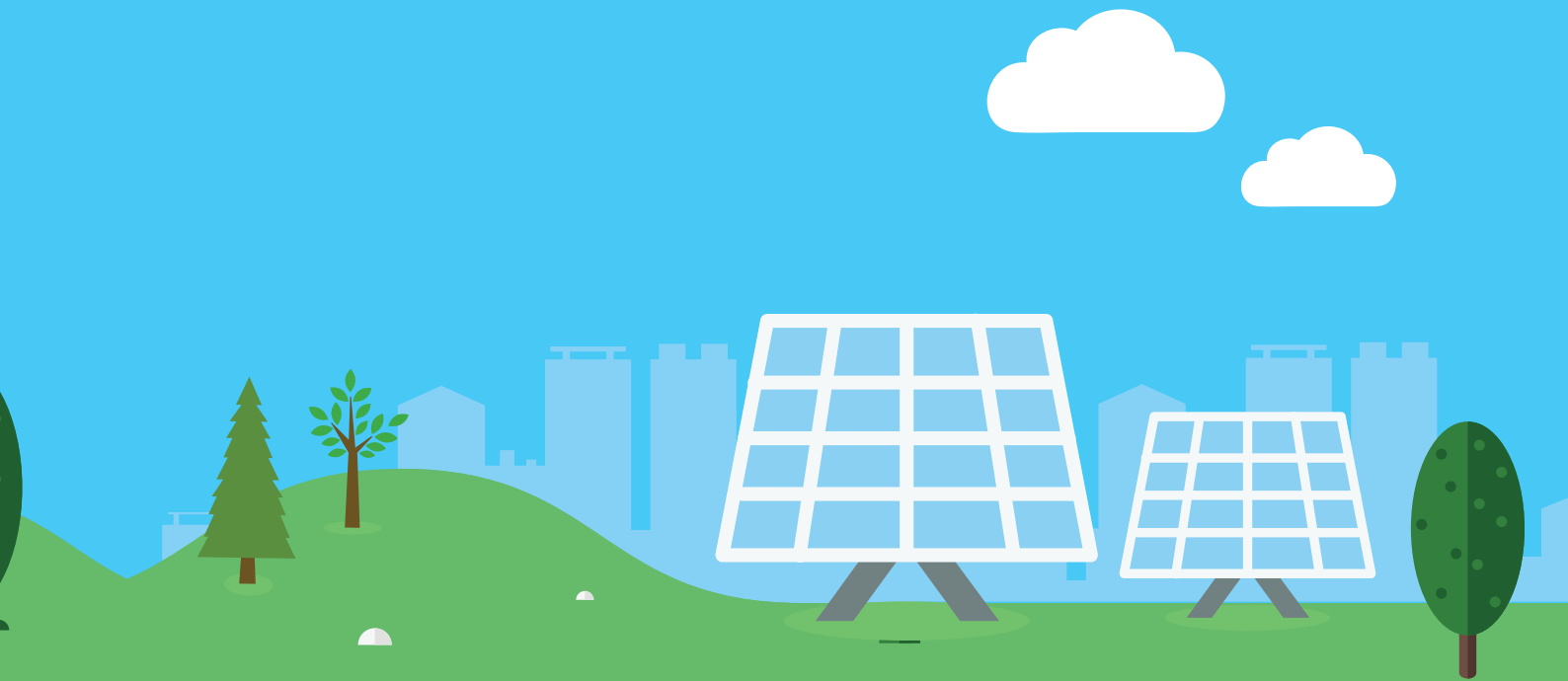


Egyptian Solar PV Feed-in-Tariff Procedures for Large Scale Projects

A guideline for investors



RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة



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Egyptian Solar PV Feed-in-Tariff Procedures for Large Scale Projects

How to start your photovoltaic project in Egypt under the first and second rounds of Feed-in-Tariff scheme

A guideline for investors



Implemented by



Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة



About RCREEE

The Regional Center for Renewable Energy and Energy Efficiency (RCREEE) is an independent intergovernmental regional organization which mission is to facilitate, increase and mainstream the adoption of renewable energy and energy efficiency practices in the Arab region. RCREEE teams up with regional governments and global organizations to initiate and lead clean energy policy dialogues, strategies, technologies and capacity development in order to increase Arab states' share of tomorrow's energy.

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About RE-ACTIVATE

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Executive Summary

This guide is intended to provide the most up to date information for investors on the currently proposed solar PV feed-in tariff process for projects above 500 kWp in nominal capacity.

Several countries from the MENA region have enacted policies and administrative procedures for private sector participation in the development and operation of utility scale solar PV projects. Several issues have however emerged in the first wave of project implementation in countries such as Jordan and Egypt. Significant confusion about the project processes among project developers is extensive in Egypt due to the infancy of the process. In Jordan developers and investors have found it difficult to develop a complete overview of the administrative procedures required throughout the project implementation phase including information flows, technical and legal requirements, leading to lengthy lead times and increased transaction costs. Civil servants also lack a complete overview of the required procedures, in some cases leading to the provision of contradictory information on project processes and documentation.

