocation of risk that is reasonably consistent with customary practices, as the risk of financing, development, construction and operation is

allocated to the RES investor. The standard PPAs incorporate the protections and advantages provided to RES projects by the three energy laws and the ERO's rules. However, potential impediments associated with the PPAs have been identified .

Potential Impediment:
While a PPAs is an important protection provided a RES project, it is noted that there exist certain impediments that might undermine the effectiveness of the PPAs in encouraging RES project development: ▪ It is noted that the ERO has yet to approve the PPA as designed by the Public Supplier. ▪ There is lack of clarity on interface issues between the PPA and ERO rules which govern RES projects. For example, if a PPA is terminated by the Public Supplier due to non-performance under the terms of the PPA, it is not clear whether the RES project is excluded from the Support Scheme on a go-forward basis. ▪ The template PPA has not been finalized, therefore, within the template PPA there are issues that need to be addressed, such as the definition of acceptance tests sufficient to provide transparency during the process of grid interconnection. ▪ Project financing requires that a PPA will have been entered into prior to the financing stage. However, under the structure of the PPA, a PPA is not signed until after construction has occurred and just prior to commissioning (e.g., there are no conditions precedent for the effectiveness of the PPAs, rather the PPA in the recitals requires certain events to have occurred, namely the construction of the project). The fact that a PPA is not entered into until construction is completed will impact the availability of project finance for RES projects in Kosovo. ▪ The 10-year term of the PPA is consistent with primary legislation and ERO rules, however, it is suggested that this PPA term be reviewed against industry best practice as the 10-year term is short relative to industry standards. The PPA term is a significant determinant of overall revenue risk of associated with RES projects. It is noted, however, that the length of term of PPAs afforded to RES projects should be viewed in light of the general view of the Energy Community against long-term PPAs.
Impediment Solution:
The template PPA developed by the Public Supplier should be finalized and approved by the ERO. The terms of the PPA should be integrated with pertinent ERO Rules in order that the PPA and Rules work together in a cohesive manner. The PPA should be entered into prior to facility construction so that it may form part of the security package for project financing. The 10-year term (of both the PPA and the Support Scheme) should be revisited in light of industry benchmarks for FIT support.

7.2.1.5 Grid Access – Cost Allocation

The EU Directive 2009/28/EC on the promotion of electricity produced from renewable energy sources requires that transmission and distribution system operators guarantee grid

access to RES projects; and – as discussed above – all three of Kosovo‘s basic energy laws provide specific rights to grid-connected RES projects. However, that legislation also provides that these RES projects must pay grid connection charges that reflect the costs of connecting to the grid.

The distribution of costs of network connection among beneficiaries is an important aspect of electric market design. Costs can be distinguished between the direct costs associated with connecting an RES project directly to the gird and those associated with the additional expenses related to grid reinforcement necessary to accommodate a new RES project.

In common practice, an RES plant will have to pay a connection charge to the DSO/TSO to cover the cost of connecting the plant to the grid (‚shallow connection charging‘). Costs related to the reinforcement of the grid may be recovered via the use of use of system charges and are socialized. The disadvantage of a shallow connection charging profile is that the RES developer may not consider the cost of network reinforcement charges and capacity constraints when siting a project, thus providing a sub-optimal solution.

In some cases, the RES plant will, in addition to the direct costs of interconnection, also have to pay a portion of grid reinforcement costs associated with grid reinforcement (‚deep connection charging‘). While this may lead to an optimal solution from a network perspective, the added costs associated with a deep connection charge are borne by the RES developer and increase project risk.

Potential Impediment:
KOSTT – the TSO within Kosovo – employs a deep connection charging process. This is likely an appropriate approach given levels of investment required in the transmission system and KOSTT‘s limited financial resources. However, such an approach may discourage grid-connected RES projects where deep connection charges are unavoidable and significant.
Impediment Solution:
KOSTT should consider utilizing ‚shallow connection charging‘ as the basis for defining interconnection costs as this increases transparency and reduces RES project costs. Costs associated with system upgrades necessary to accommodate the RES project should be socialized across all users of the transmission system via a Transmission Use Of System (TUOS) charge. Alternatively, KOSTT (and the GOK) might consider requesting donor support in the form of grants and low-cost loans for these network upgrades.

7.2.1.6 System Operation –Market Balancing of RES Generators

The electricity market design requires that Generators and Suppliers submit bid and offer volumes and prices on a day-ahead basis for energy used for system balancing. The TSO will accept bids and offers for market balancing: a) to maintain the system in balance, b) to give priority to the dispatch of RES as required under law, c) to provide for transmission losses and d) to meet any other system obligation as described under law and in the Grid Code.

In determining the imbalance calculation of each market participant, the Transmission System Operator (TSO) and Distribution System Operator (DSO) will provide the Market Operator (MO) with data required for settlement. Each Trading Party's actual energy in each hour of a given day will be summed to their energy accounts and the MO will record each Trading Party's energy imbalance in each hour.

The MO will record the volume of energy produced by grid-connected RESgeneration units and the imbalance position of these RES units vs. their declared position. The allocation of the costs of settlement of RES generator imbalances is governed by Article 19 of the ERO's Rules on the Support of Electricity for which a Certificate of Origin has been issued and Procedures for Admission to the Support Scheme,' which specifies that 25 percent of the costs of imbalance management caused by a RES generator's metered energy being less than its nominated energy in any hour will be borne by the RES generator, with the remainder of the cost being charged to a Renewable Energy Fund set up to fund FIT.

Potential Impediment:
RES generators admitted to the Support Scheme are responsible for 25 percent of the imbalance cost caused by them. While the obligation to pay 25 percent of the imbalance charge will motivate RES generators to declare their day-ahead generator positions as accurately as possible, such a charge may substantially impact the investor returns given that intermittent RES projects will be subject to such imbalance charges on an almost continuous basis.
Impediment Solution:
Analysis should be undertaken to determine whether the level of FIT provided under the Support Scheme is sufficient to motivate private sector investment given the balancing market obligations imposed on RES generation projects. Alternatively, KOSTT might consider amending the Market Rules such that imbalance costs attributable to intermittent RES technologies are socialized, with such costs being allocated to all users of the transmission network via a TUOS charge.

7.3 Electricity Grid – Technical Barriers to RES adoption

Many forms of RES are considered intermittent sources of electricity generation; electricity output from RES generators is a function of resource intensity at any given point in time. The intermittent nature of RES significantly increases issues related to real-time network balancing, especially in markets where there is limited reserve capacity, auxiliary generation and spinning reserves. The adoption of increasingly greater amounts of RES as a percent of installed net capacity on a network causes significant imbalance issues.

While the MED has published indicative targets for RES integration, these targets need to be considered in the context of Kosovo's existing electricity system. Physical constraints may limit the extent to which RES may be integrated into the existing network.

7.3.1 Potential technical constraints on grid-connected RES

Kosovo's energy sector is characterized by insufficient capacity to meet peak demand, especially during the winter peak period. KOSTT is responsible for maintaining adequate

primary, secondary and tertiary reserves. As Kosovo does not have a tertiary reserve of electricity capacity, KOSTT is obliged to disconnect load to maintain system balance.

KOSTT senior management have indicated that the maximum capacity of intermittent RES that will be allowed access to the KOSTT network at the present is 10 percent of total net available generating capacity (including both thermal and renewable capacity). TSO network constraints present a significant impediment to the adoption of grid connected RES.

7.3.2 Using Current Transmission Conditions to Evaluate 2020 Target

A critical requirement of incorporating intermittent energy sources into the grid is the system operators' ability to balance load and supply. Balancing generation with load typically takes place within a local or regional balancing area with sufficient dispatchable conventional resources to meet load fluctuations. In the absence of spinning/ non spinning reserves and quick firing peaking plants, incorporating intermittent energy sources into the grid can only be currently accommodated at a level that allows KOSTT to effectively load balance the system. The 10 percent limitation of intermittent grid-connected RES as a percent of total net available generating capacity (including both thermal and renewable capacity) places a significant constraint on the adoption of grid-connected RES projects. This current network limitation has the potential to be increased should findings from a planned World Bank technical assessmentsupport greater incorporation of renewable energy into the network. For purposes of this study, the 10percent limitation is used in the absence of an official technically derived network constraint.

Deloitte used assumptions regarding thermal power production net capacity (Table 17)to estimate the limitation on the amount of intermittent RES(MW) that is able to be accommodated on the transmission grid given the 10 percent limitation.

Table 17: Net Thermal Capacity (2009)[19]

Thermal Operating Units	Gross Unit Capacity (MW)	Net Unit Capacity (MW)	Net Available Capacity (MW)
Kosovo A3 TPP	200	182	115
Kosovo A4 TPP	200	182	115
Kosovo A5 TPP	200	187	125
Kosovo B1 TPP	339	309	245
Kosovo B2 TPP	339	309	270
Total Capacities (MW)	**1,288**	**1,169**	**870**

In addition, ERO Decision V_350_2010 provides the maximum amount of RES necessary to meet Indicative Targets, which also provides a limitation on the amount of grid-connected RES generation that will be allowed into the Support Scheme.

Utilizing these assumptions, the following projections were developed for the period 2011 – 2016 for grid connected RES technologies:[20]

[19]World Bank Options Report

- Maximum RES allowed on the KOSTT network (MW)l
- Estimated unused RES network capacity (MW);
- Estimated unused RES FIT ceiling (MW) due to KOSTT network constraints

The results of this analysis are presented in the Table 18.

Table 18: Analysis of Projected ERO FIT Ceilings (MW) and Current Network Constraints Regarding RES Generation[21]

Primary RES	2011	2012	2013	2014	2015	2016
HPPs (<10MW)	35.1	37.5	40.0	42.7	45.5	48.4
Wind	31.4	49.6	69.4	91.2	115.1	141.5
PV Solar	0.00	0.00	0.00	0.00	0.00	0.00
Biomass and Biogas	0.2	0.3	0.3	0.4	0.5	0.5
Allowable RES FIT Ceiling (MW)	66.7	87.4	109.7	134.3	161.1	190.4
Net Available Thermal Capacity (MW) – Table 17	870.0	870.0	870.0	870.0	870.0	870.0
Total Net Available Generating Capacity (MW)	936.7	957.4	979.7	1004.3	1031.1	1060.4
Maximum RES Allowed on Network @ 10%of Total Net Available Generating Capacity (MW)	93.7	95.7	98.0	100.4	103.1	106.0
Estimated Unused RES Network Capacity (MW)	27.0	8.3	0.0	0.0	0.0	0.0
Allowable RES FIT Ceiling as % of Total Net Available Capacity	7.1 %	9.1 %	11.2 %	13.4 %	15.6 %	18.0 %
Estimated Unused RES FIT Ceiling (MW) Due to Network Constraints	0.0	0.0	11.7	33.9	58.0	84.4

To determine the constraint on grid-connected RES as a result of transmission network constraints, the total net available generation capacity was multiplied by the 10 percent system constraint level. The analysis indicates that only 106 MW would be allowed access to the transmission grid by 2016, which places a significant ceiling on the amount of grid-connected RES. Were the previously mentioned World Bank study to indicate an easing of the system constraint to a 20 percent limitation, the amount of grid-connected RES would approach 212 MW. In either case, system constraints will limit the ability of Kosovo to meet its grid-connected RES targets as specified in the NREAP 2011-2020.

Potential Impediment:

The intermittent nature of certain RES technologies causes network instability in the absence of adequate reserve margin and auxillary services. System constraints might impede realization of the targets identified in NREAP.

[20] Biomass for heating, cooking and water heating is not considered in the above analysis.

[21] ERO Board Decision on Determination of Feed in Tariffs, March 30, 2011

Impediment Solution:
The forthcoming World Bank report will provide greater clarity as to system constraints that might limit grid-connected RES. However, network strengthening to allow greater amount of grid-connected RES should be considered.

Theabove analysis assumes that all RES projects will connect to the KOSTT network, rather than a percentage of smaller projects connecting directly to the KEDS distribution network. While some projects are expected to connect to the distribution network directly, that amount is currently limited to projects producing 10MW or less, based on conversations with KEK. The analysis is limited to transmission access also because no formal methodology or policy exits for connection to the distribution system. KEK is currently developing a methodology for connecting renewable energy supply to thedistribution system.

Technical improvements to the transmission network, as well as further integration with regional transmission networks, provide an opportunity to reduce the transmission system constraint. Kosovo has a 400kV interconnection and a 220kV interconnection with Serbia, a 400KV interconnection with Macedonia, a new 400kV interconnection with Montenegro, and an existing 220kV interconnection with Albania. The existing network can accommodate 400 MW of imports. KOSTT is currently in the process of construction a 400kV line with Albania that will provide greater interoperability between the KOSTT network and that of Albania.

Given synergies between the Albanian market – which is mostly hydro based – and the lignite based Kosovo electricity market, secondary and tertiary reserve and auxiliary service capacity available to KOSTT via transmission interconnection of these resources could be significantly enhanced, thus allowing increased levels of grid-connected RES to be supported by the network.

8 EXAMINATION OF FINANCIAL INCENTIVES PROVIDED TO INVESTORS & DEVELOPERS OF RES IN KOSOVO

EU directive 2009/28/EC on promotion of the use of energy from renewable resources sets country targets for the use of RES for EU member nations. As a signatory to the EnCT, the Republic of Kosovo is required to bring into force the laws, regulations and administrative provisions necessary to comply with Directive 2009/28/EC. Kosovo‘s primary energy laws – the Law on Energy, the Law on Electricity and the Law on the Energy Regulator – have largely been harmonized with the EU‘s energy *acquis*, including Directive 2009/28/EC.

To fulfill the mandate contained in Article 13 of the Law on Energy relating to the establishment of renewable energy targets, MED has published Administrative Instruction on Renewable Energy Source Targets, the purpose of which is to determine long-term and annual renewable energy source targets. The Administrative Instruction also provides that ‗support measures shall be applied to accomplish targets defined in Annex 1‘.

As RES projects have not yet achieved cost parity with conventional sources that supply electricity, financial support is necessary in order to provide sufficient return on investment to induce the development of RES projects. This section provides a review of the financial incentives provided for RES development in Kosovo and seeks to identify areas where impediments to investment may exist due to the structure of financial support provided.

8.1.1 Government & ERO Regulatory support for RES in Kosovo

Financial support provided to RES projects derives both from market support mechanisms (in the form of Feed-in-Tariffs, Quota Systems, etc.) aimed at reducing price and volume risk in the delivery of electricity from grid-connected RES projects and from advantageous tax policies.

The source of financial support from market support mechanisms is the electricity end-user, as the customer is exposed to an additional fee/tariff in its electricity bill. Support in the form of tax incentives derives from the fiscal budget of the host nation and does not impact electricity tariffs.

Within Kosovo, the ERO determines the form, structure and level of financial support from market mechanisms, while the Government of Kosovo decides the level of tax incentive, if any, to provide RES projects. The allocation of responsibility between these authorities is appropriate given the ERO‘s mandate to determine end-user tariffs and the government‘s fiscal and budgetary mandate.

8.1.2 Legal basis of Financial Support for RES

Within Kosovo, the legal basis for financial support for RESis provided under both primary law and under secondary legislation adopted by the ERO. Article 9 of the Law on Electricity provides:

- Energy enterprises generating electricity from renewable energy resources or engaged in co-generation shall be entitled to certificates of origin issued by the EROand
- The Public Supplier shall give purchasing priority to electricity produced from renewable energy sources for which a certificate of origin has been issued by the ERO
- Public Supplier shall be required to purchase at a regulated tariff (e.g. the FIT) the entire amount of electricity produced from renewable resources required to meet the needs of electricity consumption in Kosovo and
- The ERO shall set up a methodology for establishing regulated tariffs payable by the Public Supplier for electricity from renewable energy resources, as provided in the Law on the Energy Regulator.

8.1.3 Certificates of Origin

The member states of the European Union have acted to create a guarantee system for the origin of electricity in which electricity production based on renewable energy sources can be verified reliably. This system is being implemented within Kosovo where support is provided to RES projects via the provision of Certificates of Origin, which designates that electricity has derived from a RES based electricity generation project.

The ERO is the national issuing body for Certificates of Origin. In December, 2010 the ERO established 'The Rule for the establishment of a system of certificates of origin for electricity produced from renewable energy sources, from waste and co-generation in combination with heat in a single generating unit'. This Rule provides the basis upon which a RES project may be provided financial support via market mechanisms established by the ERO. A RES project is eligible to obtain the then applicable FIT once the ERO has designated that the RES project will produce electricity for which a Certificate of Origin will be issued.

8.1.4 Support Scheme

The ERO is the body which determines the admission of generation units to the Support Scheme for RES. The ERO approved the 'Rule for the Support of Electricity for which a Certificate of Origin has been issued and Procedures for Admission to the Support Scheme'.[22]

A generating unit is eligible for admission to the Support Scheme if:

1. it has entered into operation on or after 30 June 2004
2. it is located in the territory of Kosovo
3. it produces electricity using generating capacities with new equipment
4. it produces electricity from renewable resources, and
5. capacity associated with the generating units is required to meet the Indicative Targets as set by the Ministry of Energy and Mines.

While indicative targets for the consumption of electricity produced by renewable energy sources are established by the Minister of Energy and Mines pursuant to Article 13 of the Law No. 03/L-184 on energy, Article 5.2 of the ‗Rule on the Support of Electricity for which a Certificate of Origin has been issued and Procedures for Admission to the Support Scheme' specifies that the ERO may define an alternative maximum level of the installed capacity of generating units eligible for admission to the Support Scheme, taking into account the amount which has already been admitted to the scheme.

In discussions with the ERO, and in accordance with Article 3 of the ‗Rule on the Supportof Electricity for which a Certificate of Origin has been issued and Procedures for Admission to the Support Scheme,' the ERO has adopted the current RES target levels specified by MED in the Administrative Instruction on Renewable Energy Sources Targets as the maximum level of support for RES, by type of technology.

RES projects that meet the criteria for eligibility may apply for inclusion into the Support Scheme (defined as ‗the set of provisions for the support of electricity produced from renewable energy sources in Kosovo required to meet the Indicative Targets'):

1. within two years of the unit entering into operation[23], or
2. In the case of generating units which are not yet in operation, only once the Notification of Preliminary Decision (referred to in Article 12 of Rule on Authorization Procedure for Construction of New Generation Capacities, Gas Lines, Direct Electricity Energy Lines, and Direct Pipelines, has been issued by the ERO.

Generating units recorded in the Register established and maintained by the ERO are provisionally admitted to the Support Scheme (subject to the payment of a guarantee equal

[22] ' Appendix V provides a process map regarding the process for applying for support under the Support Scheme.

[23] In order to create an enabling environment for the development of new RES projects, this requirements places a restriction on the ability of existing projects that have been in operation for greater than two years to enter the Support Scheme.

to the total payment that the generating unit is entitled to receive under the Support Scheme over a period of 3 months and other conditions as specified by the ERO):[24]

1. In the chronological order in which the correct application has been submitted to the ERO;

2. for each primary renewable energy source, up to the level of installed capacity required to meet the Indicative Targets, as defined by the ERO, taking into account the installed capacity of the generation units already admitted, including those admitted on a provisional basis, to the Support Scheme.

The operator of a generating unit admitted to the Support Scheme is entitled to sell the electricity produced from the RES generating unit to the Public Supplier for a period of ten years from the date in which admission to the Support Scheme is confirmed. Admission to the Support Scheme is only confirmed once the generating unit enters into operation and if this happens not later than the required in-service date set by the ERO.

Upon the conclusion of the 10-year period, electricity from the RES project will still be designated as having a Certificate of Origin. However, the RES project will no longer be eligible to receive the FIT but will receive the price/MWh prevailing in the wholesale electricity market.

The sale of electricity by the RES project to the Public Supplier is governed by a „template" Power Purchase Agreement. The PPA provides for a 10-year term which coincides with the term specified under the Support Scheme by the ERO.The PPA requires that the project achieves commercial operation no later than that date which is agreed within the PPA.

