### Inventory of Regulatory Requirements to Start and Operate

#### A Renewable Energy Project in Kenya

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### Introduction

In 2008, the GoK adopted the so-called "Feed-in Tariffs Policy" (FiT) to attract private investment into the renewable energy sector. The FiT guarantees fixed rates and connection to the grid for electricity generated from renewable energy sources. Projects are eligible for conditions of the FiT if they have a certain size and are based on wind, biomass, small hydro-power, geothermal, biogas and solar. Table 1 summarizes the main content of the FiT Policy.

Renewable energy sources under FiT	Eligibility for FiT	Duration	Maximum Tariff (US Cents per Kilowatt-hour)
Wind	500kW-100MW, FiT only for first 300MW	20 years	12.0
Biomass	500kW-100MW, FiT only for first 200MW (firm-power), 50MW (non-firm power)	20 years	8.0 (firm), 6.0 (non-firm)
Small Hydro Power	500kW-10MW, FiT only for first 150MW (firm), and 50MW (non-firm)	20 years	8.0-12.0 depending on capacity (firm), 6.0-10.0 (non- firm)
Geothermal	0-70MW, FiT only for first 500MW	20 years	8.5
Biogas	500kW-40MW, FiT only for first 100MW	20 years	8.0 (firm), 6.0 (non-firm)
Solar	500kW-10MW, FiT only for first 100MW (firm), 50MW (non-firm)	20 years	20.0 (firm), 10.0 (non-firm)

#### Table 1: Summary of the Feed-in Tariff Policy, 2008

Source: Feed-in Tariffs Policy, 1<sup>st</sup> Revision, January 2010

However, despite ample availability of renewable energy sources in Kenya and the FiT Policy in place, actual investment in the sector remains relatively small and does not meet expectations. Therefore, it is the declared objective of the Government to identify shortcomings in the policy and the regulatory framework preventing investments in the renewable energy sector in Kenya. The inventory of licenses is a first step to analyze the regulatory framework for renewable energy.

To avoid discouraging potential start-ups from entering the renewable energy sector, it is key to ensure that licensing procedures are efficient, and that information regarding licensing is accessible and easy to understand. If this is not the case, it is likely to have adverse effect on businesses' efficiency and competitiveness, and it might in some cases prevent start-ups from entering the market; thus effecting negatively the overall development of the private sector. A streamlined, coherent and well-targeted regulation, on the other hand, can improve the competitiveness of an economy or a sector significantly.

#### Objective

The primary objective of this exercise is to map out all clearances and agreements an investor has to obtain before starting the generation of renewable energy under the Feed-in Tariffs Policy in Kenya. The inventory includes key information on each identified clearance such as the legal basis of the licenses, requirements, procedures, revenues, fees and costs. The inventory constitutes an important source of information to identify impediments of the regulatory framework and design well-targeted solutions. A brief analysis of the relevance, effectiveness and efficiency of the license and preliminary recommendations will also be provided. It is worth noting that the analysis of the economic characteristics of the FiT policy is beyond the scope of the report.

#### Methodology

The information provided in the inventory is collected in three ways: desk studies, fact-finding meetings with the involved authorities and fact validation meetings with private investors in the renewable energy sector. The Consultant was on fact-finding mission in Kenya from June 26 to July 8, 2011.

The primary objective of the desk review was to identify and map out as many licenses as possible before commencing the interview phase. It was, however, also important for the Consultant to familiarize with current terms and definitions, the extent of the sector-specific legal framework and the way process information is provided to potential investors.

Data collection from the issuing agencies was the most essential part of the assignment, and proved also to be the most time consuming and complex exercise. All interviews were done face-to-face. Part of the interviews was to fill out a template questionnaire on the respective licensing procedure with the officials. In many these cases, data would be verified through follow-up discussions with the agencies concerned. The sample questionnaire and the filled out questionnaires from issuing agencies are attached as **Annexes 4 and 5**.

Interviews with the private sector were conducted for validation purposes only. For this purpose a focus meeting with members of the Energy Sector Board of the Kenya Private Sector Alliance (KEPSA) proved very useful.

After the fact-finding mission, the relationship with the public and private sector representatives continued and verification questions were submitted to the respective officials and companies to ensure the highest possible level of correctness.

In addition to the data collection exercise, the Consultant was assigned to prepare a first assessment of each license based on the data collected through interviews with issuing agencies and private sector entities.

#### **Clarification of used terms**

The terms used in the literature, legislation, guidelines and related reports for various or similar regulatory instruments are sometimes confusing. Clearance, license, permit, approval, contract are often used interchangeably or without clear distinction. The Kenyan legislation, policy documents and practice is not different in

this respect. To ensure a consistent use and clear understanding of the terms used in this report and the inventory, Table 2 provides an explanation of the terms as they are used here. The provided definitions do not claim to be valid beyond these two documents. In the report, the term 'clearance' will be used as a general term that covers licenses, authorizations, permits, approvals, registrations and agreements.

