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Regulatory Support for Renewable Energy Regulatory Framework and Grid Integration

PART: Streamlining the Regulatory Framework for Renewable Energies

Project Report / Expert Appraisal

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Executive Summary

This report describes barriers hindering an accelerated deployment of Renewable Energy (RE) technologies in Kosovo. It further describes remedies how to overcome these barriers by amending the legal and regulatory framework in Kosovo and strengthening the related authorization process as well as other means, such as facilitating financing, enhancing the economic and market framework and others. This report covers exclusively power generating RE technologies, i.e. barriers for the deployment of RE for heating or traffic fuels are not covered.

There is a pipeline of RE projects in the authorization process indicating that there is interest in installing more RE in Kosovo in the future. The existing RE capacity would increase six fold, if all authorized and pre-authorized capacity went online, showing that the authorization procedure per se is functional and leads to considerable RE deployment. However, capacity targets for renewable energies expressed by the government would be missed by 35%, if one assumes that only RE power plants now pre-authorized or fully authorized can be realistically realized by 2020. Consequently, efforts for the deployment of RE projects need to be amplified and barriers that prevent their implementation need to be removed.

The analysis of barriers is based on a review of a number of energy-related and other laws that have direct impact on authorization procedures or investment in RE in general, rules developed by the Government of Kosovo (GoK) and the Energy Regulatory Office (ERO), and reports processed by their representatives. Further, a survey on barriers for the deployment of renewable energy projects in Kosovo was carried out among all relevant stakeholders between December 2015 and January 2016. All applicants to the Renewable Energy Feed-In Tariff (REFIT) as well as involved authorities, municipalities, and banks were interviewed, using a standardized interview guideline. Preliminary results of this study were presented to stakeholders and discussed at a meeting of the One-Stop-Shop Committee in April 2016.

For the identification of the barriers, the analysis of their linkages and the elaboration of measures to overcome the barriers it was found helpful to define eight categories of barriers. Moreover, it was necessary to classify the magnitude of the identified barrier's impact into three levels, i.e. high, medium and low.

Based on this approach, the analysis of barriers shows that in particular two categories of the eight discussed play an outstanding role concerning barriers and include important barriers. They are:

(a) the field of financing of RE projects;
(b) the authorization process for RE projects.

The analysis further shows that, while there are some very critical issues and important barriers as such in these fields, the multitude of barriers in one field leads to their mutual reinforcement and thus contributes to forming a particular difficult environment for RE developers in each field creating a valley of death for some project developments.

It was also found in the survey that some developers stressed in their answer to the final open question that they regarded achieving appropriate financing as the most severe barrier to implement their RE project. Generally, opinions of developers were divided concerning the question what they considered as more challenging, to get project authorized or to get it financed. The group of respondents that considered authorization as a more important barrier was as large as the group that found that financing is a more critical barrier. Others found the two barriers equally challenging.

A further finding of the analysis is that important barriers emerge in addition from the fact that permits granted and contracts forming the basis for RE project implementation have substantially shorter terms than the term of the PPA, not to talk of the lifetime of the RE facility. This creates uncertainties about renewal of these permits and/or extension of contracts to the developers as such and influences their decision. It, moreover, can also influence decisions of banks on financing of a project and providing a loan for the project (in particular with a reasonable term of the loan), as the banks cannot consider the flow of revenues from the project and thus debt service as ensured for the entire term of the loan. Therefore, improvement of specific elements of the legal and regulatory framework in the energy sector, which is, however, by and large in a reasonable format, is required.

Finally, a further observation is that an important element for the removal of RE barriers in the medium to long term is the strengthening of the investment framework in general, which is primarily relevant for potential foreign investors interested in RE projects in Kosovo.

Recommendations for overcoming barriers have been worked out against the background of these findings. The recommendations have been derived taking into account international experiences. The following table summarizes the barriers with “high” importance, provides a description of their major features and presents proposed measures for combating the barrier and the expected term for the measure to become effective. In addition to these most important barriers, a further eleven barriers of “medium” importance and twelve of “low” importance have been identified. The numbers given in the table do not express a ranking, but are used for the sake of convenience.

Table 1: Barriers of "high importance" to implementation of RE projects and proposed remedies

#	Barrier	Description	Category	Remark	Recommended Action	Term
1.	Limited access to capital, both equity and loans, and poor experience of developers concerning banking procedures and requirements; perceived lack of financial reliability of power off-taker by financiers	Developers face difficulties to collect sufficient funding for their projects resulting from a mismatch of requirements of banks and developers' capabilities, comprising quality of loan applications and provision of securities, including sovereign guarantees	financing	The importance of the barrier emerges from the combination of several factors, which leads to "the whole being more than the sum of its parts"	State guarantees from Kosovo Credit Guarantee Fund or other forms of sovereign guarantees, possibly soft loans (based on IFI projects); reduction of capital requirements through lower custom tax on RE equipment; capacity building for enhancing loan applications	medium
2.	Complex, sometimes confusing authorization procedures and requirements, combined with limited knowledge at local authorities about RE specific procedures, and lack of coordination of the authorization process	Missing coordination between involved authorities in the authorization procedure leads to delayed process duration, non-transparency, repetitive submissions of documents leading to extra resources with applicants and authorities. Lack of coordination within MESP	institutional / permitting	The barrier and its high importance result from a combination of factors and is not attributed to just one single factor	Establishment of a One Stop Shop as stated in Law of Energy 05/L-085 with clear attribution of tasks; internal coordination of permitting activities in concerned authorities; RE information, training to authorities' staff	short to medium
3.	Terms of authorization documents and contracts are substantially shorter than the term of the PPA and the period that feed-in tariff is granted	Ministry of Agriculture limits lease terms for land to 5 years; environmental permit is issued for a period of 5 years	legal and regulatory framework	Legal and regulatory framework barrier has direct impact on financing	Amend secondary legislation to extend lease term for public land without tendering to at least the term of the PPA or preferably further, and the term of the environmental permit accordingly	short
4.	No simplified authorization regime for small generators	Absence of particular regime for small generators does not correspond to requirements of Directive 2009/28/EC, disfavors small generators and loads widely unbearable burdens onto them	legal and regulatory framework	For small generators decisive; possible future share of small generators in total installed RE capacity and thus ultimate relevance of this barrier difficult to predict	Implement simplified authorization for small plants differentiated by technology as stated in Administrative Instruction 2/2013	short
5.	Lack of conducive investment environment	Low country rating and the negative features connected to such rating (governance; legal system; etc.) prevent many potential foreign investors from entering the country at all, before going into details of the energy sector	investment framework	Relevant primarily, if not exclusively, for foreign investors and developers	Improve state governance, ensure rule of law, enforce anti-corruption policy, enhance transparency in policy making, ensure full application of Law on Foreign Investment	long

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1. Introduction

This report was prepared for the project “Regulatory Support for Renewable Energy Regulatory Framework and Grid Integration” in the context of a contract between the Ministry of Economic Development, on behalf of the Energy Regulatory Office, and Fichtner Management Consulting AG. The report identifies barriers hindering an accelerated deployment of renewable energies (RE). It further describes remedies to overcome these barriers by amending the current legal and regulatory framework in Kosovo and by other appropriate means. We exclusively cover power generating RE technologies, i.e. barriers for the deployment of renewable energies for heating or traffic fuels are not addressed.

The report is structured as follows: A brief introduction (Chapter 2) informs on the status of the power sector in Kosovo, in particular the status of renewable energies, as well as the overarching goals of the Government of Kosovo regarding the deployment of renewable energy facilities. Chapter 3 is the core of this report. It provides an overview of barriers for the deployment of RE in Kosovo. In this context, legal documents relevant to the deployment of RE are comprehensively reviewed as is the authorization process and financing of RE projects. Subsequently, Chapter 4 elaborates on procedures and means to overcome barriers for the deployment of RE in Kosovo.

2. Sector Background

Kosovo relies heavily on solid fossil fuels such as coal (lignite) to cover two thirds of its total energy demand (Figure 1). Lignite is the main domestic energy source and is abundantly available as well as inexpensive to extract, allowing a comparably high degree of energy self-sufficiency. Renewable energies, mainly solid biomass for heating purposes and hydro power for power generation covered approximately 11% of the national energy demand in 2013. The share of RE has slightly increased over the past years[1].

[1] IEA. (2015, Januar). *http://www.iea.org/*. Retrieved from http://www.iea.org/statistics/statisticssearch/report/?year=2013&country=KOSOVO&product=RenewablesandWaste.

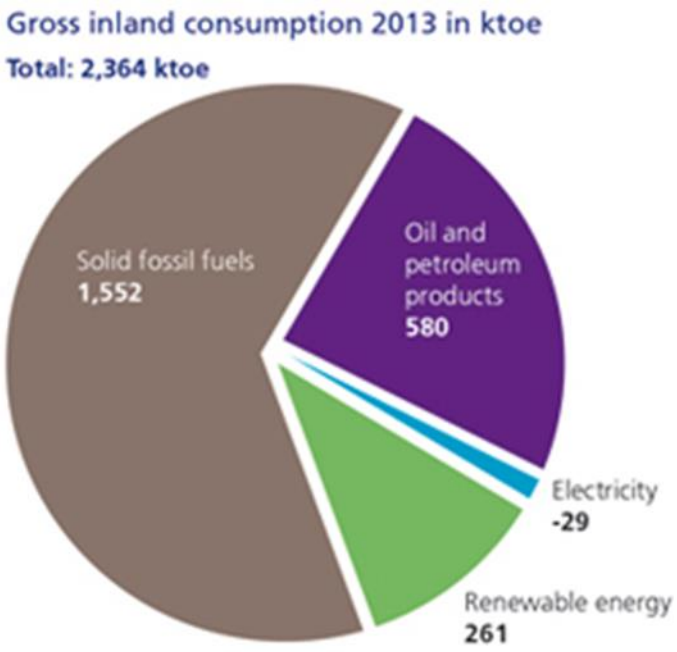

Figure 1: Energy mix in Kosovo in 2013

Lignite will continue to play a prominent role in energy supply in the years to come[2]. The energy transition plan considers the decommissioning of TPP Kosovo A and the commissioning of a new lignite power plant "Kosova e Re"[3].

The share of RES capacity in total installed capacity increased slightly from 2.8% in 2009 to 3.5% in 2015, still representing only a minor share of total installed capacity (Figure 2).

[2] EnCT. (2015a, November). *Energy Community*. Retrieved from https://www.energy-community.org/portal/page/portal/ENC_HOME/MEMBERS/PARTIES/KOSOVO

[3] MED. (2013b). *Energy Strategy of the Republic of Kosovo (2013-2020).* Prishtina, Republic of Kosovo.

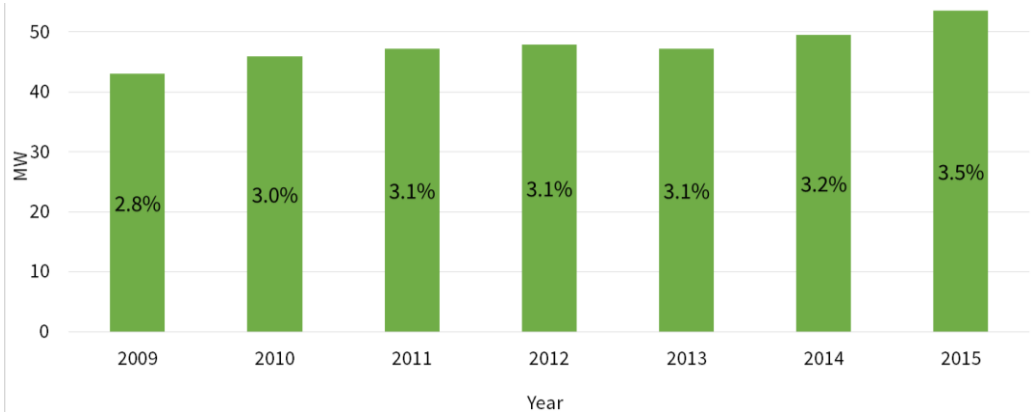

Figure 2: Development of installed capacity of renewable energy based power plants[4]

The bulk of installed RE capacity in 2016 is based on hydro power (97%), whereas "new" RE like wind power and solar power have only seen very limited deployment so far (Table 2), implying that also contributions from wind and solar power to power generation are minimal. Albeit installed RE power generation capacities in Kosovo have increased by more than 50% from 35 MW to 54 MW in the past ten years, capacity additions have been erratic rather than continuous.

Table 2: Development of RES capacities in Kosovo (Status April 2016)

Plant	Installed capacity (MW)	Year of commissioning
HPP Ujmani	35	1983
HPP Lumbardhi	8.08	2006
HPP Dikanci	3.34	2010
HPP Radavci	0.9	2010
HPP Burimi	0.86	2011
HPP Eurokos Lumi	3.89	2015
Total Hydro power	**52.07**	
Wind*	**1.35**	2010
Solar	**0.102**	2015
Total RES	**53.522**	

*not operational

There is a pipeline of RE projects in the authorization procedure indicating that there is interest in installing more RE in Kosovo in the future (see Table 3[5]). The existing RE capacity would increase six fold, if all authorized and pre-authorized capacity were to come online. However, capacity targets for RE expressed by the Government, as shown below, would mostly be missed, if one assumed that only the RES power plants currently pre-

[4] ERO Annual Reports 2009, 2010, 2011, 2012, 2013, 2014, 2015

[5] Some of the capacity depicted as authorized is already commissioned

authorized or fully authorized can be realistically realized by 2020. Under this assumption the target for wind power (150 MW) and hydro power (250 MW) would be missed, while only the solar target of 10 MW would just be met. In total the capacity target would be missed by 35%.

Table 3: Current status of RE projects in different stages of the authorization process (Status April 2016)

	Applications under Review at ERO		Preliminary Authorization		Final Authorization	
	#	Capacity (MW)	#	Capacity (MW)	#	Capacity (MW)
Hydro	10	513	11	90	13	76
Wind	1	51	3	88	1	1.35
Solar	2	6	5	9.4	2	0.867
Total	13	570	19	187	16	78

Annual generation of RE plants and their shares in total power generation have varied over the past years (Figure 3). This is less due to the slightly increased RE capacity, but results from varying precipitations over the years and thus varying outputs of hydropower plants, which is the dominant renewable energy source in Kosovo. At the current pace of development, it is unlikely that RE power generating facilities will contribute substantially to achieving the Government's targets to increase the share of renewable energy in final energy consumption to 25% by 2020.

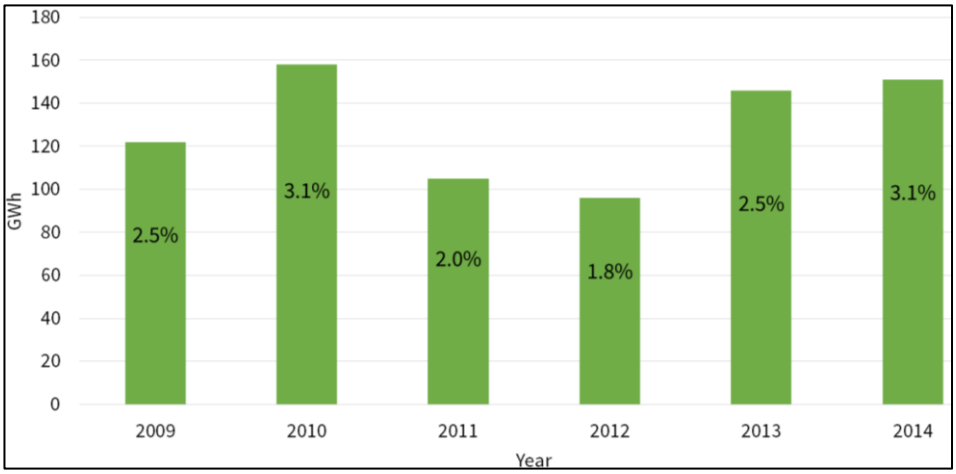

Figure 3: Development of electricity generation from renewable energies[6]

Different studies on the identification of potentials of RE sources in Kosovo were prepared in the past. A study prepared by the Albanian Association of Energy and Environment Sustainable Development[7] found out that a potential for an additional 64 MW of small hydro power plants (i.e. plants smaller than 10 MW) exists. A study financed by World Bank revealed that photo-

[6] ERO Annual report 2014

[7] http://www.mzhe-ks.net/repository/docs/Rap._Final-n-qershor_2006_opt.pdf

voltaics has a potential of 77 MW (160 GWh/year) [8]. A 2010 study financed by Swiss Renewable Energy and Energy Efficiency Promotion in International Cooperation and prepared by NEK Technologies[9] found out that Kosovo has a potential capacity of 290 MW of wind energy.

[8] Kosovo – Regulatory Framework for RES, Final Report, Mercados – Energy Markets International, November 2009

[9] http://www.nek.ch/windenergie-geothermie-e/publikationen/dokumente/2013.05.30_GIZ_Study_english_final_16012013.pdf

3. Identification of Barriers for the Deployment of Renewable Energies

3.1 Categories of Barriers

In this Chapter the current situation concerning investment in renewable energies in Kosovo is analyzed in order to identify barriers that hinder an accelerated deployment of RE. There is no uniform definition of the term "barrier" in literature, but the definition used by the IPPC in the context of renewable energy can be considered appropriate for the purpose of this study. According to IPCC, a barrier is defined as "any obstacle to reaching a goal, adaptation or mitigation potential that can be overcome or attenuated by a policy, program or measure"[10].

Based on its definition, the IPCC distinguishes four different categories of barriers to the deployment of RE, which in our view is not broad enough to cover all relevant aspects of possible barriers to RE in Kosovo. We therefore decided to apply a structure with eight categories in this report, as outlined and briefly described in the following:

1. ***Investment framework barriers***
   This item addresses whether the general investment framework in the country is considered conducive and acceptable by an investor and whether he thus is generally willing to enter the country.

2. ***Energy policy barriers***
   This category analyses the overall energy policy of the Government and its commitment to renewable energy as a basis for the developer's investment.

3. ***Economic and market barriers***
   This category deals with the question whether RE projects can be implemented in Kosovo in an economically viable manner under the given economic framework and under the existing market conditions, taking possible market distortions into account. It will include the factors that influence the stream of revenues as well as the costs of a concrete RE investment, and in this way the overall viability of the project. Furthermore, the structure of the power market under the framework of which RE developers implement and operate their projects is analyzed.

4. ***Legal and regulatory framework barriers***
   This category relates to the given set of documents that govern the energy sector in general and the renewable energy sector in particular as well as the investment and permitting / authorization process. Here we analyze, whether the legal and regulatory framework includes elements that constitute barriers.

[10] IPCC. Renewable Energy Sources and Climate Change Mitigation. 2012.

5. ***Institutional barriers***
   This category analyzes the actual ("day-to-day") authorization process for RE projects and the barriers that emerge from it.

6. ***Financial barriers***
   This category deals with arranging financing for the project. As financing is a very complex issue, several possible barriers emerging from various aspects, which are intertwined, need to be distinguished, which comprise:
   - ***a.*** Availability of the required equity and the overall financial standing of the investor
   - ***b.*** General availability of liquidity at banks and willingness of a bank to provide loans for RE projects
   - ***c.*** Bank requirements towards potential borrowers
   - ***d.*** Conditions of financing and risk distribution between bank and borrower
   - ***e.*** Capability of developers to submit decent application documents for their loan request
   - ***f.*** Capability of banks to handle RE applications and the related projects

7. ***Technical and infrastructure barriers***
   This category covers the technical aspects of the implementation of RE projects and the related barriers and can be divided into two sub-categories:
   - ***a.*** All the technical aspects related to grid connection
   - ***b.*** The available technical infrastructure for RE in Kosovo, including logistics and skills issues. In this contest, logistics matters might primarily be of relevance for wind power plants.

8. ***Public awareness and acceptance barriers***
   This category is closely linked to social and socio-cultural factors and is primarily related to any possible rejection of RE projects by the general public and/or the population directly affected by a project. In addition, it also addresses public awareness of RE in general and in the business community in particular as well as lack of awareness in these groups as a potential barrier.

In the following, the approach to the barrier analysis will be presented. Subsequently, the aforementioned eight categories of barriers will be elaborated on.

3.2 Approach

The identification and analysis of barriers for the deployment of renewable energy plants comprises several steps. First, a review of existing documents on RE barriers in Kosovo was carried out, and in particular the findings of a previous study on non-financial barriers conducted on behalf of

USAID in 2013[11] were taken into account, as requested in the Terms of Reference of this assignment. The analysis of barriers is, secondly, based on a review of a number of energy-related and other laws that have direct impact on the energy sector and on authorization procedure or investment in RE in general. In addition, a review of rules developed by Government of Kosovo (GoK) and the Energy Regulatory Office (ERO) as well as reports processed by their representatives was undertaken.

Thirdly, a further important instrument for the identification of barriers as well as to complement the analysis of documents has been a specific survey on barriers for the deployment of renewable energy projects in Kosovo that was carried out in December 2015 and January 2016. The goal is to embrace all relevant stakeholder groups involved in the process of deployment of RE projects, in order to find out crucial obstacles for their implementation. A particular focus has been put on the investors' and responsible institutions' point of view. Following groups of stakeholders were interviewed:

1. RE Developers / Investors;
2. Commercial Banks and International Financing Institutions;
3. Institution - Ministry of Environment & Spatial Planning;
4. Institution - Ministry of Economic Development;
5. Institution - Municipality of Mitrovica (which is considered as particular supportive on RES);
6. Institution - Energy Regulatory Office;
7. Institution - Agency of Forestry.

The survey was conducted as personal interviews guided by a set of questionnaires specific to individual stakeholders (the Interview Guidelines can be found in the Annex). Preliminary results of this survey were presented to stakeholders and discussed at a meeting of the One-Stop-Shop Committee in April 2016.

Renewable Energy Project developers active in Kosovo were identified from the registry of applications for authorization and admission to the support scheme as published by the Energy Regulatory Office (ERO). The twelve development companies interviewed represent a total of 24 different RE projects, which comprise more than 60% of all RE projects applying for authorization (Status February 2016). The portfolio of RE developed by interviewed parties comprises wind power, hydropower, and photovoltaic (PV) power plants ranging from 0.5 to 51 MW installed capacity. Total capacity that the interviewed investors plan to operate is 256 MW under the REFIT and 480 MW outside of the Renewable Energy Feed-In Tariff (REFIT). The survey covers two third of all distributed RE eligible for REFIT that have been commissioned or are expected to be commissioned in Kosovo. As the interviewees of this survey thus represent a significant share of all RE projects in Kosovo, its results can be deemed representative.

[11] Deloitte: Analysis of financial incentives and non-financial barriers to renewable energy development in Kosovo. 2013

Five financial institutions have been part of the interviews, four out of eleven commercial banks licensed by the Central Bank of the Republic of Kosovo and one international financing institution operating in Kosovo. Three of the interviewed banks have gained experience in financing RE projects in Kosovo.

During the survey, employees of five different departments of the Ministry of Environment and Spatial Planning (MESP) elaborated their opinion on the application process for RES projects. The Municipality of Mitrovica and the Agency of Forestry (Ministry of Agriculture, Forestry and Rural Development (MAFRD)) were included in the interviews as institutions involved in the authorization process. Other interviewees from the public sector include the Ministry of Economic Development (MED) and the regulator (ERO).

3.3 Investment Framework Barriers

A key element that investors would like to see realized in a country, when considering investment in the energy sector there, is a conducive investment framework. Therefore, from this overarching field initial barriers could emerge for investors and developers. It is thus analyzed first when looking at possible barriers for RE projects in Kosovo.

In order to address infrastructure needs, emerging and developing economies often facilitate foreign private sector participation. International private market participants and investors, however, require a supportive, enabling and predictable environment, as these preconditions potentially reduce costs and investment risks. Therefore, an international investor evaluates the overall investment framework of a country, which is influenced by factors such as:

- Economic and financial situation;
- Stability of political system;
- Property rights;
- Rule of law;
- Government regulation, transparency and accountability;
- Corruption;
- Enforceability of contracts.

The investor decides whether to consider a particular country for investment depending on how strong or weak any of the above factors are. Therefore, the potential foreign market entrant weighs probable risks and transaction costs stemming from a hindering investment framework with the potential profitability of the investment. If the investor believes that profitability of the investment might be high, willingness to accept a lacking investment framework or country risks may be higher. This is often reflected in an increased risk premium. However, if the investor considers an investment framework to be too risky, the investor will most likely not invest at all.

There is significant evidence in the literature showing that a reduction of country risk, as measured by a country risk indicator capturing the factors listed above, increases (foreign) private sector participation in infrastruc-

ture.[12] Furthermore, research also suggests that a sound rule of law and low levels of corruption significantly increase the investment into greenfield projects, which are essential to meet Kosovo's renewable energy targets.[13]

The World Bank suggests, within the research paper "The Effects of Country Risk and Conflict on Infrastructure PPPs"[14], that investments in energy projects are especially sensitive to country risk fluctuations. Therefore, the overall investment framework in Kosovo could constitute a significant barrier to the development of renewable energy projects. In fact, in Kosovo this effect might even be exaggerated since the electricity market is relatively small, implying that larger foreign investors capable of mitigating higher risks due to larger portfolios might refrain from investing in Kosovo since they could see the market as not profitable. In turn, relatively small investors are often much more sensitive to country risk (i.e. increasingly risk averse) as their portfolio might not be extensive enough to diversify risks.

Country risk in Kosovo

There are two primary databases for country risk ratings, namely Euromoney and the International Country Risk database. Although Euromoney is more extensive, neither of the two databases includes country risk indicators for Kosovo. There are, however, two databases from a reputable source capturing certain aspects of country risk in Kosovo. The first being the country risk indicator constructed by the Organization for Economic Cooperation and Development (OECD), which entails data on the financial and economic situation of the country, and the World Bank World Governance Indicator which is an aggregate indicator capturing country risk factors such as corruption, rule of law regulatory quality, government effectiveness, etc. Therefore, the World Bank and the OECD indicators are complementary. A short description on each of the indicators is given below.

The economic and financial OECD indicator integrates three groups of indicators, being:

- Payment experience of export credit agencies;
- The financial condition of a country as measured by liquidity, debt, foreign exchange reserves and financial solvency;
- The economic situation of the country as measured by policy performance in terms of budgetary and monetary policy, potential economic growth, size of economy, export, economic diversification and dependency on aid.

[12] Araya G. et al (2013). The Effects of Country Risk and Conflict on Infrastructure PPIs. Bank Policy Research Working Paper No 6569.

[13] Moszoro M. et al (2015). Institutional and Political Determinants of Private Participation in Infrastructure.

[14] Araya G. et al (2013).

The three groups are subsequently combined by taking weighted averages, and the indicators are verified by means of an expert review. The indicator scores range between 0 and 7, whereas 7 constitutes the worst score. In the 2016 OECD ranking, Kosovo scores a 7, pointing at a rather instable financial and economic environment. This could potentially hinder the foreign investor's ability to source finance as well as significantly increase project risks.

The World Bank Worldwide Governance Indicator Project constructs six aggregate governance indicators, as follows:

- **Voice and Accountability Indicator:** Captures freedom of expression, association and media as well as citizens ability to vote and to select their government.
- **Political Stability and Absence of Violence Indicator:** Captures the likelihood of political instability and politically motivated violence.
- **Government Effectiveness Indicator:** Captures quality of public as well as civil services and degree of independence from political pressures, quality of policy formulation and implementation, credibility of government's commitment to policy.
- **Regulatory Quality Indicator:** Captures the government's ability to formulate/implement policies and regulations promoting private sector development.
- **Rule of Law Indicator:** Captures confidence in and independence of the legal environment including contract enforcement, property rights, courts and the police.
- **Control of Corruption Indicator:** Captures to what extent public power is used for personal gain.

The indicators take on values between -2.5, which is the worst possible score, and 2.5, which is the best possible score. The World Bank also calculates an individual countries percentile rank (0-100) given all countries included in the dataset. Kosovo's scores in 2014, which is the latest available year, read as follows:

- **Voice and Accountability Indicator:** -0.23 (percentile rank: 40.39)
- **Political Stability and Absence of Violence Indicator:** -0.34 (percentile rank: 32.52)
- **Government Effectiveness Indicator:** -0.32 (percentile rank: 42.79)
- **Regulatory Quality Indicator:** -0.15 (percentile rank 48.08)
- **Rule of Law Indicator:** -0.48 (percentile rank 37.02)
- **Control of Corruption Indicator:** -0.45 (percentile rank 39.42)

Kosovo scores on average below the top 50 percentile throughout the six indicators, implying that Kosovo's governance framework requires significant improvement in order to boost private sector confidence. Furthermore, Kosovo scores are particularly low for political stability, rule of law and corruption, which are factors that are especially important for investments in greenfield projects, as noted earlier.

Overall, the OECD's financial and economic indicator and the World Bank's governance indicators imply that Kosovo's investment framework may result in increased project risks and transaction costs. Even though individual project risks depend on the infrastructure to be invested in and the contractual context, without improvement in the aforementioned indicators private sector participation in renewable energy projects in Kosovo is threatened to be impeded. Furthermore, since energy infrastructure projects appear to be more sensitive to country risk, Kosovo's current situation in terms of investment framework could represent a significant barrier to such investments. In addition, the World Bank also notes that the business environment as such can negatively influence the effect of government policy targeted at renewable energies.

3.4 Energy Policy Barriers

A second key element for a (foreign) investor's decision, when considering investment in the renewable energy sector, is a supportive energy policy and commitment to renewable energy sources in general in the target country. Therefore, it is briefly analyzed in following how Kosovo performs in this regard and whether possible barriers could emerge for RE projects in Kosovo from this side.

The Government of Kosovo has prepared and adopted a number of energy policy documents over the past years that also bear on renewable energy and in addition specific documents related specifically to renewable energy.

The Energy Strategy of the Republic of Kosovo 2009 – 2018, enacted in April 2010, foresees that one of the strategic objectives of the Government of Kosovo in relation to the energy sector is to promote foreign investments in the energy sector, including in RE[15]. It is outlining energy policies and development objectives in line with international standards on sustainable development, environmental protection and social wellbeing, which aims to maximize benefits from the use of the country's energy resources. The main focus is on enhancing the security of supply, diversification of energy sources, encouraging utilization of RE, while reducing the costly energy imports and aiming at a cleaner energy future.