Potential Impediment:
It is noted that the terms of the PPA have not been approved by the ERO. Further, issues arise regarding the interaction between the PPA and the Rules, as specified by the ERO. For instance, the required in-service date under the PPA is explicitly the same as the in-service date required by the ERO. Further, the termination provisions under the PPA are not harmonized with the Rules.
Impediment Solution:
The ERO should approve the PPA between the Public Supplier and a grid-connected RES generation project. The terms of the PPA should be harmonized with ERO secondary legislation to ensure compatibility of the PPA with such legislation.

[24] Article 9 of the „Rule on the Support of Electricity for which a certificate of origin has been issued and procedures for admission to the support scheme" provides for deviations from the general rule of admission to the support scheme where total installed capacity (including the aggregate capacity of other projects) would result in the total installed capacity of RES being greater than the Indicative Target as set by the MED for the specified RES technology.

8.1.5 Feed-in-Tariffs under the Support Scheme

As described in AppendixIII, there are a variety of market mechanisms for the promotion of RES. Kosovo has chosen to implement a Feed-in Tariff system, as international experience suggests that feed-in tariffs are most effective in promoting the use of renewable energy in electricity generation relative to other forms of financial incentive, as feed-in tariffs provide a greater degree of revenue certainty (thus reducing RES project revenue risk) than do other forms of RES support.

In Decision V_359_2010, the ERO established current Feed-In Tariffs applicable for electricity produced from RES and admitted to the Support Scheme, as per Table 19.

Table 19:Feed-in Tariff applicable for electricity produced from renewable energy sources and admitted to the Support Scheme

Primary Renewable Energy Source (RES)	(€/MWh)
HPPs (<10MW)[25]	63.3
Wind	85.0
PV Solar	j/a
Biomass and Biogas*	71.3

The unit price €/MWh for the sale of electricity to the Public Supplier is subject to indexation for inflation per Article 13.6, Rule on the Support of Electricity for which a Certificate of Origin has been issued and procedures for Admission to the Support Scheme.'

8.1.6 Tariffs where RES generator is not admitted to the Support Scheme

In instances where: a). a Certificate of Origin has been provided to a RES generator but such RES generator has not been admitted to the Support Scheme, or b). the 10 year period for support under the RES Support Scheme has expired, the RES generator shall be entitled to sell the electricity to the Public Supplier under a revolving one-year PPA.

The unit price applicable to the sale of electricity to the Public Supplier after the project is no longer eligible for the Support Scheme shall be equal to the price at which the Public Supplier could have purchased an equivalent quantity of electricity from public producers as determined by the Public Supplier (e.g., the wholesale price of power).It is noted that the current wholesale price of electricity is substantially below the FIT provided under the Support Scheme, which suggests revenue risk for a) projects which to not substantially amortize their fixed costs during the period of support, and b) for projects which complete construction but are not admitted to the Support Scheme.

Potential Impediment:

[25] Hydropower projects greater than 10MW are not considered to be eligible for support under the FIT.

The risk that a RES project completes construction but is not admitted to the Support Scheme (due to the Indicative Targets having been met by RES projects that have achieved commercial operation prior the given project or as a result of a RES project not achieving its required in-service date) is a significant risk currently borne by the RES project developer/investor which may impact RES project adoption.
Impediment Solution:
The ERO should provide that a project is admitted to the Support Scheme once it has received all required authorizations.

8.1.7 Obligations of Generators admitted to the Support Scheme

Generating units admitted to the Support Scheme must sell (via the PPA) annually to the Public Supplier a quantity of electricity not lower than 50 percent of their maximum production, calculated on the basis of their installed capacity and the annual production rates as defined by the ERO. Failure to comply with the minimum annual production level for two consecutive years leads to a) execution of the guarantee (referred to in Section 9.1.4) provided by the investor, and b) exclusion of the generating unit from the Support Scheme and its cancellation from the Register of units admitted to the Support Scheme. As this risk is borne by the RES project, the stability of resource intensity over the life of the RES project is of significant importance, especially for hydro-based RES projects where droughts may occur.

8.2 RES Financial Support Systems – EU Region

EU Member States incorporate different Support Schemes for grid-connected RES projects, including feed in tariffs, feed-in premiums, feed-in tariff with digression, feed-in tariffs with a stepped feature, and quota systems (often with tradable Certificates of Origin). Feed in Tariff systems are the most common RESSupport Scheme in the EU, as 20 of 27 EU Member States have implemented Feed-in Tariffs as their primary means of grid-connected RES support. Table 20 (Feed in Tariff Design Across EU Member States) provides an overview of the type of FIT structure that has been adopted in across the EU.

The design of FIT can be as flexible or as complex as policy-makers desire; as a consequence, it is very difficult to summarize national tariffs for a particular technology with a single entry in a table or to compare FIT across nations. Further, the country specific level of FIT tariff necessary to induce RES deployment depends upon a number of factors, including the estimated general cost of electricity generation and site specific considerations, including the level of resource intensity, etc.

The most important features of any FIT regime are the transparent setting of rates (based either on a cost-plus method and/or benchmarking) and the long-term nature of FIT rates, which provides for regulatory stability. While FIT levels may decline over time (a concept termed 'digression'), unplanned modification of FIT tariffs is harmful and undermines the credibility of the support system.

Appendix IV-- Feed In Tariff Support and Duration for RES Technologies -- provides an overview of FIT tariff levels in the EU. It is important to note that Appendix IV only provides a general view of relative FIT tariffs; the table does not capture the many factors inherent in FIT schemes in differing countries, such as how FIT levels may change over time. These

factors can significantly impact the economic viability of RES projects. Individual country FIT levels are subject to rapid change as countries adjust their FIT levels to reflect decreasing costs of technology, etc. Therefore, a comparison of FIT schemes and FITlevels is problematic.

Table 20: Feed in Tariff Design within EU Member States[26]

Country	Purchase Obligation	Stepped Tariff	Tariff Digression	Premium Option
Austria	X	X		
Bulgaria	X	X		
Cyprus	X	X		
Czech Rep.	X	X		X
Denmark	X	X		X
Estonia	X			X
France	X	X	X	
Germany	X	X	X	
Greece	X	X	X	
Hungary	X	X		
Ireland	X	X		

8.3 Comparison of Kosovo Feed in Tariff Structure vs. EU Region

The site-specific nature of RES resource intensity and project development costs makes the comparison of FIT incentive levels as a predictor of successful RES adaption problematic. Further, it is important to note that the level of FIT does not, in and of itself, a predictor of success for RES development, as there are a significant number of variables that determine successful RES project development.[27] Caution should therefore be exercised when comparing FIT across different markets.

8.3.1 Resource Intensity

Tariff levels are a function of resource intensity; higher levels of resource intensity provide greater flexibility to reduce FIT levels for a given technology. For example, as the power of wind is a cubic function of the wind speed, slight changes in average annual wind speed can have a significant impact on the amount of electricity that a wind turbine can produce. As a result, the tariff necessary to provide an economic basis of investment for a given wind project will vary on a case-by-case basis depending upon the wind regime at a particular site. Further, site specific costs associated with grid-connected RES project development will have a consequence for project profitability. At sites where there is significant wind intensity, a lower FIT can prevail. Where wind power is less, a greater level of FIT is required.

[26] Evaluation of different feed-in tariff design options – Best Practice paper for the International Feed-In Cooperation (December 2010); Arne Klein, Erik Merkel, Benjamin Pfluger, Anne Held, Mario Ragwitz (Fraunhofer ISI) and Gustav Resch, Sebastian Busch (Energy Economics Group)

[27] 'Renewable Support Schemes for Electricity Produced from Renewable Energy Sources. Review of the ERRA Member Countries and 2 Country Case Studies: Czech Republic and Sweden'

As the site specific nature of RES project economics makes the relative evaluation of national FIT support schemes challenging, it is suggested that if policy-makers wish to evaluate whether the level of FIT is sufficient to attract grid-connected RES investment (in addition to using standard practices of benchmarking of RES tariffs and cost-based determination of FIT), a project-specific analysis (utilizing data at a given site) be undertaken. In this manner, policymakers can determine whether a given FIT incentive is sufficient to provide an economic return to RES investors/developers. Where site characteristics of grid-connected RES projects are reasonably uniform, the results may be extrapolated to determine the sufficiency of FIT levels for a given technology.

8.3.2 FIT Tariff Duration

While a sufficient level of FIT is necessary for the adoption of RES technologies, the level of FIT tariff is not the only factor that determines grid-connected RES adoption. The duration of the tariff provided will have a significant impact on RES project development, as longer contract terms provide greater revenue certainty to the RES developer/investor/lender.

Where project financing is used to mobilize capital, long-duration FIT schemes are imperative; projects that have access to longer-duration FIT schemes allow the amortization of capital cost over a greater period of revenue certainty. Where the length of the FIT scheme is greater than the tenor of project debt, the lenders have greater assurance that underlying project debt can be repaid. Appendix IV indicates that most FIT provide a RES project access to FIT of at least 12 years, a period which corresponds to the tenor of debt associated with export credit financing. Extending access to the FIT provides even greater certainty to project lenders that loans will be repaid within the period that a given project has the benefit of a FIT support scheme.

It is noted that the 10-year period of FIT support provided in Kosovo under the Support Scheme is the minimum duration when compared to the FIT support provided by other countries. Given that RES resources in Kosovo may not provide the degree of resource intensity as is found in other countries (e.g. the wind regime in Kosovo is not considered as viable for wind project development as in countries with a strong wind resource), it is likely that wind projects in Kosovo will not generate as much electricity as projects elsewhere. As a consequence, project specific revenues will be lower (everything else being equal). Lower revenues support less debt and provide a lower equity rate of return, raising risks for providers of both debt and equity. Capital for RES projects flows where returns are perceived to be greatest. Therefore, minimum duration periods for accessing a FIT support scheme should be considered in this light.

Potential Impediment:
The term of the Support Scheme is 10 years, which is of shorter duration than international practice (See Appendix IV). Given a potentially significant difference in the FIT vs. the wholesale price of electricity, there could be a significant reduction in revenues from a RES project after the end of the 10 year period.
Impediment Solution:
The ERO should consider extending the period of support under the Support Scheme to a period greater than 10 years in order to facilitate debt financing of RES projects in Kosovo.

8.4 Comparison of Allowable RES FIT Ceiling with Kosovo NREAP Targets

In its session held on March 30, 2011, the Energy Regulatory Office (ERO) Board adopted Decision V_359_2010 which specified the amount of grid-connected RES required to meet indicative targets which also sets the limit on the amount of grid connected RES allowed under the Support Scheme. These values are recreated in Table 21.

Table 21:Allowable InstalledRES Capacity (MW)under FIT Scheme[28]

Primary RES	2011	2012	2013	2014	2015	2016
HPPs (<10MW)	35.1	37.5	40.0	42.7	45.5	48.4
Wind	31.4	49.6	69.4	91.2	115.1	141.5
PV Solar	0.00	0.00	0.00	0.00	0.00	0.00
Biomass and Biogas	0.2	0.3	0.3	0.4	0.5	0.5
Allowable RES FIT Ceiling (MW)	66.7	87.4	109.7	134.3	161.1	190.4

When the *Allowable RES FIT Ceiling*specified by the ERO is compared to the target levels of grid-connected RES specified in NREAP, the Allowable RES FIT Ceiling identified in ERO Decision V_359_2010 does not provide inclusion under the Support Scheme for a sufficient amount of grid-connected RES to meet Kosovo‘s NREAP targets.As adequate financial support is a fundamental requirement for the promotion of grid-connected RES, it will be necessary for the ERO to consider whether the indicated levels of support are sufficient to allow Kosovo to meet its self-imposed grid-connected RES targets. The constraint suggested by the Allowable RES FIT Ceiling is magnified when Kosovo‘s higher target of 29.47 percent of grid-connected RES penetration as a percent of GFEC is considered.

Therefore, even if private developers and investors were physically capable of bringing a sufficient number of projects on line in time to meet the targets specified under NREAP for 2020, developers and investors would run up against both the allowable FIT ceiling constraint. KOSTT network capacity limitations (discussed earlier)will further impact the adoption of grid-connected RES.

Potential Impediment:
ERO Decision V_359_2010 indicates a lower level of support for grid-connected RES than is required to meet either the 25 or 29.47 percent targets specified in NREAP.
Impediment Solution:
The ERO should consider extending the level of support for RES under the Support Scheme to mirror the indicative targets under the NREAP. End-user tariff affordability must be considered given the relative cost of RES (as indicated by the FIT) vs. the current wholesale price of power in Kosovo.

[28]ERO Board Decision on Determination of Feed in Tariffs, March 30, 2011

8.5 TAX INCENTIVES

8.5.1 Tax Incentives – General

As described in Appendix III, tax incentives provide a secondary financial support mechanism that may be used in conjunction with other financial support mechanisms, such as Feed in Tariffs. These tax incentives either lower the cost of investment or augment equity returns to investors.

Tax incentives have been used (primarily in the United States) to attract pools of investors (‗tax equity investors') that would not otherwise invest in RES projects. Tax incentives provided primarily fall into two classifications: investment tax credits (which reduce the amount of investment or which reduce the taxable income of a project during the initial operating period) and production tax credits (which provide a tax credit for each MWh of electricity produced). As investors in grid-connected RES projects often do not have sufficient revenues to provide for full utilization of tax credits, RES projects which benefit from either incentive tax or production tax credits are structured to provide tax credits to investors able to utilize such credits. It is noted, however, that such tax credit structures are not widely used in Europe, as a) tax incentives have not been widely used within the EU and b) the market for tax equity investors has not been significantly developed in the EU.[29]

In addition to tax incentives tied to either investment or production, the presence of accelerated depreciation of capital equipment provides further financial support. Accelerated depreciation of capital equipment reduces taxable income, thereby increasing return on equity to the investor.

Tax relief for imported equipment – in the form of a reduction of customs duty – reduces the total capital cost of RES development, resulting in a) lower financing requirements and b) higher equity returns for a give FIT.

8.5.2 Tax Incentives – Kosovo Specific

As outlined below, Kosovo has not, to date, provided significant fiscal support in the form of tax incentives for RES projects.

Investment and Production Tax Credits – Kosovo does not provide investment or production tax credits.

Accelerated Depreciation – Article 15 of the Corporate Income Tax Law (Law No. 03/L-162) provides for straight line depreciation based on the useful life of the asset. Depreciation rates are 5 percent for buildings, 10 percent for plant and machinery and 20 percent for vehicles, furniture and office equipment. There is no accelerated depreciation, but Article 17 of the Corporate Income Tax Law provides an additional one-off allowance of 10 percent (in addition to normal depreciation claims) of the cost of acquiring heavy equipment. While the law currently indicates that allowance only be applied until 31 December 2012, it is understood that the Ministry of Finance have agreed that concession should be extended for

[29] The United States has a very active municipal finance market; these investments are primarily tax driven and seek to allocate the benefit of tax deductions to investors who are seeking to reduce their tax base. As a result, the United States has a mature market of tax equity investors. In comparison, the EU does not use municipal finance to a significant degree (the EU utilizes a PPP approach to incorporate private-sector investment in public finance) and, therefore, does not have a significant base of tax equity investors.

a further two years and it is expected that the laws will be amended and made retrospective so as to achieve that outcome.

Exemption from Customs Duty on Imports – A standard rate of 10 percent is levied on imported goods. While Kosovo currently does not exempt capital equipment utilized in RES projects from customs duties, a draft law exempting renewable energy and other high priority energy sector equipment from customs duties and excise taxes is presently in Assembly Committee and is expected to pass within Q1 2013.

Value-Added Tax (VAT) – The production of RES electricity is subject to the payment of VAT at the standard rate of 16 percent.

Corporate Income Tax – Corporate income tax rate is 10 percent; there are no municipal taxes that are pancaked on top of the corporate tax rate.

Revenues derived from the generation of electricity RES is subject to payment of the corporate income tax rate on taxable income; there is no reduction of, or holiday from payment of, corporate taxes for RES. It is noted that Kosovo's corporate income tax rate is relatively low when compared against the corporate tax rate of EU and regional countries against which Kosovo competes for foreign direct investment (See Appendix V). While the low tax rate limits the benefits of tax incentives such as production tax credits and investment tax credits, investment risk in RES projects will be reduced via the introduction of tax incentives.

Reduction of Income Tax on Dividends– Kosovo does not provide a reduction of, or holiday from, the payment of dividends (derived from after tax net income) paid to foreign taxpayers who invest in RES projects.

Potential Impediment:
The GOK does not provide meaningful tax incentives for the development of grid-connected RES projects.
Impediment Solution:
The GOK should benchmark investor returns on RES projects as well as its tax policies towards the RES sector to determine whether incremental fiscal support is required.

9 ANALYSIS OF POTENTIAL NON-FINANCIAL BARRIERS TO INVESTMENT

As addressed in the previous sections of this report, Kosovo must increase the domestic consumption of energy generated from renewable resources. To this end, this section provides an overview of the authorization process for the construction of new energy generation facilities (both as prescribed in the written legislative framework and as implemented in practice), including a discussion of the GoK stakeholders and the required documentation. The ERO serves as the cornerstone of this process as it is responsible for implementing that authorization process; however, the ERO cannot be considered a one-

stop shop from the investor's perspective since the investor cannot coordinate the various associated permitting and approval processes through the ERO.[30]

The process for project development in Kosovo's energy sector is complex and involves coordination with the ERO and a number of other GoK entities.The following non-financial barriers analysis provides information on the investor due diligence process, includes a thorough discussion of the ERO s role, and outlines the most significant bureaucratic processes that must be navigated by a project sponsor.This analysis also reviews the legal framework, maps out the various processes in detailed flow-chart diagrams, andidentifies areas of potential improvement.

To evaluate the authorization process and the most significant related processes, the Deloitte team reviewed the relevant GoK legislative/regulatory framework with an eye to identifying areas that are most in need of further elaboration or modification. It is important to note that the GoK is currently in the process of reviewing some of the laws that govern certain aspects of the permitting processes that are related to the authorization process. As new laws replace the existing legal framework, the key processes and identified areas of concern outlined below may also change.

The focus of the following process evaluation is largely limited to wind and hydropower technologies as these are the primary technologies covered under the current feed-in tariff scheme. Concentrating on the procedures pertaining to wind and hydropower provided an in depth understanding of the procedures as they related to all renewable energy generation sources since the processes do not differentiate substantially to account for project size or renewable energy technology. Despite the complexity of the authorization and permitting processes and the considerable documentation required, most processes generally follow a similar basic pattern:

1. Project sponsor identifiesthe information and documents required by the application.
2. Project sponsor preparesandsubmitsthe application and required documentation.
3. Public agency evaluatesthe application for completeness, notifying sponsor of any deficiencies.
4. Public agency makes a substantive evaluation of the application and issues a decision.

9.1 PROCESS EVALUATION APPROACH

Deloitte conducted a two-part due diligence investigation to understand both the written provisions of the legal framework and the actual practices being used with respect to the renewable energy authorization and related processes. This investigation involved a thorough legal review of applicable laws and a series of interviews with stakeholders. A detailed list of meetings can be found in Appendix II.The confluence of these approaches enabled the team to develop a comprehensive understanding of the procedures.

[30] According to the 2012 Annual Report on the implementation of the Acquis under the treaty establishing the Energy Community, Albania decided –et establish a National Center for Energy Applications within [its] National Licensing Center as a one-stop-shop institution to facilitate applications for permits and other authorizations in the energy sector."

To understand the authorization process for a renewable energy project as described in the legislative framework, the team reviewed the most relevant laws as well as the concerned implementing regulations that have been issued by central GoK public authorities. Appendix Icontain a complete list of the laws and regulations reviewed. Although a detailed review of municipal acts is beyond the scope of this effort, certain municipal procedures may, for certain projects, play a significant role. Therefore, the following sections of this document also contain some discussion of the municipalities' role in the overall processes.