While recognizing that national PV programs in most of the Arab States are in their early phases, these issues risk the creation of a reputation of long process times and an unpredictable implementation context for project developers. There is a need for a comprehensive overview on both sides of the equation, authorities and developers, of the required steps across the project life cycle. Detailed visual mapping tools can facilitate access to this comprehensive overview and narrow the gap on the interpretation of requirements among various stakeholders engaged in the process. As such, RCREEE in co-operation with the RE-ACTIVATE project (GiZ) have developed two elements:

1. A detailed rich info-graphic outlining the project process from qualification through to decommissioning of large scale solar PV plant (above 500 kW)
2. A guidance document detailing the currently proposed process steps for prospective investors

The Egyptian scheme directs that the Egyptian Electricity Transmission Company (EETC) is required to expand its networks to accommodate all renewable energy supply and purchase all electricity that has been produced from renewable energy power plants at the price set by the Cabinet of Ministers¹. The price for the first round of feed-in tariff (FiT) was valid for two years (until October 2016) and set at 13.60 US cents/kWh for solar PV projects from 500 kW to 20 MW and 14.34 US cents/kWh for projects from 20 to 50 MW².

Under this scheme the cost of installing new renewable energy will be transferred to consumers and will not be subsidized by the Egyptian Government. The scheme is aimed at supporting 2000 MW of installed solar PV capacity from 500 kW to 50 MW as part of the target 4300 MW of installed renewable energy capacity by 2020. All renewable energy projects established under the scheme will qualify for priority dispatch and the EETC will sign a 25 year take or pay Power Purchase Agreement with the relevant solar PV project company (Ministry of Electricity and Renewable Energy, Egyptian Electricity Holding Company, & Egyptian Electricity Transmission Company, 2014). The value of the tariff for projects above 500 kW is to be paid in Egyptian Pounds equivalent to US Cents on the basis of the following equation for the **first round**:

PV Projects' Feed-in Tariff (EGP) = [15% of Feed-in Tariff (\$.Cent) X 7.15 (L.E.)] + [85% of Feed-in Tariff (\$.Cent) X exchange rate on the bill issuance day, as stated in the contract]

On 28th October 2016, the second round for Feed-in Tariff programme commenced officially, as announced by the MoERE. The current price for the second round of FiT will also be valid for two years (until October 2018) and has been set at 7.88 US cents/kWh for solar PV projects from 500 kW to 20 MW and 8.40 US cents/kWh for projects from 20 to 50 MW.

The value of the tariff for projects above 500 kW is calculated on the basis of the following equation for the **second round**:

PV Projects' Feed-in Tariff (EGP) = [30% of Feed-in Tariff (\$.Cent) X 8.88³(L.E.)] + [70% of Feed-in Tariff (\$.Cent) X exchange rate on the bill issuance day, as stated in the contract]

¹(Ministry of Electricity and Renewable Energy, Egyptian Electricity Holding Company, & Egyptian Electricity Transmission Company, 2014; Presidential Decree, 2014)

²Presidential decree in official Gazette October 27th, 2014

³Exchange rate of EGP against USD at the time of issuing FiT for the second round.



As confirmed by MoERE, only the pre-qualified developers from the first round are eligible to participate in the second round. Only in case the targeted capacity of 2 GW for solar PV projects are not met, new investors will be pre-qualified to participate in the FiT programme together with interested developers already qualified for the first round.

The process of developing a solar PV project in Egypt can be daunting for an investor as information is spread throughout a number of different government agencies. RCREEE and RE-ACTIVATE have been able to work closely with the three key agencies NREA, Feed-in Tariff Unit and Egypt ERA to attain the most reliable and up to date information for this guide.

The following process steps have been identified in the Egyptian solar PV project supply chain:

1. Developer qualification
2. Establishing a «Special Purpose Vehicle»
3. Land securing
4. Temporary generation license acquisition
5. Cost sharing agreement
6. Measurements and studies
7. Contracts and agreements
8. Permanent generation license acquisition
9. Construction and connections
10. Commissioning and Commercial operation
11. Decommissioning

This guide provides details on each of these steps with all relevant information including the following:

- Key stakeholders:
 - Public authorities
 - Off-takers
 - Developers
 - Financiers
 - Service providers (Consultants and legal advisors)
- A demarcation of responsibilities within each step of the key stakeholders
- Some costs such as licensing fees or land fees
- Any documents required in each step and the flow of these documents between stakeholders
- Any specific laws and regulations governing each step where available
- The websites of key organizations involved in the process

It must be made clear that these steps are valid as of December 2016 and are subject to change as the process is updated by government authorities and new directives and laws are put into place.



Abbreviations

EETC	Egyptian Electricity Transmission Company
EGP	Egyptian Pounds
Egypt ERA	Egyptian Electric Utility and Consumer Protection Regulatory Agency
FiT	Feed-in Tariff
FiT Unit	Central Unit for Feed in Tariffs
GAFI	General Authority for Investment
IFI	International Financial Institution
kWp	Kilo Watt Peak
LCOE	Levelised Cost of Electricity
MW	Mega Watt
NREA	New and Renewable Energy Authority
PPA	Power Purchase Agreement
PV	Photovoltaic
SPV	Special Purpose Vehicle



1 Introduction

Various stakeholders have communicated investor confusion with the current process to establish a solar PV project under the new Egyptian feed-in tariff. This guide is intended to provide the most up to date information for investors on the currently proposed solar PV feed-in tariff process for projects above 500 kWp in nominal capacity. Through continuous consultation with key government authorities this guide is intended to detail the process steps from investor qualification through to decommissioning of the plant. This guide is valid for the first round of feed-in-tariff scheme, from October 2014 until October 2016.