A mandatory target is established that 25% of Gross Final Energy Consumption (GFEC) shall stem from renewable energies by 2020, while Kosovo has committed to a 9% increase of energy efficiency in the final consumption by 2018 and 25% obligatory (29.47% indicative target) in the final energy consumption by 2020[16]. To achieve this goal, amongst other means, the Government shall encourage simplified authorization procedures for RE based power plants.

[15] Strategy of Republic of Kosovo 2009-2018, April 2010

[16] In accordance with Administrative Instruction Nr.1/2013 on Targets of Renewable Energy Sources (MED,2013)

The draft Energy Strategy of the Republic of Kosovo 2013 – 2022 states that renewable energy represents the most significant domestic energy source, which "provide for reliability and diversity of energy products, continuous economic development and environmental improvements"[17]. Kosovo's Energy Strategy acknowledges the necessity to develop and to improve the legal and regulatory framework in order to enable the fulfillment of the RE target in the final gross consumption by 2020. The Strategy envisages private sector investments for deploying RE plants and foresees concrete incentive fiscal measures to this end. Preparation of a supporting and incentivizing program for attraction of private sector investments in development of RE, in line with the European directives, is another important measure that is planned to be undertaken according to the Strategy.

The National Renewable Energies Action Plan 2011-2020 (NREAP) supports these targets[18]. As a major means, the amount of RE based grid-connected power generation shall be increased.

As an element of its energy policy, the Republic of Kosovo joined the Energy Community Treaty (EnCT) as a Contracting Party in 2006. The EnCT requires Contracting Parties to implement certain regulations and directives of the acquis communautaire, to create a sustainable legal framework, attractive markets for investment in power generation and networks, and to promote the use of RE. Kosovo Progress Report on promotion and use of energy from RE under Directive 2009/28/EC is submitted on a yearly basis to the Energy Community Secretariat (ECS).

For the implementation of this policy and to promote RE, the Government has introduced a feed-in tariff for RE power supply[19], set targets for RE and has undertaken a series of legal amendments in past years. This comprises, amongst others, Law on Energy, Law on Electricity, Law on Energy Regulator as well as Rule on Authorization Procedure for Construction of New Generation Capacities. These laws and other legal instruments are discussed in detail in the section on the legal and regulatory framework.

These policy papers and documents show that the Government of Kosovo is committed to a reform process in its power sector and also to the promotion of renewable energies and power generation from RE. Therefore, concerning the overall energy policy and the policy towards renewable energies no barrier could be identified in this field in the analysis.

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[17] V.7. Renewable Energy Sources, draft ENERGY STRATEGY OF THE REPUBLIC OF KOSOVO 2013-2022

[18] National Renewable Energy Action Plan (NREAP) 2011 – 2020 (issued in 2013)

[19] Decision Nr. V_673_2014 issued by ERO on Feed-in tariffs for all types of renewable energy (hydro, wind energy, solid biomass and solar/photovoltaic energy (23 December 2014)

3.5 Economic and Market Barriers

If an investor considers the overall investment framework and the government's policy environment as acceptable, he will analyze whether the investment he plans to carry out can be implemented in an economically viable manner under the given economic framework and with the existing market conditions. This leads us to possible economic and market barriers.

Concerning possible economic barriers, in addition to the costs for implementation of the plant, the decisive question is as to how the future stream of revenues from the RE-project will be generated. Here two possible general options are conceivable. On the one hand a stream of revenues based on a support scheme, such as feed-in tariff, and usually connected to a long-term agreement, such as a Power Purchase Agreement (PPA), and on the other hand the revenue stream might come from the power market, into which the developer sells the power produced in line with market rules. The assessment of barriers will therefore need to distinguish between these two broad options.

Concerning a feed-in tariff based income stream, a project might benefit from the Renewable Energy Feed-in-Tariff (REFIT), only if it is admitted to the support scheme, for which the **Rule on Support Scheme**[20] provides the legal basis and the steps to be undertaken. ERO informs the developer at the time of application whether there is still sufficient capacity uncovered in the target to allow for accommodating the new capacity. In this case, admission to the REFIT is granted automatically. The admission gets effective only when the project starts commercial operation. RE developers have asked for establishing the PPA already after authorization is finally approved to ease finance. An established PPA for a given project provides a reliable proof to banks interested to finance such projects.

Article 5 of the Rule stipulates the maximum size of a single plant eligible for the scheme as 3 MW for PV, 14 MW for biomass, 35 MW for wind and 10 MW for hydro power. Any plant that exceeds these limits shall not be considered as eligible for the support scheme. Maximum size is estimated based on Administrative Instruction No.1/2013 on Targets of RE.

Two factors determine the overall income stream for eligible projects from the feed-in tariff and thus answer the question whether the overall economic framework for RE projects in a country is a barrier or not. One factor is the level of the feed-in tariff, the other the length of the period over which the tariff is paid.

Table 4 shows that the feed-in tariffs granted in Kosovo can be considered at the lower end of tariff levels found in other European countries. However, a comparison of the tariff levels of different countries can necessarily only provide a rough indication. Differences in tariffs between countries reflect, among others, the differences in natural resources, differences in sub-technologies eligible for the specific REFIT, price levels at national power markets, the term over which the tariffs are granted and the aspiration level

[20] Adopted by ERO on 23 December 2014

of the national RE targets to which the supported renewable energy plants should contribute.

Table 4: REFiT levels by technology in different countries (in €cents/kWh)

Country	Wind	PV	Hydro	Biomass	Notes
Kosovo	8.5		6.33	7.13	Hydro PP < 10 MW
Albania	-	-	6.0 – 7.0	-	
Austria	9.0	8.2	4.9-10.4	10.6-22.2	
Bosnia and Herzegovina	7.5-19.0	20.1-31.6	6.3-14.8	11.6-16.0	Depending on power plant size
Bulgaria		10.4-10.8	4.8-12.4	8.4-12.8	Depending on type and size of plant
Czech Republic	7.3	-	9.1	5.4 - 16.9	Abolished January 2014 for new PV
France	8.2-11.0	5.8-24.6	6.1-15.0	12.1	Depending on type and size of plant
Greece	8.2-10.5	9.0-11.5	8.0-10.5	13.5-19.8	Depending on size and location
Italy	14.9-29.1		10.1-25.7	18.0-25.7	
Macedonia	8.9	12-16	4.5-12.0	15	
Montenegro	9.6	15.0	5.0-10.4	12.3 - 13.7	
Serbia	9.2	16.3-20.7	7.4-12.4	8.2-13.3	
Slovakia	7.0	9.9	9.8-11.1	9.2-10.1	
Slovenia	9.5	8.2-9.4	9.3-10.5	19.1-25.2	
Turkey	5.7-8.0	10.8-15.5	6.3-7.4	10.6-11.7	+ local-content bonus
UK	3.9-20	7.8-17.7	3.8 - 24.1	-	

Source: res-legal.eu.

Concerning the length of the period for payment of the feed-in tariff, Article 11.3 of the Rule stipulates that the Power Purchase Agreement (PPA) between power generators and the public power supplier of Kosovo is limited to 10 to 12 years depending on RE type. This means that payment of the feed-in tariff for RE projects is limited to these periods. A term of 10 years, but also 12 years, is considered short compared to international standards, as can be seen in Table 5.

Table 5: Duration of PPA in years by technology in different countries

Country	Wind	PV	Hydro	Bio-mass	Notes
Kosovo	10	12	10	10	
Albania	-	-	15	-	Common practice: PPAs with 1 year duration and regular revision
Austria	13	13	13	15	PPA ends at all events at the end of the 20th operation year. After expiry of the mandatory contracting period, the prevailing market prices, less the balancing costs, are granted for an indefinite period of time.
Bosnia and Herzegovina	12	12	12	12	Republika Srpska: 15 years
Bulgaria	12	20	15	20	
Czech Republic	20	20	30	20	
France	15	20	20	20	
Germany	20	20	20	20	
Greece	20	25	20	20	PPA can be extended by mutual agreement
Italy	20	-	20	20	Offshore wind: 25 years, hydro wave and tidal: 15 years
Macedonia	20	15	20	15	
Montenegro	12	12	12	12	
Serbia	12	12	12	12	
Slovakia	15	15	15	15	
Slovenia	15	15	15	15	
Turkey	10	10	10	10	
UK	20	20	20	-	

Source: res-legal.eu.

Despite the fact that both feed-in tariff and duration of payment of the feed-in tariff determined by the term of the PPA are at the lower end compared to other countries, the levels of the feed-in tariffs, in combination with the period for the feed-in tariff, are apparently sufficiently high for developers to provide them with a decent framework for economic viability of RE projects in Kosovo. The Consultant has not heard from developers interviewed that the tariffs are too low, given the term of the PPA. Neither did banks express views in this way. While a detailed analysis of the tariff levels is beyond the scope of this assignment and the underlying cost data used for setting the tariffs could not be scrutinized, we understand that the way the tariffs were set promises a full recovery of costs over the term of the PPA granted under the REFIT. Therefore, neither the comparatively short period, during which the feed-in tariff is granted, nor the tariff levels constitute a barrier for current developers.

To this also contributes that Article 8.2 of the rule states that feed-in tariffs must be adapted to inflation rates on a yearly basis. Moreover, on 12 April 2016 ERO published a Consultation Paper on the Methodology on Calcula-

tion of Feed-In Tariffs for Energy from Wind and Small Hydro Power Plants Technology that was subject to public consultation. This consultation paper states that in absence of wind power, and taking into account that the current support scheme for wind energy is not sufficiently attractive for investors, ERO decided to extend the duration of the Wind Power Purchase Agreement from currently 10 to 12 years, with a price of 85 €/MWh[21]. For small hydro power plants having an installed capacity of up to 10 MW, the duration of the PPA will not change, i.e. remains at 10 years, but the price is increased to 67.47 €/MWh from 63.3 €/MWh.

As both components of the REFIT scheme, level of feed-in tariff and duration of the PPA, are well accepted by investors, there is no need seen for the increase of the feed-in tariff level, which of course would always provide an additional incentive to investors. However, the comparatively low level of feed-in tariffs might constitute a possible minor barrier for additional entrants to the local renewable energy market, particularly from abroad. Investor decisions on entering a foreign RE market are often based on screening processes, in which major criteria that reflect the current situation in the envisaged country or countries are assessed. One criterion that is definitely included in such screening is the level of the feed-in tariff. Therefore, a comparatively low tariff, in combination with short PPA terms, can distract potential foreign investors from further considering investment in the Kosovo RE sector, particularly when an investor screens a multitude of countries with higher tariffs for possible entry. This aspect is not considered strong enough for an request for the adjustment of the feed-in tariff, in particular also as it would put an additional burden on the final customers that will ultimately have to bear the subsidy element of the feed-in tariff and that would hardly be in a position to afford such additional costs.

As long as an investor considers the combination of tariff level and term of PPP sufficient for reaching economic viability, the given system in Kosovo with short terms for the feed-in tariff is favorable from the investor's perspective as the operational risk is limited compared with longer terms. Accordingly, banks we interviewed did not complain about an insufficient term of the PPA, but understood the underlying calculations leading to the level of remuneration very well.

All in all the REFIT system can thus be considered a decent scheme for promoting renewable energy projects in Kosovo for the time being. It has been implemented in a sound manner and is well accepted by investors. It is thus recommended to go ahead with this scheme in the near future until the set targets have been reached. This would give investors the necessary stability concerning the framework under which they operate. The introduction of another type of scheme at this stage, such as auctions, for example, might create uncertainty and jeopardize the ongoing deployment of RE projects. It also needs to be seen that auctions may have advantages with mature RE markets and with large scale projects. This is not the case in Kosovo for the time being. Therefore, we do not see sufficient advantages that would justify a risky change of support mechanism at this point of time, as it can also not be taken for granted that auctions will immediately lead to

[21] Feed-in Tariff for wind remained the same as it was for the PPA of 10 years duration – 85 €/MWh (as per Decision nr. 673_2014)

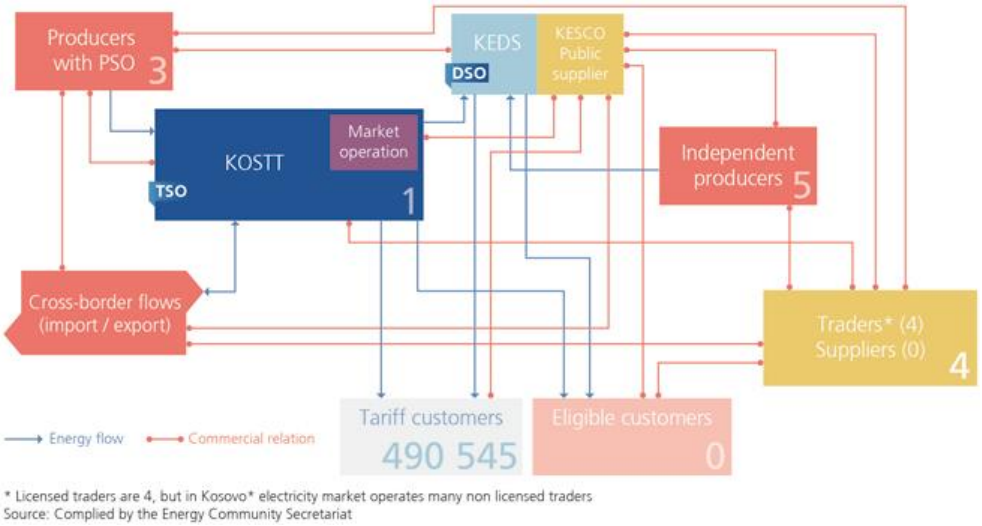
lower feed-in prices. However, this issue might be revisited once the first round of implementation of RE projects has successfully been completed under the REFIT framework and the 2020 targets have been reached, and the country has thus gained experience in RE project implementation. Through this process the RE market in Kosovo will be more mature, so that other means for fostering the implementation of renewable energies, including auctions, might then become more attractive and beneficial for Kosovo.

The Rule is silent on what happens after an individual PPA terminates. In previous versions of the Rule RE projects would be remunerated based on Weighted Average Power Purchase Price after termination of the PPA under the REFIT. It is unclear yet how Independent Power Producers will be able to market their power beyond the REFIT in the absence of a working power market and in particular at what price. Moreover, the limited size of the prospective Kosovan power market makes volatile power prices likely causing uncertainty to prospective power plant investors about their future income. This makes the income stream after the granted REFIT period very uncertain. Even though one may argue that the REFIT allows full cost recovery in the term of the PPA and that thus there is no need to provide an income after termination of PPA, we rate this uncertainty still as a minor barrier because the RE power plant remains to have a value over the entire technical lifetime i.e. also beyond termination of the PPA. A better view on possible income after termination of PPA would enhance the economic prospects of RE projects.

The attempt to create a possible stream of revenues for RE plants from selling into a competitive power market, i.e. outside the REFIT scheme, will encounter a distorted market situation. In the current power generation system, lignite fired power plants widely dominate, but they have no obligation to include the external costs of power production that result from environmental hazards and adverse impacts on the climate into their power generation costs. This clearly disfavors renewable energies that are environmentally friendly. These market distortions and the lack of a level playing field between fossil fuels for power generation and RE projects constitutes a severe barrier for renewable energies. At the moment this is not a big issue for RE developers, as the feed-in tariff has been introduced precisely in order to overcome these discrepancies and distortions, so that through the REFIT a more or less equal playing field can be established, and a competitive power market has not yet been created in Kosovo anyway. However, this issue will turn into a major barrier for RE developers, once the Government has reached its RE capacity target, as it is expected that from then on the feed-in tariff will no longer be granted to RE projects and RE plants will have to sell their output to the market. Without arranging a level playing field between fossil fuels and renewable energies at that stage, RE will not have a fair chance in a competitive power market.

On the cost side of a RE project, the specific aspect of distribution of balancing costs could be seen as a minor barrier by developers. According to Article 13.3 of the Rule on Support Scheme RE generators should pay 25% of imbalance costs, the remainder should be covered by the Renewable Energy Fund set up to fund FIT. The RES Fund has not been established yet, but this will not put an additional burden on generators. Yet, already payment of 25% balancing costs in general will have a negative impact on overall economic viability of the project, but the concrete level of the impact is not known at present, since the methodology for calculation of the imbalance costs has not been developed yet.

With regard to the power market, Kosovo has undertaken major steps towards a liberalized energy system. Generation, transmission and distribution have been unbundled (Figure 4). Kosovo Energy Corporation (KEK) is the major power generator, also being licensed for operating the lignite mine, KOSTT the transmission system and market operator, KEDS the distribution system operator and KESCO the supplier to final customer. Yet, the different companies such as KEK and KOSTT are publicly owned enterprises. KEK sells power to KESCO at regulated tariffs.



* Licensed traders are 4, but in Kosovo* electricity market operates many non licensed traders
Source: Complied by the Energy Community Secretariat

Figure 4: Structure of the power market in Kosovo

According to the Law on Electricity, starting from 1 January 2015, all customers are eligible to freely choose an electricity supplier. Although this is in compliance with the acquis, to date no customers have executed their right to opt out for an alternative supplier. A customer switching procedure has not been established yet as it still seeks final approval. Thus customers are not able to exercise their freedom of choice at this moment. Customers may wish to purchase “green” power i.e. electricity from RE for reasons of environmental consciousness or, when it comes to commercial customers, to enhance their environmental performance. Such kinds of demand would create an additional momentum for the deployment of RE independent of public support. This demand for RE electricity might evoke investments in RE. However, experiences from other countries have shown over the past twenty years that demand for green power rarely surpasses a few percentage share on the power market thus having only limited impact on the deployment of RE. Therefore, we rate the importance of this barrier as low.

It has also been observed that balancing responsibility, as a main prerequisite for proper market functioning, is still not in place as required by Article 19.4 of the Law on Electricity 05/L-085. Therefore, RE developers do not have an understanding of what requirements they might have to meet in future in this regard, which constitutes a risk for them and thus means a minor barrier.

3.6 Legal and Regulatory Framework Barriers

This section reviews whether, and in which way, the authorization framework creates barriers for the deployment of RE. To this end it is necessary

to diligently review the regulatory and legal framework both for the power sector (with particular emphasis on the RE sector) and for the authorization process.

The overarching legal element of the energy sector is the **Law on Energy No. 05/L-081 ("LE")**, adopted on June 16, 2016 by the Parliament of Kosovo and promulgated by a Decree of the President of the Republic of Kosovo on July 1, 2016. This law has transposed the main provisions as stipulated in Directive No. 2009/28/EC concerning promotion of use of energy from renewable sources. The main stipulations of the law that are of relevance for renewable energy comprise the following:

- Article 13 sets mandatory requirements to MED / Government of Kosovo to issue secondary legislation on promotion of the use of renewable energy and to MESP to issue a secondary legislation on the use of RE in buildings. The Ministry of Trade and Industry (MTI) shall draft secondary legislation on the use of biofuels in transport.

- Article 16.2 envisages that the Government shall ensure coordinated and defined responsibilities of bodies assigned with authorization, administrative procedures, regulations and codes for RE. This disposition is fully compliant with directive 2009/28/EC on the promotion of the use of energy from renewable sources, as adopted by Ministerial Council Decision Nr.2012/04/MC-EnC of 18 October 2012.[22]

- Article 16.5 of the LE requires that simplified and less burdensome authorization procedures are established for smaller projects and for decentralized devices for producing energy from RE.

- According to Article 17.6, the Ministry responsible for the energy sector shall establish a one stop shop through a special bylaw in order to facilitate investment in renewable energies. An inter-institutional working group has been established for this purpose.

- Article 28 ensures, for generation, transmission and distribution facilities, the right of access to the property through the right of servitude, right of use or other property rights in accordance with the provisions of the Law on Expropriation of Immovable Property.

The Law on Electricity No. 05/L-085 adopted recently by the Parliament is dealing with Certificate of Origin for RE and cogeneration[23]. Power certified to originate from RE is entitled to priority dispatch under the terms stated in the Grid Code and Market Rules. TSO and DSO are obliged to provide priority to electricity generated from RE power plants and co-generation. Pub-

[22] Article 13.1 of the Directive 2009/28/EC requires coordinated and defined responsibilities of bodies assigned with authorization, certification and licensing, including streamlined and expedient administration and simplified procedure for smaller generation projects

[23] Article 8 of the Law on Electricity

lic electricity suppliers are obliged to purchase the whole amount of RE electricity generated at regulated tariffs, determined by ERO through a methodology that takes into account compensation for the public supplier for the additional cost of purchasing electricity from RE. ERO adopted Rule for Establishment of a System of Certificate of Origin for Electricity generated from RE, waste incineration plants and combined-heat-power plants on 29 December 2010. The register of Certificates is still not in place. Up to now ERO has not received any application for issuance of Certificate of Origin.

As long as the REFIT scheme, which provides priority dispatch anyway, evokes the targeted amounts of RE, the absence of the system of Certificates of Origin does not pose a barrier for RE deployment. However, once these targets are fulfilled or the REFIT is not delivering results, a workable system of Certificate of Origins would be an important means to promote RE. A lack of such system would thus not create a barrier but would be a missed opportunity to promote RE. The lack of a system of Certificate of Origin may also impede investors' confidence that Kosovo is following the rules of the Energy Community and thus constitute a minor barrier.

The **Law on the Energy Regulator No. 05/L-084** stipulates the functions and duties of ERO in the market and assigns it as an independent agency[24.] The independence of ERO is provided by the Constitution of the Republic of Kosovo, whereas independent agencies shall be established by the Parliament and exercise their functions independent of any other body or authority. ERO performs its duties as described in the Law on Energy Regulator and subsequent rules.

Article 43.4 of the Law on Energy Regulator requires ERO to establish specific procedures "for the authorization of construction of small decentralized and/or distributed generation". It is important for small size generators to have a specific regulation applicable to them, since such procedure will reduce the administrative burden for investment in small scale RE projects and make their procedures faster and easier. Therefore, the absence of such procedures is a barrier for small RE generators, which can be considered to be of high importance to them. However, to our knowledge, the draft proposal of Regulation for the Authorization of Small Decentralized and/or Distributed Generation Capacities is waiting for approval by ERO, so that this barrier might be overcome soon.

According to Article 44 of the Law on Energy Regulator, tendering procedure for construction of new capacity can be authorized by the Government, if ERO issues a written determination that the authorization procedure has not resulted successfully in building of generation capacities to ensure security of supply or accomplishment of objectives related to the use of RE. In accordance with this Article 44 (paragraph 3) a tendering procedure would then be conducted by the Public Private Partnerships Inter-Ministerial Steering Committee, as per the Law on Public Private Partnership. We regard this stipulation as a safety valve in case the REFIT and other measures will not lead to the targeted deployment of renewable ener-

[24] Article 4 of Law No. 05/-L-/084 on the Energy Regulator

gy in Kosovo providing ERO with an additional instrument to guide RE development. However, this possibility may also create a barrier if RE developers wait for such tendering procedure instead developing RE projects under the feed-in tariff, as they may expect higher remuneration with tendering or less hassle.

The **Law on expropriation of immovable property (Law No.03/L –139),** as amended by the Law No.03/L-205, includes a legal instrument that can support the acquisition of land by developers of RE projects. The law sets forth that an Expropriating Authority can expropriate immovable property[25] or grant servitude rights for any legitimate public purpose in connection with activities for the generation, supply, transmission or distribution of energy. The object of an expropriation may be private ownership or other private rights in or to immovable property. The Law further provides that the Government may expropriate the ownership or other rights of a municipality or a municipal public authority to immovable property. The Ministry of Finance will determine a fair compensation value for the immovable property that is subject to an expropriation procedure.

In case an investor applies for expropriation, as per Article 8 of the Law, he shall present documents regarding the location and number of each and every concerned parcel of immovable property as well as a detailed description of the public purpose for which the expropriation is being requested. The private developer needs to argue that the realization of the project may be achieved only through expropriation and the choice for the property to be expropriated has not been made in any discriminatory purpose or objective.

A further important element of the legal and regulatory framework is the **Rule on Authorization Procedure for Construction of New Generation Capacities ("the Rule on Authorization")** adopted by ERO in November 2014, which describes the procedure for authorization of power generation projects. The authorization is a right issued by ERO that enables applicants "to commence with construction of generation capacities (....) within specified period of time"[26].

Even though the Energy Regulatory Office is the ultimate authority, which grants authorization for the construction of RE generators, the overall process involves different authorities responsible for the required permissions. This process is depicted in Figure 5.

[25] Article 2 of the Law defines the "Expropriating Authority" as „a Municipality or the Government having the authority to expropriate property" in accordance to the Law"

[26] Article 3 of the Rule on Authorization for Construction of new Generation Capacities (ERO, 2014)

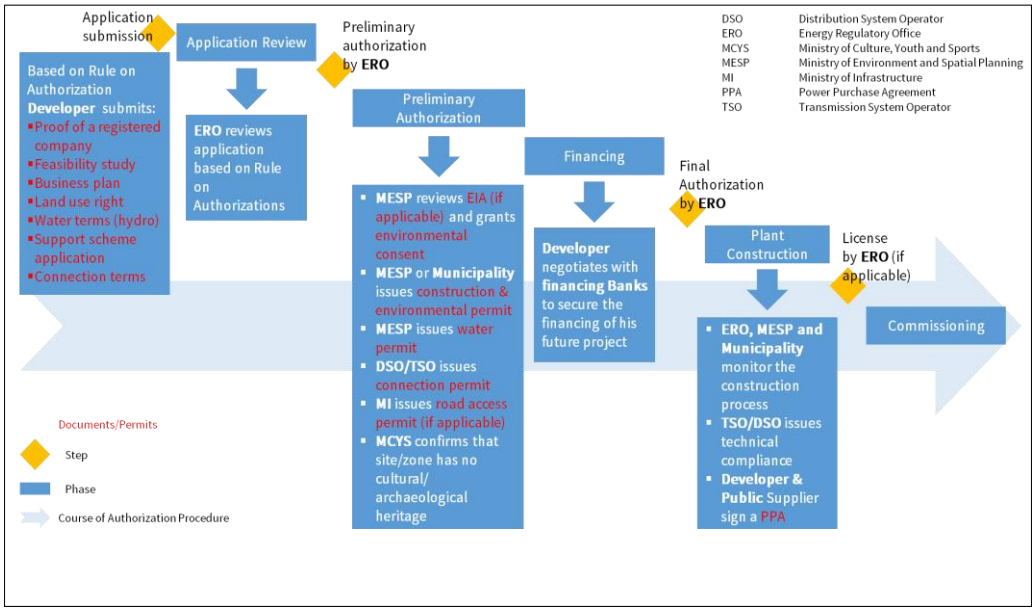


Figure 5: Process flow of authorization of RE projects

The authorization procedure has two stages: The first stage – the preliminary authorization, is considered as an '*OK in principle*' to develop the project. From the interviews held at ERO and with RE developers we understand that ERO has not refused any application as incomplete in most cases, even if not the complete documentation was submitted at the day of application. Usually ERO asks for necessary documents as required by the Rule on Authorization at this stage. The rejection of the application as incomplete may be announced by ERO only if the applicant could not provide relevant documents as requested by the Rule on Authorization. Once the applicant gets the preliminary authorization, the RE developer should turn to every institution to acquire other necessary permits and consent for the project. The second stage – the final authorization stage - is the period when the developer performs additional studies and applies for permits at other institutions. When all required documents are presented, the final authorization is issued by ERO, and the construction of the plant may start.

According to the Rule on Authorization, as shown in Figure 5, in order to obtain authorization for construction, the investor will need different permits from several institutions, such as: Kosovo Business Registration Agency (business registration), MESP (environmental consent, environmental permit, water use permit (if hydropower), construction permit (above 20 MW installed capacity), Ministry of Infrastructure (for permit for connection to existing road infrastructure), Kosovo Forestry Agency (for permits for use of land in forests) or Ministry of Culture, Youth and Sport (permits for construction if the site is of special interest/ archaeological zones), Municipalities (for construction permit below 10 MW of installed capacity or for the contract for using the land, environmental permit for wind and photovoltaics below 100 kW)[27], Kosovar Electricity Transmission, System and Market Operator (KOSTT) (for connection to the transmission system), Kosovo

[27] http://mmph-rks.org/repository/docs/ministri-ua_17-2015_766686.pdf

Electricity Distribution and Supply Company J.S.C. (KEDS) (for authorization for connection to distribution system), Kosovo Electricity Supply Company J.S.C. (KESCO) (PPA in case of feed-in tariffs) and other institutions. At the end the investor will apply to ERO for final authorization.

According to the Authorization Rule, there are 24 requirements for RES developer to prepare and submit. These requirements are presented in Table 6. They are divided into:

- General requirements;
- Technical and organizational requirements; and
- Financial requirements.

Table 6: Requirements for authorization according to Rule on Authorization (ERO 2016)

General requirements	Technical and organizational requirements	Financial requirements
1. Business Registration Certificate 2. The Applicant's name or Names of each member of the Applicant consortium in the case of a partnership or an association. 3. Evidence from competent authority proving that the applicant is not involved in a liquidation/bankruptcy procedure; that his/her business is not administered by the court and that his/her commercial activities are not suspended. 4. Evidence from competent authority proving that the applicant met legal obligations on tax payments in the country where the same is registered as legal person; 5. Evidence on Authorized Legal Representative of the Applicant, (Board Decision or any other document proving person's competencies.) 6. Evidence on the role of each Partnership member on: a) Financial Agreements, b) Execution of Engineering, Procurement and Construction (EPN) Contract. In case members of the Partnership do not provide all principal services of the Project, then please attach Evidence/Contract on proposed partnership (i.e. technology supply me, etc.). 7. Evidence experience of the applicant/ members of the Partnership, on item 6 mentioned above (List of Project references specifying Location, Starting Date, Ending Date of the project etc.).	11. Organizational Structure of the applicant on implementation of the project/plant 12. CVs of authorized representative, management staff and other senior staff of the applicant 13. Business Plan \ including: total investment cost and financing manner; Economic – financial evaluation of the project, including financial statements; static and dynamic evaluation of investment efficiency (PBP, NPV, IRR and BP); Sensitivity analyses NPV, IRR, PBP and LDC (marginal unit cost) versus the total investment, revenues and cost of O & M as well as conclusions and recommendations. 14. Evidence (or statement) describing whom does the applicant propose to sell the energy. 15. Agreement on electricity network connection (connection offer, Electro-energy permission, etc.). 16. Evidence on the right to use the land and property state of the land that will be used for construction of the new plant (possession list, copy of the plan, agreements/contracts on use of private/public land etc.). 17. Environment Requirements Evidence that confirms that plant that is planned to be constructed is in full conformity with Environment laws in Kosovo (Environment Permission, Environment Approval etc.). 18. Other relevant legislation requirements, in-	20. Evidence on the Investment value (€). Evaluation of Capital Cost. 21. Duration of construction period and annual % of investment value. 22. Financial resources (own source capital, loans), financial plan: Plan on usage of funds and payments (related to implementation plan), deadlines for return of loans and financial costs (interest rates, fees, taxes and other). Declared funding sources or other related documents. 23. Technical, environmental and commercial feasibility study of the project, including the following data: - Energy/Capacity Installed - Energy/Capacity Net - Availability of the plant (%) - Capacity factor of the plant (%) - Predictions of annual sales of energy, etc. 24. Application for Admission to the Support Scheme, in accordance with the Appendix 1 of the Rule on Admission to the Support Scheme for Renewable Energy Sources.