Term	Example for term used in Kenya	Meaning in report and inventory	Similarity
Clearance	Land Rates Clearance, Civil Aviation Clearance.	A general term for any action of the public sector necessary for an investor to start or continue an activity.	Covers all of the terms mentioned in this table.
License	Power Generation License, EIA License, Geothermal Resource License.	Any ex-ante authorization required for any business activity to commence and to operate. Often with an expiration date and to be renewed.	Covers the terms Authorization, Permit, and Approval.
Authorization	Exploration Authority	Like license, but often without expiration date.	A subset of the term License.
Permit	Water Abstraction Permit, Development Permit.	Like license, but often for closely defined activity and without expiration date.	A subset of the term License.
Approval	Eol Approval, PPA Approval.	Confirms compliance of a previously obtained clearance or document with a set standard. Not time bound. An additional layer of checks.	A subset of the term License.
Registration	Land registration.	Results in an entry in a (maybe restricted) publicly accessible registry.	Instrument on its own.
Agreement, Contract	Purchasing Power Agreement.	Rights and obligations of two or more parties negotiated at free will.	Instrument on its own.

#### Table 2: Explanation of key terms as used in the report and the inventory

#### **Licensing Inventory**

Data collected in interviews is documented in questionnaires. Most questionnaires were filled out by hand during the interview, and they were subsequently typed into the questionnaire templates. In addition to this, key data collected from issuing authorities is summarized in fact sheets for the various clearances as **Annex 1**. Furthermore, all data, has been typed into a Microsoft Excel spreadsheet – the actual inventory -, which is attached as **Annex 2**.

For each clearance the following indicators are included in the inventory: name, type, scope (sector/general, national/local), legal base, purpose, issuing authority, inputs, validity, initial charges, renewal charges, revenue keeping authority.

#### **Overall Process**

A total of 22 clearances are applicable to investors in the renewable energy sector. Six (6) of these 22 clearances are sector specific, three (3) are general environmentrelated clearances, seven (7) are general clearances necessary to establish a company, and six (6) must be obtained to own/lease the land and construct the power plant. The general procedures to establish a company are not subject to the inventory, but they are described in detail in the Doing Business Survey 2011<sup>1</sup> of the IFC and the eRegistry<sup>2</sup> of the Kenyan Government.<sup>3</sup>

The clearances vary in nature and in scope. Some clearances have to be obtained by all investors under the FiT, others only by those investing in specific energy resources. For example, the investors in wind energy must obtain a clearance from the Kenya Civil Aviation Authority to ensure that the high structures do not interfere with air traffic.<sup>4</sup>

The following process maps shall provide an overview of the process from establishing a company to start generating energy from renewable sources. The first map (Chart 1) shows the sequencing of clearances to be obtained. Since not all investors must obtain all 22 clearances, the Table 3 clarifies which clearance must be obtained by which investor. Finally, obtaining a clearance means for investors to prepare certain input documents. Therefore, the second process map (Chart 2) includes the efforts investors have to make in order to apply and receive specific clearances.

Chart 1 summarizes all sector clearances and their sequence. It also includes the four general land-related clearances to be obtained from the respective Local Government assuming that almost every investor has to acquire land rights and construct a power plant.

It should be noted that investors do not have to conclude an agreement with the transmission company KETRACO. According to interviews, the investor deals solely with the distributor Kenya Power. Kenya Power will then provide for transmission

 $<sup>^1</sup>$  www.doingbusiness.org

<sup>&</sup>lt;sup>2</sup> www.businesslicense.go.ke

<sup>&</sup>lt;sup>3</sup> To establish a standard company takes 11 steps including 7 Governments clearances and takes in total 33 days. Total costs are 38.3% of the annual income per capita. The clearances to be obtained are: (1) State registration with the Center of Public Registration, (2) Incorporation with the Register of Companies, (3) Registration for PIN and VAT with the Tax Department, (4) Obtaining a business permit with the Local Government, (5) Registration for Social Security with the National Social Security Fund, (6) Registration for hospital insurance with the National Hospital Insurance Fund, (7) Registration for PAYE with the Tax Authority. In the Doing Business 2011 Kenya ranks 127 in the overall country rankings. See <u>www.doingbusiness.org</u>

<sup>&</sup>lt;sup>4</sup> A permit from the Civil Aviation Authority is also required for generation projects based on municipal waste landfill that are located close to air transport infrastructure. This permit is not covered in this report since most of the interactions involve municipal authorities and not private investors.

either because it owns the transmission lines or by concluding a transmission contract with KETRACO.



Chart 1: Start-up Procedures for the Generation of Renewable Energy

Not every investor in renewable energy needs to obtain all 15 clearances mentioned in Chart 1 because some of the clearances depend on the kind of renewable resource used. For example, while investors in geothermal energy must obtain 12 clearances, investors in solar need only 10. Table 3 shows how many and what licenses or other clearances investors in each of the activities falling under the FiT must obtain before starting operation.