The following provides a review of the key issues with regard to the authorization process required for RES projects and identifies potential impediments and solutions within the context of the discussion on the authorization process. A separate process impediment section discusses the key impediments in more detail and provides solutions to these issues.

9.2 PROCESS EVALUATION

9.2.1 Energy Regulatory Office (ERO) Authorization Process

The ERO is Kosovo's independent energy regulator established in 2004 by the Assembly tasked with setting the domestic regulatory framework for energy, including electricity.[31]The ERO Board oversees the ERO's four departments and exercises its duties in line with responsibilities vested to it bythe "Law on the Energy Regulator" (Law 03/L-185 of 2010).[32] This law delegates to the ERO the authority to implement the authorization procedure required for the construction of energy facilities.[33]In practice, an ERO authorization is required for MESP permitting, feed-in tariff qualification, and connection to the DSO or TSO.In this way, the authorization process serves as a focal point for nearly all of the other concerned processes.

The application to the ERO for an authorization to construct new generation capacity, including new capacity that will use renewables, involves collecting extensive documentation from a number of ministries and other agencies, and occasionally from multiple departments within one agency. These concerned agencies include – but are not limited to – the ERO, MESP, MAFRD, MoF, the concerned municipality, and, at times, PAK. A full list of the documents required by the application can be found in on the ERO website.[34]Investors are expected to coordinate between these agencies and the municipality to obtain the documentation required for submission to the ERO. Thus, for a potential renewable energy investor, opening a dialogue with the ERO is the first step in attaining generation rights in Kosovo.[35] Beginning with the preparation of the application, the following diagram provides a high level outline of the ERO authorization process:[36]

[31]The Assembly of the Republic of Kosovo established the ERO under Articles 119.5 and 142 of the Constitution of the Republic of Kosovo.

[32] The ERO consists of a managing board, four departments, and administration. The departments are: Department of Legal and Licensing, Department of Energy Market, Department of Tariffs and Pricing, and Department of Customer Care.

[33]Article 38 of the Law on the Energy Regulator. A full list of the functions assigned to the ERO roles determined by the Law On the Energy Regulator can be accessed on the ERO webpage: http://www.ero-ks.org/.

[34]http://www.ero-ks.org/

[35] At this time, an investor may also want to meet with the Mayor of the concerned municipality to begin addressing the issue of land use addressed in section 11.2.2.

[36]A more detailed process flow diagram is available in Appendix V.

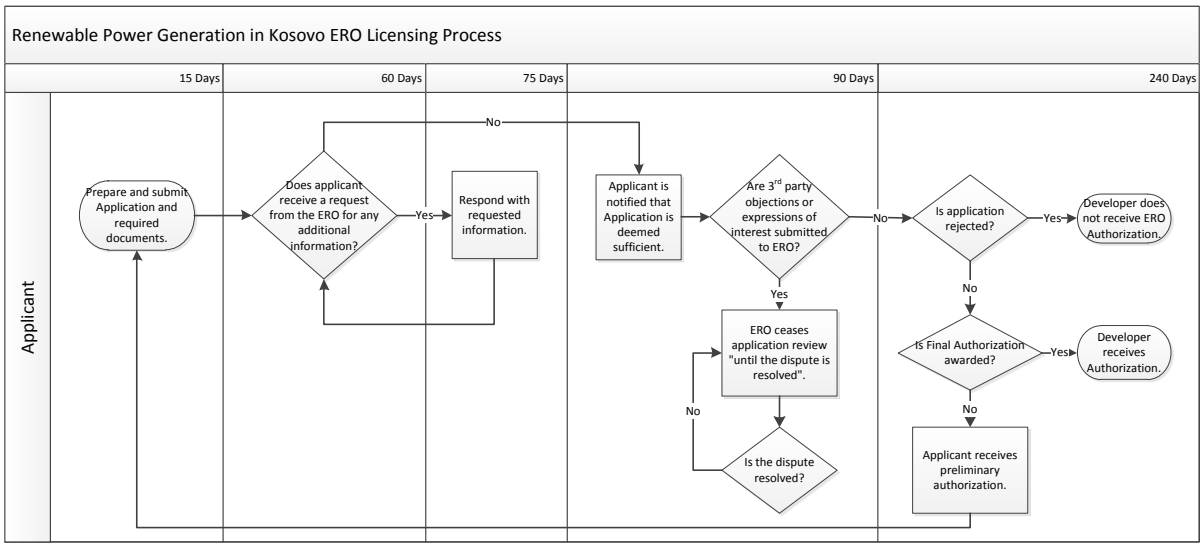

Figure 2: ERO Authorization Process

The above diagram illustrates the process dictated by the Rule on Authorization Procedure for Construction of New Generation Capacities issued on 29 August 2011. This rule is published on the ERO website and outlines the authorization process that must be followed for all proposed new energy generation construction projects in Kosovo.[37] Applicants can download the rules along with the application form, including a list of documents that must be submitted with this application. According to the ERO, all documents containing requirements are published in Albanian, and approximately 90 percent of the relevant documents are published both in Albanian and English on the ERO website, and a more limited selection of documents is available in Serbian.

From the ERO‘s perspective, the official authorization process and timeline begins when the applicant submits an application to the ERO, which is first evaluated by the ERO‘s Legal and Licensing Department. It should be noted, however, that applicants often reach out prior to submission as they collect and compile documentation.[38]

Within 15 days of the initial submission, the ERO is required to register the application and publish administrative details on its website, and the applicant must publish an announcement summarizing the contents of the application in at least in two newspapers. These publications notify the public of the application and invite comment until 15 days after the Legal and Licensing Department determines that the application is ―complete‖ or ―sufficient‖. After the ERO registers the application, the ERO Legal and Licensing Department then has 60 days to evaluate the application and request any additional information or clarifications that it requires. The Legal and Licensing Department‘s role is to evaluate applications for ―completeness‖ or ―sufficiency‖ through verifying that all required documentation is included and adequate. The ERO has published a detailed list of all

[37] http://ero-ks.org/Rregullat/Rregullat_2011/English/Rule_on_Authorization_Procedure_for_Generation_of_new_Capacities_eng.pdf

[38] Applicants often have informal discussions with Afrim Ajvazi, the Head of Legal and Licensing Department, as the primary point of contact for questions regarding the application and required documentation.

permits and documentation required for granting preliminary and final authorization; however, criteria for ~~-s~~ufficiency" appear to be neither published nor defined.

Potential Impediment:
To date, the ERO has never received a ~~-c~~omplete" application at the time of original submission[39] which indicates that there may be an issue with the complexity of the application process and/or the provision of information by the ERO and related agencies sufficient for applicants to provide a complete application.
Impediment Solution:
The ERO publish defined criteria required for the submission of an application for authorization consistent with the Rule on Authorization Procedure.

According to the Rule, as written, an application must contain all required documentation and permits before the ERO can grant a preliminary decision; however, in practice, this is not possible because the application must include a number of documents that the applicant cannot obtain without first receiving preliminary decision from the ERO. This represents a significant impediment in fulfilling the obligations required for project authorization. The application and required attachments include project details such as feasibility studies and financials as well as permits and evidence which must be collected from other agencies.For example, the following documents are representative of those required by the ERO application:

1. extensive evidence demonstrating the applicant's right to use the concerned property (Annex 3.22),

2. evidence that the project is planned in a manner that will comply fully with environmental requirements (Annex 3.23), and

3. evidence that the applicant ~~-h~~as met all applicable statutory requirements," including the right to use water whenever applicable.

However, to be able to re-zone land, receive an environmental consent from the MESP, or approach the Water Department regarding water permitting procedures, the applicant must first obtain the preliminary decision from the ERO. The ERO informed the Deloitte team that the detailed list of all required permits and documents applies only for a final authorization; even though the Rule provides that all such permits and documents are to be submitted with the initial application.

Potential Impediment:
The authorization process required by the ERO is not coordinated with the requirements of other agencies, with the result that contradictory and overlapping procedures create inefficiencies within the permitting process.

[39] Interview, Afrim Ajvazi, Head of Legal and Licensing Department, ERO.

Impediment Solution:
Authorization processes should be better coordinated and should be simplified. The creation of a _one-stop-shop‘ reduces the number of interfaces between investors and agencies.

In practice, the ERO does not require the all the permits and documents specified by the Rule before it may issue a preliminary decision, in part because the ERO has indicated that requirements may vary based on land ownership and zoning. One investor explained that the ERO required his office to present two memoranda of understanding (MOU) from the municipality: (1) a formal decision that states the project is ~~-in~~ the greater interest of the municipality" and (2) a formal letter that the municipality will allow the investor to use publicly held land. These two decisions, submitted with the general application information, were sufficient in this case to obtain preliminary decision. In practice, the preliminary decision grants the investor sole rights to obtain the necessary permits to develop the site for renewable energy generation.

Applicants expressed positive feelings towards their interactions with the ERO and specifically cited the importance of its ~~-p~~roblem oriented" guidance when compiling the documentation. The Rule requires the applicant to resubmit a revised application within 15 days of receiving a notice outlining the application deficiencies. However, the applicant typically requests and is granted an extension on this 15-day period due to the nature of the requested documentation.

After the ERO Legal and Licensing Department determines that the application is 90 percent complete through this iterative process, a working group of technical engineers hired by the ERO conducts a review and recommends a decision to the ERO board. The working group review is not codified in the Rule, but has become common practice in the ERO review of application sufficiency. Within 90 days of the working group deeming the application sufficient, the ERO board members vote to make a formal decision on the application. The decision can be one of the following:

1. Grant the authorization based on a determination that the Applicant has met ~~-a~~ll the necessary requirements and criteria of the ERO set out in the Rule and the criteria in the Law on the Energy Regulator."[40] (Art. 13.1.2; see also Art. 16.2); Note that the applicant may not commence construction until it has the authorization, and the authorization will require the Applicant to complete construction within 2 years, with a possible 6 month extension. (Arts. 16.3 and 16.4),

2. Issue a ~~-N~~otification of Preliminary Decision" (NPD) providing that the Applicant will be granted the authorization if the Applicant satisfies certain conditions within a specified period of time. (Arts.13.1.1 and 14); A "preliminary decision"– the term used in the Rule – is also referred to by the ERO as a "preliminary authorization", or

[40]The phrase "criteria in the Law on the Energy Regulator" is apparently a reference to the licensing criteria specified in Article 29 of the ERO Law. Those Article 29 criteria are specifically referred to in Article 38 of the law, which is the basic provision on the authorization procedure (See Article 38.2).

3. Issue a decision refusing to issue either of the foregoing (Art. 17) and notifying the Applicant in writing of the reasons for the refusal. This would mark the end of the authorization procedure and – according to the Rule – trigger the Applicant‘s right to appeal the decision to a court (Art.24).[41]

Upon issuance of an affirmative decision and completion of the authorization process, an investor can initiate the applications for certificates of origin and admission to the Support Scheme.

9.2.2 Land Use Procedure

The highly complex issues of land ownership, allocation and use reach beyond renewable energy projects and have been studied at length by international and domestic organizations that have attempted – with varying degrees of success – to bring clarity and structure to the very critical subject of property rights. Unlike the ERO and MESP authorization and permitting procedures, the process of acquiring land rights may involve a number of GoK entities as well as private owners.

The process of obtaining rights to a project site is outlined in Figure 3, which is based on alegal review of the relevant legislation and regulations applicable to land ownership and use.

The two primary factors in determining whether and how an investor may acquire the necessary rights over an identified project site are the site‘s current zoning and ownership. In practice, before the ERO will grant a preliminary authorization, an investor must obtain appropriate zoning of the proposed site. The zoning for land is delineated by the spatial plan. Thus, the first step in the acquisition of land use is to identify whether there is an existing spatial plan for the site area and if so, to determine if it is zoned to allow for renewable energy generation. If there is no spatial plan or the existing spatial plan does not permit the project, an investor must work with the municipality and other relevant government bodies, such as the MAFRD, to have the land zoned in a manner that will accommodate the project.

After the site is appropriately zoned for development, the investor must approach the owner of the land to lease or purchase the land for the project duration. In Kosovo, land is either privately owned or state owned (social ownership was transformed into state ownership by Article 159 of the Constitution). In the case of privately owned land, although there may be zoning issues that will require action by a public authority, the negotiation of the lease or sale of the land is negotiated directly with the owner. In contrast, the required rights over state-owned land cannot – with the exception of land held in the name of a municipality – generally be acquired through a directly negotiated transaction because such rights may only be awarded – if at all – through some type of competitive tendering process.

[41]There is no administrative adjudicatory review process provided for in either the ERO Law or the Rule; and this raises an issue under Kosovo’s Administrative Law. If a law is silent on the issue of administrative adjudication, which would normally mean that the provisions of the Administrative Law on the subject come into play; and those provisions would require an administrative review of the matter before a complaint could be filed in a court. And a piece of secondary legislation, such as the Rule, cannot alter the requirements of a law.

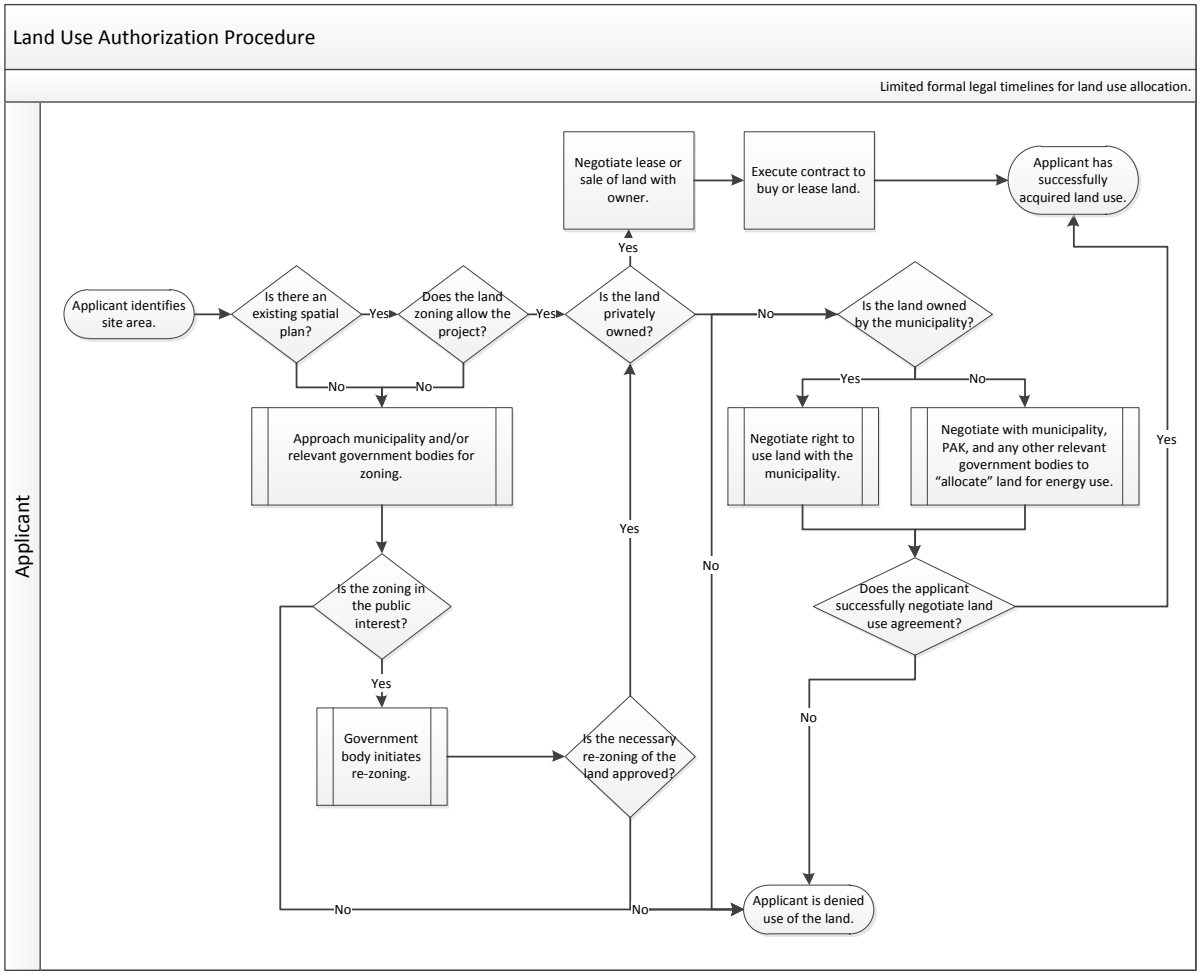

Figure 3: Land Use AcquisitionProcess

In the case of state owned land, the rights of use to a specific parcel of state-owned land may be held and/or controlled by a municipality, a central government authority or a publicly owned enterprise. These rights may also be held by an enterprise that is under the administration of the PAK or they may be controlled directly by the PAK. For state-owned land, the transferability – either on a long or short-term basis – is subject to statutory restrictions and requirements outlined in the following legal analysis.

Potential Impediment:
The process of rezoning land for renewable projects is lengthy and adds substantial delay and risk to the development of RES projects.
Impediment Solution:
The incorporation of renewable energy projects in spatial planning would expedite permit approvals and would shorten the period of time for obtaining authorizations needed to commence construction of RES projects.

9.2.2.1 Land Use Legal Analysis: Allocation and Expropriation Laws

Following a review of the relevant legislation, Deloitte has determined the Allocation Law and the Expropriation Law are the two laws under which a private investor could obtain the right to use state owned land without having to participate in a competitive tendering process for those rights. But, of the two, only the Allocation Law currently provides a legal mechanism under which long-term rights to a parcel of state-owned land can be made available directly to a privately sponsored energy project through a non-competitive process. That mechanism is severely limited as it is only available if the concerned land is already registered in the name of a municipality. However, with some adjustments to the ERO's authorization rule or a small change to the Expropriation Law, it would be possible to substantially expand the amount of land that could be made readily available to energy projects through the use of the expropriation process.

9.2.2.1.1 The Allocation Law

In the case where a land parcel is held by a municipality (i.e. the land is registered in the name of the municipality in the immovable property registry), the municipal government may ~~-a~~llocate" those rights of use to a private person according to the new Allocation Law adopted and promulgated at the end of 2012. Generally, Articles 5 through 9 of this law specify that if the duration of the right of use is between 1 and 15 years, the right of use is to be ~~-a~~llocated" by means of a public auction. In cases when the right of use duration is between 15 and 99 years (the maximum), the right of use must be competitively tendered in a complex process where non-price factors may be included in the bid evaluation criteria. However, Article 10 of the Allocation Law lists certain specific situations where the allocation of the land is not subject to an auction or competitive tendering process; and one of these exceptions specifically covers a situation where the land is to be allocated ~~-t~~o realize investments in the energy sector." It should be noted that Article 10 does not relieve the allocation from any of the other provisions of the law, therefore, market-based compensation would have to be paid by the transferee for land so allocated, as is required by the Law on State Aid.

It should also be noted that the Allocation Law provides a mechanism that enables a municipality to acquire the rights of use over land currently in the possession of an enterprise under the administration of the PAK. Article 12 provides a mechanism for the ~~-r~~einstatement" of the land to the municipality; and Article 13 provides a mechanism for the municipality to engage in a land ~~-e~~xchange" with the PAK. However, both Article 12 and Article 13 require the municipality to demonstrate a ~~-p~~ublic interest" or ~~-p~~ublic benefit purpose" justification for the requested reinstatement or exchange. Although neither term is defined in the law, Article 22 provides the best evidence that an intended transfer to a third party for a private project would not satisfy the ~~-p~~ublic interest" or ~~-p~~ublic benefit purpose" requirement. Article 22 forbids a municipality from transferring to a third party land obtained from the PAK for a period of four years unless the municipality obtains a ~~-p~~rior decision of the [PAK] Board." It appears that the intent of Article 22 is to require the municipality to go back to the PAK Board to obtain its consent if the municipality desires – within the first four years after obtaining the land – to use it for any purpose that is not a ~~-p~~ublic benefit" purpose, such as transferring the rights of use to a third party. The content of Article 22 seems to strongly suggest that an intended transfer of land to a third party is not within the scope of the intended meaning of ~~-p~~ublic interest" or ~~-p~~ublic benefit purpose" whenever those terms are used in the law; and therefore such an intended transfer could not serve as a justification for either a ~~-r~~einstatement" under Article 12 or an ~~-e~~xchange" under Article 13. Consequently, under what we consider to be the correct interpretation of the Allocation Law, a private person may not use a municipality as an intermediary to obtain rights to land from PAK.