General requirements	Technical and organizational requirements	Financial requirements
8. Evidence on funding manner of the project by the Applicant, (Attach Dedication letter from a Lender, etc.). 9. Evidence confirming that the applicant or other members of the partnership represent entities established properly and in accordance with the laws of the country where they were established. 10. Evidence (information/ financial indicators) on financial situation of the applicant, prepared according to the model presented in the Annex 2 of this Rule (attach Audited Annual Financial Report of the last three (3) years, certified by competent institution or certified Financial Audits).	cluding the right on use of water. Evidence from relevant authorities confirming that the Applicant has met all applicable statutory requirements in accordance with relevant Kosovo legislation (depending on the project), including the right on use of water whenever applicable. 19. Evidence on the type, safety, quality of solar/photovoltaic panels and certificate on recycling (TUV Certificate)	

However, the Rule on Authorization as shown in Table 6 does not define which documents are obligatory for the preliminary authorization. The very long list for authorization in general and the lack of a list of obligatory documents necessary to gain preliminary authorization increases the complexity of the regulatory framework and the permitting process and thus increases uncertainty to developers. It is not possible for the developer to clearly understand which documents are required for preliminary and which for final authorization. This inconsistency is therefore considered a barrier of medium importance.

A further aspect that constitutes a regulatory barrier is the lack of interlink between the final authorization and the generation license. The Law on Electricity requires that any generating unit exceeding a capacity of 5 MW holds a generating license issued by ERO. Article 18 of the Rule on Authorization highlights the necessity of a holder of a final authorization to apply for the generation license, prior to finalization of construction. On the other hand, the Rule on Authorization and the Rule on Licensing require RE developers to submit almost the same documents to ERO for issuing the authorization and generation licensing. It should be mentioned that according to the previous rule on authorization (of the year 2006), a RE developer that acquired the final authorization automatically qualified for the generation license. This interlink does not exist anymore. Such a lack of interlink provides a lower level of certainty for obtaining the generation license for the RE developers, which is aggravated by the fact that the generation license is issued towards the end of the construction period, once investment has already progressed. It therefore constitutes a barrier of medium importance.

The Rule of Authorization does not differentiate between different RE technologies and different sizes of RE plants. The modularity of grid-connected RE technologies allows covering a wide range of generation capacity from a few kilowatts up to gigawatts. Requirements for authorization should reflect these different sizes to ease applications for smaller projects following international standards. In Kosovo, there is no particular regime foreseen for small generators, as per categories set forth in Administrative Instruction 2/2013 issued by MED and the requirements of Directive 2009/28/EC. The Law on Energy Regulator 05/L-084 (art.43), as mentioned, requires ERO to establish specific procedures for the authorization of construction of small distributed generation, which shall take into account their limited size and potential impact. As such procedures have, however, not been adopted yet, also small generators have to go through the lengthy and cumbersome authorization process. This need, caused by a lack of simplified specific authorization rules for small generators, is a barrier of high importance for the small generators.

Summarizing the results of the analysis of the legal and regulatory framework, one can conclude that the legal and regulatory framework in the energy sector in Kosovo is well prepared and advanced and thus constitutes a decent framework for developers in the renewable energy sector that does not distract potential investors per se. There are, however, a number of specific barriers that emerge from the legal and regulatory framework, as discussed above, particularly in connection with the authorization process and the required documents to this end. This aspect will be of particular relevance in the everyday permitting process, which will be discussed in the following section.

Moreover, there exist a small number of more serious impacts from individual provisions that create important barriers. They comprise the following aspects:

- The absence of simplified authorization requirements, specifically developed for small generators, constitutes an important barrier for these small facilities for the time being.
- The Administrative Instruction adopted by the MAFRD[28] provides for the right to acquire the land without tender for a period of up to 5 years. Land use rights for a period substantially shorter than the project lifetime and the duration of the PPA constitute, however, a major risk for investors and thus a barrier that we can consider of high importance, as extension of the right after the five year period cannot be considered assured.
- The environmental permit, according to the Law on Environmental Protection (No.03/L-025) and Administrative Instruction (No.25/2012) on Environmental Permit, is issued for a period of 5 years for projects to which the Environmental Consent is issued. This term is substantially shorter than the period the REFIT is granted, the term of the PPA and the time required for recouping the investment in an RE project, not to speak of the project lifetime. This mismatch of the term of the environmental consent and the term of the PPA and REFIT leads to an unclear situation for the developer as to the environmental status of the project after the end of the environmental consent term and, in the extreme case, might threaten continuation of the project.

3.7 Institutional Barriers in the Authorization Process

From the description of the authorization process above and given the long list of documents required for authorization, in combination with a lack of clarity concerning which documents are required at what time, it can be concluded that the overall permitting process for renewable energy projects is complex, complicated and lengthy. This naturally constitutes a general barrier for the development of RE projects. Therefore, in the following, we analyze the processes for obtaining the most important permits for RE-projects in more detail and indicate the specific barriers associated with the individual processes as well as the overall permitting process, its coordination, duration and costs.

3.7.1 Land acquisition and land use right

Achieving the Land Use Right is complex for investors, since it involves several entities such as the Ministry of Agriculture, Forestry and Rural Development (MAFRD), municipalities and private land owners. If the project

[28] MAFRD Administrative Instruction MA-NR- 12/2005 as amended with the Administrative Instruction MA-NR- 16/2007 and the Administrative Instruction No.10/2010

company is a new company, the procedure starts with registration of the company in the Kosovo Business Registry. After preliminary authorization by ERO an appropriate zoning for a site shall be obtained. The zoning will determine if a certain location is suitable for RE plants. To obtain a zoning permit, a developer must submit a number of statements of approval from different authorities, bodies and public utilities, such as telecommunication and energy suppliers. The authority should decide within one month after the beginning of proceedings whether the zoning permit should be issued. In particularly complicated cases, the decision should be made within two months. This term can be extended as necessary[29].

As the zoning procedure is not transparent, it can cause a delay and exposes a risk to the project. The lack of proper and transparent zoning with published zoning maps and other information showing appropriate and available areas for the use of RE is an obstacle and thus a barrier of medium importance at this stage of land acquisition. Hydro power plants show in practice most problems concerning site zoning.

When land is successfully zoned, the investor needs to contact the landowner for acquiring the land. Acquiring land use rights for RE plants is an essential step of the authorization process, as land use rights are interdependent with the preparation of a feasibility study for the project, preparing the environmental impact assessment study, grid connection study and other necessary studies and documents. MESP informed that the site selection and clarification of the right to use the land is crucial in order to issue environmental consent and a construction permit. MESP's construction department highlighted that the main reason for delays in acquiring construction permit is due to non-clearance of the rights to use the land.

The developer, who is responsible to find the necessary information on land ownership and verify its status, faces difficulties in this process. The major reason is that property rights are not properly registered or updated at the land registry, as our survey results indicate. We found that municipalities do not publish their public land maps or locations owned by municipalities. There is, therefore, lack of transparency in this field, which is an obstacle for developers and can be seen as a medium level barrier for the land acquisition process.

Land in Kosovo can be owned privately or by different public entities. There are therefore different ways of acquiring land use rights for RE plants, such as: acquiring the municipal immovable property according to the Law on Allocation for Use and Exchange of Immovable Property of the Municipality[30], renting land from private owners, possession through rent from the Agency of Forestry, and in some specific cases by expropriation of immovable property. Each form of acquiring such right to use the land has its challeng-

[29] The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016.

[30]Law No. 04/L-144 on Allocation for Use and Exchange of Immovable Property of the Municipality

es. None of the RE developers interviewed has requested to use land which is under the management of the Agency for Privatization of Kosovo. None of the developers mentioned that they have acquired servitude rights for land use.

Our survey showed that 17 RES developers interviewed acquired public land, 3 of them acquired private land, whereas 3 others acquired both types, public and private land. The majority of RE developers prefers to acquire land use rights from state institutions. The only cases when RE developers negotiate with private land owners are when the public land is not feasible for an RE plant, as they often consider negotiations with private land owners as difficult or even unfair.

In case of publicly-owned land, the site can be acquired through a competitive public tendering process at the Agency of Forestry, Forestry and Rural Development for land exceeding the area of 5 ha. Below the size of 5 ha, the land be acquired without a tender. As this is possible only for a maximum period of five years, it a substantial risk and barrier for the RE developer, as discussed in section 3.6. The short period prescribed by MAFRD has in addition guided a number of private land owners that lease land to RE developers to use the same terms of 5 years in their lease contracts. As a consequence, also in these cases continuation of the lease contract after five years is not assured and the RE project is thus possibly at risk. The impact of MAFRD's administrative instruction is thus further aggravated in this way.

In case of land owned by a municipality the applicable law[31] gives the right to the municipality to allocate land to the energy project investor, exempting the investor from entering into a tendering process that might add a risk to his project.

Three quarters of the interviewed developers did not face any difficulties in finding appropriate land for their project, while one quarter faced such problems. Concerning municipal land, RE developers, in general, did not have any problem with land use rights, as according to their view, the Law on Allocation for Use and Exchange of Immovable Property of the Municipality has simplified the process. In one case, as we have been informed, the municipality has even expropriated private immovable property at the request of a developer.

The public authorities and the large majority of developers interviewed rate the negotiations between investors and public authorities on land acquisition as smooth (63% of developers) and average (21% of developers), while only 16% of the developers consider the negotiation procedure as "very poor".

Against this background, most of the developers do not see the acquisition of land as big challenge, as can be seen from Figure 6. 65% of the devel-

[31] Law on Allocation for Use and Exchange of Immovable Property of the Municipality

opers were faced with “little challenge” and another 20% with “average challenge”. To such a view the fact might have contributed that developers often referred to municipalities and MAFRD for finding a suitable site for their project. In addition, developers also received support for solving issues with zoning their sites, as stated by the Municipality of Mitrovica as well as MAFRD. For those developers finding land acquisition very challenging, usually very specific circumstances applied. For example, the Agency of Forestry resisted granting such rights due to legal uncertainty, regarding competencies of different institutions, as the zone was designated as national park. Therefore, finding land for their project has ultimately not created a barrier for the developers.

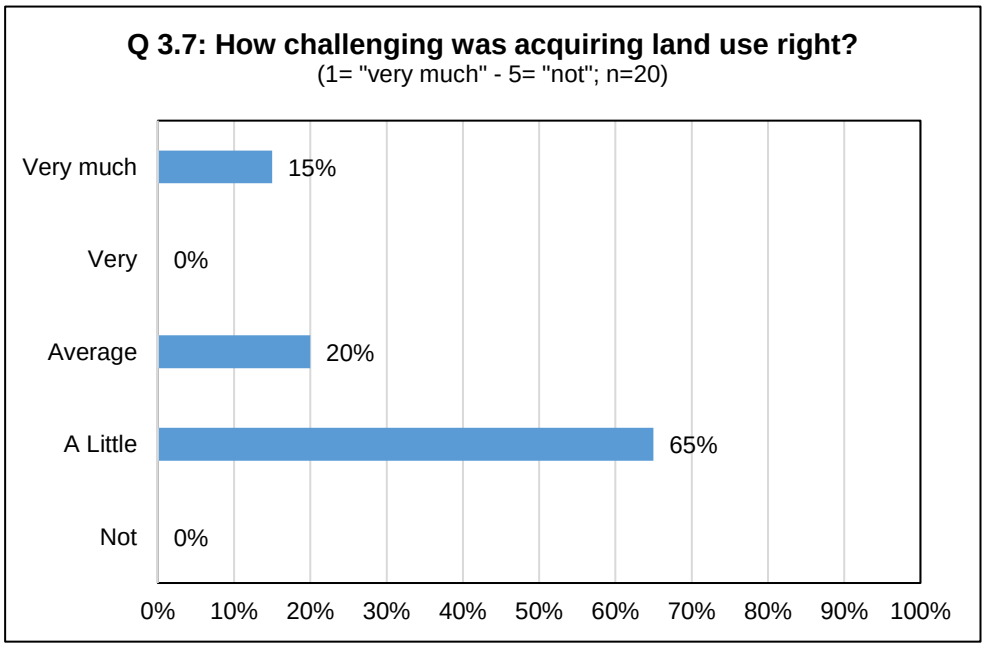


Figure 6: How challenging was acquiring land use right?

Certainly the fact has also contributed to this that all developers found access to the responsible persons in the administration either as “very good” or “good”, as can be seen in Figure 7. In particular the mayors in municipalities seemed to be highly supportive to RE projects.

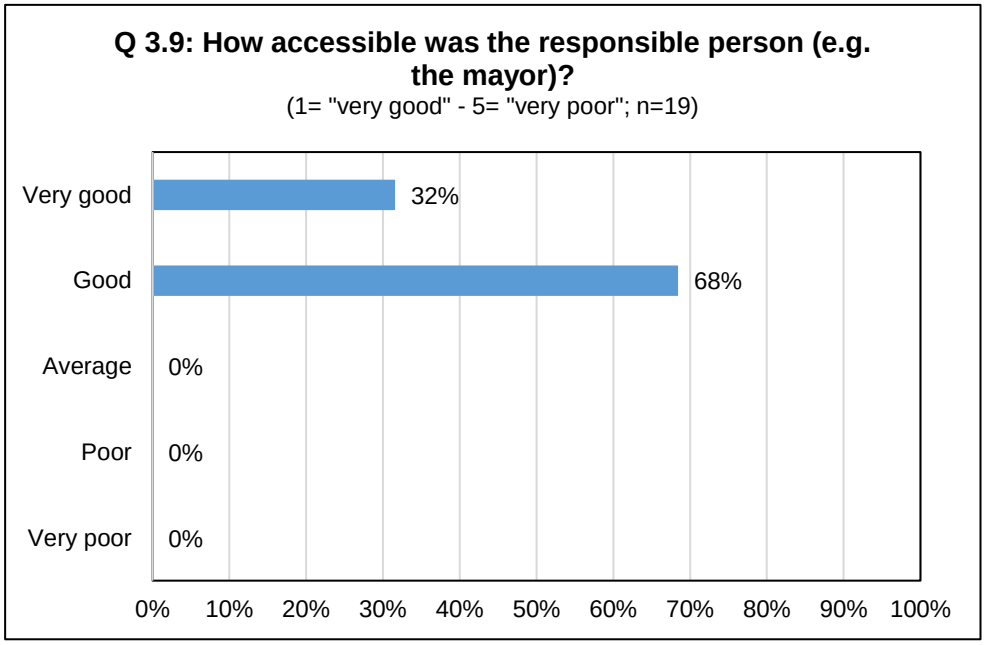


Figure 7: Answers on accessibility of responsible person in administration

For future developers, however, there might emerge a barrier from the fact that unserious investors may block favorable sites. Authorities have observed a behavior that let them start questioning the seriousness of some investors concerning the realization of their RE plants. A lacking seriousness creates a barrier in several regards: This would hinder fast deployment of RE particularly considering that Kosovo has only limited RE potential anyway. Further, such unserious developers are absorbing resources at authorities. Finally, unserious developers may undermine a positive perception of RE with stakeholders providing a message that RE is not feasible in Kosovo.

The time required for acquiring land is widely in line with the experience from other countries with a similar environment. It took most of the developers between 8 and 15 weeks to acquire land. In one single case, however, it took the developer over 4 years; the investor has explained it by incompetency of the Kosovo Forest Agency and rated the negotiation procedure with public authorities as “very poor”.

According to the interviews with representatives of MAFRD, the zoning process takes on average between 31 and 60 days. The negotiating process with investors for acquiring the land takes 16-30 days; that was confirmed by the representative of Municipality of Mitrovica. It absolutely complies with the duration of this procedure in other countries, as can be seen from Table 7. In Serbia, for example, the whole process takes from about one month (for capacities below 10 MW) to 1.5 month (for larger capacities). If a planning document is required, the process requires, however, up to 12 months.

Table 7: Length of acquiring land use right in selected countries

Country	Length as per law	Typical indications of real length	Comments
Kosovo	n.a.	*Interview investors:* 2 to 5 months. *Interview (MAFRD):* zoning process 1-2 months. Land acquisition ½-1 month.	In one extreme case it took investor over 48 months to get land use right.
Serbia	1-1 ½ month	Under old Law prior to 2014 more than 12 months. In cases where preparation of detailed regulation plans is needed 14 months	Procedure may be delayed by 1 month. If a planning document must be prepared, the procedure takes max 12 months.
Slovakia	1 month	n.a.	In particularly complicated cases 2 months. This term can be extended.

One can thus summarize that a very large group of current developers went through the process of land identification and acquisition comparatively smoothly and all in all the land acquisition and land use process is mostly not really a barrier for developers or only a minor one. The entire process of land identification, land acquisition and land use rights is, however, quite complex and contains a number of individual elements that should be improved, such as, for example, zoning of land and land registration.

3.7.2 Environmental consent

After receiving the preliminary authorization from ERO and having the site zoned, investors should apply for the environmental consent, while RE developers may obtain environmental consent already before applying for the authorization. The environmental consent is the basic consent for acquiring other permits, such as the construction permit or the water permit, implying that this document is crucial for successful completion of the authorization procedure.

According to the Law on Environmental Protection MESP is responsible for issuing the environmental permit for power plants. Through Administrative Instruction No. 17/2015 for Issuing the Municipal Environmental Permit, MESP has delegated this authority to the municipalities for wind and PV plants of up to 100 kW[32]. The authority for all other RE plants remains with MESP.

Whilst for projects that obtain their environmental consent from the municipalities (i.e. wind and solar power up to 100 kW), no EIA is required, the consent is granted by MESP for the projects under its authority according to the Law on Environmental Impact Assessment[33] which together with sec-

[32] http://mmph-rks.org/repository/docs/ministri-ua_17-2015_766686.pdf

[33] Law on Environmental Impact Assessment No.03/L-214

ondary legislation provides the conditions to be fulfilled and defines requirements for public consultations. The environmental consent is a document issued by the MESP after evaluation of the environmental impact assessment study. The Law on Environmental Impact Assessment defines projects for which the preparation of an EIA is obligatory, defined in Annex I of the Law, whilst for projects of Annex II of the law, where RES projects are listed, the need for an EIA study shall be assessed on case by case basis. Such assessment shall be done based on the criteria defined in the Annex III of the Law.

These criteria are very broad and leave room for discretion. Moreover, there is no sufficient differentiation considering the nature of the site, type of the RE project, and impact of the project for deciding whether an EIA is required or not. For instance, a rooftop mounted PV plant would be assessed in the same way as a ground-mounted one, whereas the environmental impact is obviously very different. All these factors lead to uncertainty and thus constitutess a barrier for developers of medium importance.

As the Law on Environmental Impact Assessment (EIA) requires the applicant to bear all costs related to EIA study and costs for public hearing the requirement of an EIA creates a financial burden. This effect is augmented by the fact that only entities licensed for EIA in Kosovo are eligible for conducting EIA, i.e. entities from outside Kosovo - even though licensed in other countries - would be not accepted in Kosovo. With the Kosovar market limited in size, competition among EIA conducting entities is necessarily limited. RE developers may face higher costs of EIA than in other countries and consider this as a barrier. However, as this effect is not that strong to undermine viability of RE projects, it is only of minor importance.

Regarding international practice, it can be noticed that environmental consent in general is quite time-consuming and usually takes several months, as can be seen in Table 8. Compared to other countries the procedure of environmental consent issuance takes relatively short time in Kosovo.

Table 8: Comparison of environmental consent issuance in selected countries

Country	Process length as per law	Typical indications of real length	Comments
Kosovo	If EIA required: 2-3 months	*Accord. MESP:* 1 month to complete documentation. MESP usually finishes within 1-2 months. *Accord. investors:* EIA approx. 24 months, Environmental consent: 2 months on average.	
Albania	1 ⅓ month	n.a.	
Austria	6–9 months	Up to 24 months or longer	Required for wind > 20 MW or >20 turbines (each turbine >0.5 MW); hydro < 15 MW; certain facilities combining waste management with power generation.
Bosnia and Herzegovina	n.a.	7-12 months	Depends on the size and capacity of the planned facility.
Croatia	6-10 months	n.a.	Required for facilities >100 MW (wind > 20 MW). EIA as 3 steps procedure: evaluation of the need + instructions + EIA itself. 10-month term can be extended by 2 months.
Czech Republic	n.a.	5-8 months	Required for wind > 500 kW or a tower higher than 35 m; hydro > 10 MW; RES projects that have significant effect on the territory
Hungary	4-4 ½ months	Varies depending on the nature of the activity or installation, its capacity, and the character of the area where plant will be located.	Preliminary assessment + environment permit Required for hydro situated within a natural preservation area of national importance, or wind > 10 MW within the same area. EIA for hydro > 5 MW or located in protected water zone; geothermal > 20 MW or in protected zones; wind > 600 kW.
Serbia	5-6 months	12 months	Decision if EIA is required + post-EIA response time. Post-EIA response time can be longer. Time schedule for solving the appeals is not defined.
Slovenia	3-4 months	n.a.	Environmental protection consent, required for activities that are likely to have a significant impact on the environment
	6 months	n.a.	Environmental protection permit required for installations that might cause large-scale environmental pollution; emissions of pollutants into the air, water or soil; negative impact on the environment; waste management
Ukraine	1 ½-4 months	n.a.	Required for facilities which are hazardous/potentially hazardous for the environment, upon the legitimate request of state or local authorities (e.g., hydro PP, facilities producing energy from organic fuel)

Source: The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016; interviews; own research.

According to the Law on Environmental Impact Assessment, the timeline for granting environmental consent is up to 80 days. MESP told us that this procedure takes usually between 30-60 days due to completion of efficient evaluation by MESP. In our sample of 19 projects the environmental consent was achieved within 62 days on average. In the shortest case it took only 14 days, in the longest case it took 84 days. Additionally, there are two cases in our survey, in which the final approval of the EIA is still pending after 154 days and 2 years respectively.

Therefore, developers did not have any negative comment on the environmental consent process itself, but there was yet a rather split assessment of the role of the MESP during the environmental consent process, as can be seen from

Figure **8**. Whereas two thirds of the developers judged the MESP as "good", the other third judged MESP as "weak" or "very weak", an assessment that was caused by the behavior of the employees implementing this process at MESP, according to the developers.

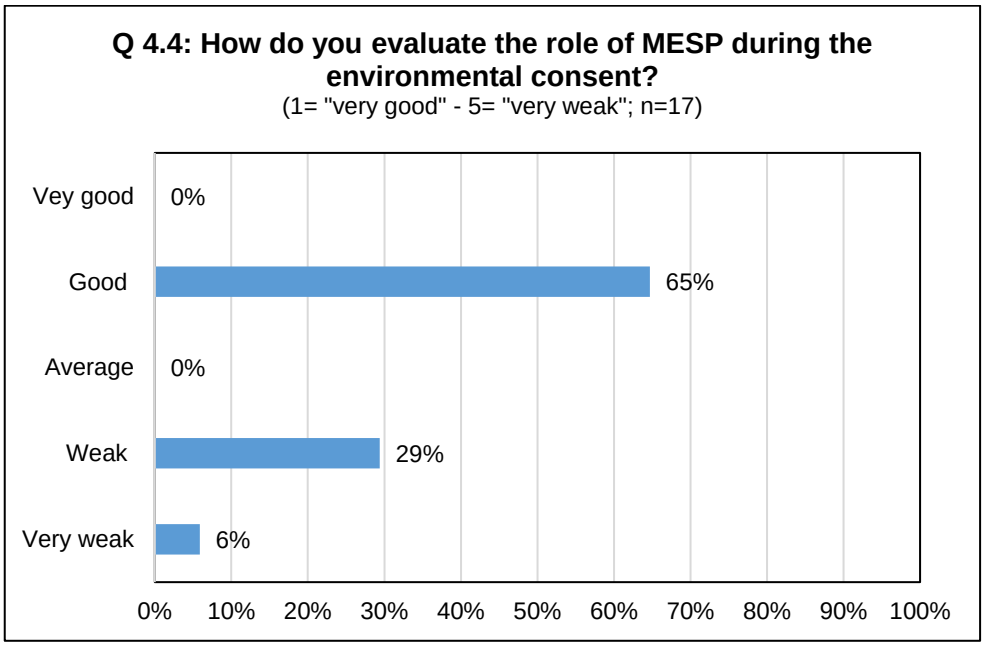


Figure 8: How do you evaluate the role of MESP during the environmental consent?

MESP denied environmental consents only in a very few cases. The main reasons for refusal are the location of the project in a protected area or residential area.

The process for obtaining an environmental consent is seen by most developers as not being fraught with major problems and thus as "doable", despite the fact that the assessment criteria have been found to be quite unspecified. It is also usually and on average carried out within a reasonable timeframe. Thus, for the majority of the developers the environmental permit process does not constitute a barrier.

3.7.3 Construction permit

The Construction Permit is the final permit to be issued for RE projects and the preliminary authorization by ERO should be acquired before application for the construction permit is made. The Construction Permit procedure cannot be started without submitting an evidence of a land ownership. According to the Law on Construction[34], MESP is responsible for permitting high-risk projects (Category III) (above 10 MW), and municipalities for the medium (Category II) and low-risk projects (Category I) (below 10 MW). This distribution of work between MESP and municipalities is clear to all developers interviewed, so that no difficulty was mentioned in this regard.

From 16 projects which have reached final authorization phase, only for one project MESP is the competent institution to issue construction permit, whilst for 15 other projects respective Municipalities are in charge. This categorization causes a more complex permitting procedure and poses more technical responsibilities on municipalities. Municipalities do not feel properly trained for the application process, as reported by the Municipality of Mitrovica, and thus often need clarifications from the MESP. This lack of expertise at the municipal level could hamper the application process for construction permits and thus constitute a barrier for developers of medium importance.

Construction terms are defined by MESP or the respective Municipality upon an official request submitted by the investor to the concerned authority. Such terms, which are specific for each project, define criteria of construction that each developer should fulfill in order to be eligible for the construction permit. Kosovo law requires the project to be defined on the first day of application, and the execution should be done in compliance with the approved project. Article 20 of the Law on Construction requires that an applicant for the construction permit shall submit construction documents at the time of application. Such documents are defined in Article 3 of the law as written and graphical documents “prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a construction permit.” According to the draft Unified Construction Code, which is under public consultation, the project should be executed in compliance with the approved documents, whereas in case that a change has occurred, the applicant shall require a change to the construction documentation (Article 4.4 of the draft Unified Construction Code – Chapter I Administrative and Legal).

MESP appears to handle the process in such a manner that it holds discussions with RE developers in order to clarify their requirements in an interactive way, rather than rejecting applications. Thereby, MESP can ask for edits of the application until MESP construction department considers it as complete according to the Law. If construction permits were denied, it was, according to MESP, due to non-completeness of project documents on the day of submission.

[34]Law on Construction No.04/L-110

Despite the perceived lack of experience of municipal authorities in issuing construction permits, duration of receiving a construction permit in Kosovo takes only 1-2 months on average, which is quite short in comparison to other countries (Table 9). Serbia is an exception as construction permits are issued there electronically within five days (which is a novelty from 2016).

Table 9: Comparison of construction permit issuance in selected countries

Country	Process length as per law	Typical indications of real length	Comments
Kosovo	1-1 ½ month	*Interview (MESP):* 1 ½ month, the procedure usually finishes in ½ month.	Duration depending on category (I construction works with low risk, II medium risk, III high risk). Required for construction works (with high risk – hydro power plants larger than 10 MW).
Albania	2 months	n.a.	Building permit (development permit, construction permit, and use permit) required for any land and structure development
Austria	6 months	n.a.	Building permit (declaration on the construction site, building permit prior to construction commencement, and operating permit after construction completion) required for most power generating facilities
Hungary	3 months	n.a.	Required for construction works. The administrative deadlines set out in the applicable laws do not take into account the period of time necessary for preparation of licensing documentation.
Macedonia	2 months	n.a.	Required for RES-Electricity or cogeneration facility with an installed power in excess of 10 MW; application possible after receiving the prior opinion of the Energy Regulatory Commission
Romania	1 month	Min 3 months	Building permit required for power generating facilities. The issuance of it is a relatively time consuming and costly process.
Serbia	½ - 1 ⅙ month	Under old Law 1 month, now ⅙ month (but no evidence yet)	Additional ⅓-1 month if amendments to the application should be made. For plants above 10 MW and within protected areas revision of design should be done within 1 month
Slovakia	1 month	n.a.	Required for power generating facilities. In particularly complicated cases, max 2 months. This term can be extended if necessary. The administrative proceedings may even be prolonged if the participants to the proceedings (e.g. owners of neighboring land lots) file an appeal against the issued construction permit. Such appeal may be submitted within a period of ½ month.
Slovenia	1 month	n.a.	Required for industrial plants. Shortened procedure. Otherwise, max 2 months.

Source: The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016; interviews; own research.

A minor barrier results from the fact that applications for construction permit need to be prepared by a project designer licensed in Kosovo. Consequently permits were refused because the related documents had been prepared

by foreign experts who are not registered in Kosovo. Further, MESP accepts project applications only in Albanian language.