Clearance	Wind	Biomass	Hydro	Geothermal	Biogas	Solar
7 Clearances to establish a company	V	V	V	V	V	V
Approval for Expression of Interest	V	v	V	V	V	٧
Exploration Authorization	(-)	(-)	(-)	V	(-)	(-)
Civil Aviation Clearance	V	(-)	(-)	(-)	(-)	(-)
EIA License	V	V	V	V	V	V

#### Table 3: Licenses and other clearances each of the activities under FiT must obtain

Clearance	Wind	Biomass	Hydro	Geothermal	Biogas	Solar
Water Abstraction Permit	(-)	(-)	٧	(v) <sup>5</sup>	(-)	(-)
Rent Clearance	V	٧	V	V	٧	V
Certificate						
Rates clearance	V	V	V	V	V	V
Land registration	V	V	V	V	V	V
Resource License	(-)	(-)	(-)	V	(-)	(-)
Electricity	V	V	V	V	V	V
Generation License						
PPA with Kenya	V	V	V	V	V	V
Power						
Approval of PPA	V	V	V	V	V	V
from ERC						
Approval for	V	V	V	V	V	V
change of use						
Development	V	V	V	V	V	V
permit						
Total <sup>®</sup>	11	10	11	12	10	10

 $\sqrt{}$  = needs to be obtained

(-) = does not need to be obtained

Investors in renewable energy under the FiT Policy have to prepare many documents and provide much information needed as input to obtain various clearances before commencing operation. Chart 2 includes not only the clearances but also the documentation prepared by the investors to be submitted to the institutions. It illustrates the sequence of events after incorporating a company until completion of the construction phase, thus the commencement of operation.

<sup>&</sup>lt;sup>5</sup> There is some confusion on the Water Permit: WRMA says Geothermal plants should have a Water Permit *de lege ferenda* but the current legislation does not oblige them to. NEMA and the Ministry of Energy expect them to obtain a Water Permit.

<sup>&</sup>lt;sup>6</sup> Excluding the 7 clearances to establish a company.

Chart 2: The sequence of events from establishment of the company to the generation of renewable energy



#### **Key Findings from the Inventory**

The following findings are based on the information provided in the fact sheets to each clearance and inventory of licenses attached as **Annex 1** and **Annex 2**.

#### A time-consuming process

Obtaining clearances takes time. Chart 3 shows the time it takes to obtain each clearance. Procedures take from 1 day up to 9 months. The longest procedure is the signing of a PPA. According to Kenya Power, it takes about 6 months to wait until the negotiations start and additional 3 months to complete them.<sup>7</sup> It should be noticed that the chart counts only the time it takes the respective institution to issue the clearance. Not accounted for is the time of the investor to collect inputs, further information, to get in contact with the institution, etc. Furthermore, clearances from the respective Local Governments may vary. The Chart and the inventory include an average of the times reported by three Local Governments (Nakuru, Njeri, Nairobi).





Some of the clearances are interdependent and cannot be run in parallel, others can. Table 4 shows an ideal (or unrealistic) scenario of an investor in renewable energy in case there are no unforeseen delays. In this scenario the total procedural time is 19 months, but the scenario is unrealistic because it does not include the time needed to obtain input documents such as the EIA Study, financing, or the land lease. It also does not include preparation time like the exploration of a geothermal site or the technical studies for hydro-power or wind locations. Note also that some of the procedures are activity specific. However, the table is useful because it shows

<sup>&</sup>lt;sup>7</sup> According to investors in some cases PPA negotiations can go beyond one year.

interdependencies and how the total procedural time adds up to a considerable time span (refer to Table 8 for details about interdependencies).

Clearance	6	12	18	24
Approval for Eol				
Exploration <sup>8</sup> Authority				
Aviation Clearance <sup>9</sup>				
EIA License				
Water Ab. Permit <sup>10</sup>				
Rent Clearance				
Rates clearance				
Land				
Registration				
Geothermal				
Resource License <sup>11</sup>				
Electricity				
Generation				
License				-
PPA with				
Kenya Power				
Approval of PPA from FRC				
Approval				
change of use				
Development				
Permit				

 Table 4: Time and sequencing of clearances (each block equals one month)

It is particularly interesting to compare the idealistic time line of Table 4 with the time line for renewable energy projects allowed in the FiT Policy as shown in Table 5. Here the completion project from submission of the EoI to completion of the construction is 24 months. Studies and approvals shall be obtained within 6 months. The time line of the FiT Policy appears unrealistic.

<sup>&</sup>lt;sup>8</sup> For geothermal only.

<sup>&</sup>lt;sup>9</sup> For wind only.

<sup>&</sup>lt;sup>10</sup> For small hydro-power only.

<sup>&</sup>lt;sup>11</sup> For geothermal only.

Action	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Applicant submits Eol																		
FiT Committee approves Eol																		
Non- renewable rights of first refusal for power generation at same location																		
Time for further studies																		
Applicant submits detailed project proposal																		
Confirmation that project is viable by FiT Committee																		
Time to conclude project development (engineering design, financing agreements, PPA negotiations																		
Time to complete on construction works																		

$1 a D C J_1 T D C C C C C C C C C C C C C C C C C C$	Table 5: Timeline to com	plete a renewable energy	project (months	) according to FiT Policy
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Red = Time for decision of the FiT Committee

Green = Time given to the applicant to obtain clearances or complete actions

#### Many authorities involved

A maximum of nine (9) different line-ministries or authorities are involved in the licensing process issuing a total of 15 different clearances. Five (5) sector clearances and seven (7) general clearances are applied. The Ministry of Energy alone issues three (3) sector licenses and the Electricity Regulatory Commission two(2). Table 6 lists the involved authorities and the clearances they issue.