9.2.2.1.2 The Expropriation Law

Under the Expropriation Law the vast majority of land in Kosovo – including privately owned land as well as land under the control or administration of a municipality or the PAK – may be subject to expropriation by the Government if the public purpose for the expropriation is specified in paragraph 3 of Article 4 of the Expropriation Law.[42] The construction of energy generation facilities is explicitly mentioned in item 3.3.3 of that paragraph. And the Government may – under Article 14.3.5.2 – transfer expropriated property to a private person if that person already holds a "license," and the concerned land is necessary to enable the license holder to conduct the activities covered by the license.[43]

Potential Impediment:
A private energy project sponsor may apply for an expropriation of the necessary land once it holds an authorization from the ERO; however – under the explicit wording of the ERO's authorization rule – the sponsor must include in its authorization application evidence that it already holds the necessary land use rights.
Impediment Solution:
Although our conversations with the ERO indicate that the ERO is not, in practice, requiring such evidence in the application (in violation of its own rule, as written), the ERO does require such evidence before it will issue the authorization. Were the authorization rule were adjusted to take into account the requirements of the Expropriation Law, this would be a major (but not sufficient) step toward removing the impediments that currently severely restrict a project sponsor's ability to acquire the land needed for a private energy project.[44]

Finally, the envisioned use of the Expropriation Law is not described in a process map because it is not currently an available process.

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[42] If land under the administration of PAK is expropriated, PAK must be compensated by the Government for the expropriated land. The reason for this is straightforward: under the Privatization Law the PAK holds a former SOE and its assets in trust for the SOE's creditors and owners (some SOEs were actually partially owned by some of its workers); and many of these have yet to be identified and/or their claims have yet to be adjudicated with finality. When such land is sold or "privatized", the resulting proceeds go into a trust account to be maintained for the satisfaction of the claims that are ultimately found to be valid. When such land is expropriated, the Expropriation Law requires the Government to compensate PAK, and the compensation is placed into a trust account just as if the land had been privatized.

[43] The word "license" in this context would, in our opinion, include an "authorization" from the ERO.

The private person is required to reimburse the Government for the expropriation costs. See Art. 14.5.

[44] The authorization rule also requires the applicant to submit other documents (construction permit, water permit, environmental consent) that are issued by the MESP; however the application processes for these documents also requires that evidence of land use rights be submitted as part of the application process. So the "evidence of land use rights" is a cross-cutting impediment across all major processes involved in the overall authorization process.

A solution to a similar problem was developed and included in the Law on Mines and Minerals; a mining license applicant is not required to hold the necessary surface rights at the time the application is submitted or the license issued. Once the license is issued, the licensee may – if necessary – apply to have the necessary surface rights expropriated, and the licensee must pay all costs associated with the expropriation, including compensating the expropriated owners.

9.2.3 Ministry of Environment and Spatial Planning (MESP)

MESP is responsible for environment, water, spatial planning and construction MESP has seven departments, two institutes, and the Environmental Protection Agency.[45] While each of the departments may play a role in the renewable energy authorization, the Department of Environmental Protection and the Environmental Protection Agency; the Department of Housing and Construction; and the Department of Water are most relevant as they are responsible for the issuance of specific permits/consents needed to initiate construction of renewable energy facilities.

The MESP oversees two key permits required for all renewable energy projects: the environmental consent and the construction permit. Additionally, MESP's Department of Water issues permits regulating the use of water.These three permitting processes each have their own authorization process, internal review requirements, and timelines. Even though the Rule on Authorization Procedure for Construction of New Generation Capacitiesspecifically requires that these permits be submitted with the initial authorization application, in practice an applicant obtainsthe preliminary authorization from the ERO before commencing a permitting/consent processat any of the departments within the MESP. Because the MESP permits are required documentation for application to the ERO, this discrepancy creates a fundamental procedural impediment to be addressed in more detail in the following discourse.

9.2.3.1 Environmental Consent Process

The MESP grants environmental consent to projects based on the provisions in the Law on Environmental Impact Assessment (EIA Law), the Law on Environmental Protection (EP Law) and the MESP's Administrative Instruction No. 09/2011 –On Information, Public Participation and Interested Parties in the Environmental Impact Assessments Procedures" (AI 09/2011). These legislative documents determine the process for issuing environmental consent in so far as it is defined. On the whole, the environmental consent process, as discussed below, lacks of transparency and the evaluation criteria are neither standardized nor clear. Neither a formal application nor all of the legal documentation are clearly defined or readily available to potential investors, thereby making it challenging to outline a standardized consent process. Based on a legal review and discussions with stakeholders, the Deloitte team drafted the following Environmental Consent Process Flow Diagramto summarize the environmental consent process:[46]

[45] MESP was established by UNMIK Regulation No. 2002/5 and 2005/15.

1. Department of Environmental Protection (DEP), 2. Department of Spatial Planning (DSP), 3. Department of Housing and Construction (DHC), 4. Department of Water (DW), 5. Department of Central Administration (DCA), 6. Department of Procurement (DP), 7. Directorate of National Park " Malet e Sharrit" (—Sharr Mountain")

1. Hydrometeorology Institute of Kosovo, 2. Institute for Spatial Planning, Inspectorate

[46] A more detailed process flow diagram is available in Appendix V.

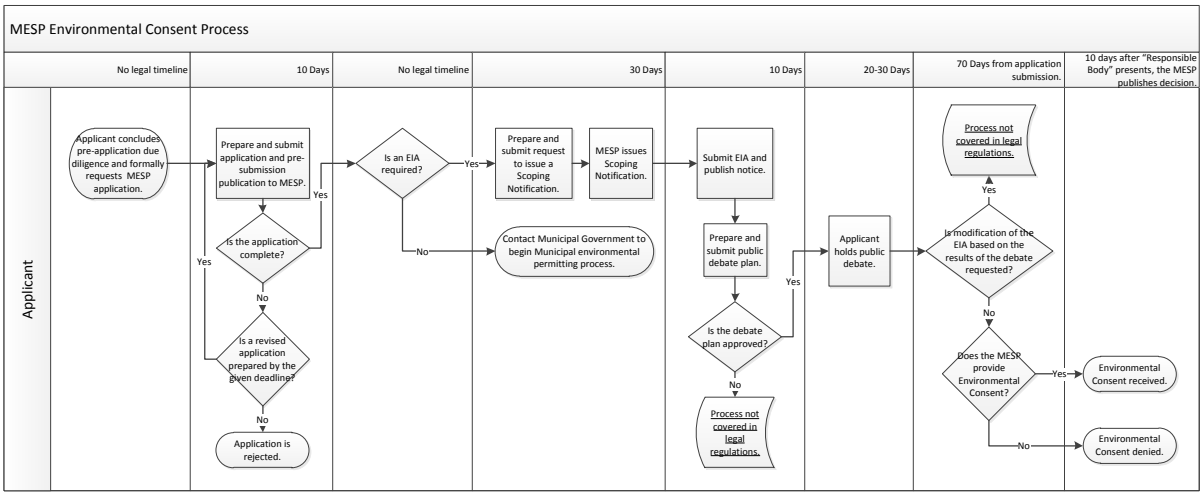

Figure 4: Environmental Consent Process

As illustrated in the Environment Consent Process Flow Diagram above, before commencing the environmental consent process, the applicant typically has to conductsome pre-application due diligence with municipalities and other central GoK agencies. This due diligence commonly includes researching the ownership of the site; reviewing the spatial/urban plans of the municipality with respect to the site to determine how the site is zoned and whether the site is subject to any specific environmental restrictions; contacting the Kosovo Environmental Protection Agency (KEPA) and the Departments of Environment and Spatial Planning to ensure that there are no other environmental restrictions affecting the site; and reaching out to the Municipality's environment department. Since MESP does not have a publically available application process and/or evaluation criteria established at the outset of the process, the contacts established and information unearthed during the initial due diligence informally guide the environmental consent application process.

The first formal step to obtain environmental consent is to make a request to the MESP to obtain the formal requirements of the application. The EIA Law obligates the MESP to provide information about the EIA procedure within 8 days of the request.[47]After the applicant completes the environmental consent requirements provided by the MESP, the law requires the applicant to publish a notice setting forth the administrative details of the project.[48]After publishing this information in a newspaper, and on the websites of the MESP and the concerned municipality, the applicant may submit the application along with a copy of the published notice to the MESP for review.

[47]Stipulated in Article 31.1

[48]Article 4 of AI 09/2011 stipulates that the applicant must publish the following relevant details related to the project after completing the environmental consent requirements required by the MESP application. Those relevant details are: (1.) the applicant's name and address; (2.) a statement that the applicant intends to apply for a "consent for the particular project"; (3) the name, location and nature of the proposed project; (4) a statement that the applicant intends to seek a "selection decision" from the MESP stating whether an EIA will have to be prepared for the project; (5) the address of the Ministry and the time frame [note: no indication as to how the applicant is to establish this time frame] within which interested persons may submit comments and questions to the MESP; and (6) the place where the application, all the attachments, and "any environmental information already available" can be reviewed by members of the public "at all reasonable hours of the day", as well as an indication of the time period (which may not be less than 20 days) during which those items will be available for public inspection.

The MESP has 10 days following receipt of an application to determine if it is complete, and (1) if the application is found to be incomplete, notify the applicant of this determination and specify the deficiencies providing a deadline for the submission of the additional documents/information required; or (2) make a ~~"S~~election Decision" as to whether an EIA is required for the project, using the Annexes to the EIA Law.[49]

The MESP has published Screening Criteria in Annex III of the EIA Law to determine whether an EIA is required for a project; however, the criteria do not clearly dictate how projects will be evaluated. Instead, the criteria provide a number of factors to be considered, and the MESP has issued no accompanying regulations or guidance on how it will apply or weigh those criteria in determining whether to require the submission of an EIA for the project. Additionally, if an EIA is required for the project, the MESP has issued no guidance, as required by Article 15, on the ~~"p~~reparation and review" of an EIA.

Potential Impediment:
The requirement for an EIA is based upon evaluation criteria weightings which diminish transparency and increase uncertainty, leading to greater project development risk.
Impediment Solution:
Publically available evaluation criteria (including how criteria are to be weighted during the evaluation process) would increase transparency and reduce development risk.

If MESP determines an EIA is not required, the applicant works with the concerned municipality or municipalities to obtain the appropriate municipal environmental permit(s). If the MESP determines an EIA is required, the applicant must then submit a request to issue a Scoping Notification, issue that Scoping Notification, and assign an MESP licensed individual to prepare an EIA in accordance with the notification. However, as of the end of 2011, there were no licensed EIA professionals in Kosovo. As a result, MESP has not strictly enforced this requirementand accepted EIA's deemed of ~~"a~~cceptable quality," as authorized by signature from the Minister of Environment and Spatial Planning.[50]

Potential Impediment:
Insufficient professional technical capability in the assessment of EIA submittals results in an uneven application of the Law on Environmental Impact Assessment.
Impediment Solution:
Training of EIA professionals would provide the basis for the transparent evaluation of EIA requirements as stipulated under law.

[49] Once the application is determined complete, the MESP maintains the right to request additional information at any point in the process.

Annex I lists projects for which an EIA is mandatory; Annex II lists projects for which the MESP has the discretion to impose or not impose an EIA requirement using the Screening Criteria in Annex III.

[50] This is based on feedback from investors interviewed by the Deloitte team.

Thereare no clear documented criteria that MESP should use to evaluate the EIA documentation or federal guidance on how to address the results of the required public debate.To date, projects which have received environmental consent have received it through this discretionary process.

9.2.3.2 Construction Permitting Process

The Construction Law of 2012 determines the process for construction permitting under the MESP Department of Housing and Construction. To accompany this law, the MESP, with the assistance of the USAID Business Enabling Environment Program, is in the process of drafting an Administrative Instruction later this year. This Administrative Instruction may clarify and/or alter the existing construction permitting process.

In practice, the construction permitting process is the final permit acquired by renewable energy investors in Kosovo and cannot be obtained without ERO preliminary authorization, established right to use the land, and an EIA if required by EIA law. The following detailed diagram outlines the Construction Permit application procedure codified by the Construction Law of 2012 and overseen by the MESP Department of Housing and Construction:[51]

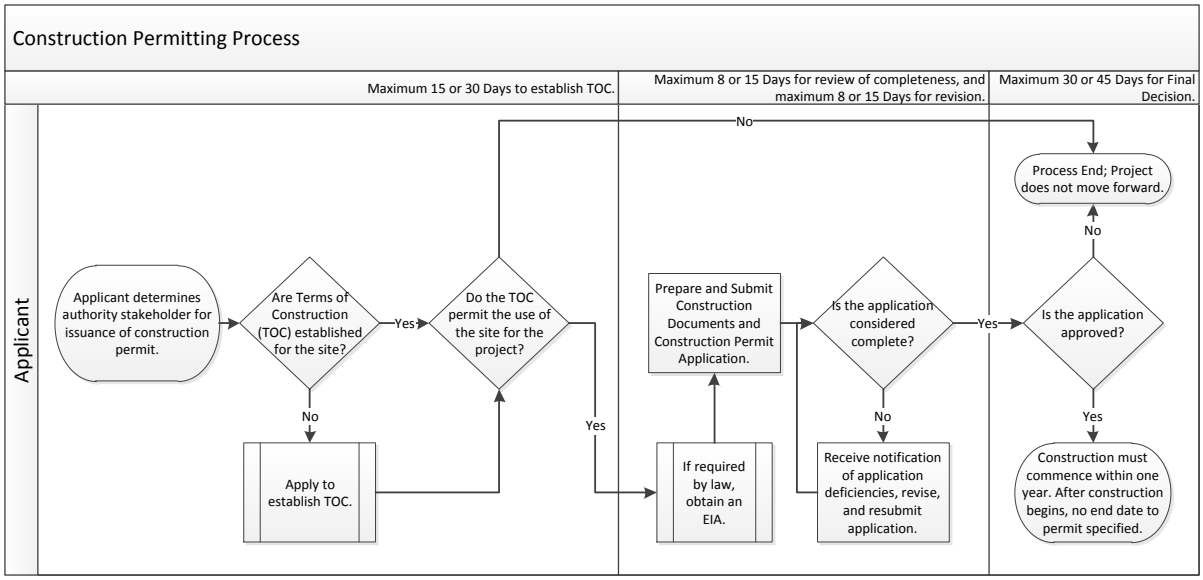

Figure 5: Construction Permitting Process

As illustrated in the Construction Permitting Process Flow Diagram above, before commencing a formal application process, an applicant must first determine which agency has the authority to issue the construction permit and conduct due diligence on the project site location. The relevant authority is determined based on the risk level of the project, either as low, medium or high.[52] High risk projects fall within Annex 1 of the Construction Law. MESP is the "competent authority" able to issue construction permits for high risk projects, including the following:[53]

[51] A more detailed process flow diagram is available in Appendix V.

[52] The law categorizes projects as "low," "medium," and "high" risk by classifying them as Category I, Category II, and Category III respectively. If the project falls within the Scope of Annex 1 to the Construction Law, the project is a Category III, "high risk," project and MESP is the consenting authority.

[53] These are the construction projects listed in Annex I that are most relevant for renewable energy projects.

- ~~h~~high dams and reservoirs…for which technical care is complicated;"[54]
- ~~h~~ydropower dams and power plants with power 10 MW or more,…power plant-electrical heating plants with power of 10 MW or more and also electrical transmission lines and transforming station of 110 KV or more;";[55] and
- ~~r~~enewable sources energy production facilities with power of over 10 MW and combined production power plants."[56]

Low and medium risk projects are not covered by Annex 1 of the Construction Law.[57] In these cases, the concerned municipality and municipalities are the competent authorities able to issue construction permits.[58]This indicates that most small hydropower plants qualifying for the ERO feed-in tariff (under 10MW) will apply for construction permits through the concerned municipality. In the Construction Law, there is no difference in the permitting process for Categories II and III.

Potential Impediment:
The requirement that projects be classified by project size and that either the MESP or a given municipality be specified as the competent authority for the issuance of a construction permit increases permitting complexity and requires additional technical competency that would not be required if this project classification were eliminated.
Impediment Solution:
Streamline the Construction Law to provide that permits required for the construction of energy projects be the responsibility of MESP.

After identifying the site and competent authority, the applicant must conduct due diligence to determine if there is an ~~u~~rban regulatory plan" that establishes the ~~t~~erms of construction" (TOC) for the site. This determination normally requires a request for zoning documentation from the relevant authority. Appropriate zoning occurs under land permitting and is explained in further detail in Section10.2.2. If there is an urban plan in place, then that plan establishes the TOC that will be applicable to the construction of the renewable project.

Due to the rural nature of most of the viable renewable energy generation project sites in Kosovo, it is unlikely that there will be an urban/spatial plan in place.[59] In that case, the applicant must develop and submit, in accordance with Articles 17.1 and 18.1, its TOC application and its proposed TOC. The competent authority is then required to publish the

[54]Item 1.1, Annex 1 to the Construction Law

[55]Item 1.6, Annex 1 to the Construction Law

[56]Item 1.18, Annex 1 to the Construction Law

[57] If the project does not fall within the Scope of Annex I to the Construction Law, which case it would be a Category 3, the categorization of the project as either a Category 1 or Category 2 must be determined by reference to the "~~u~~sb-legal act" to be promulgated by the MESP and the Municipalities as required by Article 15.3.

[58]Article 19.2 and Annex 1, para. 2, Annex 1 of the Construction Law.

[59] Based on discussions between the Deloitte Team and the Construction Department.

application for public comment and establish the TOC within either 15 or 30 days after the TOCapplication has been submitted.[60]

Following establishment of the TOC for the site, the applicant must compile and submit relevant documents and complete the application forms. The Construction Department currently uses one application for Category I, II, and III projects. In the future, the requirements will be differentiated by the degree of risk associated with the projects. The Construction Department has compiled list of required documents (not specific to energy) based on the law, but this list is not published on the department website or otherwise. Applicants are expected to conduct a review of the law to compile a list of documents required for the project and submit them with the application form.

Potential Impediment:
Lack of information regarding required documentation may result in incomplete applications which result in permitting delay and increased project development cost.
Impediment Solution:
The publication of required documentation required to submit a complete construction permit application should be published on the MESP website.

The competent authority then has limited time to review a construction permit application for completeness: 8 days for a Category I project and 15 days for a Category II or III project.[61] If deficiencies are identified, the competent authority must notify the applicant of the details of the deficiencies within the applicable time limit. The applicant then has a limited time to correct the deficiencies: 8 days for a Category I project and 15 days for a Category II or III project.

In practice, the competent authority works with the applicant until the application is considered completed and then issues the construction permit or a reasoned denial within a limited time from the date of the receipt of the application: 30 days for a Category I project and 45 days for a Category II or III project. If MESP is deemed the competent authority, the evaluation of the application is conducted on a case-by-case basis by the staff of the Department of Housing and Construction. At the time of publication of this report, the Ministry had not moved forward with its plan to define its evaluation criteria or establish a dedicated department to review permits.[62] The Department staff reviews the application and makes a recommendation to the MESP Permanent Secretary who then provides final signature on the decision. In order to complete the process, the applicant must pay fees and administrative taxes within five days of receiving notification that the application is approved.[63]

[60] Fifteen days in the case of a Category I project and 30 days in the case of a Category II or III.