RE developers prefer to collect all other permits required before applying for the construction permit due to the costs associated with the permit. According to the decision issued by MESP (043/2013) on the administrative tax for construction permit, the payment for a RE project is calculated based on the investment value. For example, for a project investment of € 5 million, the fee to be paid to MESP is € 24,000. Yet, this is not an amount that would be considered as a barrier by a developer.

3.7.4 Water use permit

For hydropower plants a further permit is required, the water use permit. MESP issues water use permits, but it can delegate the power to issue such permits to other institutions, mainly to municipalities. According to the Law on Waters[35], the water use permit for energy can be issued for a period up to 40 years. The permit shall be reviewed at least every 5 years. The Law provides criteria for evaluation of applications in general terms. However, Article 77 of the Law prescribes that the procedure and conditions for obtaining the water permit will be set in a bylaw issued by the Minister. The only bylaw we found published on the web site of MESP that is describing criteria for obtaining the water permit is Administrative Instruction Nr. 63/05 on the content, form, conditions and method of issuing the water permit, enacted by MESP on 11.10.2005, long before the new Law on Waters was adopted. Therefore, specific criteria for obtaining the water permit, as required by the Law on Waters (2013) do currently not exist. This constitutes an uncertainty for developers and might thus distract them from pursuing hydropower projects.

In line with this aspect of uncertainty is that interviewed developers have rated the performance of MESP rather modest with leeway for improvement (Figure 9). The results presented relate to all cases of hydro power projects, as MESP has not yet delegated the responsibility to issue the water use permit to other authorities.

[35] Law No. 04/L-147 on Waters of Kosovo

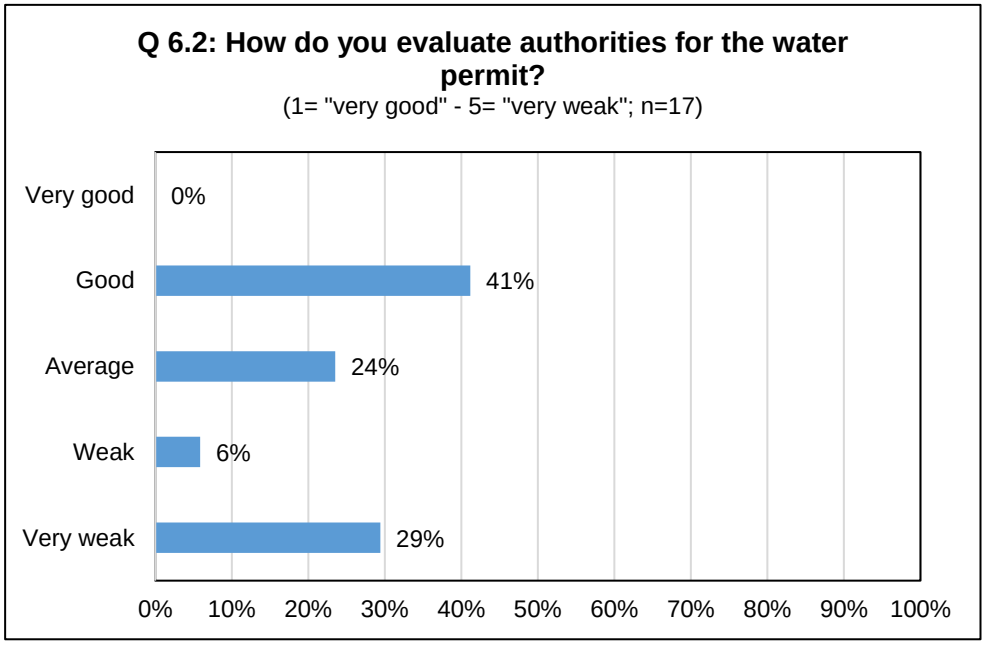


Figure 9: How do you evaluate authorities for the water permit?

Representatives of MESP find that the available information on water use permit is quite comprehensive for applicants. MESP encounters incomplete calculation of water inflow as the main reason why applications are incomplete. Incomplete applications are in turn the main reason for refusal of applications.

On the duration of the procedure for water permit, we received answers for only 5 projects. Usually the duration for receiving the water permit took around 15 weeks. Other hydro developers have not achieved the permission yet. Developers did not mention any difficulties related to the water permit.

According to the statement of the representative of MESP, the procedure of water use permit issuance takes between 61 and 90 days.

Also in other countries, a permit for water abstraction is usually required for hydro power plants. In Bulgaria, for example, the competent authority assesses an application and sends it to the mayor of the concerned municipality for publication within 20 days after its receipt. Provided that the project has not been challenged by any of the interested parties in the 14 days following its publication, the competent authority will issue the water abstraction permit[36].

[36] The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016.

3.7.5 Overall coordination of authorization process

The handling of the authorization process by ERO as the key player is widely considered as positive by RE developers, and they apparently did not face any big difficulties or problems in the interaction with ERO. Developers rated ERO by far as the most cooperative authority followed by KOSTT and municipalities, as can be seen in Figure 10.

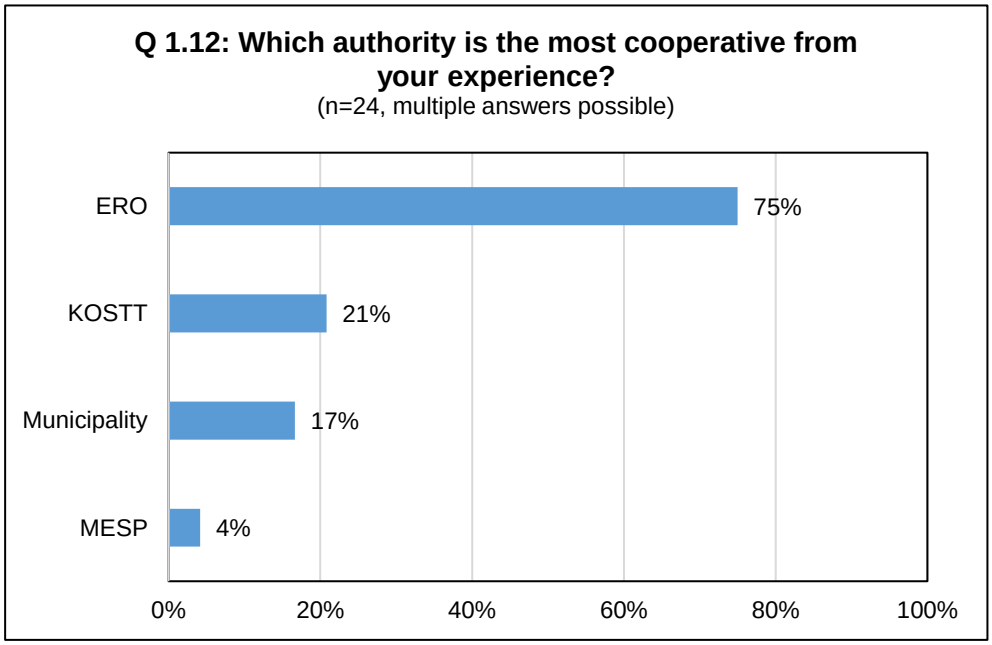


Figure 10: Which authority is the most cooperative from your experience?

Developers also rate the forms and instructions used and provided by ERO for the application and the authorization process as comprehensive and accessible, as depicted in Figure 11. 96% of the interviewees consider them as good or very good.

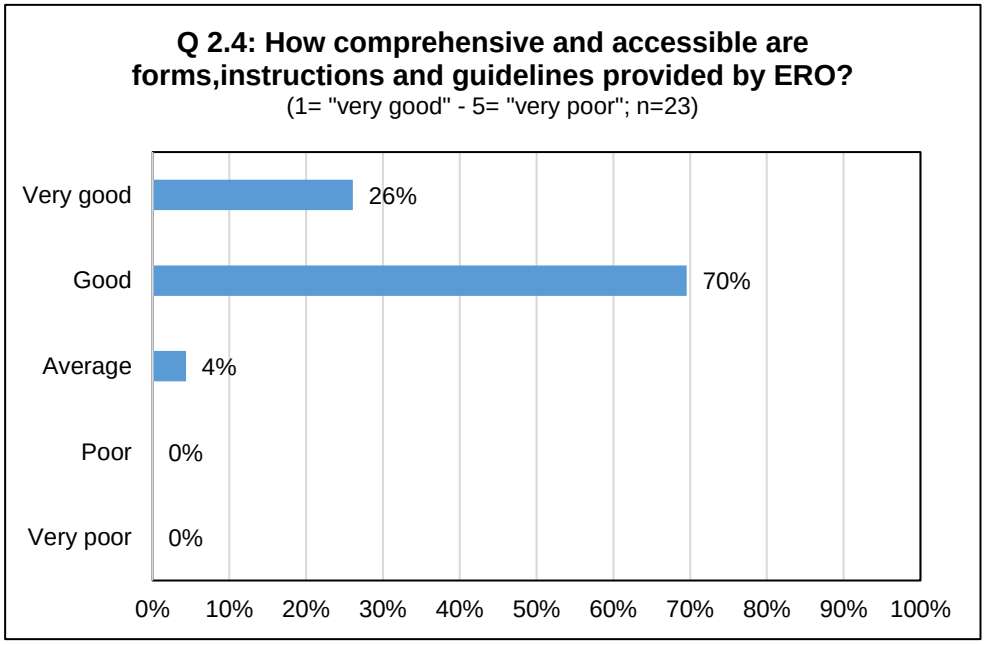


Figure 11: How comprehensive and accessible are forms, instructions, and guidelines provided by ERO?

While ERO plays a key role in the authorization procedure for renewable energy projects and ultimately issues the authorization document, other authorities are involved in the authorization process and ERO has to share its duties in the procedure with many other entities such as the Ministry of Environmental and Spatial Planning (MESP), Ministry of Agriculture, Forestry and Rural Development (MAFRD) (including their departments and agencies) along with various municipalities all over the country. This multitude of actors and permits required necessitates a sound flow of information to potential developers and good coordination between the various authorities involved.

In practice, however, these requirements are not met. There is a lack of regular coordination between different administrative levels and agencies, numerous state and local level authorities, which are involved in administrative procedures, issuing permits and different licenses. Except few meetings regarding particular issues, there is no regular exchange of communication. This affects directly the relation with RE developers.

There is also no central point of information for developers. On the contrary, RE developers need to seek individual permits and consents with individual bodies, depending on the type of the RE plant. There are no detailed guidelines available that describe the whole procedure for authorization and licensing of new generation capacities and provide the developers with a sound road map for the process. Developers have difficulties to understand how this “permitting structure of competences” works, and additional efforts are necessary for them to find their way through the “authorization jungle”. This lack of guidelines for and of a sound information process towards developers thus creates a barrier of medium importance for them.

A further serious problem in this connection is that a behavior opposite to the necessary coordination can be observed. Each authority has developed its own requirements for permits with holistic considerations for the overall

authorization process without regular communication and coordination with other authorities. In some cases, as with the Ministry of Environment and Spatial Planning, different departments of the same entity need to be addressed independently. Also there is no coordination on a regular basis between departments of the same institution. Moreover, there exists no public entity, which coordinates different permits procedures and assists developers in this regard.

The missing coordination between the various authorities and departments involved makes the way through the application and authorization process more complex and complicated and leads to non-transparency. It results in repetitive submission of documents and creates duplication of efforts by the RE developers, which means that additional resources need to be provided by the developers, but also by the authorities. All in all, it makes the process quite cumbersome for developers. The lack of coordination is therefore considered as a major obstacle and one of the barriers of high importance for the development of renewable energy projects in Kosovo.

This is also reflected in the answers of the developers to the question on how well coordinated between ERO and other authorities they find the authorization procedure, as shown in Figure 12. This coordination is rated only average till weak. Investors pointed to the missing legal basis for ERO to coordinate the processes more comprehensively. It should be mentioned, however, that in some cases ERO assisted and responded positively to developers by providing legal and procedural clarification on behalf of other institutions. We understood that ERO is very responsive also to financial institutions which are dealing with parties interested to invest in RE projects, when clarifications were needed.

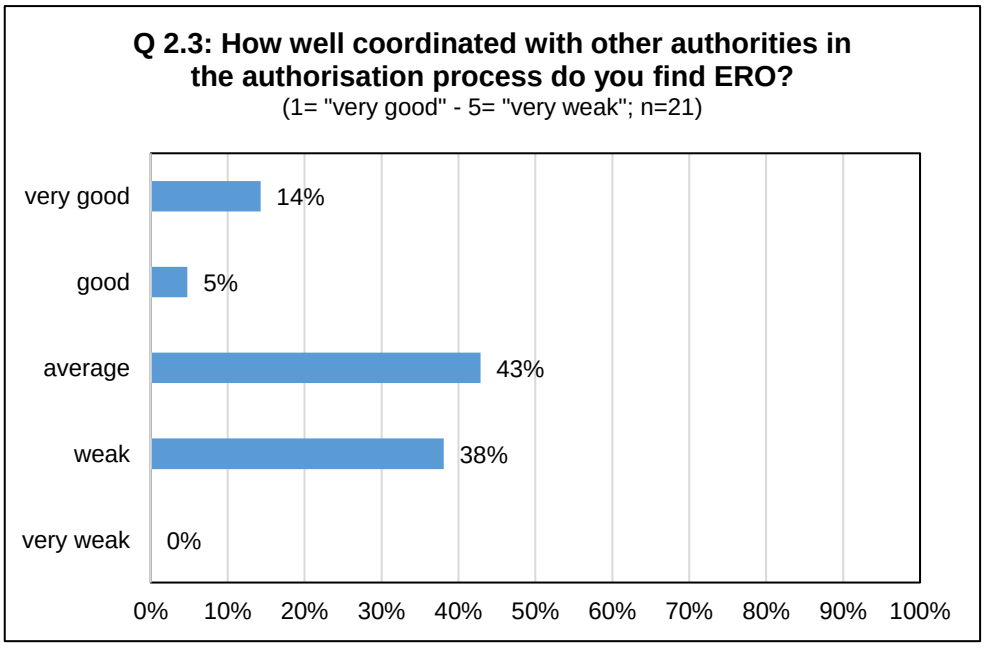


Figure 12: How well coordinated with other authorities in the authorization process do you find ERO?

It is also interesting to note which of the permits are most difficult to obtain in this uncoordinated process. Table 10 provides an overview of the number of applications for different permits during the preliminary authorization

process, and how many of them have been granted so far. For preliminary authorization it is not required to have all these permits available at this phase, meaning that other necessary permits could be obtained and submitted to ERO later in the phase of completing the application for final authorization. The land use right is a prerequisite for the construction permit so the construction permit can necessarily be awarded only at the very end of the whole authorization procedure. However, the different status of applications vs. granted permits provides an indication which permits are the most challenging. In such metrics, the environmental consent seems to be the most challenging, followed by the water use permit. Against that, grid connection terms seem to be rather easy and timely achievable.

Table 10: Current number of applications and permits granted within the preliminary authorization for different types of RES (Status April 2016)

	Hydro		Wind		Photovoltaic		Total	
	applications	granted	applications	granted	applications	granted	applications	granted
Land use right	22	12	4	3	8	8	34	23
Environmental consent	22	10	2	2	8	1	30	13
Construction permit	12	-	2	1	4	-	16	1
Water use permit	12	7	-	-	-	-	12	7
Grid connection terms	12	12	3	2	8	6	23	20

3.7.6 Authorization process duration and costs

Findings on the duration of the authorization process for RE projects are based on the ERO application register (status July 2016). We can see from Figure 13 that for projects that have already achieved final authorization (FA) it took on average 14.6 weeks for obtaining preliminary authorization (PA). The shortest time to achieve PA was 8 weeks (a hydro power plant) and the longest 158 weeks (a wind energy project). Despite this exceptional long period in this latter case, achieving preliminary authorization in general, thus, seems not to be a particular time consuming procedure. This is also confirmed by the average time required for PA for projects that have, by now, reached preliminary authorization but not yet final authorization, as depicted in Figure 14. While slightly longer than projects with FA, these projects on average also reached PA after 25 weeks. The longer period is mainly on account of projects in this group with weak preparation of the applications or doubts of responsible institutions in the feasibility of the projects. Duration of the process for PA is shortest for PV and longest for wind power plants.

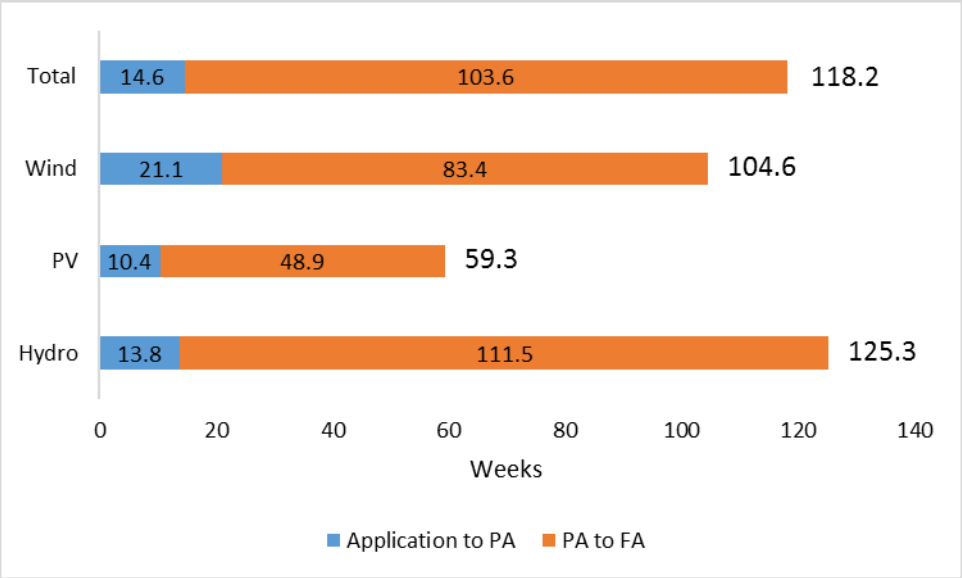


Figure 13: Average duration of achievement of preliminary (PA) and final (FA) authorization by technology in weeks

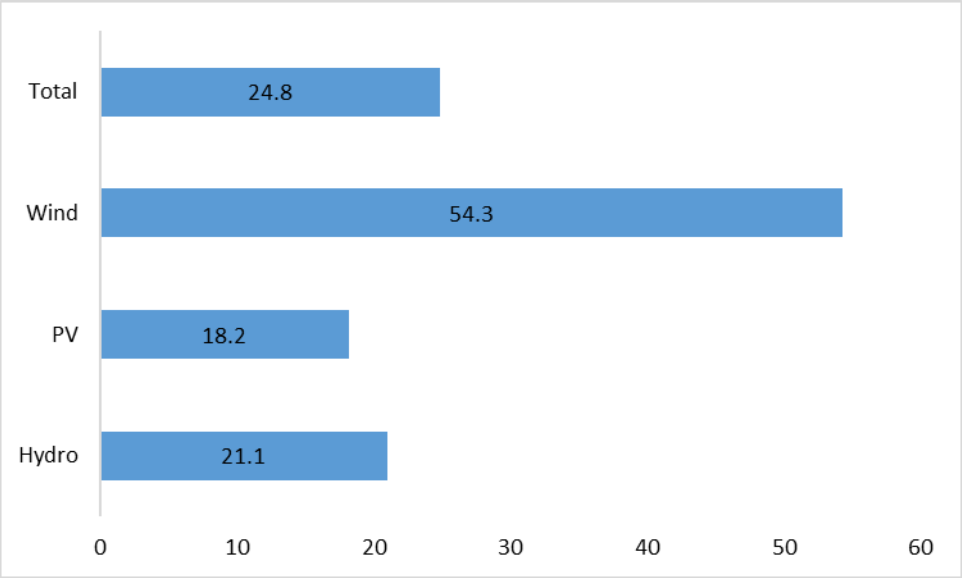


Figure 14: Average duration of achievement of preliminary (PA) authorization by technology in weeks

To obtain the final authorization the RE projects needed 118 weeks on average. The shortest case of final authorization took 25 weeks and the longest 272 weeks. In both cases it was a hydro power plant. Generally, the process for obtaining FA is much longer for wind and hydropower plants than for PV plants, but this is a pattern that can be observed in other countries as well.

Compared to international standards, the total length of the authorization procedure can be rated as of medium range, as can be seen in Table 11. This indicates that permitting processes are working in general, but that there is leeway to shorten process for faster deployment of RES.

Regarding international experience, the time frame for realization of a RE project very much depends on the time required for obtaining necessary environmental consents, building permits, connection to the grid, and licensing. In the following, more details on time lengths of authorization procedures in selected countries are given for comparison and presented in summary in Table 11.

Lengthy procedures are observed in the majority of the EU Member States. Lead times (time between the application of the first permit and the irrevocable issuance of the last permit time) differ significantly across Europe. In Denmark they are less than 50 weeks. In Slovenia, Cyprus and France project permitting procedures can take up to 2, 4 and even 6 years respectively. Onshore wind power can take 3-7 months for permitting in Germany as compared to less than 5 weeks in Denmark. Looking at small scale projects in the PV industry, in the best performing country (Germany), authorization procedures represent less than 40% of the total time needed to realize the project. However, in nearly all other countries, this proportion exceeds 60% and even often ranges between 70 and 90%. In the European Union as a whole, authorization procedures for bioenergy projects took 23 months on average[37]. A more recent study[38] determined the average lead time in EU-27 between 16-21 months.

In Greece the required lead time for the entire authorization procedure has been lengthy and exceeded on average 3.5 years for small hydro power plants and wind farms and may have reached 6-7 years in exceptional cases. For PV stations with capacity below 2 MW, the average time is now estimated to be one year while for larger stations the average time is estimated at two years.

[37] European Commission, Ecofys/Golder, Benchmark of Bioenergy permitting procedure in the European Union, January 2009.

[38] European Commission, Ecofys/Golder, Permitting of Bioenergy installations in the EU-27: Practical recommendations based on a study of 130 real cases, 2009.

Table 11: Comparison of authorization procedure in selected countries

Country	Process length as per law	Typical indications for experienced durations	Comments
Kosovo	3 months	6-27 months[39]	
Albania	n.a.	Development phase: 6-9 months; construction phase: 36-48 months	Development phase: water concession or license, and environmental permit. Construction phase: construction permit, generation license, grid connection
Belgium	n.a.	6-12 months	Indicative estimate +
Bosnia and Herzegovina	Each permit 1-2 months	Up to 24 months, in some cases as long as 72 months	Authorizations for smaller plants takes usually less than 24 months
Bulgaria	11 ½-12 months	6-24 months	Average formal duration of single permits: 1 ¼ months; max. 20 steps
Croatia	n.a.	42-54 months[40]	For smaller RES projects shorter
Cyprus	n.a.	48 months	With large projects up to 84 months
Denmark	n.a.	Less than 12 months	Onshore wind: less than 1 ¼ months
France	16 months	72 months	With large projects up to 84 months
Germany	n.a.	3-7 months	Simplified or formal procedure under the Federal Pollution Control Act; onshore wind
Greece	n.a.	12-84 months	HPP and wind farms up to 84 months; PV stations below 2 MW 12 months, larger stations: 24 months
Hungary	n.a.	48 months	Example of a biogas facility from 2013. Time limits for decisions in case of high priority projects has been shortened from 2 to 1 month
Italy	28 months	84 months	
Serbia	Max 24 months	18-24 months (estimation under new Law since 2014); longer under old Law on Planning and Construction (36-48 months)	Maximal duration if planning documentation for location conditions has to be prepared, otherwise 12 months
Slovenia	n.a.	24 months	-

Source: The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016; reports of Energy Community; Ecofys 2014; own research.

In Croatia administrative barriers for renewable energy projects stem from complex authorization procedures even for small renewable energy projects as well as insufficient coordination between different governmental agencies involved in renewable energy policies.[41] For example, the admin-

[39] ERO database

[40] USAID Report. Stocktaking Report for Regional Assessment of Renewable Energy. 2009

[41] The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016.

istrative procedure for obtaining eligibility as a power generator requires around 30 steps for a large RES generator and 20 for a smaller one. The majority of the procedures requires 20 steps and takes between 42 and 54 months. The most critical element for RE project development seems to be the licensing procedure. It is usually not possible to provide any precise estimate on the time frame necessary for the issuance of licenses / authorizations.

In Bosnia and Herzegovina, all permits and other administrative documents in the permitting procedure for the construction of energy infrastructure projects are subject to deadlines that vary between one and two months. However, the process for obtaining all necessary permits may take as long two years in practice, depending on the capacity and size of the power plant. For smaller plants it usually takes less than two years. The situation is likely to be similar in most Contracting Parties of the Energy Community[42].

In Serbia, the sum of the duration of all procedures to obtain all necessary licenses and authorizations which are stated in the legislation amounts to a maximal length of two years.[43] In 2014, a new Law on Planning and Construction was adopted. Investors' experience with the old Law shows that the procedure took three to four years in practice. It is estimated that the situation under new Law will improve, however it is difficult to estimate to what extent.

To determine the transaction costs of a typical RE project, we have analyzed exemplarily two RES projects:

1. The Project of the company Hydroline Albaniku 3 is realized in the Municipality of Mitrovica. A feasibility study, a business plan, preparation of documents for water use permit and EIA was conducted by an external contractor. It took Hydroline Albaniku 3 five months to ensure finance. Additionally, the developer has employed an external company to deal with the banks. It took him only a week to prepare for final authorization application and one month to deal for PPA.

2. The project Brezovica, realized by Matkos Group, has already reached final authorization. The developer commissioned an external company for preparing a feasibility study, a business plan, documents for the water use permit, and the environmental impact assessment. Financial negotiations took the developer six months. Final authorization took two weeks to be prepared.

Based on the statements of the developers of these two hydro power projects, we are able to provide an indication of transaction costs (Table 12). For a megawatt sized hydro power project one may expect transaction

[42] Secretariat of Energy Community. Annual Implementation Report 2015.

[43] The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016.

costs in the range of 160,000 €, of which a little more than 10% are related to fees to public authorities. Such an order of magnitude for development and project preparation costs for a RE project of less than 5% of its estimated investment amount is more at the lower end of what can be found internationally. Comparison of such costs internationally is, however, a quite difficult undertaking, as the projects usually have their specific project characteristics and specific features related to the developer, in particular in the hydropower sector.

Table 12: Indication of transaction costs of RES projects in Kosovo

Project stages	Internal preparation		Contractors	Procedure fee	Total transaction costs
	Hours	Amount €	Fees €	Official fees €	Amount €
Feasibility study	-	-	61,500	-	61,500
Business plan	-	-	15,000	-	15,000
Land acquisition (public)	24	1,920	-	8,000	9,920
Land acquisition (private)	-	-	7,500	-	7,500
Preparation of the application to apply at ERO (preliminary authorization) + tax	126	10,080	-	2,250	12,330
Water (terms and permit)	-	-	3,000	1,250	4,250
Grid connection (terms and permit, including energetic project preparation + tax)	10	800	300-	950	2,050
EIA (drafting + tax)	-	-	6,000	1,500	7,500
Revision of EIA (drafting + tax)	-	-	625	625	1,250
Construction permit (terms and permit + tax)	-	-	5,325	3,115	8,440
Financing (negotiation with banks)	160	12,800	13,500	-	26,300
Application for final authorization + tax	15	1,200	-	-	1,200
Power purchase agreement	10	800	-	-	800
Other costs	-	5,000	-	-	5,000
Total		**32,600**	**112,750**	**17,690**	**163,040**

The figures in the table indicate that the complex and uncoordinated authorization process, despite all shortcomings discussed above, does at least not lead to an unreasonable financial burden to developers.

3.8 Financial Barriers

Renewable energy technologies generally feature high initial investment costs but low operating costs compared to fossil technologies. Thus financing and access to capital is a crucial aspect for deploying RES and financing RES projects seems to be a challenging task for developers also in Kosovo.

Two thirds of developers interviewed pointed out that they faced difficulties to achieve financing for their RE project in general, as can be seen in

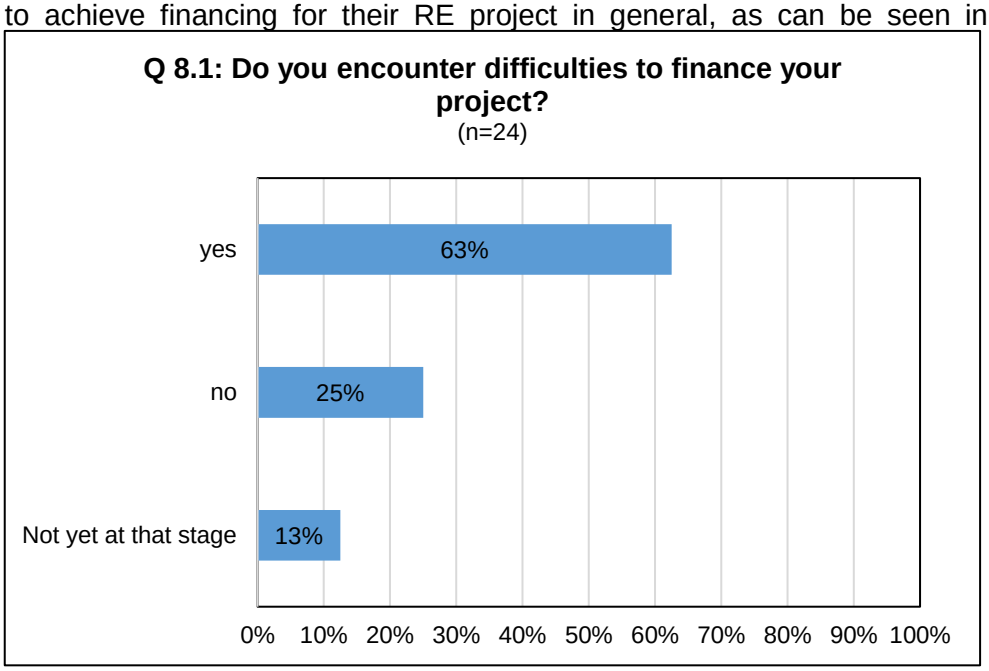


Figure **15**. As another 13% have not reached a status in the development process where concrete matters of financing become an issue, only 25% of the interviewed developers answered that they did not have problems with financing; amongst them are two developers that plan to finance their projects with 100% equity. It is worth noting that out of the 6 RE developers that have not faced financing problems so far, none has received the final authorization by now, so that they have not really gone through all necessary steps to raise capital. Financing, or rather the problem to collect the necessary financial means for investment, is thus definitely an important barrier for the implementation of RE projects. The decisive question in this context, however, is which concrete features of the financing framework constitute the specific barriers which a prudent policy could deal with. This is addressed in the following. We understand from the answers that developers faced difficulties both to raise the necessary equity on their own or find sponsors that could contribute the equity required and to get loan financing from the banking system.