Institution in charge	Sector clearances (renewable energy)	General clearances	Registration	Contract
Ministry of Energy	3			
Energy Regulatory Commission	2			
National Environment Management Authority		1		
Water Resources Management Authority		1		
Landowner (private, KWS, KFS)				1
Ministry of Lands		1	1	
Local Governments		3		
Kenya Power				1
Civil Aviation Authority		1		
Total	5	7	1	2

#### Table 6: Involved institutions and their clearances

#### Several procedures address impact on the environment

Every clearance has a purpose. Table 6 summarizes the purpose of each clearance according to the interviewed person and any available document like legislation, policy statement or guidelines. Seven (7) of the 17 procedures address technical standards concerned with the impact on the environment (Exploration Authority, Civil Aviation Clearance, Lease with KWS/KFS, EIA License, Water Permit, Geothermal License, Electricity Generation License). Some of them are contacting each other during their clearance process. For example, NEMA (EIA License) is obliged to ask for comments from WRMA (Water Permit), KCAA (Aviation Clearance) or the Ministry of Energy (Geothermal Resources License) and vice versa.

Table 7:	Purpose	of each	clearance
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Clearance	Purpose of the clearance
Approval for	Determine how the proposed power plant can be integrated into the national
Expression of Interest	power development plan and estimate suitability of proposed power plant location for interconnection including interconnection facilities and costs
Exploration Authorization	Control geothermal exploration and exploitation
Civil Aviation	Air navigation safety
Clearance	
EIA License	Protection of the environment
Water Abstraction Permit	Protection of water resources
Land lease (KWS, KFS)	If the site is in a park or forest, then protection of the flora and fauna
Rent Clearance Certificate	Revenue generation (state)
Rates clearance	Revenue generation (Local government)

Clearance	Purpose of the clearance
Land registration	Landowner certification
Geothermal Resource License	Control of geothermal exploitation, ensure revenue generation (royalties)
Electricity Generation License	Compliance with Energy Act and FiT Policy
PPA with Kenya Power	Secure energy off take at certain energy price
Approval of PPA from ERC	Evaluating PPA with respect to fair consumer prices, KW prices for Kenya Power, amount of energy provided (firm, non-firm)
Approval for change of use	Control of land use and land development
Development permit	Building safety, urban planning

#### Legal base is not fully developed

Table 8 lists key regulatory activities and their legal bases for the generation of power from each of the renewable energy resources in Kenya. Two findings are particularly of interest. First, only one of the activities mentioned in the FiT operates under a specific regulatory framework (geothermal), but the others are partly regulated by the general Energy Act and its Regulations. Second, the regulatory framework of all others is neither specific, nor legal. Next to the Energy Act, a key regulatory document for them is a Policy Statement and its guidelines, of which neither has a formal legal status. This means that - except geothermal - all other renewable energy projects are essentially governed by an Energy Act that is not specifically geared to renewable energy and a 15-page policy statement.

Regulatory Activity	Wind	Solar	Small Hydro	Geothermal	Biogas	Biomass
Regulatory Authority in charge	Energy Act	Energy Act	Energy Act	Energy Act, Geothermal Resources Act	Energy Act	Energy Act
Eligibility requirements for fixed tariffs	No legal base. Feed-in Tariffs Policy	None. Feed- in Tariffs Policy	None. Feed- in Tariffs Policy	Geothermal Resources Act and its Regulations, Energy Act. Feed-in Tariffs Policy	No legal base. Feed-in Tariffs Policy	No legal base. Feed-in Tariffs Policy
Licensing obligation	Energy Act and Regulations	Energy Act and Regulations	Energy Act and Regulations	Geothermal Resources Act and its Regulations, Energy Act.	Energy Act and Regulations	Energy Act and Regulations
Licensing procedures (EoI, PPA approval)	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors

#### Table 8: Fundamental regulatory activities and their legislative base in Kenya

Regulatory Activity	Wind	Solar	Small Hydro	Geothermal	Biogas	Biomass
Licensing procedures (Sector license)	Energy Act and Regulations	Energy Act and Regulations	Energy Act and Regulations	Geothermal Resources Act and its Regulations, Energy Act and Regulations.	Energy Act and Regulations	Energy Act and Regulations
Application requirements (EoI, PPA Approval)	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors	Geothermal Resources Act and its Regulations, Energy Act. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors	No legal base. Feed-in Tariffs Policy and the Guide to Investors
Application requirements (Sector license)	Energy Act and Regulations, Feed-in Tariffs Policy and the Guide to Investors	Energy Act and Regulations, Feed-in Tariffs Policy and the Guide to Investors	Energy Act and Regulations, Feed-in Tariffs Policy and the Guide to Investors	Energy Act and Regulations, Geothermal Resources Act and its Regulations, Feed-in Tariffs Policy and the Guide to Investors	Energy Act and Regulations, Feed-in Tariffs Policy and the Guide to Investors	Energy Act and Regulations, Feed-in Tariffs Policy and the Guide to Investors
Regulatory standards for licensed companies	PPA, other sector regulations	PPA, other sector regulations	PPA, other sector regulations	PPA and Geothermal Resources License based on the Geothermal Resources Act	PPA, other sector regulations	PPA, other sector regulations
Enforcement rules (e.g. reporting obligations, monitoring and inspection rights, fines, penalties)	PPA, other sector regulations	PPA, other sector regulations	PPA, other sector regulations	Geothermal Resources Act and its Regulations, Geothermal Resources License, PPA.	PPA, other sector regulations	PPA, other sector regulations

#### EIA License is input to a number of clearances

The time it takes for an investor to comply with requirements depends strongly on the inputs to be provided with the application for a clearance. Inputs can be clearances from other authorities or documents to be prepared without the involvement of other public bodies. If other clearances must be submitted, then it affects the sequence of events. Table 9 shows the inputs to be provided by the investor for each of the clearances. It shows that the EIA License is the single most required input to other licenses. This fact means that the time required to obtain the EIA license has a direct impact on the total duration of the process, as shown by Table 4.