[61] As mandated by Article 21.4 of the Construction Law.

[62] Based on discussions between the Deloitte team and Xhemail Metolli, Head of Construction Division, MESP

[63]Municipality calculates fees based on municipal expenses in issuing permits for the previous year. The total annual cost is divided by total square meters permitted in the given year, and the result becomes the taxes per square meter for the following year. Taxes change annually and are different in each municipality. The USAIDBusiness Enabling Environment Program is currently reforming the tax system for building and

The applicant must commence construction one year of receiving the permit, and can apply to extend this period by one year.[64] After construction has commenced at a site location, the permit does not expire.

9.2.3.3 Water Use Permitting Process

Water permits for renewable energy development must be obtained through the relevant River Basin District Authorities (RBDA), the municipality, or the MESP Department of Water for all hydropower projects.The Law on Water of 2004 (Water Law) and the MESP's Administrative Instruction No. 24/05 of 2005 (AI) determine both the jurisdiction for the permit and the application process. It should be noted, however, that the AI and procedural legislation areincomplete as the provisions on the application process terminate inconclusively at Section 14.

The following process flow diagram outlines the extent to which the legal framework defines the water permitting process.[65] As noted in the following discourse, there is no legal rule for the evaluation of water permitting applications after they are deemed complete.

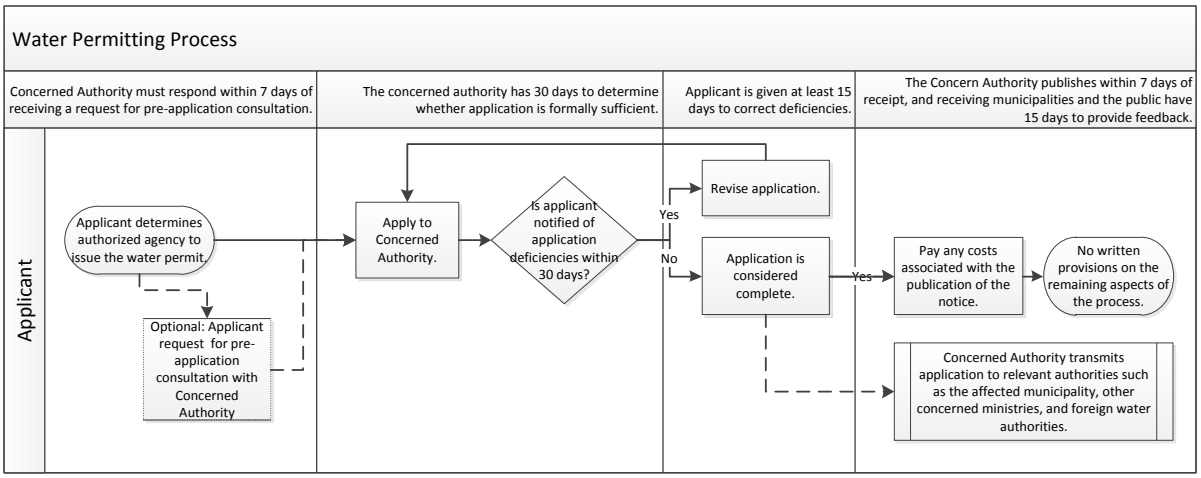

Figure 6: Water Permitting Process

Similar to other permitting processes, the first step in the attaining lawful use of water for any hydropower project applicant is to determine which GoK authority has jurisdiction over water permitting for the project.[66]Per guidance in the AI, permitting for projects with up to 5MW falls within the authority of one of the two River Basin District Authorities (RBDA), and the MESP has permitting authority for hydropower projects with installed capacity exceeding 5 MW.[67]Any hydropower projects not specifically mentioned in that section of the AI also fall

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construction permits and expects to implement the new system beginning in March 2013. The recently implemented Construction Law 2012 strives to streamline and simplify fees based on cost-recovery in an effort to reduce murky regulations enabling inconsistent enforcement.

[64] According to the Construction Law.

[65]A more detailed process flow diagram is available in Appendix VI.

[66]Section 8 of the AI outlines the legal guidance for this determination.

[67]Per sections 8.1 and 8.2 of the AI (in Albanian). It should be noted that there is a typographic error in the English translation of Sections 8.1 and 8.2 of the AI, which reads that both the RBDA and MESP cover —hydro-power plants, thermal-power plants and Central-heating plants with install power which exceeds 5 MGW."

under the permitting authority of the MESP.[68]The AI sets for that the duration of a permit for a hydro-electric plant would be 20 years irrespective of the concerned authority.

While the municipality has water permitting authority when the source is a spring or a well or when the project is a small irrigation project, that authority is superseded when the concerned project falls within the scope of the types of projects for which the AI designates the MESP or the RBDA as the permitting authority. According to the most recent reviews of the water regulatory regime of Kosovo, municipalities are not exercising even this limited water permitting authority.[69] Therefore, the water permitting process at municipal level appears to be of no material importance to a proposed renewable energy project.

The five-page water permit application form for preparation and submission to the concerned authority is attached as an annex to the AI along with a detailed 15 page set of instructions on how to complete each section of the application. The preparation of a completed application is complex giventhe substantial technical, project and legal documentation that must be attached.[70]The AI provides that potential applicant may request a consultation with the concerned authority to determine ~~t~~the content and volume of documentation" that needs to be attached to the application.

According to the AI, if the concerned authority identifies application deficiencies and notifies the applicant within 30 days of submission, the applicant then must be given a minimum of 15 days to correct the deficiencies and to resubmit the application. This process iterates until either the applicant does not resubmit the application within the given timeframe or the concerned authority deems the application complete.

By law, the concerned authority publish an announcement, in a daily newspaper, containing information about the application within 7 days ~~f~~rom the day of the receipt" of the application.[71] This is inconsistent with the 30 days for reviewing the application for completeness. In practice the concerned authority publishes the announcement within 7 days of deeming the application complete.[72] The costs associated with the publication of the notice in the daily newspaper are to be paid by the applicant.

After it deems the application complete, the concerned authority must also send a copy of the application to (i) the ~~c~~competent ministries in the field of activities for which the building or plant is constructed", (ii) the concerned municipality, and (iii) if necessary, a foreign water authority. The municipality then has 15 days to provide the concerned authority with its written opinion on the ~~i~~information contained in the application". The municipality may organize a public hearing within this period, but this has no effect on the 15 day deadline. The 15-day municipal comment period may run concurrently, in whole or in part, with the public and the foreign water authority comment/inspection period.

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[68] Per section 8.4 of the AI,

[69]See, e.g., UNDP Human Rights Based Approach (HRBA) to Improving Water Governance in Europe & CIS Programme, Kosovo Sector Assessment, January, 2010.

[70] This documentation includes: including (i) documentation demonstrating the applicant's ownership of (or right to use) the land where the water source is located and where the project is to be constructed and (ii) very detailed financial and other documentation, including the feasibility study.

[71] Per Section 12.1 of the AI

[72] This notice must set forth, in a daily newspaper, information about the application, the applicant and the project, including where and how the full application may be reviewed and the deadline for public comments (which must be no less than 15 days from the date of the notice).

There is no legal timeline defined for the foreign water authority, but comments received indicate that involving a foreign water authority may affect the permitting process substantially. If comments from a foreign water authority involve any sort of objection – or if a foreign water authority believes it should have been consulted and was not, then there almost certainly will need to be (a) a negotiated compromise; (b) a termination of the permitting process or (c) an international incident/dispute ultimately leading back to one of the former two options or some ongoing tension. If there is an applicable international agreement, then the terms of that agreement would prevail over Kosovo‘s domestic legislation.

The AI does not specify the role of municipal or public comments in the permitting process, nor does it outline the process after the comment periods. Stakeholders at the Water Department were unable to clearly outline the application evaluation process, and no clear criteria are provided by law.

9.2.4 Municipality Processes

In addition to the legal review of the land use acquisition process in Section 10.2.2, Deloitte met with representatives from the Association of Municipalities, the Deqan Municipality, and the Peja Municipality in order to understand the municipal role in RES development. The degree of municipal involvement varies depending on the land ownership and zoning of the identified project site and whether a project must utilize municipal rights of way for either transmission interconnections or accessing the identified site. In meetings with Deloitte, investors expressed that support from the Mayor and then the Municipal Assembly (which makes the final decision on a proposed allocation of municipal land rights to an energy project), as crucial for obtaining a preliminary authorization from the ERO.

The following sections summarize Deloitte‘s findings from the key municipal due diligence meetings.

9.2.4.1 Association of Municipalities

In meeting with the Association of Municipalities, Deloitte determined that the regulations vary at the municipal levelfor small-scale energy projects (less than 20 MW) and larger power projects, yet all proposed projects must be in harmony with the Municipality‘s urban development plan, regardless of ownership or size.

Regarding a request for state-owned, municipal land, a renewable energy project developer or potential investor would follow approximately the same process in all municipalities:

1. Potential investor informs the mayor of project interest, submits land use request, and conducts a preliminary meeting with the mayor‘s office.

2. Mayor next refers the land use request to the Urban Planning Directorate for review.

3. The Urban Planning Directorate provides a Directive to the developer or investor if the proposedland use is deemed consistent with and in harmony with the Municipality‘s Development Plan (may involve public debate).

4. The Municipal Assembly makes an authorization decision.

5. If viewed favorably, the Municipal Assembly will initiate a public announcementto see if any other parties are interested in the site (which can prove to be a major market failure in the overall land use and acquisition approval process since this makes the

site available for all interested bidders after the RES project developer has already invested considerable time, money, and effort to validate it).

6. After this public disclosure has been duly advertised and responses have been received, the mayor is then authorized to negotiate with potential bidders for the sale or lease of the site.

The process for private land is much more truncated.If the site is privately owned, the process follows the same steps except the Municipal Assembly does not initiate a public announcement to invite other bidders for the site. All that is required is a ruling that the proposed use of the site is in harmonization with the Municipal Development Plan and deemed in the public interest.

9.2.4.2 Peja

The municipal officials who met with Deloitte outlined the land ~~-a~~llocation" (concession) process as applied to 3 small-scale hydropower projects that recently received approval from the Municipal Assembly. When the land for the project site is owned or controlled by the municipality, the procedural steps employed by the Municipality of Peja are as follows:

1. The developer/investor meets with the mayor who will decide which local government officials and departments should review the land allocation request for the proposed project. At this meeting, the mayor invites relevant stakeholders, and the developer/investor also presents a formal request for municipal approval of the project along with detailed project documentation;

2. Next, the mayor holds a regular Board meeting with participation by all relevant stakeholders typically including the Director of the Finance & Budget Department, the Director of the Urban Planning & Land Use Department, the Property & Legal Issues Department, the Administration Division, and the Information Office for Tourism. The investor may be asked to present at the Board meeting, after which the Board has 7 working days to decide whether to issue a letter of support;

3. The Committee for Finance & Policy either approves or rejects the request to go to Municipal Assembly for vote within 7 working days;

4. After approvals have been given by all relevant committees, the request then goes to the Municipal Assembly for final approval.The Municipal Assembly votes during the next monthly meeting.

9.2.4.3 Deqan

The Municipality of Deqan recently reviewed and gave permission for rights of way and use of the existing access roads for the 24.4 MW Kelkos hydropower plant currently under construction. For that project, the Ministry of Agriculture issued the rest of the permits.

The land ~~-a~~llocation" (concession) process for municipal land as exercised in Deqan – according to the Municipal Director for Urban Planning – is highlighted below:

1. The developer/investor must first make a formal request to the Mayor;

2. The mayor next forms a Committee to review both the project and also the request for land use in detail;

3. The required documents are completed by the various municipal stakeholders and sent to the Municipal Assembly;

4. The Municipal Assembly provides final approval for both the project and intended use of the municipal land.

For privately owned land in Deqan, the process is truncated so that only the Director of the appropriate department needs to approve the project as long as it is deemed in harmony with the Municipal Development Document and also the Urban Development Plan. If, however, the project requires road or transmission line access over municipal land, then there would be a need to obtain Municipal Assembly approval for that aspect of the project in accordance with the above procedure.

9.2.5 Grid Connection Processes

The grid connection approval process in Kosovo is managed by two separate organizations: (1) the distribution system operator (KEK)and (2) the transmission system operator (KOSTT).[73]The entity that is responsible for reviewing and approving or disapproving a proposed connection as well as exercising oversight once a connection has been established depends upon the capacity of the concerned generation facility.

If the generation facility has an installed capacity of 10 MW or less, then KEK has overall responsibility for reviewing and approving an application for connection to either its 35 kV or 10 kV networks, and the facility‘s owner/management must file an application with KEK for a connection to the concerned network.If the generation facility has an installed capacity in excess of10 MW, then KOSTT has overall responsibility for managing the grid connection for that facility – regardless as to whether it is connecting to the 400 kV, 220 kV, or 110 kV circuits – andthe facility‘s owner/management must submit a Connection Application to KOSTT and otherwise adhere to the Transmission Connection Charging Methodology issued in 2010.

Each of these connection application processes may only be initiated after the ERO has issued a preliminary authorization for the facility.The following diagram provides an outline of both processes.[74]

[73] It is anticipated that KEK will become KEDS after May 3, 2013 as a result of the privatization of KEK‘s distribution and supply business.

[74]A more detailed process flow diagram is available in Appendix V.

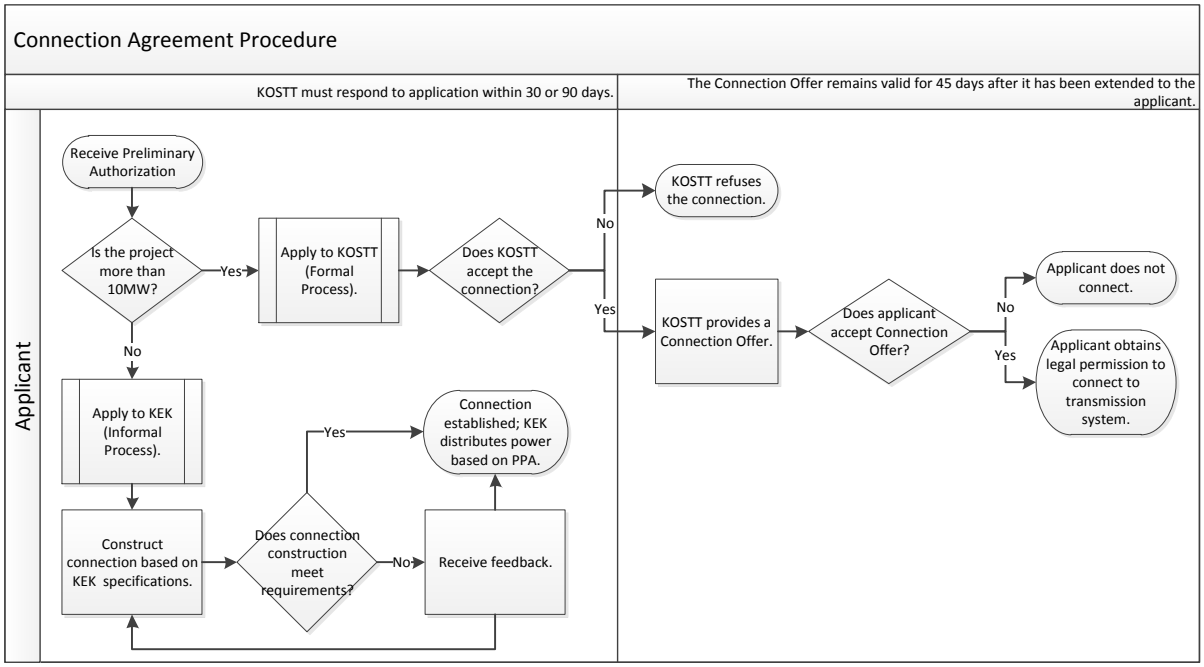

Figure 7: Connection Agreement Process

For projects of 10MW or less, KEK does not currently have a written procedure governing the grid connection application process.The ~~"~~KEK" component of the process diagram above was developed from an oral description of the process provided to the Deloitte team during its due diligence meetings. Under the process as described, to initiate a connection agreement with KEK the applicant first must send a letter of request to the KEK HQ. KEK then responds by advising the applicant to provide the following information needed by KEK to initiate its preliminary review process:

- Installed capacity of the proposed plant
- Estimate of energy to be produced annually
- Power factor, proposed minimum voltage, and level of current
- Single line electrical diagram of the proposed plant and interconnection
- Equipment specifications and operational performance standards
- Proposed line routing and metering point

Once an applicant approaches KEK to obtain permission to connect to either the 35 kV or 10 kV distribution network, KEK establishes a technical commission to review the request, evaluate the project and the site, determine the nearest connection point and propose technical conditions for connection. This technical commission will be comprised of 3 to 4 members who will be responsible for determining the final technical design criteria for the connecting distribution line and electrical equipment at the point of interconnection, as well as specifications of any voltage protection requirements.

After the first KEK technical commission grants approval, KEK establishes a second commission to oversee the construction process in the field. After construction has been completed, KEK establishes a third commission to review the ~~"~~as constructed" facility and electrical connection to ensure compliance with the distribution code, including voltage

control requirements, before issuing approval of the Final Agreement for Connection. However, before the project can actually be connected to the distribution network, the applicant will also need to enter into a PPA with the Public Supplier. With respect to who pays for the cost of connection to the KEK distribution network, all transmission line costs from the project site to the connection pointare to be paid for by the applicant.

For projects greater than 10MW, the Transmission Connection Charging Methodology outlines the process described in the above diagram. First, the applicant prepares and submits a Connection Application Form to the TSO (KOSTT) along with the required application fee. After a review of the Connection Application and possible requests for additional documentation, KOSTT will provide the applicant with a Connection Offer including the suggested technical design, allowable connection capacity, preferred date of connection, KOSTT contact points, estimated connection charge, and draft Connection Agreement. If the applicant accepts the offer from KOSTT, the offer is signed and the applicant pays the requested connection charges. Once payment clears the applicant receives legal permission to connect to the KOSTT grid.

KOSTT is obligated to respond formally with a Connection Offer within 30 days as long as there has been a successful discussion with KOSTT technical staff and a preliminary design has already been developed by the applicant. If no system studies have been performed by the applicant, then KOSTT legally has 90 days to respond to a connection request. Finally, the Connection Offer remains valid for 45 days after it has been extended to the applicant.

9.3 PROCESS IMPEDIMENTS

9.3.1 General Administrative Barriers Pervasive Throughout the System

Through examination of the authorization and permitting processes, various systematic impediments became evident across GoK entities and throughout the legal framework. These impediments create real and perceived barriers to widespread adoption of renewable technologies and increase risk for project development in Kosovo. The following analysis outlines the impediments identified through extensive due diligence, including discussions with investors, interviews with GoK stakeholders, and legal review of the relevant legislation. Additionally, the Deloitte team researched best practices and mitigation strategies from other EU community states to understand how countries have successfully overcome similar type challenges and how these strategies might be applied to Kosovo. In researching best practice, Austria, Denmark, and Germany stand out as noteworthy examples of institutionalizing innovative approaches to their renewable energy authorization processes. They have created shorter, more efficient frameworks that have facilitated widespread adoption of renewable energy in their countries. The following section discusses the specific administrative impediments for the processes explained out in section 10.2 and suggests best practices based on research cited in Appendix I.

9.3.1.1 General Process Impediment #1:Lack of clear, harmonized, and comprehensive Legal Frameworkwith consistent terminology and complete legal code

Through evaluation of the legislation that governs the authorization process, the Deloitte team identified issues pertaining to the laws, namely inconsistent terminology and, in some cases, incomplete legal code across GoK ministries. For example, with respect to the environmental consent permitting process, terminology used in the Law on Environmental Protection is not consistent with the terminology used in the EIA law. Specifically, in the Law on Environmental Protection, the term ~~-e~~nvironmental consent" is used as a general term defined as an ~~-a~~uthorization" issued by a ~~-c~~ompetent body" ~~-f~~or the purpose of taking the

construction license." In the EIA Law the term ―environment consent" is used to describe the environmental authorization specifically issued by the MESP, a document that the Law on Environmental Protection calls an ―environmental permit." This gives contradictory and confusing guidance to investors seeking evidence of environmental consent for the ERO.