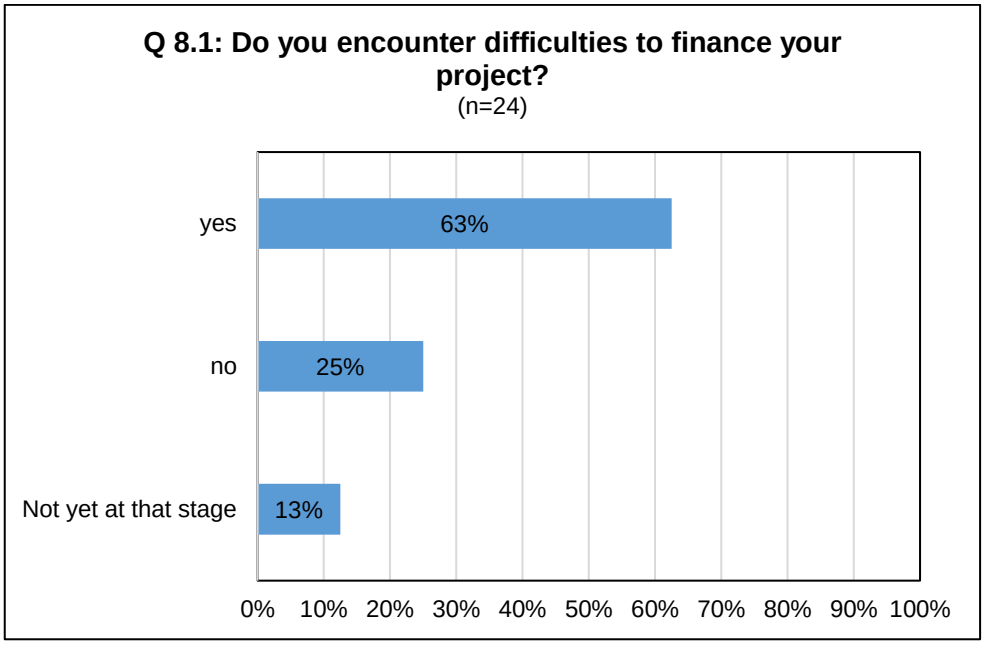


Figure 15: Do you encounter difficulties to finance your project?

Renewable energy projects are often developed by small and medium size entrepreneurs that have limited free financial resources available for their projects; this is often combined with a weak overall financial standing. In order to be able to provide the necessary equity, such developers often approach possible sponsors in their nearby business environment. This can easily lead to lengthy processes of discussions and negotiations between the envisaged partners and might ultimately not end in a successful deal, as the partners do not agree on the distribution of risks and expected rewards and conditions under which sponsors contribute their share. This means that already the availability of equity and contribution of equity to the RE projects constitutes a barrier.

Concerning loan financing, developers perceived in particular international banks as unwilling to provide loans for RE projects in Kosovo; the country risk was given as the main reason for this attitude of the banks. In practice, project developers have approached national banks, branches of foreign banks as well as international financial institutions. Over 80% of the developers that answered have not been successful in getting loan financing for their project so far. Albeit one needs to consider the preliminary status of many RE projects covered in the survey, the impossibility to get appropriate loans for financing of a project is beyond doubt a severe obstacle and barrier for the deployment of RE in Kosovo, creating a valley of death.

There are several reasons why the banking system does not provide the requested loans for RE projects, and several aspects are found on both sides of the transaction, the lender and the borrower side, that hinder loan financing and thus constitute barriers for financing of the project. However, in practice it can be sometimes quite difficult to unveil the true reasons for the denial of a loan, as it has been observed that the same developers were able to get finance for one project, but failed to get finance in another RE project. These various aspects and possible specific barriers are discussed in the following.

The country risk of Kosovo has already been mentioned as one important reason for denying loans by international banks. Despite this perception of the developers, several international commercial banks with branches in Kosovo that we interviewed have expressed that they are generally interested in financing RE projects in Kosovo. Some of these banks have actually financed or are in the process of financing RE projects in Kosovo. Moreover, International Financing Institutions, such as IFC and Export Credit Norway Bank are also generally interested in RE project financing. It is thus ultimately difficult to judge what role the country risk plays for international banks in RE financing, but international experience indicates that country risk does have an influence on providing loans to RE developers, in particular as such loans mostly have a comparatively long tenor. This effect can thus also be expected in Kosovo, particularly in the light of the level of country risk described in section 3.3. Nevertheless, no matter how strong this barrier will ultimately be, it is one that can hardly be influenced by the energy sector and energy policy framework.

Information on the financial standing or financial credentials of a sponsor is important material for a bank to assess the creditworthiness of a borrower. Already the availability of financial statements or other documents on the financial situation of a sponsor can prove a problem. If financial statements that are audited in line with international standards are required, this can lead to delays, as often local companies get their statements audited according to local requirements. One case has in fact been observed amongst the interviewees, in which internationally audited financial documents were not or could not be provided in the requested time.

The financial standing of a company is, of course, always a matter that is scrutinized by banks, and here small and medium size developers in particular show often a weak performance and have only limited financial resources available for their RE project, so that banks might consider this an additional risk for granting a loan, as they see the developers as unreliable investors.

However, concerning the equity share required by banks a common order of magnitude for premature renewable energy markets is observed in Kosovo. The banks interviewed mostly request an equity contribution of 20% to 30% (with the exception of IFC), while one bank makes the equity share dependent on the specific characteristics of the project. While provision of equity can always be seen as a general problem for RE developers, the specific requirements of the banks concerning equity share are not a particular barrier for the developers, as they reflect sound economic thinking and are in line with international practice.

The type of project structuring (on-balance vs. off-balance) is apparently not an issue for banks. Banks offer both on-balance sheet financing as well as project financing to finance RES projects. However, from our interviews we got the impression that on-balance sheet financing dominates. This is usually favorable for the banks, as they have better recourse on the financial resources of the investor. However, as mentioned, it does not constitute a barrier for a developer, if he wants to go ahead with a project finance scheme, as this is generally also conceivable for the banks. Alone, it might be linked to more stringent requirements for the viability of the project and

the quality of project documents, which could lead to difficulties, as will be discussed further below.

A major concern for the banks, when financing RE projects, is that the developers can often not provide the guarantees that the banks would like to see. Experience shows that banks asked for substantial amount of mortgage to be provided by RE developers as a condition for financing a RE project. This also needs to be seen against the background that banks favor on-balance sheet deals. As RE developers can often not provide such required mortgages and securities, banks would prefer that state guarantees are included in the loan package, so that in case of default of the borrower the lenders would have access to an alternative entity for repayment of the loan (and payment of interest).

As state guarantees can be applied independent of the type of financing (on-balance vs. off-balance), they can provide also securities in case of project finance. This is of particular importance, since it has been pointed out in the interviews that KESCO as the off-taker of the power generated in project-financed RE projects is not considered as financially sound and is said to lack a track record of financial performance. It is thus seen as not being financially strong enough to guarantee a secure flow of revenues for the project company over the life of the PPA, and consequently not considered a reliable off-taker. As the payments from the power off-taker are the only source of income for the project company, the involvement of the state and the provision of a sovereign guarantee in one way or the other is therefore considered essential by some banks, in particular for large projects.

The lack of such state guarantees or a similar security scheme that could compensate for the lack of financial strength of both developers and the off-taker of the power generated in the case of project finance can thus be seen as a barrier that reduces in any case the willingness of the banks to finance RE projects and is likely to decrease the number of projects that banks actually consider acceptable for granting loans. In the extreme case, banks are not willing to finance RE projects on the basis of project financing at all, if state guarantees are not available, in particular concerning large projects, as the off-taker of the power generated is not seen as a reliable source for the project company's income.

In addition, as found in the interviews, many banks are afraid that the feed-in tariff might be terminated before the end of the term of the PPA in case the government should decide to give up the REFIT regulation, so that the secure stream of revenues of the project would be terminated or at least threatened. While we could not find any legal document or provision in the PPA that would support such a view, this way of thinking apparently influences the banks' considerations on and appraisal of RE projects. It is, however, difficult to judge to what extent this perception really flows into day-to-day business.

A further element in the application process for financing of developers that is disliked by banks, according to answers provided in the interviews, is when the applicants do not have the required permits from the state authorities in place yet. It is more than understandable that banks cannot provide a firm commitment for financing unless and until the final authorization for project implementation is given by ERO. The complicated and lengthy per-

mitting process that in itself is an important barrier for the development of RE projects, leads to a further possible barrier in the form of reluctance of banks to provide financing for the projects. This type of a financial barrier, however, is most likely not a very serious one, as banks can provide a conditional commitment for financing, subject to the developer ultimately obtaining the final authorization. Thus this effect appears to be more of a nuisance for the banks, requiring more of their efforts, time and personnel, than a real barrier.

A more serious problem for the banks is that they very often, according to information provided by them, obtain project proposals and documents for due diligence in the application process that they consider as not sufficient and prepared in an unsatisfactory manner. Considering that comprehensive project proposals of a sound quality are key for getting project finance, the actual quality of the documents obtained by banks does often simply not allow a proper assessment of the project and its credential and possible risks, on which a decision of the bank on a loan could be based. There seems to be a mismatch between the expectations of banks and the abilities of RE developers. It has been found that the lack of quality of application documents results from the lack of expertise and professionalism of RE developers. Therefore, the lack of knowledge of developers and their staff in RE projects specifics, and in particular the lack of expertise in the preparation of the necessary documents for applications for bank loans leads, in combination with the other barriers discussed, to a severe hindrance of RE financing and constitutes a barrier, at least for the time being in this initial phase of RE development in Kosovo.

As a mirror picture of the concern of banks just discussed, developers stated also in the interviews that they do not see Kosovo banks as well prepared to handle RE projects and they consider this as a barrier of financing. It is worth noting that also the banks interviewed, except IFC for understandable reasons, emphasized that they do not have enough expertise in RE projects, and that they face a lack of knowledge and experience for these types of projects in particular. Banks operating in Kosovo are lacking information on the energy sector as well as information on the authorization process. Such lack of knowledge and expertise is likely to delay credit approval, as it was demonstrated by one case, when it took the bank a full year for approval for the said reasons. In the extreme case, limited know-how and expertise can even lead to the refusal of a loan, when banks behave too cautious in a field they are not familiar with and not knowledgeable of. It thus constitutes a substantial barrier for RE financing, in particular in combination with the other obstacles discussed related to financing.

Banks try to overcome this problem by outsourcing the due diligence (primarily the technical parts) to specialized companies that evaluate the projects. Moreover, one commercial bank has meanwhile established a separate department dedicated to assess RES projects, in which expertise can be concentrated in order to overcome this lack of know-how and expertise. As a proper due diligence is seen by banks as the biggest challenge for financing RE projects, such approaches can ease the barrier, but they cannot completely solve the problem and eliminate the barrier at this stage.

Some other factors that have been observed in other countries as important barriers for financing RE projects are not an issue in Kosovo:

- Availability of foreign exchange and risks associated with the development of the exchange rate are not relevant in Kosovo, as Kosovo uses the Euro as its currency and loans are thus provided in Euro and interest and principal payment is also made in Euro.
- Conditions of loan financing, in particular high interest rates, do also not appear to be a problem for RE developers. From what we know, the interest rates seem to be in the range of some 5% to 7%, which is a decent order or magnitude, given the risks for RE projects in Kosovo, even when taking into account that the interest rate does not need to include a risk premium for the development of the exchange rate and possible depreciation of the local currency. Are they worse for RE projects than for other loans? Unlikely? Or are loans generally very expensive?

The duration for project approval differs significantly between banks. Two banks approve projects within 3 to 5 weeks, one other within 12 to 16 weeks. One bank, as mentioned, carried out this procedure in one year since it was the first project in this area; they expect to proceed faster in future projects due to the experiences gained. With this small number in the sample and the vast span of values, calculation of an average figure would not be meaningful.

In summary, one can state that financing has been and still is a major barrier for deploying RES in Kosovo. Lack of equity is a first barrier. Developers, in particular small and medium size entities, often do not have available the necessary equity contribution required and lack a sound financial standing, although the share of equity requested by banks is in line with international practice. Banks expressed their general willingness to finance RE project, but in practice they seem to be somewhat cautious in doing so, as they rate RE projects, and small hydro power projects in particular, as having high risks.

Banks consider, in particular, the following issues as risks, so that they constitute barriers for the banks to provide the requested loans for RE financing: developers cannot provide the level of mortgages or alternatively (state) guarantees for the loan, which the banks would like to see due to the high project risks and low creditworthy of developers; investors do not have available the permits and authorization required when applying for a loan; developers lack the know-how and experience in RE projects and also in banks' appraisal procedures, so that they submit low quality applications and documents. Of these, in particular the lack of state guarantees and the low level of developer's expertise and low quality of application documents are seen as important barriers.

While there are a number of severe individual barriers for financing of RE projects, the strongest impact results from the combination of the relevant factors, as banks tend to appreciate projects from an "entirety" perspective. Here the principle can be observed that "the whole is more than the sum of its individual parts".

3.9 Technical Barriers

Technical barriers comprise two sub-categories of barriers. They are on the one hand barriers related to grid connection of the renewable energy plant, and on the other hand they are related to low quality or lack of infrastructure and to logistical issues. The various aspects are analyzed in the following section.

3.9.1 Grid connection related barriers

Grid connection permits are issued by the distribution system operator (DSO) Kosovo Electricity Distribution (KEDS) or by the transmission system operator (TSO) Kosovo Transmission System and Market Operator (KOSTT) depending on the size of the plant to be connected: KEDS issues permits for plants smaller than 10 MW i.e. plants to be connected on the medium or low voltage levels, whereas KOSTT for plants larger than 10 MW i.e. typically those which are connected to the high voltage grid with 110 kV and beyond.

Connection to the distribution grid has to comply with the distribution code. Initially, the applicant submits a request for acquiring terms of connection. These connection terms specify the provisions for connection, connection method, technical standards and standards of performance. The developer is required to follow these terms in order to ultimately get the connection permit granted. KEDS has established commissions for reviewing and evaluating applications.

KEDS is currently using outdated KEKs methodology for connection. KEDS has prepared a Draft Methodology for connection to the distribution grid and submitted to ERO for approval. However, the Methodology is still not approved since ERO returned the Methodology to KEDS for further improvement and resubmission. Lack of such Methodology may create uncertainty for investors wishing to know in advance what the conditions for the connection are, including payment for connection. Lack of methodology is included in the Matrix as a medium level barrier.[44]

We received assessments on the technical and organizational ability of KEDS from 12 developers (Figure 16). Developers were rather content with KEDS, however none of the developers rated KEDS ability as “very good”.

[44] The grid component of this assignment contains a draft for Grid Code: Connection Requirements for generators as required by ENTSO-E standards. Even though issued by the Transmission Grid Operator this grid code will be also pivotal for KEDS.

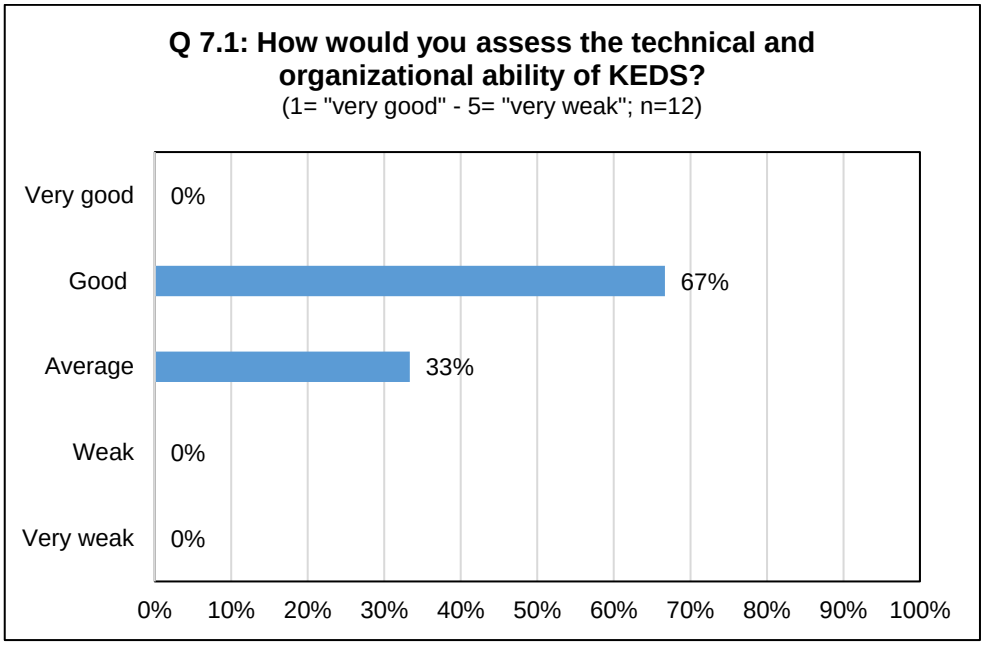


Figure 16: How would you assess the technical and organizational capability of KEDS?

However, when asked to identify the difficulties faced in obtaining the grid connection, 14 out of 18 developers connected to the DSO stated that they have faced difficulties to obtain grid connection permit, but this has mainly to do with the distance of the RE plant to the connection point (9 out of 14). Four developers confirmed the weak methodology mentioned and saw the connection methodology as a difficulty for their process, and for one developer the procedures of KEDS were unclear. Some RE developers felt treated non equal and unfair by the DSO, but this point was not further substantiated. All in all, apart from the methodology, there are no barriers observed concerning connection to the distribution grid.

For the RE plants of the capacity above 10 MW, a connection agreement between KOSTT and the RE generator defines the terms necessary to be fulfilled by the RE generator. After the RE developer filed an application for connection to Transmission Network, Transmission System Operator will send an offer with related costs for the connection within 90 days from the received application. TSO may request additional studies if the connection is complex because of, e.g., the size of the plant or location in order to promptly evaluate the impact on the system. If such a study is necessary, the 90-day period can be extended for an additional 30 days. Secondary legislation envisages prior discussions to be held between the generator and TSO for clarification purposes before the application for connection is filed.

The technical and organizational ability of KOSTT, as Transmission Network Operator, is rated by developers consistently as “good” or “very good”. However, this assessment is based on a rather limited number of 4 respondents as there have been not so many RES plants larger than 10 MW applied for grid connection yet.

As examples from other countries show (Table 13), the process of a grid connection permit issuance can be quite long. In this relation, the situation

in Kosovo does not differ from those of other countries analyzed when it comes to the process length as prescribed by law. However, in practice the actual duration for granting permits was substantially shorter in the case of KOSTT, which reviewed applications on average within 4 weeks.

Table 13: Comparison of grid connection permitting in selected countries

Country	Process length as per law	Typical indications of real length	Comments
Kosovo	3-4 months	1 month	Transmission grid connection permit by KOSTT
Bosnia & Herzegovina	1 month	n.a.	Connections at the low voltage grid; 1-month term from the moment investor fulfils his obligations from the agreement on connection
Bulgaria	1 ½-2 ½ months	n.a.	Statement of opinion on the conditions and manner of connection: 1 month for the distribution grid operators or 2 months for transmission grid operator from the date of the issuance of the statement of opinion on application accessibility
Poland	5 months	n.a.	The term starts from the day of advance payment
Serbia	4 months	n.a.	Pre-construction phase: 2 months; post-construction: 2 months. Post-construction phase can be extended by 1 month for energy license if required (>1 MW)

Source: The Wolf Theiss Guide to: Generating Electricity from Renewable Sources in Central, Eastern & Southeastern Europe 2016; interviews; own research.

The Transmission Connection Charges Methodology of KOSTT (October 2013) in Article 4.2 requires that "Generators will pay deep connection charges", meaning that they will pay for all direct assets, new infrastructure assets and infrastructure reinforcement assets for the existing system. The Policy Guidelines on Reform of the Support Schemes for Promotion of Energy from Renewable Sources, issued by the Energy Community Secretariat[45] recommend that „producers should be charged with the cost of connection to the nearest point in the public electricity network only ("shallow" connection cost) and not with the costs for reinforcement or expansion of the networks ("deep" connection costs). With shallow connection charging, the transmission and distribution grid operators are in charge to create an optimal infrastructure by investing in grids enforcement or expansion of the grids and socialize the cost for the ownership and maintenance of the network assets with all network users through regulated network tariffs. The actually applied deep connection charges, in contrast, put a substantial share of network enforcement costs on the RE developers. This adds a further financial burden on them and will make the investment less attractive. For some developers this can therefore be seen as a barrier of medium importance.

[45] Article 6 of the Policy Guidelines of the Energy Community Secretariat on Reform of the Support Schemes for Promotion of Energy from Renewable Sources, PG 05/2015, 21 Dec 2015

3.9.2 Infrastructure and logistics barriers

Renewable energies for power generation have been rarely used in Kosovo so far and hardly any RE plant has been constructed apart from hydropower. Thus, there are neither established suppliers of RE equipment nor is there an infrastructure for operating and maintaining RE equipment. As the (prospective) market for RE technologies is quite limited in size in Kosovo, technology suppliers might be hesitant to enter.

Equipment, therefore, has to be supplied overwhelmingly from abroad, and local investors often have to deal directly with international manufacturers and suppliers. Starting with the search for an appropriate supplier, this process is often a time consuming and burdensome undertaking for developers, which might distract potentially interested parties, in particular small and medium size developers. Developers, as experiences also from other countries, such as Ukraine, shows might also face a lack of willingness of reputed suppliers to actually supply their equipment to the Kosovo, as the additional transaction costs for the supplier are considered quite high for the very limited quantity of equipment actually supplied. So far, this, however, does not appear a major issue in Kosovo, but it needs further observance, as most developers of wind and solar power plants have not gone through their entire purchasing process.

Such a supply situation can lead to higher costs for RE developers, as there are no economies of scale and higher transport and transaction costs for a single undertaking of the supplier. Moreover, these suppliers might also apply a different payment schedule and request upfront payment of almost the entire invoice amount, which leads to higher costs of financing for the developer. Moreover, suppliers of equipment (in particular of wind turbines) might not be willing to offer the same level of services form operation and maintenance of the plant as they provide in larger markets, which might impact on the quality of operation.

Article 22 and 23 of the newly drafted “Grid Code - Requirements for grid connection of generators” requires generators to use only certified equipment. This will ensure that only quality proofed equipment is connected to the grid. We did not get any complaints from project developers that they have problems of suppliers interested in offering equipment or similar. In contrary, one project developer confirmed that he received several offers for equipment from abroad.

All these factors can be considered as additional risks and obstacles for both developers and financing institutions and thus constitute a barrier.

There are also no EPC contractors that operate in Kosovo in the field of RE projects. Such contractors would take on a substantial share of the risks associated with a project and therefore shift away risks from the developer. Developers, therefore, either have to carry out a project on their own and accept a higher level of risks for implementation and operation or to rely on foreign EPC contractors. This is not only likely to increase overall costs, but usually also means that foreign contractors accept only a lower level of risks compared to their home markets. Such a more unfavorable risk allocation for the developer constitutes a barrier for him in the process of RE development.

If for wind power projects the most recent technology is used, very heavy equipment (e.g. prefabricated rings for the tower) and very long elements (the blades) need to be transported. To this end appropriate ways for transportation need to be identified and the surface of the roads over which the transport is arranged must be able to carry the load and the design of the roads must allow the transport (e.g. through narrow bends). Therefore, the transport infrastructure can ultimately constitute an impediment, if not a barrier for the project or at least for the most up-to-date technology with the highest capacity. In fact, in the Municipality of Mitrovica we received the information that there have been several requests for wind projects to be developed, but that the municipality does not have the budget to invest in the improvement and extension of roads that lead to possible project sites. As a consequence, the developers refrained from going ahead with their projects and so far, no project has started yet in that area. This example shows that lack of appropriate transport ways can definitely be a barrier for the development of sites for wind power plants in some areas.

Wind power plants also require very heavy machinery for erection, in particular for the tower. For mounting modern type of wind power plants (e.g. 3 MW class of wind turbines) very large cranes are required. In Kosovo no such cranes are available and need to be provided from outside the country. If the availability of such cranes from abroad cannot be guaranteed at the required time, delays can occur; in any case, it leads to additional costs. In the extreme case, a developer would need to resort to smaller size turbines, which are usually less economic. This however, does not appear to be the case in Kosovo so far. Nevertheless, the non-availability of the necessary machinery for installation of wind power plants at the required time at the required place can constitute a minor barrier for developers, in particular for wind power plants.

3.10 Public Awareness and Acceptance Barriers

Public awareness has two aspects. One is awareness of the public at large, the other relates to awareness of a specific group of the public, the developers. The public at large is usually not aware of the opportunities for renewable energy projects at the beginning of the process of capacity expansion of renewable energies in the power sector and lacks information and knowledge on basically all relevant aspects for the implementation of RE projects. This relates first to the various technologies and concrete technical solutions that might be applied by an individual person for RE plants. It further relates to knowledge about which craftsmen could properly install the plant and access to the relevant people, and it finally also relates to the knowledge about possible sources of financing of the RE plant.

Therefore, this lack of awareness and knowledge as well as the limited information available constitute a barrier for implementation of small-scale renewable energy projects by individual citizens. However, it must be acknowledged that all in all such individual small scale projects will play only a limited role for the overall expansion of renewable energy in Kosovo. Therefore, more important in this context is the lack of awareness of potential developers.

As renewable energies are a new concept for Kosovo, potential investors often lack information on specific opportunities for renewable energy projects. More important is, however, that developers, even if general opportunities are known to them, usually do not have detailed information, knowledge and expertise on the specific technologies or even best available technologies, and, particularly in the case of hydropower plants, on the best design for the RE plant. Moreover, initially they are also short on information on potential manufacturers and suppliers and on the overall commercial framework for RE project implementation. Nonetheless, they also do not have knowledge about possible sources of financing, apart from the general banking system, and support schemes for financing. The lack of expertise on best technical solutions, if a project is actually pursued, can lead to a lower performance, with impacts on the viability of the project and its financeability.

All these factors hinder potential developers in engaging them in the renewable energy sector. They constitute obstacles and barriers for the development of RE projects. This effect is further aggravated by the fact that also the concept of Independent Power Producers (IPP) and project finance is new to the Kosovan power market. Very limited experience exists so far in this field. IPP schemes, however, are nowadays the most widely used approach for the implementation of standalone RE projects internationally. Developers lack knowledge about an appropriate allocation of risks under an IPP scheme and about the security package, i.e. the set of agreements required, for implementation. If (foreign) EPC contractors are involved in a project, proper knowledge on how to handle them and how to negotiate with them is usually also not given and the execution of an EPC contract might thus disfavor the local developer. Such deficiencies on the side of (potential) developers constitute not only a barrier eo ipso, but, as shown above, create further difficulties and possible barriers towards banks in the process of securing financing for RE projects.

The aspect of acceptance of renewable energy projects and related barriers is included here for the reason that in many cases developers face difficulties and often encounter strong opposition from the population affected by a particular project or from environmental and/or civilian movement groups. They relate to all types of RE facilities, but are usually stronger for hydropower plants and to some extent wind power plants. While such opposition and barriers of acceptance of RE facilities can particularly be observed in Central European countries, they can also be found in such countries as, e.g., Ukraine, where small hydropower plants and biomass plants were heavily contested.

Such lack of acceptance of RE plants and related resistance very often lead to delays in the implementation of the plant, sometimes over considerable periods, and can also result in a general halt of the project. Thus, some developers, having these possible opposition and conflicts in mind, completely give up planned projects or do not even consider a project for these reasons.

So far, according to information received, none of RE the projects registered by ERO under planning or in the implementation process has been confronted with such problems of non-acceptance. However, many of these projects have not yet advanced to a stage where the population concerned

might even be aware of the project and its concrete impacts. Moreover, the issue of acceptance also relates to any future RE project. Therefore, the lack of public acceptance can be a potential barrier, not necessarily imminent at the moment, but still a possible threat in the future. It is, therefore, considered necessary to take this aspect into account in a prudent RE policy framework.

3.11 Summary of Barriers

The analysis of barriers in this chapter has found a large number of issues that constitute potential barriers for the deployment of RE projects in Kosovo. The barriers are, however, of different importance for developers and for the Government, i.e. they hinder or prevent the implementation of RE projects to a different degree. It is thus necessary to rate the barriers in line with the severity of their impact. To this end we distinguish three classes of severity and importance of a barrier, namely “high”, “medium” and “low”. For attributing one specific mark to a barrier of the three mentioned, the following considerations are taken into account:

There are two perspectives on the importance of barriers: From the point of view of an individual project developer a barrier is important, if it severely hinders the realization of projects developed by the project developer. However, from the perspective of policy makers, such a barrier might be still regarded as minor as long as the RE capacity delayed or prevented by the barrier is only minor in relation to the overall target. We could not calculate how much capacity is hindered by individual barriers, thus we take the perspective of project developers when assessing the importance of barriers. However, we marked when an individual barrier applies only to a subset of RE technologies.

Our assessment of the importance of barriers is based on the statements and data provided by stakeholders we interviewed as well as on our expert opinion rooted in having provided similar consultancy in many countries all over the place. We have rated a barrier as being of:

- high importance, if currently due to this barrier actual RE projects have been severely delayed or even entirely not been realized; the same rating applies if we expect overcoming this barrier would lead to a substantial acceleration of RE deployment;
- medium importance, if due to this barrier actual RES projects have been or might be delayed;
- low importance, if the barrier has currently only a limited impact on developer decision and/or the impact can be expected in the future.

The analysis of barriers shows that in particular two categories of the eight discussed play an outstanding role concerning barriers and include important barriers. They are:

(a) the field of financing of RE projects;
(b) the permitting process for RE projects.