**Redundant requirements in some procedures** Noteworthy of Table 9 is also the third column listing the documentation to be submitted including several redundancies such as drawings, project specifics, financial data, a feasibility study, etc.

ruble 31 input	s for cach crearance	
Clearance	Inputs from other Authorities	Other documentation to be submitted
Approval for Expression of Interest	Copy of incorporation certificate, VAT registration certificate	Project proposal including particulars of the applicant, information on land ownership and control, preliminary project feasibility assessment, information on sponsors and developers, outline on technical expertise, description of project financing, implementation plan.
Exploration Authorization	None	(1) Informal application letter, (2) data on applicant and its directors, (3) statement of financial status and technical expertise, (4) description of area concerned, (5) particulars on work and minimum Expenditure
Civil Aviation Clearance	None	<ul><li>(1) Application letter, (2) description of site, (3) height of construction,</li><li>(4) number of masts/turbines, (5) drawings</li></ul>
EIA License		<b>Project Report:</b> (1) Name of the proponent, PIN number, address and contact person, (2) Title of the project, (3) Objectives and scope of the project, (4) Nature of the project; (5) Location of the proposed project, including the physical area that may be affected by the project's activities; (6) Types of activities that will be undertaken during the project construction, operation and decommissioning phases; (7) Design(s) of the project; (8) Materials to be used, products and by-products, including waste to be generated by the project and the method(s) of their disposal; (9) Potential environmental impacts of the project; (10) Mitigation measures to be taken during the project cycle; (12) A plan to ensure the health and safety of the workers, and neighboring communities; (13) Economic and social benefits to the local community and the nation in general; (14) Project budget; (15) Views of the public about the project, indicating representativeness of the potentially affected people; and (16) An environmental management plan (EMP) for the entire project cycle. <b>EIA License:</b> EIA Study (10 hard copies, 1 e-version).
Water Abstraction Permit	EIA License	(1) Application Form, (2) Land title deeds, (3) Hydrological/hydro- geological assessment reports, (4) Proof of fee payment, (5) Effluent Discharge Plans, (6) No objection from water service provider.
Geothermal Resource License	EIA License	<ol> <li>Informal letter of request, (2) coordinates of applicant, (3) coordinates of directors and owners of company, (4) Statement of expertise, (5) Plan and description of area, (6) terms of license requested, (7) employment and training proposal, (8) Infrastructure needs.</li> </ol>
Electricity Generation License	EIA License	(1) Application letter, (2) copy of newspaper advertisement, (3) Copy of notice to local authority, (4) Draft or signed PPA, (5) Audited accounts for 3 years, (6) Information according to the Feed-in Tariffs Policy, see details in Annex 1.
PPA with Kenya Power	<ol> <li>(1) Eol Approval, (2)</li> <li>Certificate of</li> <li>Incorporation (copy),</li> <li>(3) Water Abstraction</li> <li>Permit (hydro, geothermal)</li> </ol>	(1) Land Lease Agreement, (2) Project Proposal, (3) Financing Plan, (4) Feasibility Study.

#### Table 9. Inputs for each clearance

Clearance	Inputs from other Authorities	Other documentation to be submitted
Approval of PPA from ERC	None	(1) Letter of request for approval from Kenya Power, (2) Final draft of PPA.
Rent Clearance	None	Copy of ownership documents.
Rates Clearance	None	Copy of ownership documents.
Land registration	(1) Rates Clearance Certificate from Council, (2) Rent Clearance Certificate from Ministry of Lands, (3) Valuation for purposes of Stamp Duty, (4) Stamp Duty receipt	(1) Application form, (2) Land transfer document
Approval for change of use	<ul><li>(1) Copy of the title,</li><li>(2) EIA License</li></ul>	(1) Application form (PPA-1), (2) Drawings, (2) Planning Brief
Development permit	(1) Rates clearance certificate, (2) Copy of ownership documents	(1) Application Form (PPA-1), (2) Drawings

#### **Brief evaluation**

Though this is not an in-depth assessment of the regulatory framework for renewable energy in Kenya, it is a first cut on the administrative issues faced by any potential investor in the renewable energy sector under the FiT in Kenya.

First, commonly used criteria to evaluate the quality of a regulatory procedure will be applied. Second, some observations can be gained from the information collected in interviews, the legislation and other documents.

However, it should be noted that interviewed investors regarded the regulatory framework related to administrative procedures not as the single biggest constraint to doing business in the renewable energy sector. Shortcomings related to the FiT Policy were considered as one of the major constraints.

Commonly used criteria to evaluate a regulatory framework concern three questions: Is the procedure necessary? Is it effective? And is it efficient? These three criteria are further explained in Table 10.