Although the second round is mainly addressing the pre-qualified developers from the first round since its commencement on 28th October 2016, this guide tried also to consider and refer to any relevant changes that could be important for interested developers.

While these steps are up to date at time of writing, they are subject to change and this document will be required to be updated on a regular basis as new information comes to hand.

1.1 Content of this guide

This guiding document is divided into 4 key sections:

Section 1 – The introduction to this document as well as the scope of the information graphic and a description of the feed-in-tariff scheme.

Section 2 – A detailed description of the current proposed feed-in-tariff process steps from qualification to the project commissioning and decommissioning. Each step will firstly demarcate the responsibilities of each of the key stakeholders and then describe the processes in each step. Four key groups of stakeholders have been identified while researching the feed-in tariff process:

1. Public authorities: NREA, Egypt ERA and GAFI
2. Off-taker: EETC including the FIT Unit as a functional unit
3. Developers/investors
4. Financiers: IFI's, commercial banks, central banks
5. Service providers: such as expert consultants and legal entities

Within each step, the guide will provide descriptions of the flows of information (documents), approximate time frame, approximate costs or set costs such as generation license fees, any specific laws and codes associated with the step such as land allocation laws.

The information for these steps and processes within has predominantly been attained from government organization documents, presentations as well as interviews with key stakeholders and any relevant ratified laws.

Section 3 - Outlines the relevant documents and laws required by a developer in order to establish a solar PV project in Egypt.

1.2 Scope of the Info-graphic and Guide

Within this first stage of the project RCREEE and RE-ACTIVATE have developed an info-graphic that details the Feed-in-Tariff scheme for projects over 5 MW. This is the focus, as it is currently the most sought-after process direction for investors.

The info-graphic contains the following elements for projects that fall under this scope:

- Key stakeholders:
 - Public authorities
 - Off-takers
 - Developers
 - Financiers
 - Service providers (Consultants and legal advisors)
- The major process steps from qualification through to decommissioning
- A demarcation of responsibilities within each step of the key stakeholders
- The approximate time frame - where available - for each step or process
- Any costs, such as licensing fees or land feese
- Any documents required in each step and the flow of these documents between stakeholders
- Any specific laws and regulations governing each step where available
- The websites of key organizations involved in the process



1.3 Egypt and the Feed-In-Tariff Scheme

Egypt is characterized by relatively low electricity tariff levels, due to its high subsidies, low energy imports, significant natural gas reserves, and a renewable energy strategy that in the past period has focused on large-scale wind. The solar energy sector has however received a large amount of attention in recent months. The ratification of the new Renewable Energy Law (203/2014) and the introduction of the Feed-in-Tariff scheme for large-scale solar PV projects have focused both local and international investor attention on the country.

Feed-in tariffs, or FITs, are a type of market-based instrument aimed to increase investment security for technologies that have not reached grid parity. Worldwide, FITs are commonly used and many studies argue that this policy option is the most effective to stimulate the deployment of grid-connected RE technologies (Michell et al., 2011; del Río, 2012; Couture & Gagnon, 2010).

FITs allow for producers to sell their generated electricity to the utility under a Power Purchase Agreement (PPA). A regulatory body sets the price to which electricity can be sold and thereafter lets the market determine the level of deployment. The price paid per kWh is usually technology-specific and an appropriate price level should be determined as closely as possible to the specific generation cost (Levelised Cost of Electricity – LCOE) of a certain technology (Couture & Gagnon, 2010). FITs are usually fixed with a reduction of tariff levels over time. The duration of a FIT support scheme varies between 5-10 years for a short-term contract and 15-25 years for a long-term contract (del Río, 2012).

The Egyptian scheme dictates that the Egyptian Electricity Transmission Company (EETC) is required to expand its networks to accommodate all renewable energy supply and purchase all electricity that has been produced from renewable energy power plants at the price set by the Cabinet of Ministers⁴. The price for the first round of feed-in tariff solar PV projects was set at 13.60 US cents/kWh for projects from 500 kW to 20 MW and 14.34 US cents/kWh for projects from 20 to 50 MW⁵.

This tariff was valid for the following 2 years (Ministry of Electricity and Renewable Energy et al., 2014). Under the scheme the cost of the installing new renewable energy will be transferred to consumers and will not be subsidized by the Egyptian Government. The scheme is aimed at supporting 2000 MW of installed solar PV capacity from 500 kW to 50 MW as part of the target 4300 MW of installed renewable energy capacity by 2020. All renewable energy projects established under the scheme will qualify for priority dispatch and the EETC will sign a 25 year take or pay Power Purchase Agreement with the relevant solar PV project company (Ministry of Electricity and Renewable Energy et al., 2014).