The analysis further shows that, while there are some very critical issues and important barriers as such in these fields, the multitude of barriers in

one field leads to their mutual reinforcement and thus contributes to forming a particular difficult environment for RE developers in each field creating a valley of death for some project developments.

It was also found in the survey that some developers stressed in their answer to the final open question that they regarded achieving appropriate financing as the most severe barrier to implement their RE project. Generally, opinions of developers were divided concerning the question what they considered as more challenging, to get project authorized or to get it financed. The group of respondents that considered authorization as a more important barrier was as large as the group that found that financing is a more critical barrier. Others found the two barriers equally challenging.

A further finding of the analysis is that important barriers emerge in addition from the fact that permits granted and contracts forming the basis for RE project implementation have substantially shorter terms than the term of the PPA, not to talk of the lifetime of the RE facility. This creates uncertainties about renewal of these permits and/or extension of contracts to the developers as such and influences their decision. It, moreover, can also influence decision of banks on financing of a project and providing a loan for the project (in particular with a reasonable term of the loan), as the banks cannot consider the flow of revenues from the project and thus debt service as ensured for the entire term of the loan. Therefore, improvement of specific elements of the legal and regulatory framework in the energy sector, which is, however, by and large in a reasonable format, is required.

Finally, a further observation is that an important element for the removal of RE barriers in the medium to long term is the strengthening of the investment framework in general, which is primarily relevant for potential foreign investors interested in RE projects in Kosovo.

The following three tables summarize the “high”, “medium” and “low” important barriers respectively with a short description of their essence. The numbers given do not express a ranking, but are used for the sake of convenience.

Table 14: Barriers of "high importance" to implementation of RE projects

#	Barrier	Description	Category	Remark
1.	Limited access to capital, both equity and loans, and poor experience of developers concerning banking procedures and requirements; perceived lack of financial reliability of power off-taker by financiers	Developers face difficulties to collect sufficient funding for their projects resulting from a mismatch of requirements of banks and developers' capabilities, comprising quality of loan applications and provision of securities, including sovereign guarantees	financing	The importance of the barrier emerges from the combination of several factors, which leads to "the whole being more than the sum of its parts"
2.	Complex, sometimes confusing authorization procedures and requirements, combined with limited knowledge at local authorities about RE specific procedures, and lack of coordination of the authorization process	Missing coordination between involved authorities in the authorization procedure leads to delayed process duration, non-transparency, repetitive submissions of documents leading to extra resources with applicants and authorities. Lack of coordination within MESP	institutional / permitting	The barrier and its high importance result from a combination of factors and is not attributed to just one single factor
3.	Terms of authorization documents and contracts are substantially shorter than the term of the PPA and the period that feed-in tariff is granted	Ministry of Agriculture limits lease terms for land to 5 years; environmental permit is issued for a period of 5 years	legal and regulatory framework	Legal and regulatory framework barrier has direct impact on financing
4.	No simplified authorization regime for small generators	Absence of particular regime for small generators does not correspond to requirements of Directive 2009/28/EC, disfavors small generators and loads widely unbearable burdens onto them	legal and regulatory framework	For small generators decisive; possible future share of small generators in total installed RE capacity and thus ultimate relevance of this barrier difficult to predict
5.	Lack of conducive investment environment	Low country rating and the negative features connected to such rating (governance; legal system; etc.) prevent many potential foreign investors from entering the country at all, before going into details of the energy sector	investment framework	Relevant primarily, if not exclusively, for foreign investors and developers

Table 15: Barriers of "medium importance" to implementation of RE projects

#	Barrier	Description	Category
6.	Inventories on municipal land not public	Publication of land maps would help developers to identify potential sites for RE	institutional / permitting
7.	Lack of zoning	Municipal development plans lack zones dedicated to RE deployment	institutional / permitting
8.	Outdated evaluation criteria on applications for water use permit	Law on Waters supplies general criteria but bylaws are lacking providing detailed criteria	legal and regulatory framework
9.	No guidelines on the authorization procedure	Absence of clear guidelines leads to opacity and confusion of developers	institutional / permitting
10.	Authorization and licensing procedure not sufficiently linked	Rule on Authorization and Rule on Licensing require RE developers to submit almost the same documents to ERO for issuing the authorization and generation licensing	institutional / permitting
11.	Lack of differentiated criteria when an EIA is required	Insufficient differentiation considering the nature of the site, type of RE, and impact of the project for deciding whether an EIA is required or not.	legal and regulatory framework
12.	Generators have to pay deep connection charges	RE generators should pay "shallow" connection costs; against that, they shall not finance reinforcement or expansion of networks	economic / market
13.	KEDS is using outdated KEKs methodology for connection	Lack of appropriate methodology for connection to distribution network creates uncertainty for investor	technical
14.	RES developers lack expertise	Banks complain about poorly drafted project proposals	financing
15.	Banks lack expertise with RES projects	Banks lack expertise to properly assess the specifics of RE projects	financing
16.	Distorted power markets	As electricity prices on wholesale markets do not reflect environmental costs of fossil fuels, RE outside the REFIT are disfavored	economic / market

Table 16: Barriers of "low importance" to implementation of RE projects

#	Barrier	Description	Category
17.	Limited public awareness	Awareness campaigns have been limited in time and not so much focused on RE developers	public awareness and acceptance
18.	Absence of balancing methodology	Balancing responsibility, as a main prerequisite for proper market functioning, is still not in place as required by Article 19.4 of the Law on Electricity 05/L-085	economic / market
19.	Absence of customer switching procedure	Customer switching procedure is still not in place impeding demand for green energy. Such rule shall be approved by ERO.	legal and regulatory framework
20.	Authorization procedures lack clarity on financial requirements for investors	More clarity is needed on financial requirements for RE developers	legal and regulatory framework
21.	EIA studies need to be conducted by entities licensed in Kosovo	Only entities licensed for EIA in Kosovo are eligible for conducting EIA; limited number of licensed entities due to small size of domestic market leads to high costs	institutional / permitting
22.	RE project designer needs to be licensed in Kosovo	Only RE project designers licensed in Kosovo are eligible for construction permit; limited availability of licensed entities leads to higher costs	institutional / permitting
23.	Uncertainty on power price outside REFIT	As power markets are not fully fledged developed yet RE investors do not know what power prices they may expect after termination of PPA and outside REFIT	economic / market
24.	Draft PPA does not comply entirely with energy legislation	Draft PPA does not comply entirely with the Law on Electricity, Market Rules, Rules on General Conditions of Energy Supply, and the Rule on the Support Scheme	legal and regulatory framework
25.	Certificate of Origin not implemented	System of Certificate of Origin as required by the Energy Community not fully implemented	legal and regulatory framework
26.	Some RE developers lack seriousness	Lacking seriousness of some RE developers is blocking potential sites and absorbs unnecessarily resources at authorities	institutional / permitting
27.	Shortcomings on transport system and equipment / facilities required for RE implementation	Heavy equipment and transport network required for some RE projects (wind power) not always available at the place and in time	technical
28.	Difficulties in the supply of equipment, O&M services and EPC services	There are no suppliers of equipment and no EPC contractors for RE projects in Kosovo, which can complicate the process of purchasing equipment and services and make it costlier	technical

Even though the number of barriers is considerable, we do rate the regulatory framework in general as modestly appropriate for the deployment of RE. This is also shown be the fact that some developments of RE projects have occurred recently and that more projects in the pipeline (see Chapter 2). However, considering the ambitious RE targets of the Government of Kosovo, a more conducive environment for the implementation of RE projects is required. It is therefore considered necessary to take the necessary

steps and apply the appropriate measures in order to overcome at least a number of these barriers to accelerate deployment of power generating RE projects. Recommendations for such measures are elaborated in Chapter 4. Ultimately, it should be the ultimate goal to create a virtuous cycle where successful RE developments allow stakeholders to gain experience and triggers even more RE projects in the future.

4. Recommendations for the Removal of Barriers through Enhancement of the RE Framework

Based on the analysis of barriers presented in the previous chapter, a number of recommendations have been developed, by which the current framework for renewable energies can be improved and the barriers identified can be combated. They are discussed in the following sections and subsequently summarized in Tables Table **19** to Table **21**. For each category of barriers, except for energy policy, where no barrier was identified, concrete measures are defined, which would help to overcome the specific barriers. We include also a crude assessment on how fast certain remedies can be put into action considering the comprehensiveness of the means as well as the importance of the underlying barrier. This is to be distinguished from the importance of the underlying barrier which indicates how fast actions to overcome this barrier should be initiated. In other words, a barrier with high importance should be addressed immediately but it may take some time until actions take effect, indicated by a “medium” or “long” term rating. In the elaboration of the measures, international examples for overcoming barriers and the experience made in the countries where the measures are applied are presented.

When discussing measures, it also needs to be understood that some of the measures have or can have an impact on more than one category of barriers. This is briefly mentioned in the individual sections for the relevant cases. For example, the extension of the term of land lease beyond five years reduces, in the first instance, the uncertainty for developers and therefore their risk concerning their revenue stream and through this addresses an economic barrier. At the same time and as a secondary effect it strengthens the standing of developers towards banks in loan applications, as it also reduces the debt service risk for banks and thus also contributes to overcoming financing barriers.

4.1 Improving the Investment Climate

The studies outlined in section 3.3 provide an essence of international experience of the impact of improvements of the investment climate on RE investment and suggest that an improvement in a particular country’s risk score by one standard deviation increases the probability of private sector participation in infrastructure, including renewable energy, by 27 percent.[46] Therefore, if a country wishes to boost private sector involvement, including in renewable energy, improvements in the investment framework are very essential.

Since country risk indicators capture a macro-perspective of a particular country, broad policy to tackle the economic situation, corruption and to fos-

[46] Araya G. et al (2013). The Effects of Country Risk and Conflict on Infrastructure PPIs. Bank Policy Research Working Paper No 6569.

ter transparency can be employed to enhance the investment framework. This often goes hand in hand with economic development. In particular, policy to improve the investment framework could constitute of:

- Anti-corruption policies and stronger sanctioning;
- Rule of law monitoring missions (as conducted by the OSCE), transparency in proceedings and independence of courts and judges;
- Transparent policy making;
- Removal of specific barriers to renewable energy investments (as further detailed in the remainder of this report).

The process to improve an investment framework can take a significant amount of time. Therefore, it is of essence that policy is tailored to the long-term. As a first step, however, it is important that specific barriers to renewable energy investment in Kosovo are removed. The removal of such barriers will enhance investor confidence and can be expected to accelerate investments in renewable energies.

Kosovo has already taken steps to foster such improvements. In particular, Law No. 04/L-220 on Foreign Investment, adopted on 12 December 2013, is favorable for investment in Kosovo. Article 4 ensures non-discrimination, while article 6 ensures stability of investment regime by foreseeing that „No law, regulation or other legal act shall have retroactive force or be applied retroactively to the detriment of a foreign investor or the investment of a foreign investor". In addition, article 7 envisages that assets of foreign investors shall not be subject to any form of expropriation or nationalization except in cases of special public interest established by law, without discrimination, in which case immediate and adequate compensation is ensured. Article 8 of the law further elaborates compensation in case of expropriation and nationalization, when compensation will be paid in a freely convertible currency and be equivalent to the fair market value of the concerned asset including interest before the act of expropriation was taken. In addition, Article 23 of the law establishes a Kosovo Investment and Enterprise Support Agency („KIESA") that is operating under the Ministry of Trade and Industry and is responsible for protection and promotion of investments. To further foster its investment framework, the Government of Kosovo needs to ensure that the Law is applied without restrictions as one policy element.

4.2 Removing Market Barriers and Enhancing Economic Framework

A major market distortion is that prices on the electricity market do not reflect full costs of electricity generation including external costs. There is, therefore, no level playing field for RE projects. Presently, the level playing is thus created by REFIT that grants RE generators a higher tariff than the fossil plant operators. This higher price can be justified by the lower environmental impact, i.e. lower external costs of RE compared to fossil fuels.

The decisive question in this context is what is going to happen, once the capacity targets for RE are met and the feed-in tariff will not be granted any longer to additional RE projects. In such a situation a level playing field can

only be reached, if all power plants have to bear their full costs of electricity generation, including true environmental costs. To achieve this, alternative means need to be implemented, such as imposing an emission tax on fuels or alternatively selling pollution rights to emitters i.e. power plant operators.

A study prepared on request of the Government of Kosovo 2011[47] analyzed different power supply options for Kosovo considering environmental externalities (Table 17). The difference between the levelized electricity costs (LEC) including externalities and LEC excluding them represents the external cost of power generation in Kosovo (local socio-economic costs of emissions from thermal power plants, global carbon prices, etc.). Regarding lignite-fueled thermal power plant this difference amounts to more than 60% of LEC excluding externalities. In contrast to it, in the case of gas-fired power plant this value equals to less than 13% of the respective LEC, in the case of fuel oil to 10%. In other words, power from lignite fueled power plants needs to be more than 30 €/MWh more expensive than presently.

Table 17: Estimated environmental costs of thermal supply options, €/MWh

	Lignite	Natural gas	Fuel oil	Imports
LEC, incl. externalities	81.42	89.78	161.45	97.03
LEC, excl. externalities	50.05	79.64	145.85	85.00
Externalities	31.37	10.14	15.60	12.03

The Government of Kosovo should thus consider introducing mechanisms that will allow the allocation of all environmental costs to all power generators operating in the market. As mentioned, this would be notably emission taxes on fuels or a system of pollution rights that generators that emit environmentally hazardous substances from their power plants need to acquire.

In addition to this general market distortion that will constitute a barrier once the RE targets have been achieved, some other minor barriers have been identified for current developers that result from additional costs for RE projects and uncertainties about the future project income stream and marketing options. Measures to overcome these barriers are elaborated in the following.

The application of deep connection charges has been identified as a technical barrier, which, however, has potential economic consequences, as it can negatively impact on the viability of RE projects. In any case, it adds general uncertainties for the developers, as it is not clear how the deep connection charges will actually be calculated. Details of this aspect are discussed in section 4.6.

As analyzed in section 3.5, further additional costs for RE projects result from the prescription that RE generators pay 25% of the balancing costs of the system, which impacts on the viability of RE projects. For the time being

[47] Background Paper: Development and Evaluation of Power Supply Options for Kosovo, Dec. 2011.

there is also no methodology in place for the calculation of the balancing costs (and subsequently the RE generators' share), so that developers have to make an investment decision without knowing what amount exactly they will have to pay in the future in this regard.

In order to overcome this barrier, it is suggested that the concerned article 13.3 of the Rule on Support Scheme is amended accordingly in order to reduce the share that RE generators have to pay or bring it to zero.

At the moment, RE investors cannot freely market their generated power and there is no stipulation in place that provides RE investors with information on the selling price of the electricity they generate. This holds true also for the time after the expiration of the individual PPAs. The Government will thus have to give developers some indication how and at what price they will be able to market their power in such a situation.

As an example of security of price after termination of the feed-in tariff can serve Austria. The duration of the mandatory statutory obligation to off-take electricity generated in officially recognized RE facilities at guaranteed feed-in tariffs (general mandatory contracting period) in Austria is generally thirteen years or fifteen years for solid and liquid biomass and biogas facilities. PPAs end at all events at the end of the 20th operation year. After expiry of the mandatory contracting period, the Green Electricity Settlement Centre is obliged to offer the operator of RE power plants to off-take the electricity at the prevailing market prices, less the balancing costs, for an indefinite period of time.

In Kosovo, in previous versions of the Rule on Support Scheme, RE projects would be remunerated based on Weighted Average Power Purchase Price after termination of the PPA under the REFIT. Until the power market is fully opened, it can be a solution to revert to the previous stipulation where Weighted Average Power Purchase Price was in place in order to give RE developers clarity on further income for the project during the remaining project lifetime.

In addition, a schedule for opening the market including the possibility to sell power which provides clear timelines would be beneficial to provide certainty to RE investors beyond the term of PPA. The stipulations of the new Law on Energy Regulator 05/L-084 are a right step in this direction.

For the time being, customers in Kosovo are also not able to exercise their freedom of choice for power supply. Some customers may wish to purchase "green" power i.e. electricity from RE plants for reasons of environmental consciousness or, when it comes to commercial customers, to enhance their environmental performance. Such kind of demand might create an additional momentum for the deployment of renewable energies independent of public support means. However, experience from other countries over the past twenty years has shown that demand for green power rarely surpasses a share of a few percent in the power market, thus having only limited impact on the deployment of RE projects, so that this is not a matter of urgency in Kosovo. In the medium and long term, the Government of Kosovo should, however, consider implementing switching procedures.

4.3 Strengthening the Legal and Regulatory Framework

As concluded from the analysis of the legal framework in Chapter 3, this framework is by and large a reasonable basis for the development of renewable energy in Kosovo and does not constitute a barrier per se for such development. At the lower regulatory level, however, the system contains a number of individual elements that in fact hamper or can hamper developers in their investment decision and thus mean a barrier for them. Recommendations for remedying these elements are unfolded in the following; the first three of them address barriers that are considered as being of "high importance".

- Small generators in Kosovo have to go through the same authorization process as larger power plants. Experience from several EU member states, which have introduced different types of simplified procedures, show that specific, streamlined procedures for small scale projects can remove barriers for these projects and thus promote their implementation. It is thus recommended that secondary legislation is adopted that provides for simplified authorization procedures for small plants, as laid down in article 16.2 of the Law on Energy and article 43.4 of the Law on Energy Regulator. A capacity smaller than 100 kW should be considered as "small" in this regard, using the same scale like for the EIA requirements. Such a simplified approach could also be implemented through a "notification procedure", which means that approval is considered granted upon notification as long as the projects follow the criteria for the procedure; such an approach is applied in a number of EU countries.
- There currently is a limited lease period for public land applied by the Ministry of Agriculture, Forestry and Rural Development as well the limitation of the area of public land for RE projects available without a tendering process. To overcome these barriers, lease terms shall correspondent to usual economic lifetimes of RE power plants and the project area should be in line with the area required for proper project design. It is thus recommended that the Ministry considers amending secondary legislation in order to extend the lease term for public land from the presently 5 years to at least the terms of the PPA and the REFIT, preferably, however, to 15 or 20 years, and the area to be leased, without tender, to more than the presently 5 hectares. Adoption of such measure would ease the process of project development and the Agency of Forestry would not be obliged to go through a tender process. The tender for acquiring public land managed by the Agency of Forestry is not recommended for RE projects, especially when the developer has identified the site, has already done the measurements on a site and has developed necessary studies for the project.
- Concerning environmental legislation two important amendments are required. First, the duration of the environmental permit falls short of the period for which the feed-in tariff is granted, so that an amendment shall be made in the Law on Environmental Protection (No.03/L-025) and in the Administrative Instruction (No.25/2012) on Environmental Permit, by which the validity of the environmental permit is extended to at least 10 or 12 years, as the case may be determined by the applicable term of the feed-in tariff. Secondly, the

criteria laid down in the Law on Environmental Impact Assessment that determine whether or not an EIA is required are not clear and differ. Therefore, Annex III of the Law should be adjusted accordingly, in order to give clarity to decision makers concerning the need for an EIA.

- The Rule on Authorization and the Rule on Licensing are not properly aligned in their procedures. Under the two rules the developers are required to submit almost the same documents to ERO in order to obtain the authorization for the project on the one hand and the generation license on the other. ERO should streamline these processes by ensuring that the documents provided in the earlier process shall maintain their validity in the subsequent process when the license is granted, and by specifying which additional documents are needed for the license that are not in advance requested during the authorization process. It is also conceivable that the generation license is granted automatically to the holder of a final authorization, if the holder can prove that the RE plant has been built exactly as approved in the final authorization.
- In the Rule on Authorization, the documents required from the developers for preliminary authorization are not clearly defined. Moreover, there are inconsistencies between the documents required for preliminary authorization and for final authorization in the Rule, and there is also a lack of clarity on financial requirements for investors. The Rule on Authorization should thus be amended in such a manner that it (a) contains a sound and unambiguous list of the documents necessary for submittal for preliminary authorization, (b) eliminates any discrepancy and inconsistency between the documents required for preliminary and for final authorization, and (c) provides clarity on the financial requirements for investors. Such amendments will increase the predictability of the entire process for developers and avoid possible confusion.
- As law generally allows the use of tendering procedures for the implementation of RE projects, if the feed-in tariff scheme were declared failed by ERO, and some developers might wait for such tendering processes, we recommend that ERO should communicate clearly that they regard tendering only as an ultimo ratio and that it is not envisaged to apply it for the time being and in the foreseeable future. In such communication ERO may best provide a date (say 2019), before which they would not consider at all to issue the written determination on the failure to successfully build new generation capacities.
- So far no Certificates of Origin have been issued in Kosovo. In order to overcome this, ERO should put in place the Register of Certificates of Origin in line with Rule for Establishment of a System of Certificate of Origin for Electricity Generated from RE.

A further barrier identified is the discrepancy between some stipulations of the draft Power Purchase Agreement for the purchase and sale of electricity from RE plants under the REFIT scheme and the energy legislation. As the PPA is a tool for regulation by contract, we see it as part of the legal and regulatory framework and thus comment in the following on the cases of observed non-compliance with legislation. The standard PPA shall there-

fore be modified in these points and adopted by ERO in a form compliant with legislation applicable in the energy sector, so that it does not put any additional burden on RE developers beyond what is requested by law:

1. The references in the draft PPA to the Rules should reflect the Rules which are in force (e.g., Rule on Authorization and Rule on Support Scheme).
2. Article 3.1 of the PPA (commencement of the PPA) is not compliant with deadlines for commencement set in Article 12 of the Rule on Support Scheme.
3. Article 3.2 of the PPA should reflect Article 11 of the Rule on Support Scheme regarding the duration of the PPA for 10 years, respectively 12 years.
4. Obligations for DSO as provided in Article 5.2 for the connection agreement and Article 7.5 for metering should apply also for the TSO.
5. Article 7.2 of the draft PPA requires the Generator to "at its own expense, procure the installation of metering and communication equipment" which is not in line with Article 53 of the new Law on Electricity 05/L-085, where it is clearly defined that the metering devices are the property of the TSO or DSO.
6. Balancing Responsibility, as per Article 13 of the PPA is correctly set by providing reference to Article 16 and 17 of the Market Rules, however the PPA does not adequately reflect balancing responsibility in case KESCO is requesting to recover any imbalance costs from the generator and the Renewable Energy Fund (REF) operated by the Market Operator.
7. Article 16.3 of the PPA requires both Parties to maintain full and accurate records of any invoicing and other data including any data which may be requested by any Competent Authority as might be required by law, for the duration of PPA and for a period of 2 years following its expiration and/or termination. As the Law on Electricity requires that all data referred to in Article 16.3 should be kept at least 5 years, the PPA should also require 5 years from the date of invoicing.
8. In Article 25.1 of the PPA KESCO is prejudging the legal status of the generator, which may or may not be a joint stock company. The law on Energy Regulator and the Rule on Authorization requires from energy enterprises to be registered in compliance with the Law on Business organizations, hence the generator is free to choose the legal status.
9. The Arbitration clause used in Article 36.5 of the draft PPA sets responsibility of settlement of disputes in accordance with the UNCITRAL arbitration rules. It defines the number of arbitrators, language of arbitration and place of arbitration, but the clause regarding the law that will be applicable in case of arbitration is missing. The governing law in accordance with the Article 35 of the PPA is the laws of the Republic of Kosovo, however the arbitration clause is missing such disposition.

4.4 Streamlining the Authorization Process

Chapter 3 has demonstrated that a complex, sometimes confusing, lengthy and uncoordinated authorization and permitting process constitutes one of the most important barriers for developers. Therefore, the individual steps of the process and its overall handling and coordination need improvement.

It has been found that at the starting point of the permitting process, no clear guidelines, or no guidelines at all, are available for developers to lead them through the process. A first measure is thus the compilation and wide publication of clear and comprehensive guidelines on the whole authorization procedure and all related stipulations for effectiveness of the authorization process. Such guidelines should include simplified information on different licenses and permits for different technologies, duration of each of the licenses and permits and terms for renewal if applicable, authorities to be addressed, the related sequence of necessity, information on specific requirements to be prepared for different authorities depending on the technology, etc.

Such guidelines are used in many EU countries and have proved an efficient way for preparing and smoothing the application process of developers:

- In Austria, guidelines to assist with the course of authorization procedures are available on the websites of respective federal state government. These guidelines contain an overview of the authorization requirements (according to federal and regional provisions) as well as the general legal conditions, standards and directives. The main section consists of a comprehensive description of the project documents necessary with explanations of each special field and provides general details on the design, location and planning of the plant[48].
- In Croatia, availability of information on the processing of applications for the issuance of authorizations, certificates and permits is ensured through the internet application of the Register of Projects and Plants (RESCPP), which is found on the website of the Ministry of Economy. Next to information on types of decisions and date of execution of decisions for projects, the website provides detailed instructions and a list of steps in the development of projects for officials in administrative bodies, project leaders, project designers and investors. In addition to the instructions, users also have access to detailed flow charts which, like the instructions, are divided based on the type of plant, thereby allowing for a simple overview of procedure by the type and capacity of plant. The website further contains other useful information, such as a comprehensive overview of all relevant legal regulations, instructions for project applications and European and national energy policy, particularly RE policy.

[48] National Renewable Energy Action Plan 2010 for Austria.

- In Denmark, two state secretariats were established: The Wind Turbine Secretariat and the Biogas Secretariat, whose job is to advise local authorities on questions of planning for wind turbines and biogas installations respectively. The Energy Agency has the most comprehensive website, which provides guidance and information on all the requirements necessary for obtaining authorization etc. Furthermore, the Energy Agency offers actors telephone advice, or if necessary a meeting, to clarify any areas of doubt in connection with an application[49].
- In Italy, the guidelines for the regions (as provided for by Legislative Decree No 387/2003) on issuing authorizations for power plants aim at ensuring uniform treatment across Italy, fixed deadlines for each stage, and a more transparent process. The regions should adapt their respective rules within ninety days of the guidelines' entry into force, otherwise the national guidelines will apply. According to the guidelines, the regions or provinces must use their own websites or other means to publish information on the authorization regime for the various types of plant, their capacities and locations, the authority responsible for giving authorization, the documentation to be attached to the application and the methods and deadlines for concluding the related procedures, and provide suitable application forms for single authorization. Equally, lists and plans of areas and sites declared unsuitable for RE will be published on the websites of the regions and local authorities concerned. The public authorities may use these communication and publicity methods for all authorization procedures for the various types of plant and network they operate, in line with the regulations in force.

As can be seen, there is an increasing use of internet platforms in most countries for the purpose of disseminating information and guidelines, and this mode of communication is considered also the best way to be applied in Kosovo. It can be complemented by printed guidelines in a summary format, leaflets and similar printed material disseminated by the concerned authorities.

Internet platforms are also used in some countries, such as in Portugal and Hungary) for real online applications of the developers. However, in a situation with complex authorization processes and procedures, such as in Kosovo, the possibility to submit an application for a RE project online does not appear a promising approach. Rather, this might even contribute to further confusion and delays and is thus not recommended in Kosovo for the time being.

Some countries also try to streamline and accelerate the authorization process through the setting of deadlines for intermediate stages and/or "fast track licensing". A notable example is Greece, where Law L3851/2010 sets mandatory deadlines for various authorization approval steps, such as production license, environmental terms approval, terms and conditions for ac-

[49] National Action Plan for Renewable Energy in Denmark. June 2010.

cess to the grid and installation license. Moreover, Greece has also put a special licensing process, called “fast track licensing” in place for large-scale renewable energy projects that provide local employment benefits and attract substantial capital (more than € 200 million or more than € 75 million, if at least 200 new jobs are created).

Also in Germany licensing procedures are speeded up on the basis of the so-called concentrating effect of Article 13 Federal Pollution Control act. This concentrating effect on the one hand ensures the coordination of the different responsible authorities and on the other hand simplifies the procedure, as the RE developer in general has to apply for a license only at the competent pollution control authority.

While such measures with mandatory deadlines and fast track procedures are in general also conceivable approaches for Kosovo, it appears somewhat premature to apply them already at the present. Initially it is more important to get the ordinary authorization process on the right track and to reach a decent level of handling capacity at the various authorities involved. Otherwise the administration might be overloaded with additional tasks and parallel processes, and any delay in a fast track undertaking could further undermine investors’ confidence. Moreover, in some cases deadlines in this regard already exist in Kosovo. Thus, the introduction of such measures in Kosovo could be reconsidered at a later stage.

The most essential barrier that was identified in the permitting process is the lack of coordination of the various steps and different authorities involved in a very complex and often confusing application and authorization process. Therefore, the establishment of a one stop shop is regarded as one of the most important means to streamline the permitting process for applicants.

As international experience shows, the aim of such a one stop shop is to provide a range of services to a multitude of clients based on their needs, but two tasks are usually outstanding activities. This is on the one hand the provision of information to developers and investors, and on the other hand the coordination of the authorization work of the various entities involved, so that the developer would have, as the name says, only one entity to deal with in the course of his application. Many countries have established one stop shops for renewable energies that have shown positive outcomes and demonstrated to be an important factor in assisting in the authorization process of RE projects. Some examples are outlined in the following:

- In Austria, for instance, only one authority acts as a contact point for authorization procedures in order to optimize administrative tasks[50].
- In Denmark, the competences for making decisions on authorizations, calculation of support, etc. for energy installation is centered in one national authority, the Energy Agency. There is usually no need to facilitate a horizontal coordination. If such a need arises in exceptional situations, this will usually be undertaken by the Energy

[50] National Renewable Energy Action Plan 2010 for Austria.

Agency, so that applicants do not themselves need to obtain the results of consultations, authorizations etc. from other state authorities. The Energy Agency is also the EIA authority for the project and helps to simplify site identification processes for RE projects. Once the Energy Agency's decision is reached, this is cleared with other involved authorities so that there will be normally no need for the applicant to obtain further permission from other authorities[51]. With this approach, Denmark is hailed internationally as being a global leader when it comes to streamlining of RE project development, and the one stop shop approach has significantly reduced the lead time for RE projects in the country.