Criteria	Question asked
Necessity	What is the purpose of the procedure? Is it a valid purpose? How would the world look like if the license were abolished? Would there be any more risks for important values like health, safety and the environment?
Effectiveness	Does the instrument achieve its purpose? Are there better, less interfering, less costly measures to achieve the same results? Does it need strengthening to be more effective?
Efficiency	Is the necessary and effective instrument applied efficiently? Could it be applied faster and/or with fewer documentation requirements? Can the personal appearances be replaced by a flow of paper?

Table 10: Criteria commonly used to	evaluate a regulatory framework
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It could be said that each of the applied procedures has a valid regulatory purpose and is necessary to protect important values, whether it is the environment, aviation safety or compliance with technical standards. In this respect, the GOK should continue to enforce these values in its regulatory framework.

Looking at the effectiveness of the procedures, it can also be said that the existing procedures achieve their regulatory objective. At least, it is not apparent and has not been brought up in interviews with the private and public sector that any of the 15 procedures is not implemented, monitored or enforced.

The key question is whether the applied procedures are efficient. Some issues can be noted in this respect. First, though each of the authorities protecting some parts of the environment does communicate with each other, there is no link between or integration of closely related procedures. For example, NEMA asks for the opinion on WRMA, KCAA or the Ministry of Energy before issuing the EIA License; however, each of these authorities goes through the full length of their own procedure after the EIA license is issued. Second, much of the information requested from the investor has to be submitted several times to various authorities. Again, it seems that there is no coordination of the authorities when it comes to information sharing. Third, overlapping mandates for specific types of renewable energy are perceived. The Ministry of Energy is the regulatory authority for geothermal projects implementing the Geothermal Resources Act, and at the same time the ERC is in charge of regulation for all renewable energy projects including geothermal undertakings. Fourth, the information requested might not be fully needed for the regulatory purpose. For example, the ERC requests financial accounts and auditing reports for several years back. However, there might be room for rationalization of the required information considering how ERC uses it for complying with their regulatory mandate..

Tables 11 a-d summarize the evaluation of each applicable clearance procedure for
the five types of renewable energy covered by FiT.

Clearance	Purpose of the clearance	Is the clearance necessary?	Is the clearance effective?	Is the clearance efficient?
Approval for Expression of Interest	Compliance of project with national energy plan and existing grid	Yes, it ensures that the supplied energy can be fed into the grid at reasonable connection cost. It also gives the investor certainty.	Yes, this policy decision is made by the Minister and early on in the process. This is the right place and the right moment for it.	Yes, the process takes with 1 month not very long and the information requested is needed to make an informed decision.
EIA License	Protection of the environment	Yes, this is the central procedure to ensure the protection of the environment.	Yes, the generation of energy is potentially damaging the environment and a prior clearance is an effective protection.	Yes, there the legal time limits are reasonable and information requirements justified.

Table 11a: A brief evaluation of the regulatory framework (biomass, biogas, sola	r)
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Clearance	Purpose of the	Is the clearance	Is the clearance	Is the clearance
Rent Clearance Certificate	Revenue generation (state)	Yes, property taxes are an important income source and the clearance is necessary to identify the taxpayer.	Yes, the procedure achieves its objective.	Unclear, while Local Governments can issue their identical rate clearance instantly, the Commissioner needs 2- 3 weeks for it.
Rates clearance	Revenue generation (Local government)	Yes, property taxes are an important income source and the clearance is necessary to identify the taxpayer.	Yes, the procedure achieves its objective.	Yes, there is a minimum documentation requirement and the certificate is issued instantly.
Land registration	Landowner certification	Yes, a land market can only be established where ownership is registered.	An assessment of the land administration is beyond the scope of this report.	An assessment of the land administration is beyond the scope of this report.
Electricity Generation License	Compliance with FiT Policy	Unclear, if the roles of the Ministry of Energy, ERC and Kenya Power with each of them examining technical and financial requirements can be cut clearer, particular in the case of geothermal.	Unclear. Question is if there are overlaps in the subject of the procedures, particular in cases in which additional licensing obligations exist (geothermal).	See, previous column.
PPA with Kenya Power	Secure energy supply	Yes, a contract is necessary to stipulate rights and obligations between these two private parties.	Yes, a contract is the most effective instrument.	Unclear, nine months in total might be excessive for a contract that can have standard provisions and be based on tariffs set in the FiT.
Approval of PPA from ERC	Evaluating PPA with respect to fair consumer prices, KW prices for Kenya Power, amount of energy provided (firm, non-firm)	Yes, ERC as the regulator needs to know whether the PPA is in compliance with legal and technical requirements.	An ex-ante standard PPA and an ex-post confirmation might be sufficient.	Yes, it takes only a couple of weeks to examine the PPA.
Approval for change of use	Control of land use and land development	Yes, the change of use can be contrary to important planning objectives.	Yes, an approval achieves the purpose to control land development.	Yes, two months appears to be reasonable.
Development permit	Building safety, urban planning	Yes, building safety justifies and ex-ante permit.	Yes, a permit achieves the purpose of building safety.	Yes, three months appears to be reasonable.

#### Table 11b: A brief evaluation of the regulatory framework (small hydro-power)

Clearance	Purpose of the clearance	Is the clearance necessary?	Is the clearance effective?	Is the clearance efficient?
Approval for Expression of Interest	See Table 11a.			
EIA License	See Table 11a.			