The value of the tariff for projects above 500 kW is to be paid in Egyptian Pound equivalent to US cent on the basis of the following equation for the **first round**:

PV Projects' Feed-in Tariff (EGP) = [15% of Feed-in Tariff (\$.Cent) X 7.15 (LE)] + [85% of Feed-in Tariff (\$.Cent) X exchange rate on the bill issuance day, as stated in the contract]

In its form the Egyptian feed-in-tariff scheme was classified as a "proposed" scheme with no detailed guidance document available for developers, financiers, public authorities or service providers. The new Presidential Decisions Directive of December 21, 2014 fixed the price of the feed-in tariff for 25 years for solar PV projects and specifies the features of the scheme for land use (section III), establishing a project company (Section IV), connections (Section VI) and payments (Section VII)⁶. The details of the process an investor must go through in order to establish a project are however not in place. No bi-laws or directives have been initiated and no detailed process documents have been provided detailing the steps, fees and documentation required to be produced by investors to establish a project. This includes no bankable PPA, transmission agreement, and cost sharing agreement or sovereign guarantee. Public authorities such as NREA have done a good job at involving project developers and financiers in developing the scheme. However, as no official decision has been made about certain key steps in the process, developers and financiers are still facing many uncertainties moving forward. This document and info-graphic have been developed to help clear up some of this uncertainty.

Furthermore, the second round for Feed-in Tariff programme commenced officially in October 2016, as announced by the MoERE. The current price for the second round of FiT will also be valid for two years (until October 2018) and has been set at 7.88 US cents/kWh for solar PV projects from 500 kW to 20 MW and 8.40 US cents/kWh for projects from 20-50 MW⁷.

⁴ Ministry of Electricity and Renewable Energy, Egyptian Electricity Holding Company, & Egyptian Electricity Transmission Company, 2014; Presidential Decree, 2014

⁵ Presidential Decree in official gazette, October 27th, 2014

⁶ Republic of Egypt Presidential Decision Directive Pursuant to Act number 203, year 2014

⁷ <http://www.lexology.com/library/detail.aspx?g=08865856-b64c-4634-adc5-fb6d41977bd2>



For the **second round**, the value of the tariff for projects above 500 kW is calculated on the basis of the following equation:

$$\text{PV Projects' Feed-in Tariff (EGP)} = [30\% \text{ of Feed-in Tariff (\$.Cent)} \times 8.88^8 \text{(L.E.)}] + [70\% \text{ of Feed-in Tariff (\$.Cent)} \times \text{exchange rate on the bill issuance day, as stated in the contract}]$$

As confirmed by MoERE, only the pre-qualified developers from the first round are eligible to participate in round two. Only in case the targeted capacity of 2 GW for solar PV projects are not met, new investors will be pre-qualified to participate in the FiT programme. Other than that, no clear differences in the overall procedures and processes were noted for the second round in comparison with the first round.

1.4 Electricity and Renewable Energy Sector of Egypt

The Egyptian Electricity Transmission Company (EETC), Electricity Distribution Companies (EDCs) and Electricity Generation Companies (EGCs) are all affiliated to the Egyptian Electricity Holding Company (EEHC), which is operating under the umbrella of the Ministry of Electricity and Renewable Energy (MoERE).

The overall structure of the MoERE with all relevant authorities is highlighted in the Figure 1:-