In another example, detailed in Section 10.2.3 Water Permitting Process, the MESP's AI which gives procedural guidance on the water permitting is incomplete and ends inconclusively at Section 14.[75] Additionally, the construction permitting process requirements require evidence of land ownership as certified by the competent bodies. However,the word ―ownership" here is problematic since applicants will most often lease, rather than purchase the right to use land because lease agreements are preferable to minimize business risk to developers.

***Impact*:** These inconsistencies – lack of standardized terminology and missing documentation – result in subjective interpretation of the laws intent. When elements of the code are missing or terminology is inconsistent, individuals, in this case both project developers and the staff of relevant GoK ministries, must interpret the law based on their unique interpretation and understanding. This further exasperates the existing challenges with coordination within and across Departments at the Ministry. Such practices can lead to a perception by the investment community of there being a lack of a consistent, standardized processes based on clearly written rules of law, which increases the risks for project development.

***Recommendation/Best Practice*:** As is the case in Denmark, Canada's province of Ontario passed the ―Renewable Energy Approvals Regulation" in 2009. As discrepancies are uncovered, the state has continued to revise the law to refine definitions, make processes more clear, etc. The Canadian regulation includes several guidelines and checklists to help developers sift through the requirements of the different permitting agencies. Kosovo might consider implementing this best practice in order to provide clarity to investors on the process.

9.3.1.2 General Process Impediment #2: Segmented Development of Processes among Agencies

The authorization process was not developed within a holistic framework with planned sequencing and coordination among stakeholder agencies. Instead, each Ministry/ Department's authorization requirements have developed with limited consideration for the overall process. As a result, contradictory and overlapping procedures create inefficiencies within the permitting process by contradicting process sequence steps. This is evidenced by the ERO's authorization process as well as the procedures for PPA signature and official feed-in tariff qualification. ERO preliminary authorization requires a number of permits and authorizations from agencies throughout the country; however, in order to receive those permits from other agencies, the developers must first obtain the preliminary authorization from the ERO to develop a renewable energy project, essentially creating a chicken and egg problem that increases the uncertainty to developers. Similarly, developers cannot obtain signature for PPAs or official guarantees for receipt of the feed-in tariffs until after construction has commenced.[76]

[75] Department of Water – Administrative Instruction No. 24/05 of 2005

[76] Article 13.1 of the RES Support Scheme Rule states that: ―The operator of a generating unit admitted to the Support Scheme is entitled to sell the electricity produced from renewable energy source(s) by the generating

***The Impact*:** Developing permitting requirements and processes without coordination between Ministries increases the prevalence of conflicting or unclear investor guidance. As a result, a substantial amount of time must be spent by the developer performing initial due diligence with stakeholders to understand permitting requirements. This can further complicate the process for the developer and extend the process timeline.

***Recommendations/Best Practice*:** The central government should work to reform the legal framework such that authorization and permitting processes are better coordinated and inefficiencies associated with contradicting sequencing are mitigated.The EU Renewable Energy Source (RES) Directive 2009/28/EC mandates that Member States take action to reduce the administrative and regulatory barriers and increase of renewable energy generation in the country as reflected in its national regulatory framework.[77] Select EU countries have instituted several simplifications to the overall authorization process for renewable energy generation projects through national mandates. A prominent approach to simplifying the process has been to reduce the number of required authorizations for renewable energy project development. Additionally, these countries have also minimized the number of interfaces between investors and the government by creating ―one stop shops" for the authorization process. These one stop shops, which normally sit within a national or municipal level agency, coordinate all the permitting and authorizations required for developers across the other relevant ministries. This reduces the inefficiency and due diligence necessary on behalf of the investor.

A noteworthy example of this streamlined approach is Denmark. In Denmark, the conditions for offshore wind are outlined in the ―Promotion of Renewable Energy Act," which establishes the right to exploit energy from water and wind within the territorial waters and the exclusive economic zone. The Act requires three licenses to establish an offshore wind project in Denmark, all of which are granted by the Danish Energy Agency (DEA). For each renewable energy project submitted, the DEA coordinates internally with the relevant agencies to issue the three required licenses successively.[78] This gives the developer a clear understanding of the order of the process. The DEA is the only interface for the offshore wind developer, and it coordinates internally with the other ministries to navigate the authorization application processes and arrange one-on-one consultations with the investor and the necessary stakeholder. In Kosovo, while the ERO technically functions as the one stop shop for the final authorization to proceed, the onus is on the investors to obtain all the necessary authorizations from the pertinent ministries themselves.

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unit to the Public Supplier according to the terms specified in this Article, for a period of ten years from the date in which admission to the Support Scheme is confirmed."

Article 9.8 provides that ―In the case of generating units which are not yet operational at the time in which the application for admission to the Support Scheme is submitted, ERO also determines the date by which the generating unit should enter into operation. ―Admission to the Support Scheme is only confirmed if the generating unit enters into operation, and if this happens not later that the date set by ERO."
A detailed process flow diagram for the Support Scheme can be referenced in Appendix V.

[77] European Renewable Energy Council. ―Renewable Energy Technology Roadmap: 20% by 2020"

[78] The three licenses required by Danish national law follow: (1) License to carry out preliminary investigations; (2) License to establish the offshore wind turbines (only given if preliminary investigations show that the project is compatible with the relevant interests at sea); (3) License to exploit wind power for a given number of years, and – in the case of wind farms of more than 25 MW – an approval for electricity production; (given if conditions in license to establish project are kept)http://www.ens.dk/en-US/supply/Renewable-energy/WindPower/offshore-Wind-Power/Procedures-and-permits-for-offshore-wind-parks/Sider/Forside.aspx

9.3.1.3 General Process Impediment #3:Unpublished evaluation criteria and application criteria

Deloitte identified deficiencies in the application and/or evaluation criteria for nearly all relevant permitting procedures, with noted absence of standardized evaluation criteria for assessing the viability of the submitted application. Technical approval processes lack transparency with regard to the evaluation factors and their weighted importance. For example, while MESP's Administrative Instruction No. 24/05 of 2005 (AI) provides procedural guidance on the water permit application process for hydro power projects, it does not establish how the application criteria are weighted in the approval process. When interviewed, Water Department stakeholders were unable to provide clarity on the application evaluation process as there is no legal guidance on the matter. The environmental consent process offers another example. In this process, the MESP has published neither a standard application on its website nor made publicly available clearly documented criteria for how submitted EIA documentation will be evaluated.[79] Furthermore, the regulation does not provide for how the results of the required public debate are to be taken into account. This lack of transparency requires that investors conduct extensivepre-application due diligence with several different agencies to understand the process.

Impact: The lack of clear evaluation criteria and application requirements for the development of renewable energy projects creates uncertainty and increases administrative costs because of the extensive due diligence necessary to understand how the permitting and authorization processes function. This, in turn, disincentives potential developers since a tacit understanding of the informal process and relationships within the Ministries are required to navigate through the process. Most importantly, unclear evaluation criteria and opaque review procedures introduce potential opportunities for corruption into the process.

Recommendation/Best Practice:All of the EU benchmark countries studied, including the U.K., Austria, and Germany, have publically available evaluation criteria and an established process for explaining that evaluation criteria to applicants. For example, the U.K.'s Department of Energy and Climate Change (DECC) has an "Energy Infrastructure Portal" which outlines the permitting and evaluation process associated with an Electricity Development Consent approval for an independent power project. Austria and Germany have similar processes for construction and building permitting.[80] In addition to publishing evaluation criteria in public forums, these countries take the process one step further to make it more user-friendly for developers. The process begins with an initial meeting between the developer and the building permitting agency during which the application process and associated evaluation criteria are discussed. This meeting clearly outlines the requirements for a successful application as well as discusses the decision criteria used to

[79] Although the MESP has issued three sets of regulations on some ancillary matters: public participation in the EIA process; licensing of EIA preparers; and determining the fee for EIA services, there is a noted absence of necessary regulations on the EIA process. For example, MESP AI 09/2011, which is relevant to this process, is not available on the MESP's web site, and no information in either the law or any publicly available written rule of the MESP with respect to either the required form or content of the application. This lack of transparency creates a need to conduct pre-application environmental due diligence with several different agencies, which is a procedural weakness forcing the investor to coordinate between a variety of government actors. To assist investors with this due diligence, Article 9 of the EIA law does require any authority having relevant environmental information to provide it within 15 days after receiving the request; however, the absence of clear documentation produces an environment in which the application and content requirements and evaluation criteria can be established and altered by the MESP on an ad hoc basis.

[80] OECD, "Attracting Investment in Renewable Energy in Ukraine" Private Sector Development, Policy Handbook, November 2012.

assess them.[81] Additionally, the responsible agency evaluates the chosen location to identify potential pitfalls in the permitting procedure. Once that has been completed, the applicant has a higher probability of submitting successful applications as they have a more nuanced understanding the of the evaluation criteria.[82]

9.3.1.4 General Process Impediment #4:Technical skill and knowledge deficiency in evaluation of applications

Several cases pertaining to the permitting process for renewable energy have highlighted the need for specific and relevant skill sets to qualify professionals to oversee and evaluate applications as dictated by the rule of law on the authorization process. This is most apparent with the EIA application and the rule of law that stipulates that a licensed EIA professional must prepare the assessment. Because there were no licensed professionals in Kosovo that could complete the EIA as of the end of 2011, current practice allows the Minister‘s signature to determine whether an EIA is of sufficient quality. The importance of technical skills is also illustrated with regards to the evaluation of MESP water permitting applications. The MESP water permit application form requires the applicant hire professional assistance to compile the technical, project and legal documentation. Thus, thorough technical review of the applications requires equivalent expertise, which is not always available within the evaluating Ministries.

Impact: The lack of qualified applicant preparation and evaluation professionals invites discretionary practices into the system that are not consistent with the rule of law pertaining to both permitting processes.

***Recommendation/Best Practice*:** Many European agencies offer trainings and certifications to develop the technical knowledge and skill sets needed with regards to environmental impact assessments, renewable energy installation, and energy trading, among others. These trainings enable government employees to effectively and objectively perform functions. Additionally, public universities offer courses and licensing programs to build the appropriate skill sets within the country. Germany provides a good example, as they have developed an integrated approach to training their workforce on solar PV and wind technologies. The German government has dedicated training programs for professionals in these fields, both at the university and workforce development levels, so civil servants are equipped with the knowledge to successfully perform their functions. This type of capacity building evolves over time; however, it could be initiated in many of Kosovo‘s schools and technical training programs using an incremental approach.

Additionally, until these capabilities within the ministries are developed, the ministries could contract out for trained engineers and licensed technicians to assist with the review of the applications. Indeed, some GoK ministries, like the ERO, have used this approach. The ERO Legal and Licensing Department contracts a working group to review final applications for authorization. Other permitting authorities might consider adopting a similar approach, until internal capacity can be augmented. This type of mechanism is common in countries with regional disparities in capacity, allowing central governments to bring in experts to areas that need assistance but cannot find it locally, often offering them extra incentives to relocate to

[81] OECD, —Attracting Investment in Renewable Energy in Ukraine” Private Sector Development, Policy Handbook, November 2012.

[82] OCED. —Attracting Investment in Renewable Energy in Ukraine.” Private Sector Development Policy Handbook. November 2012.

the area with the extra need. This could be considered region-wide for Balkans, as there are licensed professionals in neighbor countries.

9.3.1.5 General Process Impediment #5: Rule of law is replaced with discretionary practice in absence of institutionalized processes and available resources

Given the discrepancies in the law and the difficulty in understanding the technical language as it is written, legal provisions are applied or implemented based on subjective interpretation. This is evident in the way in which environmental consent is determined by MESP. Due to the lack of MESP-licensed professionals in Kosovo, the de facto process has become review by the Minster of Environment and Spatial Planning and his signature as proof that the EIA is of acceptable quality. In the construction permitting process, the application review is conducted by the staff of the Department of Housing and Construction without any specific evaluation criteria. This department then makes a recommendation to the Permanent Secretary of MESP, who provides a final signature as proof the application is acceptable. Furthermore, the preliminary authorization from the ERO for a renewable energy project necessarily involves discretionary judgment on the part of the ERO, since there is no published list of required documents for awarding preliminary authorization under the existing system, One developer cited ―convincing the ERO of their model" to obtain preliminary authorization as the biggest hurdle in the application process.

Impact: Allowing a Minister's signature to override procedural deficiencies and using informal discussions as gateways for authorizations creates confusion for developers, could potentially invite corruption into the process, and opens the government up to legal recourse and dispute.

Recommendation/Best Practice: To increase transparency, the GoK could adopt more detailed legal provisions that provide alternative, comprehensive procedures. Another option may be to release guidelines for the public, to interpret and explain any legally mandated alternatives. For example, if there are no licensed professionals and the law requires an EIA to be completed by one, legally mandated alternatives could be made available. In some cases, the legal rule needs to be adjusted in order to standardize and define evaluation criteria for authorizations.

As the evaluation criteria become clearer, Kosovo should consider Germany's ‗bound decision' approach to the authorization process in order to remove the space for discretionary application of the law (e.g. the authorizing administration has no discretionary power over the application. If the publically listed requirements are met, the permit authority has to grant the permission by law[83]).

9.3.1.6 General Process Impediment #6: Arbitraryapplication review and revision timelines

The legal framework for Kosovo's renewable energy permitting and authorization process dictates strict timelines with unrealistic deadlines and missing details. The problem is three-fold: (1) the GoK entities do not have a deadline for the authorization process; (2) there are unrealistic, and at times unnecessary, deadlines in place for the applicant; and (3) the law ties legally binding results to missed deadlines.

[83] ECORYS ―Assessment of non-cost barriers to renewable energy growth in EU Member States" DG TREN/D1/48 – 2008 Final Report 10 May 2010.

In the first case, the ERO does not have an estimate or goal for how long the entire renewable energy permitting process should take in Kosovo. Without a benchmark, permitting authorities have no reason move quickly and efficiently through the permitting process, as there is no consequence to a long approval process.

In the second case, inconsistences in the water use permitting process illustrate the impact of deadlines that are not indicative of the actual process. The AI, which governs the water use permit process, both mandates a 30 day deadline for the Water Department to review the application and also states that the application must be posted for comment within 7 days of receipt of the application. Realistically, it would be difficult for any public comment to be included in the review under this short a timeline. In order to meaningfully incorporate any public concerns, the application would have to be rejected by the consenting and restarted. Another similar example is apparent in the construction permitting process. After review, if there are any deficiencies in the construction permit application, the applicant only has a limited time period to address those deficiencies (8 or 15 days). Depending on the feedback from the competent authority, this may or may not be enough time for the applicant to meaningfully address the problems, even if they are financially motivated to do so.

In the third case, the construction permitting process illustrates the impact of legally bound timelines. The Construction Law imposes a maximum 15 to 30 day timeline for the competent authority to establish the Terms of Construction, after which, if there is no action from the competent authority, the proposed TOC becomes law. This period of time is too short for review and essentially allows the applicant to rezone the land for the project purposes without explicit consent from a public authority.

Impact:A system that either approves or rejects projects based on arbitrary timelines and lacks prescriptive guidance on the overall process timeline creates risk for developers and investors and that can foster an uninviting investment environment.

Recommendation/Best Practice:In lieu of the existing deadlines that were developed without a holistic understanding the time needed to accomplish each tasks, the Kosovo government should revise the legal code to establish meaningful deadlines based on the overall process. Common practice for the countries investigated by the Deloitte team showed that most governments have central guidance that mandates the permitting bodies to expedite processes to the extent possible. Once those timelines have been vetted with relevant stakeholders, deadlines should be in place along with sanctions for the authorizing body if they do not abide by the deadline. Tacit approval – meaning default approval if there is no response from the authorizing agency by the deadline – of submitted applications is an option favored by European developers.[84] Countries have shied from this option, however, because it could result in authorization of projects that have not been examined adequately. A more realistic approach could be an escalating fee or public notice for agencies that are not mindful of deadlines. Another option, perhaps less potent, might be legal recourse for the developers if authorities do not respect the mandated timelines, as in Germany.[85] Any sanction that is put in place should be coupled with GoK guidance that administrative proceedings should take place swift and without willful delay.[86]

[84] Ecorys —Assessment of non-cost barriers to renewable energy growth in EU Member States.” Pg. 24
[85] Ecorys —Assessment of non-cost barriers to renewable energy growth in EU Member States.” Pg. 24
[86] Ecorys —Assessment of non-cost barriers to renewable energy growth in EU Member States.” Pg. 24

In Germany, the German legal system provides several important guidelines and accompanying administrative tools for stakeholders involved in the authorization process. First, the law sets out the ―Principle of Expedition of Proceedings" specifying that administrative proceedings should place swiftly and without any willful delay in order to build into the law that authorizing bodies must adhere to deadlines. Second, the law provides legal recourse in the way of an ―administrative inaction suit" which allows for legal actions at administrative courts if that particular ministry does not react to complaints in due time. It should be noted, however, that these legal proceedings are lengthy, weakening this tool's potency.

9.3.1.7 Construction Specific Process Impediments #7:Permitting processes do not account for the size of the renewable energy projects in a meaningful way

MESP's Construction Department has an essentially one-size-fits all approach to permitting for renewable energy projects regardless of project size. Currently as it is documented in the law, all developers—regardless of project size—have to establish a TOC, submit the identical paperwork, and follow the identical process for final approval to construct a renewable energy project. Eventually, the Department plans to disaggregate the application process based on differentiated risk levels described in Section 10.2.3, but currently the application process is does not differentiate by project sizes. Similarly, the primary authorization process housed within the ERO does not differentiate substantially by size or technology.

Impact: This one-size-fits-all approach impedes the expedited development of small, distributed generation renewable energy projects by burdening small projects with superfluous permitting requirements that are not applicable to small projects.

Best Practice/Recommendation: The European Commission in the EU Directive 2009/28/EC recommends that countries implement more expedient building permitting procedures for micro and/or distributed generation projects, as they differ fundamentally from large scale generation, such as coal-fired power plants. In 1996, Germany revised its federal building code for most small renewable energy systems, including rooftop solar PV, solar thermal systems, and small biogas systems, so that the project developer has the option to inform the county administration and is not required to report if a project does not infringe on any building regulations. In another example from Austria, public participation in the biomass permitting process is disaggregated according the size of the project and not required for projects less than 1 MW.

9.3.1.8 Land Use ProcessImpediment #8: Lack of a proactive spatial planning process

While a process exists for rezoning land for renewable energy projects in Kosovo, that process has not actively addressed renewable energy development. The process associated with rezoning for renewable energy projects is overseen by the municipality and other relevant government bodies to obtain the right to use the land. This causes avoidable hurdles that could easily be circumvented with spatial planning that accounts for renewable energy development.

***Impact*:** Discourages project development because of the paperwork associated with rezoning an area for renewable energy and raises perceived cost of initiating a project.

***Recommendation/Best Practice*:** The early inclusion of renewable energy projects in spatial planning is important for administrative procedures because it avoids potentially long bureaucratic rezoning and authorization processes. In the case of Germany, which leads the

Europe in this case, the building code of 1996 obliged municipalities and regional authorities to designate special areas for wind and thermal power plants, avoiding long authorization processes to rezone the land for that purpose. Kosovo can minimize the re-zoning time required by proactively designating energy generation as one of the expropriated uses for land parcels that are not currently zoned through a spatial plan.