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Clearance	Purpose of the	Is the clearance	Is the clearance	Is the clearance
	clearance	necessary?	effective?	efficient?
Water Abstraction Permit	Protection of water resources	Yes, for geothermal and hydro-power plants, because they use water resources potentially affecting ground water flows.	Yes, water resources are essential and their protection justifies an ex-ante license.	Unclear, the procedure may be integrated into the EIA License instead of being sequential to it?
Rent Clearance Certificate	See Table 11a.			
Rates clearance	See Table 11a.			
Land registration	See Table 11a.			
Electricity Generation License	See Table 11a.			
PPA with Kenya Power	See Table 11a.			
Approval of PPA from ERC	See Table 11a.			
Approval for change of use	See Table 11a.			
Development permit	See Table 11a.			

#### Table 11c: A brief evaluation of the regulatory framework (wind)

Clearance	Purpose of the clearance	Is the clearance necessary?	Is the clearance effective?	Is the clearance efficient?
Approval for Expression of Interest	See Table 11a.			
Civil Aviation Clearance	Air navigation safety	Yes, high masts can be dangerous for air traffic and should be approved.	Yes, masts should need prior clearance before erected.	Unclear, while KCAA is the right organization to do it, the clearance may be integrated into the NEMA license?
EIA License	See Table 11a.			
Rent Clearance Certificate	See Table 11a.			
Rates clearance	See Table 11a.			
Land registration	See Table 11a.			
Electricity Generation License	See Table 11a.			
PPA with Kenya Power	See Table 11a.			
Approval of PPA from ERC	See Table 11a.			
Approval for change of use	See Table 11a.			
Development permit	See Table 11a.			

Tuble IIum	fiel evaluation of a	the regulatory numer	ork (geothermar)	
Clearance	Purpose of the	Is the clearance	Is the clearance	Is the clearance
Approval for Expression of Interest	See Table 11a.	necessary	enective?	encient
Exploration Authority,	Control geothermal exploration and exploitation	Yes, drilling deep holes is expensive and risky. The authorization guarantees the investor the block in case steam is found. The investor has the option to skip this procedure and apply straight for the license.	Yes, because it provides an investor for the exploration phase with a faster and cheaper alternative to the Geothermal Resource License.	Yes, the authority can be obtained within 2 weeks and documentation requirements are limited.
EIA License	See Table 11a.			
Water Abstraction Permit	Protection of water resources	Yes, for geothermal and hydro-power plants, because they use water resources potentially affecting ground water flows.	Yes, water resources are essential and their protection justifies an ex-ante license.	Unclear, the procedure may be integrated into the EIA License instead of being sequential to it?
Rent Clearance Certificate	See Table 11a.			
Rates clearance	See Table 11a.			
Land registration	See Table 11a.			
Geothermal Resource License	Control of geothermal exploitation, ensure revenue generation (royalties)	Yes, the protection of the environment and the stipulation of the royalties make a license/contract necessary.	Yes, the ex-ante license requirement is affective to achieve the stated purpose.	Unclear, maybe the environmental part of the license can be integrated into the EIA License and the revenue part into the electricity generation license?
Electricity Generation License	See Table 11a.			
PPA with Kenya Power	See Table 11a.			
Approval of PPA from ERC	See Table 11a.			
Approval for change of use	See Table 11a.			
Development permit	See Table 11a.			

#### Table 11d: A brief evaluation of the regulatory framework (geothermal)

# Recommendations: Suggestions for streamlining and increased effectiveness

Based on the brief evaluation above, the following improvements of the regulatory framework could be considered:

#### Improve the dissemination of regulatory information, e.g. by creating a one-stopfacility for renewable energy.

Ultimately, the GOK might consider a one-stop-facility for renewable energy projects in which the investor submits the proposal and is guided by the facility through the process from submission of the EoI to the issuance of the PPA approval. Such a facility would provide reliable information on the project requirements, the process, rights and obligation. In addition, it could also provide information on signed PPAs as well as tenders of sites underway and awarded. It would collect all documents necessary and assist the applicant in obtaining all necessary clearances. It would furthermore ensure that all processes for clearances are conducted in an expedient way and intervene on behalf of the investor when problems arise.

It is key that such a facility operates efficiently and does not add another bureaucratic layer on the already existing complex structure. Whether it is located within ERC, the Ministry of Energy or somewhere else, it should depend on capacity, expertise and cost.

In a first phase, an option could be to create a digital One-Stop-Shop for the provision of relevant information to investors. This would be a website containing the described information on regulatory procedures for starting an investment project, tenders of sites, regulatory and policy decisions, and any information relevant to RE investors. Tender documents and application forms could be made downloadable. In addition, the GoK should consider publishing all signed PPAs to improve transparency in the sector as it is done in other countries.

It should be noted that the Kenya Investment Authority is currently in the process to establish a digital One-Stop-Shop. To which extent a digital One-Stop-Shop for the RE sector can learn, cooperate and be integrated with these efforts needs further exploration.

An important question is which institution should be responsible for a One-Stop-Shop. First bodies to be considered are the Ministry of Energy and ERC. Nonetheless, this has to be further investigated.

## Introduce fast track for PPA negotiations at Kenya Power and a streamlined standard PPA for renewable energy projects.