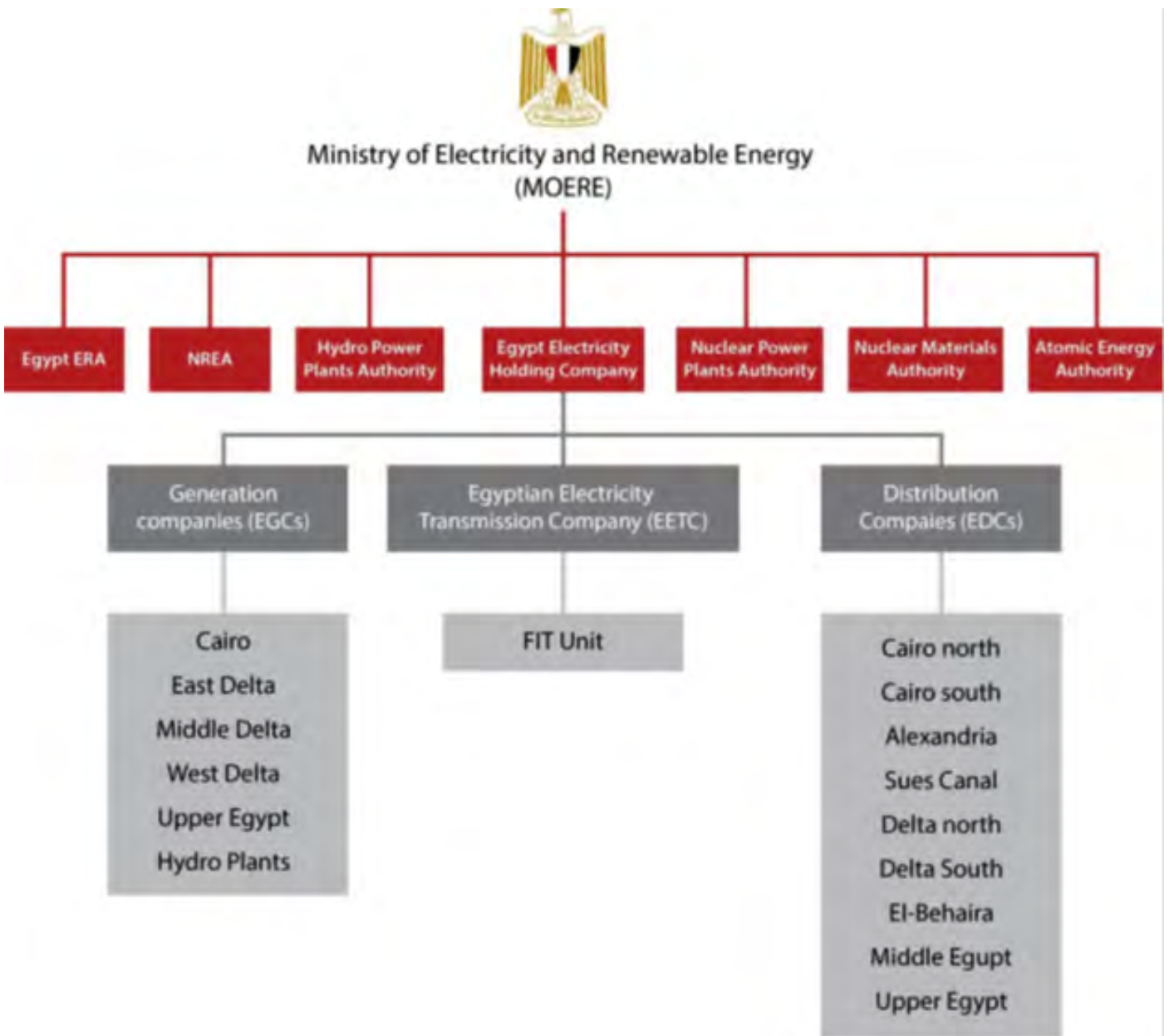


Figure 1: Egyptian Electricity Sector Schematic
(Source: Ministry of Electricity and Renewable Energy)

⁸Exchange rate of EGP against USD at the time of issuing FiT for the second round.



2 Process of Establishing a Solar PV Project under the Proposed Feed-In-Tariff Scheme for Projects above 500 kW

2.1 Call for Applicants

Shall the Egyptian government aim to procure renewable energy capacity, of which a named capacity in megawatts of medium to large scale solar photovoltaics facilities, the General Authority for Investment (GAFI) and Feed-in-Tariff Unit shall announce a «**call for application**» and indicate the respective qualification criteria and conditions for interested developers.

2.2 Developer Qualification

The developer addresses the “Central Unit for Feed-in-Tariff Projects” in order to acquire an “**evaluation application**” for establishing a PV project above 500 kWp. The developer (investor) provides the required documentation to the Central Unit for Feed-in-Tariff. These documents will be used to qualify or reject the investor from continuing the project process.

Investors shall submit their required documents in Arabic or English in three (3) original hard copies to the following address of the Central Unit for Feed-in Tariff and one (1) soft copy to the following email address:

12th Floor,
Ministry of Electricity and Renewable Energy,
Abassia, Cairo
fitunit@moeec.cloud.gov.eg

The Central Unit evaluates and answers the investors’ inquiries within one (1) month from the date of receipt of the application, according to the requirements and the evaluation mechanism.

In order to qualify, the developer must score 650 points or more based on specific criteria outlined in the table below. For detailed information on qualification criteria, the investor should read the qualifications requirements for investors to participate in feed-in tariff scheme available at the Egypt ERA website⁹.

Section	Points
General format and completeness	50
Title Page	0
Introduction	50
Project understanding	200
Qualifications and experience	300
Human resources	150
Financial resources	250
Additional information	0

⁹<http://egyptera.org/en/kwa3d%20tanzmia.aspx>



2.3 Establish a Special Purpose Vehicle¹⁰

In parallel with the land acquisition, the developer is required to establish a Special Purpose Vehicle (SPV) company in accordance with Law (8/1997) that governs the guarantees and incentives of investments¹¹. This company can be registered at the General Authority for Investment (GAFI)¹².

This is done through GAFI in the following process:

Step 1 - All the documents are submitted to the operation department according to its legal status for completing and reviewing the contract with the attorney from GAFI besides filling in the following applications for:

- Registering the company in the commercial registry office.
- Issuing the shares of the established company (Joint Stock & Partnership limited by share co.).
- Publishing in the Investment magazine.

The contract will be issued after completing and reviewing the data.

Step 2 - The file should be handed to the operation department for:

- Calculating the fees of the concerned authorities (according to its legal status and law)
- After paying the fees according to the central paying system of Alexandria Bank – GAFI Branch will handle the receipts to the operation department, the concerned employee will finish the required procedures on behalf of the investor with:
 - Lawyers syndicate
 - Egyptian Financial Supervisory Authority (Joint Stock & Partnership limited by share co.)
 - Notarization Office
 - Chamber of Commerce Union (for the companies registered according to law no. 159/ 1982)
 - Commercial Registration

Step 3 - The investor or his attorney should sign the contract by the Notarization Office.

Step 4 - Issuing the decree of the company establishing.

Step 5 - The commercial registration will be presented to the interested person.