10 APPENDIX I: WORKS CITED

10.1 Documents Reviewed for Assessment of Proposed Renewable Energy Targets and Available Renewable Sources

- ERO Board Decision on Determination of Feed in Tariffs, March 30, 2011
- ERO Rule for the Establishment of a System of Certificates of Origin for Electricity Produced from Renewable Energy Sources, from Waste and Co-Generation In Combination with Heat In a Single Generating Unit, December 29, 2010
- ERO Rule on the Support of Electricity for which a Certificate of Origin Has Been Issued and Procedures For Admission to the Support Scheme, December 2010
- Renewable Energy Policy and Market Developments in Kosovo, N. Avdiu1 and A. Hamiti1, ERO, April 13 – 15, 2011
- Evaluation of the Must-Run Dispatch Nature of Authorized Renewable Energy Projects and the Likely Financial Impact on KEDS, Deloitte Consulting, February15, 2010
- Energy Strategy of the Republic of Kosovo for the Period 2009–2018, Ministry of Energy and Mining, 2009
- Kosovo Plan for Renewable Energy Sources 2011-2020 (Simplified Plan), Ministry of Economic Development, December 2011
- Energy Policy in the Republic of Kosovo, Ministry of Economic Development, June 2012
- Working Group Report from the Office of Renewable Energy and Energy Efficiency, Ministry of Economic Development, October 2012
- Annual Report on the Implementation of the Acquis under the Treaty Establishing the Energy Community, Energy Community Secretariat, September 1, 2012
- Draft Aide Memoire – World Bank Energy Sector Mission to Kosovo (October 15 – 26, 2012)
- Draft Long Term Energy Balance, 2013 - 2022, KOSTT, October 2012
- Updated Calculation of the 2020 RES Targets for the Contracting Parties of the Energy Community in the 8th Renewable Energy Task Force meeting of March 6, 2012
- Decision of the Ministerial Council of the Energy Community adopted October 18, 2012.
- A World Bank Power Options Report entitled World Bank Background Paper: Development and Evaluation of Power Supply Options for Kosovo, December 2011

- A European Agency for Reconstruction study for the Ministry of Energy and Mining entitled Lot No 4 Assessment Study of Renewable Energy Resources in Kosovo , FINAL DRAFT Report, June 2008
- Mercados Estimate of RES Potential in Kosovo by 2020, Mercados Energy Markets International, 2009
- Biomass Consumption Survey for Energy Purposes in the Energy Community, UNMIK National Report, Kane Cres Centre for Renewable Energy Sources and Saving, October 31, 2011
- Background Paper: Development and Evaluation of Power Supply Options for Kosovo, World Bank Fact Sheet, January 26, 2012
- Preliminary Evaluation of the World Bank's December, 2011 "Background Paper, Development and Evaluation of Power Supply Options for Kosovo" Bruce C. Buckheit, January 2012
- Kosovo's Energy Options: A Comparison of Two Recently Published Reports, The World Bank, April 9, 2012
- INDEP, Sierra Club, and RAEL's Reply to the World Bank Group's Kosovo's Energy Options: Response to the Sierra Club/INDEP Report: Re-evaluating Kosovo's Least Cost Electricity Option , July 16, 2012
- Kosovo Needs Clean Energy, Not New Coal, INDEP and Sierra Club Fact Sheet, 2012
- Proposed Zhur HPP – Information Brief for KEK Management, PA Consulting for USAID, November 2007
- Review of HPP Zhur Feasibility Study Including Preparation of Preliminary Environmental Impact Assessment and Preliminary Social Assessment, Final Report, Ministry of Energy and Mining of Kosovo, May 2009
- Wind Park Zatric – Project Description Update, NEK, October 16, 2012
- Wind Park Budakove – Preliminaru Project Description, November 7, 2012

10.2 LEGAL REVIEW SOURCES

- Constitution of the Republic of Kosovo (2008).
- Law on Public Private Partnerships, Law No. 04/L-045 of 21 October 2011.
- Law on Nature Conservation, Law No. 02/L-18 of 23 March 2005, as promulgated by UNMIK Regulation 2006/22 of 24 April 2006.
- Law on Nature Protection, Law No. 03/L-233 of 30 September 2010.
- Law on the Expropriation of Immovable Property, Law No. 03/L-139 of 26 March 2009, as amended by Law No. 03/L-205, "On Amending and Supplementing Law No. 03/L-139 On the Expropriation of Immovable Property", of 28 October 2010.

- Law on Forests in Kosovo, Law no. 2003/3 of 13 February 2003, as promulgated by UNMIK Regulation 2003/6 of 20 March 2003, and as amended by: Law No. 2004/29 of 28 July 2004, as promulgated by UNMIK Regulation No. 2004/40 of 14 October 2004, and Law No. 03/L-153 of 25 February 2010.
- Law on Property and Other Real Rights, Law No. 03/L-154 of 25 June 2009, published in the OG on4 August 2009.
- Law on Agricultural Land, Law No. 02/L-26 of 24 June 2005 (promulgated by UNMIK Regulation 2006/37 of 23 June 2006).
- MAFRD Administrative Instruction No. 10/2010 amending and supplementing Administrative Instruction No. 41/2006 of 27 December on the Change of Usage Designation of Agricultural Land. [Also has provisions relating to the Law on Forests].
- Law on Allocation for Use and Exchange of the Immovable Property of Municipality, Law No. 03/L-226 of 2010.
- Law on the Privatization Agency of Kosovo, Law No. 04/L-034 of 31 August 2011, published in the OG on 21 September 2011.
- UNMIK Regulation No. 2003/13, On the Transformation of the Right of Use to Socially Owned Immovable Property, of 9 May 2003.
- Law on Environmental Impact Assessment, Law No. 03/L-214 of 23 September 2010, (approved by Presidential Decree) published in the OG on 29 October 2010.
- MESP Administrative Instruction No. 09/2011. public participation in the EIA process
- MESP‘s Administrative Instruction No. 09/2011 –On Information, Public Participation and Interested Parties in the Environmental Impact Assessments Procedures” (AI 09/2011).
- MESP Administrative Instruction No. 07/2011. licensing of EIA preparers
- MESP Administrative Instruction No. 11/2011. determining the fee for EIA services
- MESP AI 03/2011, need to obtain
- Law on Environmental Protection, Law No. 03/L-025 of 26 February 2009; promulgated by Presidential Decree No.DL-007-2009 of19March 2009; published in the OG on 06 April 2009.
- Law on Spatial Planning, Law no. 2003/14 of 3 July 2003 (promulgated by UNMIK Regulation 2003/30 of 10 September 2003); as amended by Law No. 03/L-106 of 10 November 2008, published in the OG on 25 November 2008.
- Law on Construction of 2012.
- Law on the Energy Regulator
- ERO‘s Rule on Authorization Procedure for Construction of New Generation Capacities of 29 August 2011.

- Law on Water of 2004 (Water Law) and the
- MESP's Administrative Instruction No. 24/05 of 2005 (AI).
- Law on Electricity
- Law on Energy

10.3 PROCESS IMPEDIMENTS SOURCES

- Ecorys. "Assessment of non-cost barriers to renewable energy growth in the EU Member States" DG TREN No. TREN/D1/48 – 2008. Final Report. 10 May 2010.
- Jacobs, David. "Framework Conditions and International Best Practices for Renewable Energy Support Mechanisms." Organization for Security and Cooperation in Europe (OSCE). Prepared for the Seminar on "International Best Practices for the Legal and Regulatory Framework of Renewable Energy." Baku, Azerbaijan, December 2009
- OECD. "Attracting Investment in Renewable Energy in Ukraine." Private Sector Development: Policy Handbook. November 2012.
- OECD. "Guiding Principles of Effective Environmental Permitting Systems" OECD. 2007.
- Lipp, Judith. "Lessons for effective renewable electricity policy from Denmark, Germany and the United Kingdom." Energy Policy 35 (2007) 5481–5495.
- Sharick, Amber and Dr. Dorte Fouquet. "Meeting the Renewable Energy Mandate in 2020: Policy Recommendations & Best Practices from the EU Member State National Action Plans." Prepared for REPAP2020 Project.
- M. Mendonca et al. "Stability, participation, and transparency in renewable energy policy: Lessons from Denmark and the United States" Policy and Society (2009).
- Ragwitz, Mario et al. "Assessment and optimization of renewable energy support schemes in the European electricity market." OPTRES for Intelligent Energy Europe. February 2007.
- Ragwitz. Mario et al. "Assessment of National Renewable Energy Action Plans." REPAP2020. Supported by Intelligent Energy Europe. 14 March 2011.
- Biz Clim. "Identification of Best Practice Relating of Renewable Energy Financing and Policy in ACP Countries." July 2012. Financed by the European Union through the European Development Fund

11 APPENDIX II: DETAILED LIST OF DUE DILIGENCE MEETINGS

No.	Date	Organization
1	Wednesday, October31, 2012	KEK
2	Thursday, November 1, 2012	USAID
3	Thursday, November 1, 2013	KEDS PIU
4	Thursday, November 1, 2012	ERO
5	Monday November 5, 2012	KOSST
6	Monday November 5, 2012	ERA Energji Sh.p.k.
7	Tuesday, November 6, 2012	BKT
8	Tuesday, November 6, 2012	MESP
9	Tuesday, November 6, 2012	MED
10	Wednesday, November 7, 2012	MED
11	Wednesday, November 7, 2012	Kosovo Customs
12	Thursday, November 8, 2012	IFC
13	Friday, November 9, 2012	USAID & AEAI
14	Wednesday, November 14, 2012	ERO
15	Friday, November 16, 2012	KOSTT
16	Monday, November 19, 2012	USAID
17	Tuesday, November 20, 2012	MED
18	Tuesday, November 20, 2012	ERO
19	Wednesday, November 21, 2012	KOSTT
20	Wednesday, November 21, 2012	KEK
21	Thursday, November 22, 2012	Ministry of Spatial Planning
22	Friday, November 23, 2012	Triangle General Contractors
23	Monday, November 26, 2012	Water and Wastewater Regulatory Office
24	Monday, November 26, 2012	Privatization Agency
25	Monday, November 26, 2012	Deloitte GFSI – Legal Advisory
26	Tuesday, November 27, 2012	Ministry of Local Government Administration
27	Friday, November 30, 2012	Ministry of Agriculture, Forestry and Rural Development
28	Friday, November 30, 2012	Housing and Construction Department
29	Monday December 3, 2012	GFSI
30	Monday December 3, 2012	MATKOS Group
31	Tuesday, December 4, 2012	Water Department
32	Tuesday, December 4, 2012	Forestry Agency
33	Wednesday, December 5, 2012	Eurokos
34	Wednesday, December 5, 2012	KFW
35	Friday, December 7, 2012	MED

36	Monday, December 10, 2012	USAID, U.S. Department of State
37	Monday, December 10, 2012	KEK
38	Monday, December 10, 2012	MOE / Legal Department
39	Monday December 10, 2012	GiZ
40	Tuesday, December 11, 2012	BEEP / Construction Department
41	Wednesday, December 12, 2012	Ministry of the Environment
42	Thursday, December 13, 2012	NEK
43	Thursday, December 13, 2012	GiZ
44	Friday, December 14,2012	ERO
45	Monday, December 17, 2012	KEK
46	Monday, December 17, 2012	MED
47	Tuesday, December 18, 2012	Association of Municipalities
48	Wednesday, December 19, 2012	Peja Municipality
49	Wednesday, December 19, 2012	Deqan Municipality
50	Monday, January 14, 2013	Construction Department
51	Tuesday, January 15, 2013	IRON Consulting
52	Thursday, January 17, 2013	Kelkos Energy

12 APPENDIX III: OVERVIEW OF FINANCIAL INCENTIVES

A number of financial incentive mechanisms have been developed to support RES development worldwide. The popularity and application of these financial incentive mechanisms differs by region.

Fiscal incentives can be broadly characterized as either market support instruments, tax incentives, and financing incentives (including both equity and debt instruments). Combinations of fiscal incentives are seen in various regional markets.

- **Market support instruments** primarily consist of feed-in tariffs, premium tariffs, quota systems (e.g., renewable obligations, such as Renewable Portfolio Standards), and auctions.
- **Tax incentives** include production tax credits, investment tax credits, as well as incentives in the form of accelerated depreciation. Reductions in taxation due on imported equipment (or VAT) provide additional financial support for RES.
- Financing incentives include the various **equity and debt instruments** that are provided to developers and investors in RES technologies.

Each of these fiscal incentives is described in further detail below.

12.1 MARKET SUPPORT INSTRUMENTS

While the cost of RES technologies has followed a declining path over time as these technologies are adopted into energy markets, the absolute cost of these technologies are still higher than conventional technologies – especially as the capital investment costs of current sources of energy are fully amortized. Without government support, these higher costs make RES a less attractive and more risky investment than conventional energy resources. Developing a RES market requires strong legislative, regulatory, administrative and economic support in the form of financial incentives for investment.

Within the EU, there are a number of alternative market-related financial incentives that are provided RES developers/investors in the electricity sector, often in combination. However, the two most prevalent are feed-in tariffs and purchase obligation (Quota) system.

12.1.1 Feed-In & Premium Tariffs

Feed-in tariffs – which are mandated by government legislation and are designed and approved by regulatory bodies – provide a fixed payment per unit of electricity (€/MWh) produced by the RES facility. The feed-in tariff provided will vary by technology, as different technologies require varying levels of revenue support (to cover varying levels of capital and operations costs). Varying the level of feed-in tariffs by type of technology allows policy makers to provide support to different RES technologies while avoiding windfall profits to more cost-effective technologies. Feed in tariffs can also be structured to reduce over time (‗tariff digression') to reflect the expected reduction in cost of RES technologies. Further, FIT tariff schemes may incorporate a feature whereby the level of FIT increases over time (‗stepped tariff') in order to mitigate the impact of RES tariffs on end-user electricity bills.

Under a feed-in tariff system, the RES unit sells all of its output at the feed-in tariff to a specified off-taker which is usually the Market Operator (e.g., the party that is responsible for ensuring the efficient operation of competitive electricity markets). Therefore, the RES unit is

insulated from variations in the price of wholesale electricity in the market – the RES unit is guaranteed the feed-in tariff no matter the prevailing wholesale price of electricity. As price risk is eliminated, the feed-in tariff system provides the greatest degree of revenue assurance to a developer/investor. Further, as RES systems are usually allowed priority of dispatch (i.e., they are identified as ‗must run' units when they are generating electricity), all electricity generated is sold to the market. Revenue risk is, therefore, eliminated.

An alternative to the feed-in tariff design is a premium tariff. Under the premium tariff structure, the RES unit is provided a specified guaranteed tariff premium (measured in €/MWh) above the prevailing wholesale market price of electricity. As the overall tariff that the RES unit sees is comprised of both the wholesale unit price of electricity plus the premium tariff, the RES unit is exposed to the overall price of electricity in the market. Premium tariff structures provide greater risk to developers, as they are exposed to – though insulated from – the prevailing wholesale price of electricity. However, this price risk is again mitigated as a result of the ‗must run' feature (e.g., market priority) of RES units.

The support provided a RES unit via either a feed-in tariff or premium tariff is provided for a defined period, which must be of sufficient length to allow the RES unit to amortize a substantial portion of the underlying capital cost. A minimum period of 10 years is required in most instances. Where project financing is exclusively used to raise capital for a RES project, lenders may require a minimum tariff period of up to 15 years. The required period of revenue support varies with the level of tariff; where feed-in tariffs are higher (given uniform costs) capital costs are able to be amortized more quickly, allowing for a shorter duration period of tariff support.

Regulatory stability – and the consistent application of regulatory tariff principles as they apply to feed-in tariffs – is critical to reducing revenue risk to RES developers and investors.

12.1.2 Purchase Obligation Quota systems (Renewable Portfolio Standards)

Purchase Obligation quota systems (termed Renewable Portfolio Standards in the United States) require that RES make up a defined, minimum percent of overall energy supply within a given market (which can either be the service territory of a utility or a national standard). The obligation is imposed upon market participants (usually utilities or consumers (via the Market Operator), who are sanctioned with penalties for not meeting required targets.

In general, the RES unit is exposed to various in the wholesale price of electricity, which increases revenue risk and, therefore, total project risk. Due to the increased revenue risk borne by RES units, only the most cost efficient RES technologies are adopted in a market utilizing a quota system.

In a quota system, the degree of market risk (revenue risk) borne by the RES unit varies in accordance with electricity market design. RES units may be totally exposed to the wholesale price of electricity. Alternatively, policy makers may decide to adopt various mechanisms to mitigate market risk. Minimum tariff requirements (imposed on the party which has the quota obligation) for specific technologies provide greater tariff (and revenue) security in markets which face fluctuating long-term prices. In addition, long-term contracts (e.g., Power Purchase Agreements) may be used to mitigate risk for both the RES developer and market participant to whom a quota applies; the RES unit is guaranteed a certain tariff while the counter-party is assured of RES generation to meet its quota obligation.

Tendering schemes may be used by markets participants to procure RES to meet quota obligations. Such tendering schemes often provide an incentive to the RES developer/investor of a long-term off-take agreement. However, the unit price of electricity is determined via competitive tender.

Unless mitigated by electricity market design features, quota systems allocate increased revenue risk to RES investors (relative to a feed-in tariff system).

12.2 TAX SUPPORT INCENTIVES

Fiscal incentives in the form of tax exemptions may be provided as additional, complementary support mechanism for RES units (in addition to the market mechanisms discussed above). These tax exemptions (or tax credits) are usually provided in the form of: a) Investment tax credit, b). Production tax credit, or c). accelerated depreciation on capital equipment. Tax exemptions in the form of reduction on customs duties for imported products may also be utilized in markets which import components required for RES facility development. Each of these various mechanisms is discussed below.

12.2.1 Investment Tax Credits

Investment tax credits reduce the tax obligation on a project by providing a tax credit for the amount of invested capital. The investment tax credit is essentially a subsidy, which reduces the capital cost of the installed RES unit. Investment tax credits require an investor that has sufficient taxable income to utilize the investment tax credit and, therefore, do not provide uniform support to all developers/investors. A market of ‗tax equity investors' has developed in countries that utilize investment tax credits (e.g., the United States), where financial instruments are structured to provide a pass-through of tax benefits to equity investors.

Investments tax credits will have a limited impact on RES investment in regional markets where the mix of developers/investors do not have sufficient taxable income against which an investment tax credit might offset. A further limitation of tax incentives is that the tax incentive is often not able to be transferred across international borders, hence international investors may not benefit from a tax incentive provided within a specific country.

12.2.2 Production Tax Credits

Production tax credits provide a reduction in tax on a per unit basis of production (MWh), hence the RES facility must operate in order to be able to utilize the production tax credit. Production tax credits benefit the project by reducing tax obligations and increasing cash flow (and Return on Equity). However, as with an investment tax credit, there must be sufficient taxable revenues – either at the project company or with the equity investor (if the production tax credit is structured as a pass-through) – against which the production tax credit may be off-set. Where RES projects are highly leveraged (e.g., there is a large debt-to-equity ratio), there may not be sufficient revenues (after debt service) to fully utilize the production tax credit. Similar constraints on the effectiveness of investment tax credits will apply to production tax credits if the pool of investors within a regional market does not have sufficient taxable income or if tax incentives are not able to be applied across international borders.

12.2.3 Accelerated Depreciation

Accelerated depreciation of capital assets reduces near term tax obligations by reducing taxable income, thus increasing project cash flows and the net present value of a project vs. straight-line depreciation of capital assets. Where projects are highly leveraged, there may not be sufficient free cash flow to equity to off-set the benefit of accelerated depreciation.

Therefore, as with the investment and production tax credits, for the accelerated depreciation tax incentive to be fully realized, the equity investor must have sufficient taxable income (either at the project level or at a corporate level above the project level).

12.2.4 Customs Tax Credit

In countries that rely on importing equipment for the construction of renewable energy facilities, a reduction in the rate of customs duty will provide a fiscal incentive to developers/investors and will act to reduce the overall capital cost of the project. As this incentive provides for a reduction in project costs, the incentive is readily able to be utilized by all developers and acts to reduce project risk by reducing the overall level of project cost that must be recovered.