From the perspective of Kenya Power, negotiating a PPA for renewable energy is considered relatively straight-forward and the PPA is a standard template.

Although the negotiation process (three months) is considered much faster than for a traditional energy project, the waiting time is six months. It should be considered to create a fast track process within Kenya Power for renewable energy, especially for small power producers. This would show the priority for renewable energy sources and would also take into account those renewable energy projects that are of smaller nature. A possibility would be to have a special procedure for small producers (e.g. below 30 MW) and very small producers (e.g. below 1 MW).

Considering that the content of a PPA for RE projects has to comply with certain regulatory requirements, it is suggested that ERC designs a standard PPA for RE containing a minimum of negotiable elements. This would shorten negotiation time and also facilitate the approval of PPAs at ERC.

#### Reduce discretionary decision criteria

Many of the licenses allow the issuing authority a high degree of discretionary power. Decision criteria are in some cases vague, not communicated or absent. This might be acceptable - but not necessarily- when the procedure reflects a policy decision, for example in case of the approval for an expression of interest. However, in all other cases, the applicant should know the requirements and the decision criteria in advance so the investor knows exactly what to do to obtain the clearance. Table 12 lists some examples of discretionary powers.

Clearance	Decision power	Decision criteria
Approval for	Feed-in Tariff Committee	How to integrate project into national power
Expression of Interest	(Ministry of Energy, KP, ERC)	development plan – FiT Tariff Policy. Not clear cut criteria.
Exploration Authority	Minister	None – Sec. 2 (3) Geothermal Resources Regulations, 1990
Geothermal Resource License	Minister	None – Sec. 3 (3) Geothermal Resources Regulations, 1990. Some requirements mentioned in Sec. 12, 13 but not part of the decision.
Electricity Generation License	ERC	Decision criteria provided under Sec. 14 of the Energy (Electricity Licensing) Regulations, 2010.
Approval of PPA	ERC	None set in legislation.

### Table 12: Examples of discretionary powers in the regulatory framework for the renewable energy sector

It is important to give investors certainty about the requirements of clearances, the applied decision criteria and conditions to be fulfilled by the investor.

## Provide higher degree of transparency and certainty of the regulatory framework by the adoption of sector legislation instead of policy statements

Related to the issue of the discretionary power of the Government is the fact that apart from geothermal investments the renewable energy sector is not governed by specific gazetted legislation. A non-binding policy statement is the only document issued by the Government, there are no laws and regulations specifying the regulatory framework. This has three negative effects: (1) a lack of certainty because the policy can be changed on the spot, (2) a lack of transparency because the policy is made and altered without the involvement of the main stakeholders and without a public debate, and (3) a lack of detail because a proper regulatory framework would provide investors with a higher degree of specific rules than a policy does.

#### Combine the EIA with other environment and safety related clearances

There are a number of general environmental and security clearances that are requested in a sequential manner: EIA, water permit, aviation clearance, geothermal license. Though the Environmental Authority requests the opinions of each specific authority within the EIA licensing procedure, investors still have to obtain the specific license. It would save time and compliance cost if these licenses could be integrated and be covered by the EIA in an internal process that involves the participation of relevant government bodies.

#### Consider streamlining the Electricity Generation License

Like all energy projects, RE projects under a capacity of 1 MW do not need a license or permit, those over 1 MW and under 3 MW need a streamlined Electricity Permit from ERC. Only RE projects with a capacity above 3 MW must be licensed by ERC. Those licensing requirements are relatively cumbersome and a long list of data and documents must be submitted as listed in the Annexes of the Energy (Electricity Licensing) Regulations, 2010. Considering that under FiT a set tariff is applied (though the FiT speaks of a maximum tariff, these maximum tariffs are the ones applied) and the tariffs are negotiated by the investor and Kenya Power and then stipulated in the PPA, then it should be analyzed which data ERC needs to assess technical and financial ability and eliminate the irrelevant requirements or those that are already part of previous clearances.

The same might be valid for the technical arrangements though this has to be further assessed. Kenya Power ensures in the PPA that the investor fulfills all technical requirements to provide safe power. It might be sufficient if ERC obtains the technical information stipulated in the annexes of the PPA instead of requesting the same or similar information within the Electricity Generation Licensing procedure.

#### Expedite the Aviation Clearance

Obtaining the aviation clearance for mast to log wind data and wind turbines takes 14 days to two months if military areas are not involved, provided that the specific coordinates of the masts or wind turbines are defined by the applicant. In case physical site inspection is required, the process may take longer specially when there is lack of inspectors and vehicles to reach the location. Given the increase of applications in the last months according to the Aviation Authority, additional regulations will be implemented to expedite the procedure. One action is to identify areas – especially in the most obvious areas for wind farms - in those that have to be inspected because they are close to an airfield and those for which a desk

assessment is sufficient. Another action is to burden the applicant with the inspection cost instead of the two flat fees that were applied at the moment of the interview. For example, the applicant would have to provide transportation of the inspector. Given the technicalities of the criteria to issue the clearance, the Aviation Authority might consider a procedure to pre-evaluate the site and inform the applicant if a desk assessment will be sufficient or if the proposed site is located in areas that require physical inspection and consultation with other bodies. The Aviation Authority could also consider providing information in a simple language about the criteria and the regulations that will be applied to assess the applications. This will increase the transparency and predictability of the procedure.