Documents required to complete the above procedure are as follows:

- a. A company registry application
- b. The possession contract or the allocating deed of the project land (or present an act for presenting it during one year from the establishing date).
- c. The power of attorney to take the necessary procedures to establish the company should be given by the partner to the partner attorney and it should include company establishment right and signing contracts in the notary office.
- d. A copy of the identity cards or the passports of the partners or the owner and the birth certificate for minors, if any.
- e. Criminal declaration in case the company includes foreigners.
- f. A copy of attorney card «not less than primary attorney» enlisted in the Lawyers Syndicate , paid participation fees, signed by a lawyer and authorized (companies with capital less than EGP 20,000 are exempted from this document).
- g. In case the company is located in Sinai, a map of the company's location is submitted in addition to the approval of the chairman of GAFI.
For Industrial Projects: A prior approval has to be obtained from General Authority for Industrial Development before establishment.

¹⁰All information about establishing an SPV was provided by GAFI

¹¹In 13/3/2015, Article 29 of this law has been changed and the Free Zone Areas were cancelled, which

¹²encouraged more investors to sign PV contracts to benefit of the exemption from custom duties and taxes Egypt ERA Renewable Energy Feed-in Tariff Projects Regulations



For Capital Companies:

- a. Non-confusion certificate include the company name.
- b. A bank certificate proving that 10% of the issued capital has been deposited .In case of limited liability companies, the amount of capital is paid in full.
- c. In case the company's auditor is dealing with GAFI for the first time, a certificate from the Ministry of Finance (General Registry of Accountants and Auditors) is required, which states that he has the right to sign capital companies balance sheets.

The following fees are also required to be paid as per fees of Law (8/1997):

Type of fee	Amount (Egyptian Pounds)	Authority
Authentication fee of the lawyers syndicate	5 EGP per 1,000 EGP of the capital amount plus 20 EGP lawyers stamp (Max 5,000 EGP)	Lawyers syndicate
Notarization fee	0.25% of the paid capital (max. 500 EGP)	Public notary at Salah Salem street
Commercial registry fee	Sole proprietorships : 9.50 Capital Co. : 56 Partnerships : 64 Partnership(foreign partners): 76	The commercial registration office
Fees of publishing in the investment magazine	Joint Stock Co. in Arabic 200 Joint Stock Co. in Arabic / English 400 L.LC in Arabic 150 L.L.C in Arabic/English 300 Partnership Co.& Sole proprietorships in Arabic 100	
Tax license fees	Exempted	The investment tax department
Fee for issuing shares (Joint stocks and partnerships)	0.5 EGP per thousand EGP (Max. 10,000 EGP)	Egyptian financial supervisory authority
Fees for evaluating a corporeal share for inland investment companies	2,000 EGP of the value of the corporeal share with a minimum fee of 5,000 EGP and max fee of 7,500 EGP	The General authority for investment and free zones

2.4 Land Application, Allocation and Acquisition

Land can be acquired by three avenues:

1. State owned land allocated for NREA
2. State owned land allocated by other state entities
3. Private land acquired through a private landowner and a private purchase or land lease agreement signed between the developer and land owner.



2.4.1 State Owned Land – Allocated for NREA

All developers have the right to obtain land from NREA. A letter is sent from NREA advising the developers that they have qualified for the Feed-in-Tariff program and can now apply for land through the Feed-in tariff Unit and NREA. Land can be applied for once the following conditions are met¹³:

- A fee of USD 2,000¹⁴ or 20,000 EGP¹⁵ is paid and guidelines of the land availing studies are given to the developer
- The letter of qualification, SPV registration and signed cost sharing agreement have been sent to NREA.

Once these requirements have been fulfilled, the developer will receive site data and guidelines to apply for land availing. The developer is then required to submit an application for land availing with the following documents included:

- A copy of the award letter issued by EETC and NREA
- The guidelines of the land availing studies signed and stamped by the company stamp
- The desired piece of land in accordance with land availability, each representing a piece of land from those specified by NREA, referring to it by a code shown by NREA and signed and stamped by the company.
- Project pre-feasibility study
- An initial bank guarantee in an amount of 1% of the project estimated cost (USD 1.5 million per PV megawatt and USD 1.3 million per wind energy megawatt has been estimated by NREA).

NREA will then supply the available land as best it can, based on the desires of investors. The cost sharing agreement means that costs are split evenly for connections to the sub-station and building of the sub-station. If an over qualification of investors has occurred, then the land allocation is on a first come first served basis. As in, the first developers to fulfil the above requirements will be in the first round of land allocation.

The developer is to enter into an initial MOU between the developer and NREA¹⁶. The developer can carry out initial measurements and availing studies on the land. It is the responsibility of NREA to perform all data measurements for the land as well as the environmental impact assessment and acquire all permits.

Permits from following organizations are required for land use¹⁷:

- Ministry of Petroleum
- Operations Authority of Armed Forces
- Civil Aviation Authority
- Ministry of Agriculture and Land Reclamation
- Antiquities Authority
- National Center for the Usage of State-Owned Lands
- Ministry of Information and Communication
- Ministry of Housing and Development
- Governorate where the project will be implemented
- Civil Defence Authority
- Quarries and Mining Authority
- Urban Development and Land Management Unit (City Council)
- Respective City Council in the governorate for both:
 - the project itself, and
 - building bricks, fences or any civil works

The following key points about state owned land should be noted:

- All access roads are to be constructed and maintained by NREA.
- Substations – The substation is to be built by EETC close to the allocated land.
- A land fee of 2% of annual electricity generated will be required to be paid to NREA.