- In Italy, horizontal and vertical coordination between the administrative bodies involved in authorization procedures is ensured by convening the Services Conference, which is always used for RE power plants that cannot be implemented by giving notification or a commencement notice. This conference has the same purpose as a one stop shop, since it allows coordination, in a single procedure and for a single party, of all the assessments and actions required for plant installation. This very important tool, introduced by Law No 241/1990, brings together all the administrative bodies and entities potentially related to the evaluation and authorization of the project in the same place, in order to examine all the interests at play at the same time. The reasoned decision which concludes the procedure takes into account the prevailing opinions expressed. As part of the Conference, a single authorization is issued for the construction and operation of RE plants and the connected works and essential infrastructure which is defined as being in the public interest, necessary and urgent. The outcome of the environmental impact assessment (EIA) applicability screening process for the project is also considered at the Services Conference, as is the result of the assessment itself, including the impact assessment if required. The single authorization replaces to all effects any authorizations, licenses, clearance and consent documents under any name which are the responsibility of the administrative bodies involved. In general, there are exceptions for licenses to divert public water supplies or licenses to use geothermal resources, which must usually be obtained outside the Service Conference process.
- In Serbia, in March 2015 a one stop shop was introduced, and permits are issued electronically within much shorter period of time (e.g., construction permit is issued within 5 days from the application date).
- In the Netherlands, a one stop shop system for RE developers has been put in place and has led to significant decreases in the lead times of projects.

The interviews with developers showed that RE developers are very supportive to the idea of a one stop shop, as can be seen in Figure 17. They

[51] National Action Plan for Renewable Energy in Denmark. June 2010.

expect that a one stop shop would be helpful, if it acts as a coordinating, orienting and easement mechanism. It is worth mentioning that also all interviewed authorities underlined the importance of a better coordination of the permitting procedures for RE projects between all involved parties. A general comment stated frequently by RE developers was that a better coordination of all institutional stakeholders, coordination between individual permits, and consultation of MESP with Agency of Forestry and MED regarding RE projects are needed.

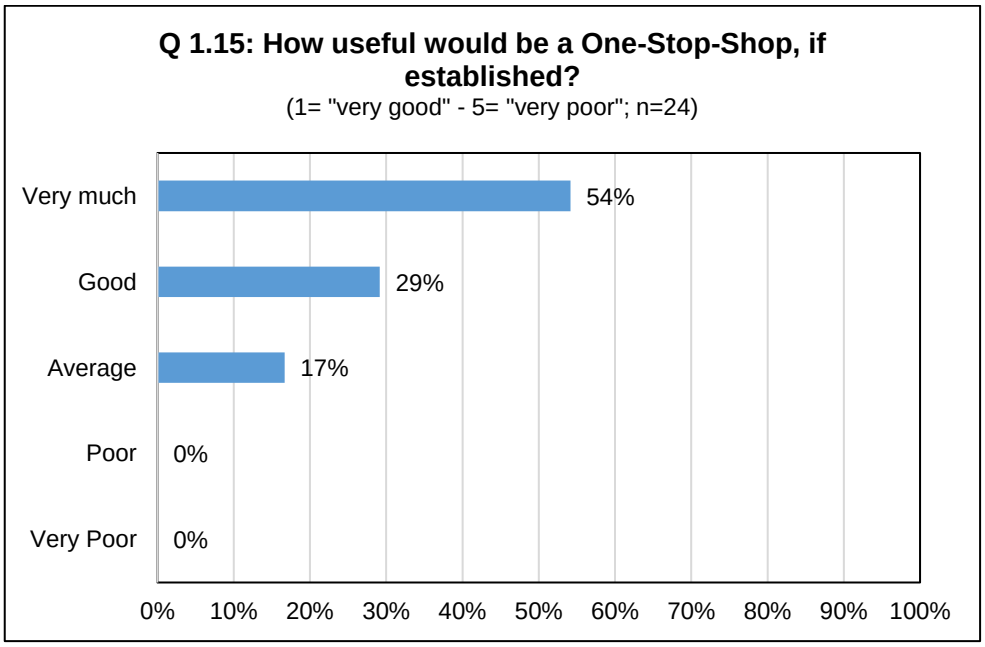


Figure 17: How useful would be a One-Stop-Shop, if established?

We note that the National Council for Economic Development has already approved the establishment of a one stop shop. A “One Stop Shop Committee” has been set up with the task of working out details. Their work is in progress. Our following elaborations might add to this process.

Based on international experience and the specific needs in Kosovo, a one stop shop for RE projects in Kosovo should take over several major tasks:

- Provide a central point of information supply on any matters concerning RE development in Kosovo, including identification of suitable sites
- As an element of the information task, prepare, maintain and disseminate a project toolkit and the guidelines described above
- Support project developers in achieving all relevant permits by making them conversant with the variety and sequence of required procedures that developers need to go through and guide them through the permitting process
- Coordinate administrative procedures between different public bodies on behalf of the developer and streamline and refine administrative procedures
- Support municipalities in planning and infrastructure matters and train municipal and other public staff

- Enable the exchange of views between members of the technical working groups and institutions involved in authorization procedure and discussions on particular matters of the authorization process and get their feedback on internal documents; to this end a web site might be created that will be available to concerned groups.

The one stop shop should also filter projects in advance. Once an application is filed at ERO, ERO (with the assistance of a one stop shop) shall consult initially with the Municipality, MESP and relevant grid operator before issuing preliminary authorization.[52] MED should consider providing the obligation for consultation when adopting secondary legislation for the role and responsibilities of one stop shop.

A one stop shop might be set up in different ways. With a working regulatory framework in place and a public administration able to put this framework into action – as it is the case in Kosovo – it is important that the one stop shop does not create an additional administrative barrier which RE developers have to overcome. For these reasons, we recommend that no decision power from individual permitting authorities shall be transferred to the one stop shop. Thus the different elements of authorization procedure will remain with the individual authorities responsible for them by law or regulation. This will also allow keeping the one stop shop quite lean and would avoid some resistance the establishment of a one stop shop may otherwise face from established authorities. In summary, a one stop shop should serve following purposes:

- A coordinating body between different entities involved in the authorization procedure;
- A place to get information about renewable energy in Kosovo.

We expect that a one stop shop leads to better coordinated administrative procedures during authorization, avoiding requiring redundant information from RE developers thereby shortening the authorization procedure and making the procedure less costly both for RE developers and public administration. At the same time, transparency could be enhanced providing RE developers with clear information on the required documents as well as the status of their application. By that, confidence in the regulatory framework increases which in turn would allow providing crucial financing at lower costs. Further, a one stop shop allows public administration to monitor project applications more easily so that public administration can provide better guidance to RE developers.

An intermediate step, while work of the Committee is in progress, would be the establishment of an inter-ministerial group involving all concerned au-

[52] Examples: The Municipality should inform if the project fits within the Municipality development plans and if the relevant permits can be given. MESP should inform if the project is allowed by the primary legislation, does not conflict with any other project of higher interest. Relevant permits can be provided if the applicant completes the legal conditions. Network operator would inform on the connection possibilities.

thorities. This group should meet regularly (say every fortnight) to coordinate on the ongoing applications. Such a lean approach does not require any additional resources besides organization and documentation of the meetings. However, it will directly ease and accelerate ongoing application procedures, and facilitate processing in individual entities.

Lack of coordination has been observed in the identification of barriers not only between the various public authorities involved in the authorization process, but also within public entities, notably the MESP. Since MESP is the competent authority for issuing different permits, it shall harmonize the different processes time-wise and concerning data requirements within its organization. One point of contact and one data base at MESP for different permits should be established. Single data base of applications would help RE developers not to send the same documents several times to the same organization. To this end an intra-ministerial group involving all concerned departments should be established. This group should meet regularly (say every fortnight) to coordinate on the ongoing applications.

A general quite effective supporting measure for streamlining the individual steps of the permitting process and, in sum, the entire process is training of the personnel involved in the process and improvement of the training curricula. It is recommended that an approach to this end comprises incorporation of specifics of RE permitting processes in the ordinary curriculum of public staff, when undergoing their basic education, as well as specific training courses for the public administration staff already working in the related authorities that issue permits. Such training courses are recommended particularly for staff of the municipalities. Training should comprise not only the permitting processes as such, but also provide basic general information on RE technologies to allow the trainees to better understand the background of the application. Authorities should also be entitled to acquire the necessary external expertise, if particular aspects of an application for an RE project cannot be handled adequately by internal administrative staff.

Internationally, there is plenty of experience that shows the advantages of proper training for the enhancement and strengthening of permitting processes, and there are also examples on how specific RE authorization processes can be improved:

- In Austria, in order to ensure the quickest possible handling of official procedures, official experts are trained through practice-orientated training and advanced training. Specialists in several fields are supported through the training of official experts for particular tasks (plant-specific official experts, official experts for consolidated authorization procedures, etc.).
- The Walloon Region in Belgium subsidizes the annual employment of one or more consultants for regional and urban planning, who deal among other things at the level of local authorities with administrative authorizations. The subsidy is granted subject to the condition that the consultant undergoes an annual training provided by the Permanent Conference for Territorial Development in cooperation with a University. A successful training module has shown to be ‘Sustainable Urban Planning and Energy - What is the Role of the Consultant?’.

- In Croatia, special training for persons handling applications in the procedures of issuing documents for renewable energy installations is included in the state examination process. All state services have the obligation to pass the state expert examination.
- In Czech Republic, training for granting of licenses is organized directly by the Energy Regulatory Office for its employees. For granting of authorizations, training is provided by the Ministry of Industry and Trade for its employees. For issuing of the environmental impact assessment statements, training for its employees is organized directly by the regional authorities or the Ministry of the Environment. The Ministry of the Environment also launches information campaigns for public administration employees who issue decisions on renewable energy installations, including the publication of suitable publications and organization of seminars at the regional level and training sessions at the municipal level. It also issues a white paper for its employees.
- In Greece, the one stop shop agency of the Ministry of the Environment, Energy and Climate Change, in cooperation with Centre for Renewable Energy Source and Saving carried out a series of seminars for local officials on the changes introduced by L3851/2010 regarding licensing procedures.

Better educated and trained staff of public authorities will not only improve the quality of the permitting processes and accelerate the processes and in this way contribute to reducing costs and efforts of the RE developers. It will, moreover, increase the trust in the regulatory framework and its longevity and efficiency. This will improve the overall perception of the authorization process, possibly also amongst banks and other financiers of RE projects, and can have a positive impact on the provision of financial means for renewable energies. It would also be a contribution to the improvement of the overall investment framework.

There are, in addition, a few other supporting measures that could possibly accelerate preparation of the documents required for the authorization process and thus the entire authorization process. This includes giving up the requirement that only entities licensed in Kosovo are entitled to carry out EIA studies, and further abolishing the prescription that project designers need to be licensed in Kosovo. This would widen the group of experts that could carry out the required studies and work and in this way reduce cost and time.

4.5 Facilitating Financing

To facilitate financing for RE projects in Kosovo, we recommend that two broad groups of measures are implemented. The first is that concrete steps are taken to overcome the financial constraints and barriers identified in Chapter 3. The second group of measures relates to supporting instruments for broadening possible sources of finance and easing conditions of financing.

As mentioned, some measures recommended under earlier categories of barriers are expected to also have an impact on the possibilities for developers to acquire financing from banks. They cover such aspects that align

provisions of the regulatory framework with the given technical conditions of the RE projects and include:

- Extension of the term for the use of land that is leased by developers from the Ministry of Agriculture, Forestry and Rural Development (MAFRD) beyond the currently applicable period of five years and alignment with the term of the PPA.
- Extension of the term of the environmental consent beyond the currently applicable period of five years and alignment with the term of the PPA.

Such adjustments to fundamental contractual and authorization documents that will lead to a match of the term of the PPA with these documents can be easily arranged through amendments to the legal and regulatory framework, as shown above. Such alignment will not only reduce the overall level of uncertainty for the developers, but also in particular the risks perceived by institutions that lend money to developers, as factual risks for the stream of revenues and thus the ability of the borrower to meet his debt service obligations as a result of possible discontinuation of the project are eliminated. This will decrease the unwillingness of banks, should there be any, to provide loans to developers of RE projects.

The analysis of barriers has shown that developers approaching banks for financing of their project can often not provide sufficient securities to the banks and do not dispose of reasonable amounts of assets that they could use as mortgage for the loans. It is therefore recommended that developers with sound projects obtain guarantees from state organizations.

State guarantees may ease the access to capital to kick-start markets. The Kosovo Credit Guarantee Fund (KCGF), established by Law No. 05/L-057 on the Establishment of the Kosovo Credit Guarantee Fund and in force since January 2016, might be an appropriate tool to provide such means. KCGF can provide guarantees to enterprises with less than 250 employees, which met minimal conditions as defined in Article 6 of the law. Therefore, we recommend that the Kosovo Credit Guarantee Fund is made fully operational and is allowed to provide guarantees for RE projects, possibly on a priority basis. The Kosovo Credit Guarantee Fund will provide banks and other financial institutions with partial loan guarantees (up to 50% of the loans) to encourage increased lending to qualified borrowers. Through the guarantees the banks can reduce their risk exposure for RE loans substantially, which increases their willingness to accept a project for loan financing. The KCGF will be capitalized with funding from donors and the Government of Kosovo, through the sponsoring Ministry of Trade and Industry (MTI).

A further barrier identified for financing is the lack of expertise of bank staff in RE projects and their authorization process as well as limited experience in handling and assessing applications for RE projects submitted by developers. It is therefore recommended that specific training and capacity building is provided to staff of banks in general and to those banks that have expressed a higher willingness to lend money to RE developers in particular.

Such specific training and capacity building can best be provided by local consultants, if they are fully knowledgeable of the RE sector, the various RE technologies, the concept of project finance and the permitting requirements and processes. As it can be expected that local consultants did not have the opportunity to collect sufficient experience in all these fields, it is further recommended that (local) training teams are complemented with foreign experts that possess the specific know–how and experience.

For financing the cost of experts for such training the Government of Kosovo should try to secure financial means from international financing institutions such as the World Bank, EBRD, KfW or similar. Such training for banks is, for example, often provided in Eastern Europe and CIS countries by EBRD in the framework of EBRD's projects on sustainable energy financing facilities (SEFFs). Examples of EBRD projects with training activities for banks comprise USELF (Ukraine Sustainable Energy Lending Facility) and TurSEFF (Turkish Sustainable Energy Finance Facility) where technical assistance included training of partner banks' staff in sustainable energy lending and project identification and evaluation. A further example is the Bulgarian Energy Efficiency and Renewable Energy Credit Line (BEERECL) that required the development of a whole new infrastructure in partner banks to handle preparation of instructions and training for loan officers.

It is recommended that the training comprises such subjects as basic information on the various relevant RE technologies, RE policy in Kosovo, specific authorization procedure and requirements in Kosovo, the concept of project finance, risk exposure in financing of RE projects and related risk perception by international banks and financing institutions, appraisal of RE projects and related due diligence techniques to this end. In addition, specific needs of the trainees should be identified in advance, and the related topics should be added to this list of subjects. Information on successfully implemented pilot projects in the country can round up the program of such training workshops. It is further recommended that a short monitoring exercise for the evaluation of the training results is undertaken.

As a lack of know-how and experience of the developers has also been identified as a barrier for financing, since it leads to low quality of the applications submitted to the banks and the supporting documents provided, similar training programs should be provided to (potential) developers, their staff and their consultants. Financing of these training workshops could again be sought from international financing institutions, such as EBRD, which in fact has also provided training to developers and their staff and consultants in the framework of the broader SEFF projects mentioned in other countries. Funding could, however, also be looked for locally, e.g. from industrial associations or energy related associations. The subjects to be included in training for developers would be widely the same as for banks, however with a shift of the focus on RE technologies and the preparation of quality documents for loan application.

To overcome financing barriers and poor access of developers to capital, support mechanisms could be applied that decrease the amount of equity required for a project as well as the amount of loans from the commercial banking system. Such support schemes are usually provided by state or parastatal organizations.

Major instruments of the support schemes comprise direct subsidies, interest free loans, low interest loans and tax privileges and exemptions. While direct subsidies and concessionary loans might be beyond the capability of state organizations in Kosovo, MED and the Ministry of Finance may consider to apply a zero rate of the custom tax on that RE equipment that is not yet included in the zero rate scheme[53], in line with international practice.

Such a measure would directly lower investment costs and thus ease financing. It would, however, also increase the overall viability of affected RE projects, which in turn would make the projects more easily acceptable for the banks.

Several EU Member States are addressing financing RE projects and provide support schemes. Table 18 depicts a number of examples. However, some countries also try to find alternative ways to finance RE projects. In Estonia, the Ministry of Economic Affairs and Communications, the Development Fund and the Environmental Investment Centre are working on the identification of barriers for alternative financing models for RE projects, e.g. involving local population, as well as the possibilities to minimize such barriers. Denmark involves the local population for participation in such projects within the framework of the purchasing rights scheme which makes it mandatory to offer at least 20% of the shares in a wind turbine project to local residents. However, for the time being such alternative financing schemes of renewable energies are not considered an option for Kosovo, as the population at large does not dispose of sufficient amounts of capital to finance such projects, nor is it expected that sufficient interest for such projects could be raised amongst the population.

[53] So far photovoltaic panels are exempted from customs duty according to Law No. 04/L-163 on Goods exempted from Custom Tax and Goods with Zero Rate of the Customs Tax, adopted on 26 December 2013

Table 18: Comparison of support mechanisms for RE in selected countries

Country	Support mechanism	Issuing institution	Eligible projects	Amount	Addressees	Distribution of costs
Croatia	Renewable energy loan	Croatian Bank for Reconstruction and Development (HBOR)	Aiming at environmental protection, all RE technologies eligible	Minimum loan amount: 13,300 €; is not subject to a maximum; loan covers up to 75% of estimated investment value; interest rate (currently 4%) is variable and mainly subject to decision of HBOR	Local and regional governments, utilities, trade companies, others	Costs are borne by the HBOR which is fully funded by state
	Interest-free loan for RES project	Fund for Environmental Protection and Energy Efficiency	All RE technologies	Defined in the tender in conjunction with budget of current year	All public and private legal entities and natural persons with residence, branch or head office in Croatia	Loans are funded by national budget and voluntary donations
Poland	Low interest loan to support purchase and installation	National Fund for Environmental Protection & Water Management	All RE except geothermal energy	Overall budget of program: 95 €m for 2014-2020. Loan cover percentage of investment's eligible costs: wind max 30%, PV max 75%, biogas max 75%, biomass max 75%. Loan amounts to 452,000-9,033,000 €. Interest rate: WIBOR 3M – 100 base points but at least 2%. Max duration: 15 years.	Enterprises	The means provided by the National Fund to promote renewable energy are made up of compensation and penalty fees paid by electricity producers and suppliers that have failed to meet their quota obligations. The costs of these fees are passed on to the end-users
	Exemption of RES electricity from consumption tax	State	All RE technologies	Consumption tax on electricity: 4.5 €/MWh	Generators and suppliers of renewable electricity	Costs are borne by state
Romania	Program for the Promotion of RES Generation	Romanian Environmental Fund	All RE except biogas eligible	Maximum subsidy: 50% of eligible project costs, maximum 6.6 €m per project	RES generators	State bears costs
Slovakia	Investment grants under Operational Program Environmental Quality	European Regional Development Fund (ERDF)	Installation of small PV systems and wind turbines up to a capacity of 10 kW	Determined in the individual call for applications	Natural or legal persons authorized to conduct business, associations, local government bodies or non-profit organizations	15% of total amount of subsidies funded by state, 85% by ERDF
	Exemption of renewable energy from	State	All RE technologies	Tax on electricity: 0.132 €ct/kWh	Every legal entity or natural person	Costs are borne by state

Table 18: Comparison of support mechanisms for RE in selected countries

Country	Support mechanism	Issuing institution	Eligible projects	Amount	Addressees	Distribution of costs
	excise tax					
Slovenia	Low-interest loans awarded by tendering	Environmental Fund of the Republic of Slovenia (Eko sklad)	All RE technologies	A total of 8 €m for residents. For private individuals loan ranges from 1,500 to 20,000 € or 40,000 € in special circumstances. Max credit period: 10 years. Min interest rate: three-month EURIBOR rate plus 1.5 percentage points.	All natural persons with place of residence in Slovenia	Loans are funded by national budget and voluntary donations
	Subsidies, state aid and "de minimis" aid for investment projects through tendering	Ministry of Infrastructure	All RE technologies	Support mechanisms are intended to cover some of the costs related to the use of RE. Subsidies: max 50% of eligible costs of investment costs, state aid and "de minimis" aid: max 30%	State aid: companies that intend to make an initial investment in energy efficiency, renewable energy and CHP	The Republic of Slovenia provides funds for the subsidy scheme. In case of tenders run by state owned energy companies the burden accrues to the company (partially) itself.

Source: RES-legal.eu.

4.6 Overcoming Technical Barriers

As shown in Chapter 3, KEDS uses an outdated methodology for connection. In order to enhance security for developers, it is necessary that a new methodology is elaborated and adopted. In fact, KEDS has already prepared a Draft Methodology for connection to the distribution grid. This methodology is currently in the approval process. As it was found to not fully meet the intended purpose, the methodology has entered a process of review, modification and update. It is therefore recommended that the process for updating and finalizing the method shall be speeded up and that the methodology shall be adopted as early as possible. Adoption of the methodology will decrease uncertainty for developers who want to have clarity about the conditions for connection in advance. As the methodology is to include regulations for payment for such connection, it is even more important for the developers to have clarity also from an economic point of view.

The use of deep connection charges to developers has been identified as a further barrier. Deep connection charging is particular then advantageous if new distributed power plants have to be integrated in a poorly meshed grid of wide spatial extent. In such a case the deep connection charging would incentivize project developers to site the power plant at a spot with minimal overall integration costs. However, the Kosovo power grid is neither poorly meshed nor has it a large spatial extent. Alternatively, a shallow charging methodology can be applied. A shallow cost structure indicates that the plant operator has to bear only the costs for infrastructure connecting its installation to the grid. Costs for grid reinforcement and expansion have to be paid or circulated by grid operator. We recommend that ERO approves shallow charging methodologies for connecting RE plants to transmission and distribution grids after making financial analysis of such modification. We expect that costs of necessary grid enforcement, i.e. the costs the grid operator have to bear in a shallow connection charging scheme, will be low if at all any costs occur, because the current well meshed grid is well prepared to accommodate at least the capacity set in the targets of the REFIT scheme.

A review of the extension needs of the Kosovar grid reveals that the present grid is tightly meshed and well suited to accommodate the amounts from RE according to the present governmental targets (Fichtner, June 2016). Consequently, one may expect only little additional costs, if at all, from grid enforcements due to RE integration. Further, there is no need to provide incentives for siting of RE plants, which allows cost minimal grid enforcement.

Shallow cost structure is widely applied in EU countries and is implemented, amongst others, in Austria, Bulgaria, Denmark, Germany, Spain, France, Austria, Poland, Romania, Portugal, Finland, Greece, Ireland.

- In Austria, for example, the costs of the grid connection are borne by the energy producer in the form of a one-off payment to the distribution grid operator. The costs of grid reinforcements, improvements, upgrades and other similar costs are borne by end-customers and grid operators by way of an annual payment.

- In Denmark, the owner of the installation is solely responsible for costs associated with connection to the 10-20 kV network, or if a higher level of current is desired, the costs associated with connection to this level of current. Additional costs, including network reinforcement and expansion are borne by the network companies.
- In France the division of connection and technical adaptation costs between producers and network managers corresponds in principle to the concept of "shallow cost" expressed in Article 4 of the Law of 10 February 2000. In this context, upstream network reinforcements are covered by the network use price and the producers finance the works created for their connection, together with extensions.[54]

Concerning infrastructure, no serious problems have been observed, and the minor barriers identified are often of a physical nature, which can hardly be influenced by Government action and policy. Should a one stop shop be established, this entity, in the course of its overall information task, might provide additional information on possible suppliers and EPC contractors in order to widen the choice of developers and possibly enhance competition, and also information on heavy equipment required for project implementation. However, this would most likely be only a marginal aspect, as developers have found to be able to identify reputable suppliers, partners and equipment. The Government, when improving the road infrastructure, should also take specific requirements into account in areas with potential wind sites, but it is more than obvious that the specific development of road infrastructure just for RE plants cannot be justified, if it cannot be combined with other purposes.

4.7 Creating Public Awareness and Ensuring Social Acceptance

A vast deployment of RE requires a high social acceptance combined with a wide recognition of RE. Due to their distributed nature RE are more visible than centralized power plants. Further, distributed generation involves more stakeholders and decision makers than centralized power generation. At early stages of RE market deployment like it is the case in Kosovo, public awareness and social acceptance are usually a minor barrier if at all. However, building up social acceptance and public awareness is a long-time venture. It is thereby crucial that the public image of RE is not spoilt in early stages of deployment. We thus recommend to put some efforts in campaigns to raise public awareness and social acceptance. Examples from many European countries prove that such campaigns are indispensable to clarify peculiarities of construction and operation of RE power plants and remove or at least smoothen doubts of different stakeholder groups regarding RE.

A good example of a currently running project in the EU is WISE Power aimed at fostering social acceptance for wind power. The main goal is a significant improvement of local engagement for RE and enhancement of

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[54] Further information on cost distribution of grid connection in various European countries can be found in (Innogate).

local community participation in the planning and implementation of wind energy projects and associated grid infrastructure. The project involves 13 European countries with different market maturity as well as broad geographical and cultural representation:

- Advanced wind energy markets: Denmark, Germany, UK, Spain
- Growth markets: Greece, France, Italy, Ireland and Belgium
- Emerging markets: Croatia, Finland, Poland, Romania.

The project involves among others wind energy associations, wind power developers, municipal and regional planning authorities, policy makers, and an international organization with experience in dissemination and capacity building in Croatia and Western Balkans (UNDP Croatia). WISE Power has a strong focus on alternative financing models by involving various stakeholders: banks, cooperatives, public and other financial institutions, and improving their acceptance of wind energy. With a strong focus on the Balkan region approaches and findings of this project might be particular pivotal for Kosovo. The project resulted in

- A monitoring tool that enables identification of project barriers, addressing of knowledge gaps and measuring of project performance;
- Social Acceptance Pathways available in 10 languages containing concrete steps for community engagement, benefit sharing mechanisms and communication on local impacts, targeted at local communities, authorities, developers, system operators, citizen groups, cooperatives and environmental organizations;

An example of a completed project in the area of public awareness of RE for power generation in the EU is the project RESINBUIL – Introduction of Renewable Energies in Building Sector. This project aimed to encourage use of small-scale renewable energy appliances in buildings, especially solar and biomass energy, in selected provinces of Spain, Italy, Slovenia and Romania. Its main target groups were local authorities, business associations, constructors, professional associations and citizens. Starting with an analysis of current development rates and market barriers, the implemented project strategy included:

1. Development of new local markets through changes of regulatory framework (e.g., local tax cuts) and commercial agreements between project developers and local banks with energy agencies as intermediates;
2. Promotion of RE by appliance exhibitions and 4-month awareness raising campaign using radio messages, local TV spots, posters.
3. (Online) training courses on RE in buildings for architects and engineers in other participating members.

Main output of the project was significant boost in rate of installment of small-scale RE applications in buildings in close cooperation with companies and local authorities. New or modified legal ordinances to support RE in buildings were adopted by conducting meetings with city council representatives and other key actors. Commercial agreements for the favorable purchase and/or installation of RE in buildings were signed.

When we appeal to the experience of individual countries, one successful project can attract attention, namely SolarLokal which is on stage since

2003 in Germany. It is the national image campaign for solar power in districts, cities and communities with the goal to increase the share of environmentally friendly energy generation. The project is carried out by German environmental association and German PV power company SolarWorld AG and supported by central organizations of local government – German rural district association, Association of German cities and German alliance of cities and communities. SolarLokal builds the positive image of solar energy in the population under the concept “Nationwide active – Individually on site”. Now 409 districts, cities and communities take part in the project. The campaign results depend wholly on engagement of actors on site. Together with districts, cities and municipalities solar energy is promoted through mass media, posters, folders and actions. District mayors are important mediators. Citizens are informed about the advantages of solar energy and get addresses of competent local SolarLokal representatives. The positive outcome of the project is the significant boost of solar energy installations all over Germany in the past two decades.

A campaign for RE-E in Kosovo should focus on two major target groups: Building developers and farmers.

Building developers. A lot of new buildings are developed in Kosovo. This is a good opportunity for building integrated photovoltaics, as this technology can more easily be integrated in new buildings than in existing buildings. When applying for building permit developers may receive a leaflet informing them about the opportunities of building integrated photovoltaics. A more comprehensive brochure may inform about concrete characteristics and economic feasibility of PV in Kosovo. Workshops in cooperation with the university architectural associations and building associations may inform further.

Farmers. Farmers are an interesting target group in two ways. On the one hand farmers may offer their land as sites for wind turbines and ground-mounted solar plants. Even smaller farms can increase their income this way. On the other hand, livestock farming may supply manure for biogas facilities. Also other residues like straw may serve as a fuel for RE-E plants. We recommend that a series of articles is launched in journals and newspapers published by farming associations or similar widely spread among farmers. These articles should be supplemented with some brochures describing opportunities and characteristics of RE in more detail and providing also examples of successful RE developments.

The campaign might be coordinated through the envisaged one stop shop but should be conducted in close cooperation with the relevant ministries as well as stakeholder associations to allow for maximum efficiency. It is very important to provide the strong participation and engagement of local authorities in these projects since they are aware of peculiarities of their cities and districts and can find effective solutions fitting to the needs of public. As similar activities are going on in the region anyway (refer to, e.g., the WEB-SEFF of the EBRD) it seems to be wise to review information material already available from these activities on their suitability for Kosovo.

4.8 Matrix of Recommendations for Overcoming Identified Barriers

The various recommendations elaborated in the previous sections and the related measures and actions described are summarized in Table **19** to Table **21**, which also provide an indication as to where such or similar measures have been applied internationally (except where the barrier is a specific feature in Kosovo).