Tax exemptions rely on stable tax policies of host nations and are subject to being re-opened during periods of budget crisis (see the recent discussions in the United States regarding the continuation of the investment and production tax credits for wind projects, etc.). Where fiscal policy is seen as unstable or subject to change, tax incentives will provide limited incentive to developers/equity investors. Further, in countries where the rate of corporate tax is low (such as the Republic of Kosovo), the application of tax incentives as a secondary means of support will be of limited value to developers/investors.

Finally, tax exemptions are used extensively within the United States but are not a primary financial support mechanism that is used within the EU.

12.3 Financing Incentives – Debt & Equity Sources

There is substantial risk involved in project development, as these costs are primarily funded by equity. Reducing development risk – which, in turn, should reduce the amount of ‚at risk' equity capital investors will need to develop a RES project – should be a goal of national policies aimed at encouraging RES projects (this issue will be discussed in the non-financial barriers to RES development section of this report).

RES projects are capital intensive, requiring substantial investment in equipment, construction costs, land and amortized development costs (which can amount to up to 10% of total project costs). Once a project has reached ‚critical mass' with regard to its development, a projects may be either financed ‚on balance sheet' (e.g., by the financing capacity of the equity investor and/or sponsor company) or on a project finance basis. The utilization of debt for project construction substantially reduces investor project risk.

12.3.1 Equity Sources

Equity is required both for initial project development as well as for funding, either in total or in part, all costs associated with bringing a RES project on-line.

Development equity is required to fund the development of projects to the stage where a project might be sufficiently advanced to interest providers of debt capital. There are limited options for the initial development funding of projects other than the developer/investor's own equity. Reducing costs associated with the development of RES projects as well as the risk that a project may not be financeable is, therefore, critical to increasing developer/investor interest in RES opportunities.

Project developers/investors attempt to reduce the amount of equity required to be placed into projects. Reducing equity requirements – primarily via the introduction of other sources of capital – substantially reduces investor risk, as less capital is at stake in any one project.

None-the-less, sources of equity may be required to fund up to 20% of a project which is able to attract debt capital. However, not all projects are able to access debt – debt is mostly accessible by larger projects (or by a pool of smaller projects that have achieved construction completion) as the transaction costs associated with capital raising preclude the raising of capital for small projects with limited capital requirements.

12.3.2 Debt Sources

Project finance is the preferred financing method of RES project developers, as the utilization of debt capital substantially reduces the equity commitment (and, hence, risk) associated with individual projects. In a typical project, up to 80-85% of total costs may be covered by project finance, depending upon the robustness of cash flows able to support debt service. Access to project finance, therefore, substantially increases the sources of financing available to meet country RES obligations as provided under EU Directives.

Project finance lenders conduct substantial due diligence on project risks prior to providing senior debt. Given the long tenor of debt facilities (often greater than 12 years, but up to 20 years in some cases), a project has to show the ability to cover debt obligations over the course of the debt term to secure debt financing.

Given the potential funding gap between currently available funds and those required to fulfill RES obligations, national policies should focus on ensuring continuity of renewable energy policies to de-risk the project over the course of the potential lending period. Further, as debt is primarily available for larger projects (or for smaller projects that have been pooled), raising debt for small to medium sized projects is a constraint on RES development. Efforts should be made to encourage the adoption of financial support facilities that might be available from IFI institutions and other agencies focused on providing financing for RES projects while raising the awareness of financing institutions (such as local banks) to the RES opportunities that exist within national markets.

13 APPENDIX IV: FEED INTARIFF SUPPORT & DURATION FOR RES TECHNOLOGIES[87]

Country		Tariff Level in 2010 (€ cents/KWh) and duration of support for different RS				
		Small Hydro	Wind Onshore	Solid Biomass	Biogas	PV
Austria (fixed)		3.29 – 6.23 (15 Years)	7.53 (10-12 Years)	11.1 – 15.6 (10-12 Years)	11.3 – 16.9 (10-12 Years)	30-46 (10-12 Years)
Bulgaria (fixed)		5.4 (15 Years)	7.4 – 9.7 (15 Years)	8.5 – 11.1 (15 Years)	8.5-10.0 (15 Years)	38.6 – 42.1 (25 Years)
Cyprus (fixed)		-	16.6 (15-20 Years)	13.5 (15-20 Years)	11.5 (15-20 Years)	20.5 – 38.3 (15-20 Years)
Czech Rep.	Fixed	10.0 (30 Years)	8.6 (20 Years)	9.5 – 16.6 (20 Years)	13.1 – 15.2 (20 Years)	47.2 – 47.5 (20 Years)
	Premium	4.7 (30 Years)	6.0 (20 Years)	3.8 – 10.9 (20 Years)	7.4 – 9.5 (20 Years)	43.6 – 43.9 (20 Years)
Denmark						
Estonia	Fixed	7.35 (12 Years)	7.35 (12 Years)	7.35 (12 Years)	7.35 (12 Years)	7.35 (12 Years)
	Premium	5.37 (12 Years)	5.37 (12 Years)	5.37 (12 Years)	5.37 (12 Years)	5.37 (12 Years)
France (fixed)		6.1 – 10.3 (20 Years)	8.2 (15 Years)	12.8 (20 Years)	7.5 – 14 (15 Years)	32.8 – 60.1 (20 Years)
Germany (fixed)		3.5 – 12.7 (20 Years)	5.0 – 9.2 (20 Years)	7.8 – 30 (20 Years)	4.16 – 11.0 (20 Years)	32 – 43 (20 Years)
Greece (fixed)		8.0 – 9.2 (10 Years)	8.0 – 9.2 (10 Years)	8.0 – 9.2 (10 Years)	8.0 – 9.2 (10 Years)	40.7 – 50.7 (20 Years)
Hungary (fixed)		9.5 (no limit)	9.5 (no limit)	3.9 – 10.7 (no limit)	3.9 – 10.7 (no limit)	9.5 (no limit)
Ireland (fixed)		8.4 (15 Years)	6.6 – 6.9 (15 Years)	8,4 (15 Years)	8.1 (15 Years)	N/A
Italy	Fixed	22 (15 Years)	22.0 (15 Years)	28.0 (15 Years)	28.0 (15 Years)	N/A
	Premium				36 – 48 (20 Years)	
Latvia (fixed)		10.8 – 13.9	6.7 – 12.8	6.0 – 17.7	13.0 – 16.7	33.0

[87] Evaluation of different feed-in tariff design options – Best Practice paper for the International Feed-In Cooperation (December 2010); Arne Klein, Erik Merkel, Benjamin Pfluger, Anne Held, Mario Ragwitz (Fraunhofer ISI) and Gustav Resch, Sebastian Busch (Energy Economics Group);

		(10 Years)	(10 Years)	(10 Years)	(10 Years)	(10 Years)
Lithuania (fixed)		7.5 (10 Years)	8.7 (10 Years)	8.7 (10 Years)	8.7 (10 Years)	43.7 – 47.2 (10 Years)
Luxembourg (fixed)		8.5 – 10.5 (15 Years)	8.2 (15 Years)	14.5 (15 Years)	12.0 – 15.0 20 Years	36 – 41 (15 Years)
Netherlands (fixed)		8.1 (15 Years)	6.9 (15 Years)	7.1 – 13.3 (15 Years)	1.5 (12 Years)	32.4 – 40.6 (15 Years)
Portugal (fixed)		7.5 – 77 (20-25 Years)	7.4 – 7.5 (15 Years)	10.2 – 10.9 (25 Years)	10.2 – 11.7 (15 Years)	35.5 – 47 (15 Years)
Slovakia		8.4 – 13.4 (12 Years)	8.5 – 10.2 (12 Years)	10.7 -13.0 (12 Years)	10.4 – 17.9 (12 Years)	40 – 45 (12 Years)
Slovenia	Fixed	8.2 – 10.5 (15 Years)	3.1 – 4.3 (15 Years)	10.8 – 16.5 (15 Years)	0.7 – 10.3 (15 Years)	20.4 – 35.8 (15 Years)
	Premium	3.7 – 5.0 (15 Years)	3.1 – 4.3 (15 Years)	10.8 – 16.5 (15 Years)	0.7 – 10.3 (15 Years)	20.4 – 35.8 (15 Years)
Spain	Fixed	8.25 (25 Years)	7.65 (20 Years)	9.0 – 17 (15 Years)	6.8 – 8.5 (15 Years)	20 – 46 (25 Years)
	Premium	6.9 – 9 No limit	7.5 – 9 No Limit	11 – 17.6 No Limit	7.47 – 9.5 No Limit	N/A
United Kingdom (Fixed)		17.8 – 18.9 (20 Years)	4.5 – 34.5 (20 Years)	9.0 – 11.5 (20 Years)	9.0 – 11.5 (20 Years)	29.3 – 36.2 (25 Years)

14 APPENDIX V: TAX RATES OF EUROPE[88]

Country	Corporate Tax Rate	VAT Rate
Albania	10%	20%
Austria	25%	20%
Belarus	24%	20%
Belgium	34%	21%
Bosnia & Herzegovina	10%	17%
Bulgaria	10%	20%
Croatia	20%	25%
Cyprus	10%	17%
Czech Republic	21%	21%
Denmark	25%	25%
Estonia	21%	20%
Finland	26%	24%
France	33%	19%
Germany	30%	19%
Greece	25%	23%
Hungary	19%	27%
Iceland	18%	25%
Ireland	12.5%	23%
Italy	31%	21%
Latvia	15%	21%
Lithuania	15%	21%
Macedonia	10%	18%
Montenegro	9%	17%
Netherlands	25%	21%
Norway	28%	25%
Poland	19%	23%
Portugal	15%	23%
Romania	16%	24%
Serbia	10%	20%
Slovakia	23%	20%
Slovenia	20%	20%
Spain	30%	21%
Sweden	26%	25%
United Kingdom	23%	20%

[88] Tax Policy Center; Federation of International Trade Associations

15 APPENDIX V: DETAILED PROCESS FLOW DIAGRAMS

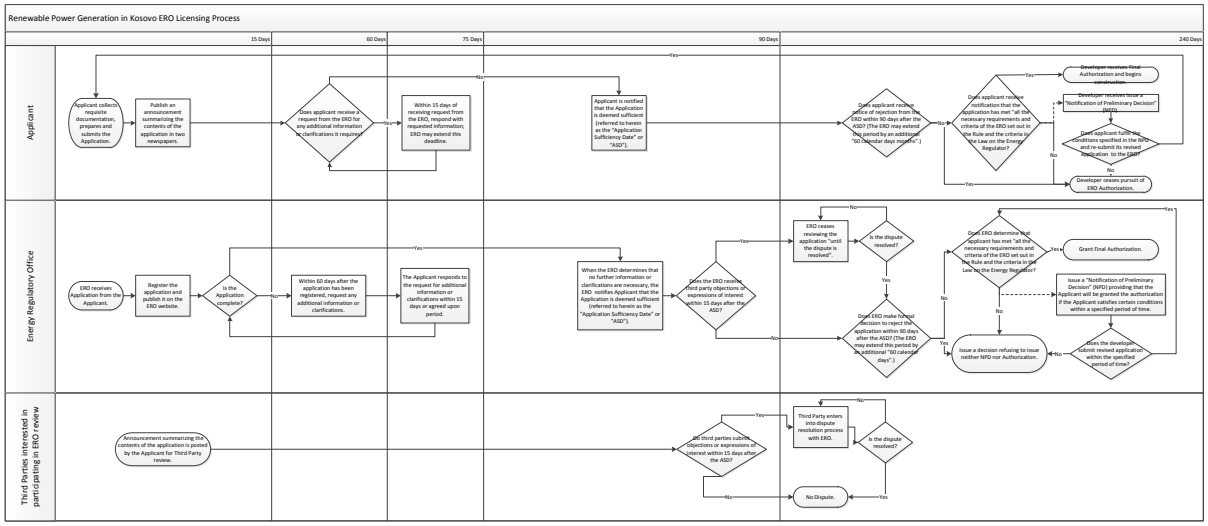

Figure 8: Detailed ERO Process Flow Diagram

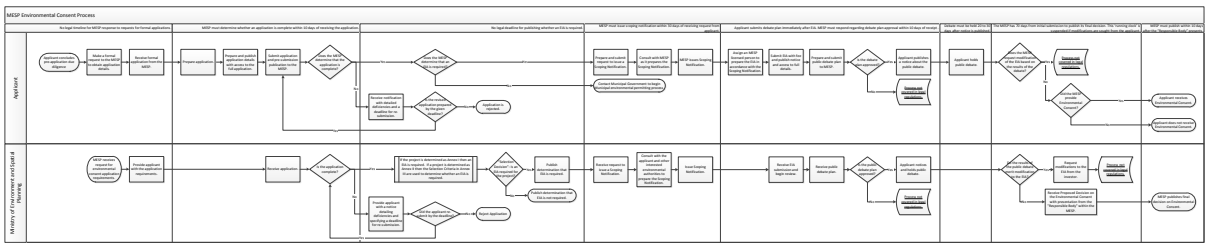

Figure 9: Detailed Environmental Consent Process

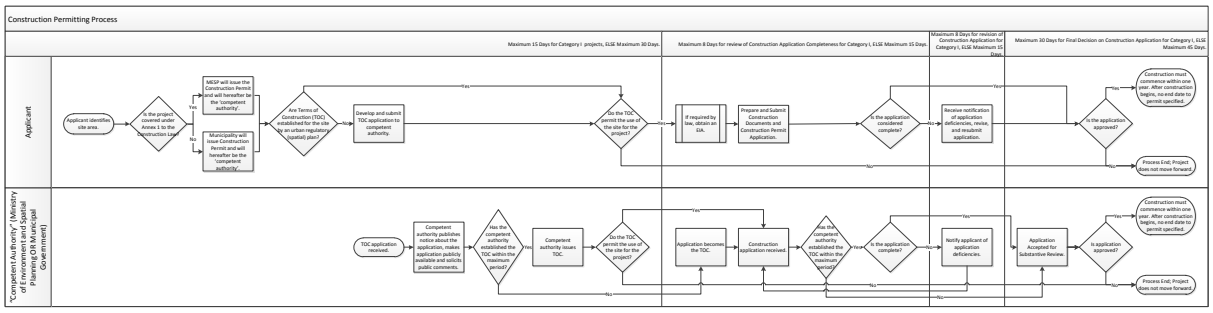

Figure 10: Detailed Construction Permitting Process

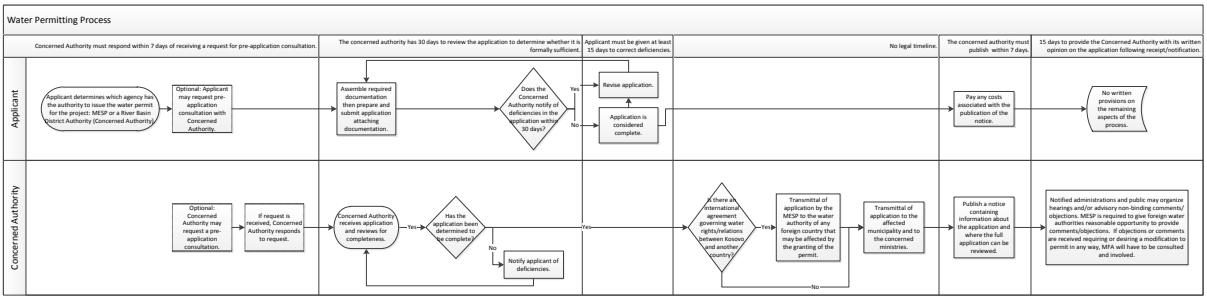

Figure 11: Detailed Water Permitting Process

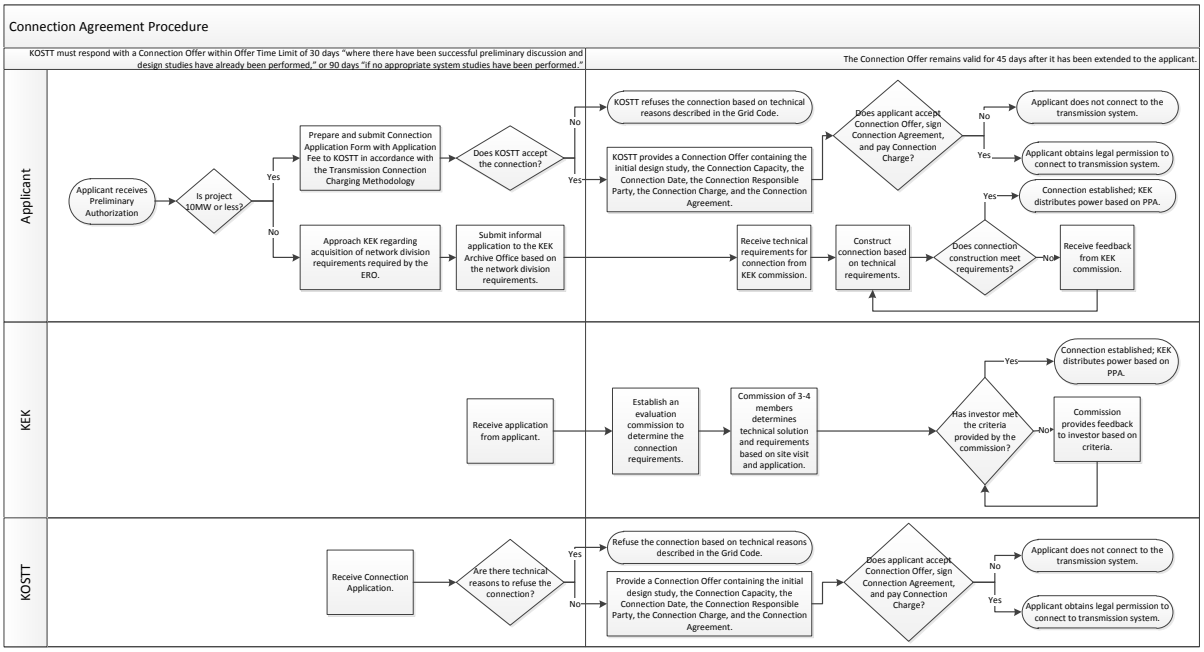

Figure 12: Detailed Connection Agreement Process

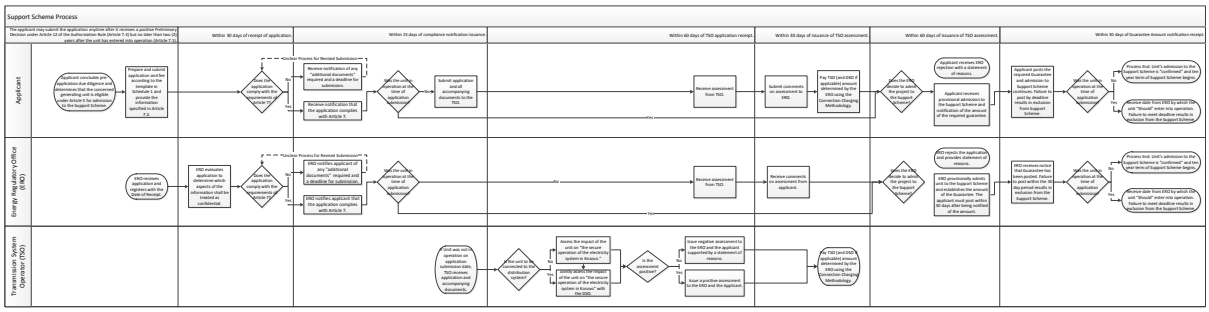

Figure 13: Detailed Process for Entry Support Scheme Admission

USAID Kosovo: Analysis of Financial Incentives and Non-Financial Barriers to Renewable Energy Development in Kosovo

Prepared by: Deloitte Consulting LLP under sub-contract to Advanced Engineering Associates International, Inc. (AEAI)