¹³These stipulations were gathered through meetings with various developers

¹⁴This can be paid through NREA's website or land availability unit at the NREA headquarters

¹⁵All exchange rates are according to official rate for EGP against USD until October 2016

¹⁶This MOU will be converted into an usufruct agreement, which will be signed among the overall security package

¹⁷E-mail from Egypt ERA



2.4.2 State Owned Land – Allocated by Other Public Authorities

Land can also be allocated by other state entities such as¹⁸:

- General Authority for Investment and Free Zones
- General Authority for Industrial Development
- General Authority for Tourism Development
- New Urban Communities Authority
- General Authority for Rehabilitation Projects and Agricultural Development
- Land Improvement Authority

In order to acquire this land, the investor must follow the same process as with NREA's land. However, in this case the land availing will be through NREA. It is the responsibility of the developer to acquire all permits related to this land.

The following key points about state owned land should be noted:

- All access roads are to be constructed and maintained by the developer.
- Substations – The substation is to be built by EETC close to the allocated land.

2.4.3 Private Land

Private land is also eligible to be used and can be attained through a land lease with a private landowner (registered contract). To establish the project on private land, the developer should contact the private landowner as well as the EETC.

Negotiations will need to take place with the landowner to determine who will perform and pay for relevant technical studies such as irradiation studies. Private land does not require the same permits as the state owned.

Depending on the condition of private land to be used as the project's site, permits from the following organizations are required:

- In case there are water wells in land: permit of Ministry of Water Resources and Irrigation.
- In case the land is used for agriculture: permit of Ministry of Agriculture and Land Reclamation.
- In case it is an industrial land: permit form Industrial Development Authority (IDA)
- In case the land is located near the Nile: permit from Nile Research Institute.

The developer will be required to perform technical and land feasibility studies and hand these over to the EETC in order to perform simulations and determine suitable connection points.

The EETC from its side will be required to carry out a grid feasibility study and determine if the grid is able to absorb the capacity of the proposed project. The study will also determine where the nearest sub-station is or if a new sub-station is required to be built.

The EETC is required to accept all power produced from renewable energy systems as per new Electricity Law (87/ 2015) Negotiations will be required to take place to determine the cost sharing arrangements of building a sub-station (if required) as well as maintenance and guarantees¹⁹.

2.4.4 Letter of Guarantee

In case of state owned land, letters of guarantee are required at various points along the project timeline to ensure firstly completion of the project and then ongoing performance of the plant. These guarantees are increased and decreased depending on the stage of the project, however all are included in one letter of guarantee to be provided by the developer. The following schedule will be agreed on with NREA.

¹⁸ Meeting with Egypt ERA (12/02/2015)

¹⁹ Meeting with Egypt ERA (12/02/2015)



Project stage	Percentage of total (estimated) project cost required to be guaranteed to NREA (%)
Usufruct Land agreement	0.5
Construction	2
Commercial operation	0.5
10 years after commercial completion	0.5
End of commercial operation	2
Returning of land	Guarantee returned to investor

2.5 Acquiring the Temporary Generation License

The SPV is able to acquire a temporary generation license for one (1) year that can be renewed only once by Egypt ERA according to the license requirements. The license can potentially be renewed for a third year if the investor provided logical reasons to Egypt ERA's committee. An application fee is required to study the requests and this is non-refundable, even if the application is unsuccessful.

The application must have all documents stamped with the seal of the company's license request and numbered all the presented papers. The applicant has only two opportunities to complete the papers. If they are not completed on both occasions, the applicant forfeits the right to obtain a temporary generation license.

The requirements to qualify for the temporary generation license are very general. The developer will be required to provide a general outline of the project including capacity and predicted output. Any technical issues will need to be discussed and solved with the EETC or Electricity Distribution Company (EDC) before the temporary license is obtained²⁰.

Included in the contract are the following provisions²¹:

- Duration of the contract and the terms of renewal.
- Ability and minimum electrical power contracted.
- The proposed date for the start of the implementation of the service.
- The proposed method of calculating the price of the service rendered and the various variables that affects it.
- The obligations of the parties to the contract.
- Cases and procedures for termination of the contract.
- Adoption of the requirement of the device to project contracting.
- Refer to the condition of the device when the emergence of any dispute between the parties to the contract before resorting to terminate the contract.

Once the temporary generation license is obtained, the developer is able to perform more detailed land studies and begin the civil work on site.

2.6 Cost Sharing Agreement

A cost sharing agreement is entered into with NREA and EETC for the infrastructure development, interconnection and installation of a substation.

2.7 Measurements and Studies

The developer is now able to deal with the EETC to develop a grid connection study based on the technology to be used, the capacity and the predicted output of the plant. The developer (with aid of specialist consultant) is also required to carry out the Environmental Impact Assessment and develop an environmental impact statement. This is required to be given to NREA in order to send it to the Egyptian Environmental Affairs Agency (EEAA) for evaluation, feedback and approval and then return it back to NREA to be given to the developer.

²⁰ Meeting with Egypt ERA (12/02/2015)

²¹ Licensing instructions from Egypt ERA website



2.8 Contracts and Agreements

The following contracts and agreements will be entered into between the developer and the relevant government authority:

Usufruct Land Agreement (UA) – the usufruct land agreement will be signed between NREA and the developer. This will also require a land fee to be paid equal to 2% of the yearly production of electricity from the plant.