Table 19: Recommended actions to overcome barriers with high importance

#	Barrier	Recommended Action	Term	International Experience
1.	Limited access to capital, both equity and loans, and poor experience of developers concerning banking procedures and requirements; perceived lack of financial reliability of power off-taker by financiers	State guarantees from Kosovo Credit Guarantee Fund or other forms of sovereign guarantees, possibly soft loans (based on IFI projects); reduction of capital requirements through lower custom tax on RE equipment; capacity building for enhancing loan applications	medium	Broad international experience, for example Croatia, Estonia, Denmark, Poland, Romania, Slovakia, Slovenia
2.	Complex, sometimes confusing authorization procedures and requirements, combined with limited knowledge at local authorities about RE specific procedures, and lack of coordination of the authorization process	Establishment of a One Stop Shop as stated in Law of Energy 05/L-085 with clear attribution of tasks; internal coordination of permitting activities in concerned authorities; RE information, training to authorities' staff	short to medium	Austria, Denmark, Germany, Italy, the Netherlands, Serbia, UK
3.	Terms of authorization documents and contracts are substantially shorter than the term of the PPA and the period that feed-in tariff is granted	Amend secondary legislation to extend lease term for public land without tendering to at least the term of the PPA or preferably further, and the term of the environmental permit accordingly	short	Country specific action
4.	No simplified authorization regime for small generators	Implement simplified authorization for small plants differentiated by technology as stated in Administrative Instruction 2/2013	short	Austria, Bulgaria, Italy, The Netherlands
5.	Lack of conducive investment environment	Improve state governance, ensure rule of law, enforce anti-corruption policy, enhance transparency in policy making, ensure full application of Law on Foreign Investment	long	General international experience (not country specific)

Table 20: Recommended actions to overcome barriers with medium importance

#	Barrier	Recommended Action	Term	International Experience
6.	Inventories on municipal land not public	Publish inventories on municipal lands	short	Bulgaria, Cyprus, Estonia, Finland, Germany, Ireland, The Netherlands, Slovakia, Sweden
7.	Lack of zoning	Include RE zones into municipal development plans	medium	Bulgaria, Estonia, The Netherlands, Slovakia
8.	Outdated evaluation criteria on applications for water use permit	Issue bylaw providing detailed evaluation criteria.	short	Bulgaria
9.	No guidelines on the authorization procedure	Prepare and disseminate clear and comprehensive guidelines; conduct awareness rising campaigns	short	Austria, Croatia, Denmark, Hungary, Italy, Portugal, Sweden
10.	Authorization and licensing procedure not sufficiently linked	Grant automatically the generation license to holder of final authorization, subject to confirmation of “built-as-permitted”	short	Germany; Austria, The Netherlands
11.	Lack of differentiated criteria when an EIA is required	Develop criteria differentiated by plant size and other plant characteristics when an EIA is required	short	Germany; Austria, The Netherlands
12.	Generators have to pay deep connection charges	Implement shallow charging methodology for small RE generators	medium	Austria, Bulgaria, Denmark, Finland, France, Germany, Greece, Ireland, Poland, Portugal, Romania, Spain
13.	KEDS is using outdated KEKs methodology for connection	KEDS to develop appropriate connection methodology, and ERO to approve	short	Country specific action
14.	RE developers lack expertise	Provide training (including from international experts)	medium	Turkey, Ukraine, Bulgaria
15.	Banks lack expertise with RE projects	Provide training (including from international experts)	medium	Turkey, Ukraine, Bulgaria
16.	Distorted power markets	Presently REFIT addresses this barrier; once targets of the REFIT are met, power prices shall reflect full costs including external costs	long	Member States of the European Union

Table 21: Recommended actions to overcome barriers with low importance

#	Barrier	Recommended Action	Term	International Experience
17.	Limited public awareness	Widen public awareness campaigns for RE in terms of scope and scale both amongst public at large and potential developers	medium	Austria, Belgium, Croatia, Denmark, Greece, Hungary, Italy
18.	Absence of balancing methodology	ERO to adopt balancing methodology and KOSTT to prepare the bylaw (Rule on Balancing)	short	Country specific action
19.	Absence of customer switching procedure	Adopt customer switching procedure prepared by KOSTT	medium	Country specific action
20.	Authorization procedures lack clarity on financial requirements for investors	Establish clear information for RE developers on financial requirements in authorization documents	medium	Country specific action
21.	EIA studies need to be conducted by entities licensed in Kosovo	Facilitate the access to a license for national as well as international environmental experts/entities; allow experts with international license/qualification	short	Germany; Austria, The Netherlands
22.	RE project designer needs to be licensed in Kosovo	Facilitate the access to a license for national as well as international design experts/entities; allow experts with international license/qualification	short	Germany; Austria, The Netherlands
23.	Uncertainty on power price outside REFIT	Revert to previous stipulation where Weighted Average Power Purchase Price after termination of the PPA until power market are fully developed	medium	Austria
24.	Draft PPA does not comply entirely with energy legislation	Improve draft PPA accordingly	medium	Country specific action
25.	Certificate of Origin not implemented	Implement system of Certificate of Origin as required by the Energy Community	medium	Albania, Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Greece, Hungary, The Netherlands
26.	Some RE developers lack seriousness	Implement regular monitoring of applications during authorization procedure; handle requests for extension defensively and consider guarantees in extreme cases	medium	Brazil, Greece, India, Morocco, Peru, Poland, South Africa, Spain, Uruguay
27.	Shortcomings on transport system and equipment / facilities required for RE implementation	Take requirements of RE projects into account in specific cases of transport system extensions	medium / long	
28.	Difficulties in the supply of equipment, O&M services and EPC services	Provide information on suppliers and services providers through one stop shop, if established, or energy / economic associations	short / medium	Ukraine

Annex: Interview Guidelines

Barriers for Renewable Energy Technologies in Kosovo
Survey / Interview Guideline RES Developers

This survey is conducted on behalf of the Energy Regulatory Office (ERO) to identify obstacles for the deployment of renewable energy projects for electricity generation under the REFIT in Kosovo. Ultimate goal is to identify potential barriers and recommend ways how processes could be streamlined and obstacles could be minimized. Any individual information you give will be kept confidential with the Consultant.

1 General

1.1 Name of interviewee: _____

1.2 Date: _____

1.3 Affiliation: _____

1.4 Which kind of renewable energy technology do/did you want to apply? (multiple answers possible)

☐ Wind ☐ Hydro ☐ Solar/PV ☐ Biomass ☐ Other _____

1.5 Project location: _____

1.6 Project size: _____ MW

1.7 When did you start to plan the project? Month_____ Year_____

1.8 When did you start to apply for permissions? Month_____ Year_____ ☐ Not so far

1.9 When did you commission the plant? Month_____ Year_____ ☐ Not so far

1.10 What have been the main challenges you faced through-out the authorization process?

_____

_____

1.11 How do you rate the sequence of the entire authorization process within ERO?

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very poor

1.12 Which authority is the most cooperative from your experience?

_____

1.13 Which authority is the least cooperative from your experience?

_____

1.14 Do you consider to invest in the Kosovar energy market again under the current framework?

☐ Yes ☐ No

1.15 How useful would be One-Stop-Shop, if established?

☐ Very much ☐ Good ☐ Average ☐ Poor ☐ Very poor

2 Authorization process of renewable energy plant

2.1 How accessible are the representatives of ERO?

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very poor

2.2 How professionally qualified do you find the ERO personals?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

2.3 How well coordinated with other authorities in the authorization process do you find ERO?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

2.4 *The Authorization Rule states that eleven (11) documents should be generally submitted to ERO:* How comprehensive and accessible are forms, instructions and guidelines provided?

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very poor

2.5 Did you face any difficulties concerning this submission of application in one of the official languages of Kosovo?

☐ Yes ☐ No

Comment: _____

2.6 Did you receive an application-refusal due to the publication of the notice in two (2) daily newspapers in Kosovo?

☐ Yes ☐ No

If yes, how negotiable was it? _____

2.7 *If an application would considered by ERO to be incomplete, the applicant would be allowed to complete his application within a certain period of time:*

Was your application at any certain point considered incomplete?

☐ Yes ☐ No

If yes, was the extension period reasonably enough?

☐ Yes ☐ No

2.8 How many times personal presence was needed to finalize an authorization procedure?

_____ times

2.9 Which processes required your personal attendance

_____

2.10 Please name the authorization stage that was the most time-consuming according to your experience? And what was the reason?

_____

_____

3 Land Use Permit

Before the ERO grants a preliminary authorization, an investor must obtain appropriate zoning of the proposed site. The procedure includes many parties such as a number of governmental representatives and private owners.

3.1 Did you face any difficulties in initially finding an appropriate land for your project?

☐ Yes ☐ No

If yes, why? _____

3.2 Do you use public or private land?

☐ public ☐ private

Please justify your choice:

_____

3.3 Did you receive land use refusal?

☐ Yes ☐ No

If yes, for what reasons?

_____

3.4 How many weeks did the rezoning process take? _____weeks

3.5 How many weeks did the whole land acquisition procedure take? _____weeks

I. Acquisition of a state-owned land-use permit

3.6 From whom did you get the land-use permit?

_____

3.7 How challenging was acquiring land-use permit?

☐ Very much ☐ Very ☐ Average ☐ A little ☐ Not

Why? _____

3.8 How do you rate the negotiation procedure with the public authorities?

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very poor

3.9 How accessible was the responsible person (e.g. the mayor)?

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very poor

II. Acquisition of a private-owned land-use permit

3.10 How do you rate negotiations with local land-owner?

☐ Very good ☐ Good ☐ Average ☐ Bad ☐ Very bad

Comment:

_____

3.11 Did land owner prefer lease or sale?

☐ Lease ☐ Sale

3.12 In case of lease: For how long? _____ years

4 Environmental Consent

4.1 How do you rate the accessibility to legal documents concerning environmental consent?

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very poor

Are they sufficiently comprehensive?

☐ Yes ☐ No

4.2 What difficulties did you face during the Environmental Impact Assessment (EIA)?

_____

_____

4.3 How clear are the assessment criteria?

☐ Very clear ☐ Clear ☐ Average ☐ Unclear ☐ Very unclear

4.4 How do you evaluate the role of the Ministry of Environment and Spatial Planning MESP during the environmental consent?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment:

_____

4.5 How many weeks did the environmental consent process take? _____weeks

5 Construction Permitting Procedure

Investors in renewable energy cannot obtain the final permit without ERO preliminary authorization, established right to use the land, and an EIA. Projects are classified according to plant capacity: MESP is responsible for permitting the high-risk projects (Category III) (above 10 MW) and publicities for medium (Category II) and low-risk projects (Category I) (below 10 MW). If deficiencies are found, applicant has limited time for resubmission (8 days for Category I and 15 days for category II or III).

5.1 What difficulties did you face due to the distribution of work between MESP and municipalities according to the categorization mentioned above?

_____

_____

5.2 Was the granted time for resubmission sufficient?
☐ Yes ☐ No

5.3 Was your Terms of Construction TOC application considered incomplete by the MESP?
☐ Yes ☐ No

If yes, which documents were lacking?

_____

6 Water Use Permit

If applicable, water use permits for must be acquired through the River Basin District Authorities (RBDA), the publicity, or MESP's Department of Water for all hydropower projects.

6.1 Name the authorities you have dealt with through-out the water user permit procedure:

_____

6.2 How would you evaluate these authorities?
☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

6.3 How many weeks did the procedure take? _____weeks

7 Grid Connection Permit

The application for a grid connection can only be submitted after receiving a preliminary authorization from ERO. The permit is issued by Kosovo Energy Distribution Services (KEDS) (plants < 10MW)/ Transmission System and Market Operator (KOSTT) (>10MW) respectively.

I. Distribution Grid Connection Permit by KEDS

KEDS establishes a technical commission to review the request and to evaluate the project. A second commission with a role of supervision of the construction process on site. The third commission reviews compliance of grid connection with the grid code.

7.1 How would you assess the technical and organizational ability of the above mentioned commissions?
☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

7.2 What difficulties did you face in the process of obtaining grid connection permit?

_____

_____

7.3 How many weeks did the process take? _____weeks

II. Transmission Grid Connection Permit by KOSTT

Applicant has to submit his application for KOSTT. After reviewing the grid connection application, KOSTT provide the applicant a connection offer including technical designs, allowed connection capacity, and costs.

7.4 How do you assess the technical and organizational ability of KOSTT?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

7.5 How different was the KOSTT offer compared to your initial grid connection studies?

_____

_____

7.6 How many weeks did it take KOSTT to review application and sent a grid connection offer?

_____weeks

8 Financing

8.1 Do you encounter difficulties to finance your project?

☐ Yes ☐ No

If yes, what kind of difficulties?

_____

8.2 What are the major concerns expressed by banks when assessing your project?

_____

8.3 Which banks have you approached to obtain finance?

_____

8.4 Were you successful to obtain finance?

☐ Yes ☐ No

8.5 How do you rate the challenges with authorization compared to challenges of getting the project financed?

☐ Authorization more challenging ☐ Similar challenging ☐ Financing more challenging

9 Closing Questions

9.1 What are your concerns for future projects in Kosovo?

_____

_____

9.2 Do you have the intention to be involved in any framework-improvement activities in Kosovo?

☐ Yes ☐ No

9.3 Feel free to add any additional comments or recommendations:

_____

_____

Barriers for Financing of Renewable Energy Projects
Survey / Interview Guideline Banks

This survey is conducted on behalf of the Energy Regulatory Office (ERO) to identify obstacles for the deployment of renewable energy projects for electricity generation under the REFIT in Kosovo. Ultimate goal is to identify potential barriers and recommend ways how processes could be streamlined and obstacles could be minimized. Any individual information you give will be kept confidential with the Consultant.

3 General

1.1 Name of Bank: _____

1.2 Type of Bank:
☐ Private ☐ Cooperative ☐ International ☐ other_____

1.3 Name of interviewee: _____

1.4 Position: _____

1.5 Date: _____

2 Financing of Energy Projects

2.1 Does your bank finance Renewable energy projects in Kosovo?
☐ Yes ☐ No

2.2 If not, why?

_____

2.3 If yes, what are the motivations?

_____

_____

2.4 Since when do you consider financing renewable energy projects in Kosovo? _____ years

2.5 In total, how many renewable energy projects in the Kosovan market till now have you financed?

_____

2.6 Which renewable projects do you finance? *(multiple answers possible)*
☐ Wind ☐ Hydro ☐ Solar/PV ☐ Biomass ☐ other_____

2.7 Is your bank still considering financing renewable energy projects?
☐ Yes ☐ No
If no, please give reason(s):

_____

_____

2.8 What is the share of loans for renewable energy projects on total loan volume? _____ %

2.9 Which type of renewable energy investors do you finance? (multiple answers possible)

☐ Private households ☐ Project developer

☐Public sector ☐ Commercial sector

☐ Power utilities ☐ Other _____

2.10 From your perception, what are the risk in renewable energy project in Kosovan market? (multiple answers possible)

☐ Regulatory framework ☐ Construction permit

☐ Land acquisition ☐ Operation/maintenance of power plants

☐ Support scheme for Feed-in-Tariff ☐ Technological capabilities

Lengthy and unclear authorization procedure ☐ Others _____

2.11 What was the biggest challenge your bank faced that has resulted a cancelation of financing? Please provide project name, if possible.

_____

_____

2.12 How do you generally assess the severity of financing risk in the Kosovan renewable energy market compared to other investments?

☐ Very risky ☐ Risky ☐ Average ☐ Safe ☐ Very safe

Comment: _____

2.13 What type of loans do you provide to renewable energy projects? (multiple answers possible)

☐ On-balance sheet

☐ Project finance

☐ Other _____

2.14 What is the required equity share?

☐ <10% ☐ 10-20% ☐ 21-30% ☐ 31-50% ☐ 51-70% ☐ >70%

2.15 The required equity depends on (multiple answers possible):

☐ Balance sheet

☐ Technology

☐ Project setup

☐ Other _____

2.16 Do you refinance through commercial banks or donors?

☐ Yes ☐ No

2.17 If yes, which?

_____

2.18 How many weeks does it in average take to approve a financing of a project? _____ Weeks.

3 Closing Questions

3.1 What are your biggest concerns for financing future projects in Kosovo?

_____

_____

3.2 Feel free to add any additional comments or recommendations:

_____

_____

_____

_____

Barriers for Acquiring Land Use Permit for Renewable Energy Projects
Survey / Interview Guideline Municipalities

This survey is conducted on behalf of the Energy Regulatory Office (ERO) to identify obstacles for the deployment of renewable energy projects for electricity generation under the REFIT in Kosovo. Ultimate goal is to identify potential barriers and recommend ways how processes could be streamlined and obstacles could be minimized. Any individual information you give will be kept confidential with the Consultant.

4 General

Name of interviewee:

_____

Authority:

☐ Municipality Name of municipality:

_____

☐ Ministry of Agriculture, Forestry and Rural Development (MAFRD)

☐ Privatization Agency of Kosovo (PAK)

Position: _____

Date: _____

5 Permit-Related Questions

3.3 How often do applicants refer to you for finding a suitable site?

☐ Very often ☐ Often ☐ Average ☐ Rarely ☐ Very rare

Comment: _____

3.4 How often do applicants refer to you for solving issues with zoning?

☐ Very often ☐ Often ☐ Average ☐ Rarely ☐ Very rarely

Comment: _____

3.5 Which renewable energy technology faces most problems concerning site zoning?

☐ Wind ☐ Hydro ☐ Solar/PV ☐ Biomass ☐ Other _____

3.6 What is the percentage of the following? Zoning process that takes:

____ ≤ 15 days ____ 61-90 days

____ 16-30 days ____ > 90 days

____ 30-60 days

3.7 How do you rate the negotiation process with investors for acquiring the land?

☐ Very difficult ☐ Difficult ☐ Average ☐ Smooth ☐ Very smooth

3.8 What is the most common way of communication used during negotiations?

_____

3.9 Was the language an issue during negotiations with foreign investors?

☐ Yes ☐ No

3.10 If yes, how did you overcome it?

_____

3.11 What is the percentage of the following? Negotiation that takes:

____ ≤ 15 days ____ 61-90 days

____ 16-30 days ____ > 90 days

____ 30-60 days

9.4 Based on feed-backs and inquiries from applicants, how comprehensive do investors find the land use permit procedure?

☐ Very comprehensive ☐ modest ☐ Average ☐ Little ☐ Very little

Comment: _____

2.11 With which stage of land use permit do investors struggle the most?

(Multiple answers possible)

☐ Finding a suitable site

☐ Zoning the site according to the application

☐ Negotiation with relevant authority

☐ Competitive tendering process to acquire the land

☐ Contract settlement

☐ Other: _____

Reasons:

_____

_____

2.12 How often do applicants of renewable energy projects benefit from the Allocation Law?

☐ Very often ☐ Often ☐ Average ☐ Rarely ☐ Very rarely

Comment: _____

2.13 Is the application of Allocation Law for renewable energy projects still limited?

☐ Yes ☐ No

2.14 If yes, why?

_____

2.15 How often do renewable energy projects benefit from the Expropriation Law?

☐ Very often ☐ Often ☐ Average ☐ Rarely ☐ Very rarely

2.16 Is application of the Expropriation Law for renewable energy project still limited?

☐ Yes ☐ No

2.17 If yes, why?

_____

2.18 What is the percentage of the following? Whole land use permit procedure that takes:

____ ≤ 15 days ____ 61-90 days

____ 16-30 days ____ > 90 days

____ 30-60 days

2.19 How long on average is the validation period of the land use permit? _____ Years.

3 Administrative-Related Questions

3.1 How well trained do you feel to fulfill the required tasks?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

3.2 How often did you receive training?

_____

_____

3.3 Do you think that your authority is sufficiently staffed to keep up with the applications?

☐ Yes ☐ No

4 Authorities-Related Questions

This section is about the relation between authorities included in the frame of land use permit procedure such as ministries, governmental entities and municipalities…etc.

4.1 How in general do you rate the cooperation and organization between you and other authorities involved in the process?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

4.2 With which authority was collaboration most challenging?

_____

5 Framework Improvement

5.1 What steps did you take towards procedure streamlining since the investigation conducted by Deloitte in 2013?

_____

5.2 What changes were done on regulations since then?

_____

5.3 How many times was the legal frame-work subject to changes since August 2013?
_____ times

6 Closing Questions

6.1 What are your concerns for future renewable energy projects in Kosovo?

_____

_____

6.2 Feel free to add any additional comments or recommendations:

_____

_____

_____

_____

Barriers within Authorization Procedure for Renewable Energy Plants
Interview Guideline to the Minister of Environment & Spatial Planning

This interview is conducted on behalf of the Energy Regulatory Office (ERO) to identify obstacles for the deployment of renewable energy projects for electricity generation under the REFIT in Kosovo. Ultimate goal is to identify potential barriers and recommend ways how processes could be streamlined and obstacles could be minimized. Any individual information you give will be kept confidential with the Consultant.

1 Interviewee

1.1 Name of interviewee:

_____

1.2 Department/ Agency:

_____

1.3 Position:

_____

1.4 Date: _____

2 General Questions

3.1 How accessible were the applicants when you needed to contact?

☐ Very accessible ☐ Accessible ☐ Average ☐ Barely accessible ☐ Not accessible

Comment: _____

3.2 What is the most common means of communication used to contact the applicants?

_____

3.3 How many applications have you received for the following energy technologies?

__ Wind __ Hydro __ Solar/PV __ Biomass __ Other

3.4 Did you at any time perceive that the language was an obstacle between foreign applicants and you?

☐ Yes ☐ No

3.5 How would you rate the degree of applicants' commitment to the announced deadlines?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

9.5 Due to feed-backs and inquiries from applicants, how comprehensive do you think they did find the rules?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

Note: please answer the following questions according to your responsibilities (applicable for section three to five)

4 Environmental Consent for Renewable Energy Projects

This section is addressed to MESP departments involved in the environmental consent process, related to renewable energy projects.

3.1 Do you think that the screening criteria published by MESP, whether an Environmental Impact Assessment (EIA) should be submitted or not, are sufficiently clear to applicants?

☐ Yes ☐ No

3.2 Do you think EIA assessment criteria are clear and informative enough for the applicants?

☐ Yes ☐ No

3.3 How often have applications been considered incomplete?

_____

3.4 If incomplete, which information were typically lacking?

_____

3.5 Name the trickiest situation you faced with an application and how you have successfully solved it.

_____

_____

3.6 Name the trickiest situation you faced with an application that you could not solve and give reasons.

_____

_____

3.7 What is the percentage of each of the following?
Environmental consent that have been issued within:

____ ≤ 15 days ____ 61-90 days

____ 16-30 days ____ > 90 days

3.8 What is the percentage of refused applications compared to total applications?

_____

3.9 What are the main refusal reasons?

_____

3.10 Can an applicant appeal on the refusal?

☐ Yes ☐ No

5 Construction Permit for Renewable Energy Projects

This section is applied to MESP departments included in the construction permitting process for renewable energy projects.

4.1 Projects are classified according to their capacity; MESP is responsible for permission of high-risk projects (Category III) (above 20 MW) and municipalities for medium (Category II) and low-risk projects (Category I) (below 20 M)].
Do applicants face problems due to this categorization?
☐ Yes ☐ No

4.2 Due to feed-backs and inquiries from applicants about the Term of Construction TOC, how comprehensive do you think they find the available information?
☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

4.3 In case of incomplete application was the time for resubmission sufficient?
☐ Yes ☐ No

4.4 What are the main reasons that cause the incompletion of applications?

_____

4.5 How often is an application considered incomplete as a percentage on applications received?

_____

4.6 What is the percentage of refused applications compared to total applications?

_____

4.7 What are the main refusal reasons?

_____

4.8 Could applicant appeal on the refusal?
☐ Yes ☐ No

4.9 What is the percentage of each of the following?
Construction permit that have been issued within:

____ ≤ 15 days ____ 61-90 days

____ 16-30 days ____ > 90 days

6 Water Use Permit for Renewable Energy Projects

5.1 Do you think that applicants are able to correctly determine the adequate agency responsible of issuing the individual permit?
☐ Yes ☐ No

5.2 If no, what are the reasons? _____

5.3 Due to feed-backs and inquiries from applicants about the permit, how comprehensive do you think applicants find the available information?
☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment:

_____

5.4 In case of incomplete application: Was the resubmission time sufficient?

☐ Yes ☐ No

5.5 What are the main reasons that cause the incomplete applications?

_____

5.6 What is the percentage of incomplete applications on total applications?

_____

5.7 What is the percentage of refused applications on total applications?

_____

5.8 What are the main reasons for refusal?

_____

5.9 Could applicants appeal on the refusal?

☐ Yes ☐ No

5.10 What is the percentage of each of the following?

Water use permit that have been issued within:

_____ ≤ 15 days _____ 61-90 days

_____ 16-30 days _____ > 90 days

7 Administrative Questions

6.1 How do you assess the cooperation between your department/agency and others included under the control of the MESP?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment:

_____

6.2 How do you rate the cooperation between MESP and ERO?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

6.3 How do you rate the cooperation between you and the municipalities?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

6.4 How often have you received training during your work to maintain the work quality level?

_____

_____

6.5 Do you think that your authority is sufficiently staffed to keep up with the applications demand?
☐ Yes ☐ No

8 Framework Improvement

7.1 Which steps did you take towards procedure streamlining since the investigation done by Deloitte[55] on August 2013?

_____

7.2 How do you find the cooperation between you and ERO concerning that point?
☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment:

_____

7.3 What changes were done on regulations since then?

_____

7.4 How many times was the legal frame-work subjected to changes since August 2013? _____ times

9 Closing Questions

8.1 What are your concerns for future renewable energy projects in Kosovo?

_____

_____

8.2 Feel free to add any additional comments or recommendations:

_____

_____

[55] United States for International Development report: Analysis of financial incentives and non-financial barriers to renewable energy development in Kosovo

Barriers to Renewable Energy Projects in Kosovo faced by the Ministry of Economic Development (MED)

Survey / Interview Guideline

This survey is conducted on behalf of the Energy Regulatory Office (ERO) to identify obstacles for the deployment of renewable energy projects for electricity generation under the REFIT in Kosovo. Ultimate goal is to identify potential barriers and recommend ways how processes could be streamlined and obstacles could be minimized. Any individual information you give will be kept confidential with the Consultant

3 General

1.1 Name of interviewee: _____

1.2 Position: _____

1.3 Department: _____

1.4 Division: _____

1.5 Date: _____

4 Responsibilities-Related Questions

This section is about monitoring the issues facing MED to perform its duties and responsibilities.

3.6 Was the National Renewable Energy Action NREAP subjected to any amendment since the version of the year 2013 (2011-2020)?

☐ Yes ☐ No

3.7 If yes, please name the main amendments:

_____

3.8 Based on the current condition of the Kosovan Renewable Energy Market, do you expect that the targets set in the NREAP will be met?

☐ Yes ☐ No

3.9 If not, what are the reasons?

_____

3.10 How often did you request for technical support from foreign bodies?

☐ Very often ☐ Often ☐ Average ☐ Rarely ☐ Very rare

3.11 Please name those bodies:

_____

3.12 Are you in need for additional technical support?

☐ Yes ☐ No

3.13 If yes, in which areas?

_____

5 Administrative-Related Questions

This section is a survey on MED's administrative structure and human resources.

2.1 How well trained do you think you are to fulfill the required tasks?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment: _____

2.2 How often did you receive training during your work at MED to maintain the work quality level?

_____

2.3 Did you receive any training from any foreign body?

_____

2.4 *As per MED's official website, the Energy Department at the ministry is staffed with 17 employees distributed among its four (4) divisions.*
Do you think that your department/division is sufficiently staffed to keep up with the work demand?

☐ Yes ☐ No

6 Authorities-Related Questions

This section is about questioning the relation between MED and other authorities MED get in touch with in the range of its responsibilities.

3.1 How intense do you get involved with ERO?

☐ Very intense ☐ Intense ☐ Average ☐ Weak ☐ Very weak

Comment: Idea of One-Stop-Shop was developed jointly.

3.2 How do you evaluate the cooperation between MED & ERO?

☐ Very good ☐ Good ☐ Average ☐ Weak ☐ Very weak

Comment:

_____

7 Framework Improvement

4.1 Did you participate in any activities with other authorities (e.g. ERO) for improving the current framework for REs?

☐ Yes ☐ No

5 Closing Questions

5.1 What are your concerns for future projects in Kosovo?

_____

_____

5.2 Feel free to add any additional comments or recommendations:

_____

_____

_____

Thanks for your cooperation and your time

Annex: List of interviewed stakeholders

Investors and project developers:

Name	Firma	Datum
Sofie Kika	Treangle GC, USA	10/12/15
Granit Veseli	Upwind international	10/12/15
Muhamer Ibrahimi	Hydro-Line	17/12/15
Ylber Shamolli	EuroKos/Air Energy/ HidroEnergij	17/12/15
Labinot Vitija	Matkos Group	23/12/15
Agim Nitaj	Eling	14/01/16
Bairam Rushiti	Drini I Bardhe	18/01/16
Adriatik Berisha	Birra Peja / Frigo Food	21/01/16
Lorik Haxhiu	Vermica	26/01/16

Banks:

Name	Firma	Datum
Megzon Nela	Raiffeisenbank	11/12/15
Suad Lushtaku	Raiffeisenbank	11/12/15
Mehdi Kameraj	NBL Prishtina	18/12/15
Gezim Tropoja	Procedit Bank	18/12/15
Shpresa Kastrati	International Finance Corporation - IFC	06/01/16
Ardian Efendija	BKT	13/01/16
Anes Jusic	EBRD	02/09/16

Ministries and other public bodies:

Name	Firma	Datum
Shukri Shabani	MESP, Environment Department	20/01/16
Servet Spahiu	MESP, Expropriation Department	20/01/16
Xhemajl Metolli	MESP, Construction Department	20/01/16
Luan Nushi	Institute for Spatial Planning	20/01/16
Shiqeri Dermaku	MESP, Water Department	20/01/16
Ahmet Zejnullahu	Agency of Forestry	12/12/15
Agim Bahtiri	Municipality of Mitrovica	22/01/16
Sami Zeka	Municipality of Mitrovica	22/01/16
Nasuf Aliu	Municipality of Mitrovica	22/01/16
Sead Gashi	Municipality of Mitrovica	22/01/16
Egzon Jashari	Municipality of Mitrovica	22/01/16
Luan Morina	Ministry of Economic Development	19/01/16
Ymridin Misini	ERO	20/01/16