Usufruct and Cost Sharing Direct Agreement (UCS DA) – this will be signed between the NREA, the developer and the Security Agent (for and on behalf of the each of the financing parties)

Grid Connection Contract (GCC) – this will be signed between the EETC and the developer. It will detail the technical connection conditions governing the supply of electricity from the plant to the grid.

Grid Connection Contract and Cost Sharing Direct Agreement (GCC CSDA) – this will be signed between the EETC, the developer and the Security Agent (for and on behalf of the each of the financing parties)

Power Purchase Agreement (PPA) – this will be signed between the EETC and the developer. It will include a sovereign guarantee by the Ministry of Finance as well as fix the rate at which electricity is sold to the EETC.

Power Purchase Agreement Direct Agreement (PPA DA) – The direct agreement is signed between the EETC, Ministry of Finance, the developer and the financing institution.

Financial closure - After all agreements have been signed by the relevant parties these can then be presented to the financier in order to achieve financial closure.

2.9 Attaining the Permanent Generation License

After all measurements, agreements and contractual requirements have been fulfilled, the developer is able to apply for a permanent generation license. The following is required to be given to Egypt ERA to attain a permanent generation license:

1. All measurements, technical studies and required permits.
2. Raising the paid capital of the SPV to be equivalent to the level of equity of the planned project according to financial feasibility studies.
3. Agreement on financial closure

Failure to meet these requirements will result in the interim license being canceled, unless investor demonstrates strong evidence regarding his inability to fulfil the requirements within the time frame of two years.

The costs of a permanent generation license are shown in the table below:

Size	Points
1-10 MW	5,000 EGP
10-100 MW	10,000 EGP
>100 MW	20,000 EGP



2.10 Construction and Connection of Plant

Construction of the plant will take place utilizing the same EPC contractors that were stated in the original application if the entity is a consortium. Construction must adhere to all Egyptian laws and environmental standards. During plant construction, the EPC must keep the EETC up to date with the progress of the project.

- Construction bond of EGP 15 Million for 50 MW or EGP 5 Million for 20 MW Project shall be issued within 10 days from the financial closure
- It will be replaced by the Operation bond which shall be submitted 10 days before the Commercial Operation Date (COD)

The EETC is responsible for expanding the capacity of the grid to accommodate new renewable energy projects²². The renewable energy project developer is not required to pay any grid access fees for energy transmission.

Regarding the connections²³ of the plant:

- The connection facility up to the substation from the plant is the responsibility of the developer but should be done by EETC.
- The sub-station and connection to the grid is the responsibility of the EETC.

While the connection facility is constructed and connected, an O&M contract will be signed with EETC (only for connection facility).

2.11 Commissioning and Commercial Operation

Agreements on the time of commissioning and connection to the substation are stipulated in the Power Purchase Agreement (PPA). All interconnection must be finalized 6 months before the final date of commissioning so the plant is ready to produce power on that date. The interconnection to the substation will be paid for by developers and split evenly between developers on the same plot of land, regardless of distance to the sub-station. This will be a one-time fee.

Bank guarantee – A letter of guarantee of 0.5% of the total project cost is applied to this step to ensure all commissioning is carried out on time (operation and maintenance bond). This guarantee will increase in equal steps to reach 2% by the end of the project term.

Power production will take place under the terms of the PPA for 25 years and payments for the electricity produced to the grid will be paid on an annual schedule in accordance with the feed-in-tariff calculation for the **first round** based on the following equation:

PV Projects' Feed-in Tariff (EGP) = [15% of Feed-in Tariff (\$.Cent) X 7.15 (L.E.)] + [85% of Feed-in Tariff (\$.Cent) X exchange rate on the bill issuance day, as stated in the contract]

While for the **second round**, the FiT calculation will be based on the following equation:

PV Projects' Feed-in Tariff (EGP) = [30% of Feed-in Tariff (\$.Cent) X 8.88 (L.E.)] + [70% of Feed-in Tariff (\$.Cent) X exchange rate on the bill issuance day, as stated in the contract]

Operation and maintenance needs to be undertaken by a specialist contractor in accordance with the PPA terms. The SPV must provide an operation and maintenance contractor before starting the commissioning process of the plant, to ensure that the operation of the plant is in accordance with certain KPI's stipulated by Egypt ERA/EETC. The maintenance of the substation and grid connection facility is the responsibility of the EETC. Any interruption in the grid or substation will be the liability of the EETC and will not impact the payment to the SPV.

²² Republic of Egypt Presidential Decision Directive Pursuant to Act number 203, year 2014

²³ Republic of Egypt Presidential Decision Directive Pursuant to Act number 203, year 2014



2.12 Decommissioning

After the 25 year PPA has expired, it is the responsibility of the developer to decommission the power plant and return the land to its original condition.

At the end of the commercial operations, the operation and maintenance bond of 2% will also be returned from NREA to the developer.

2.13 Access to Digital Documents

An interactive version of this document and the related visualization tool are available online through this short link: <http://GOO.GL/HV46C4>

In addition, smartphones can be used to scan this **QR** code to access these documents





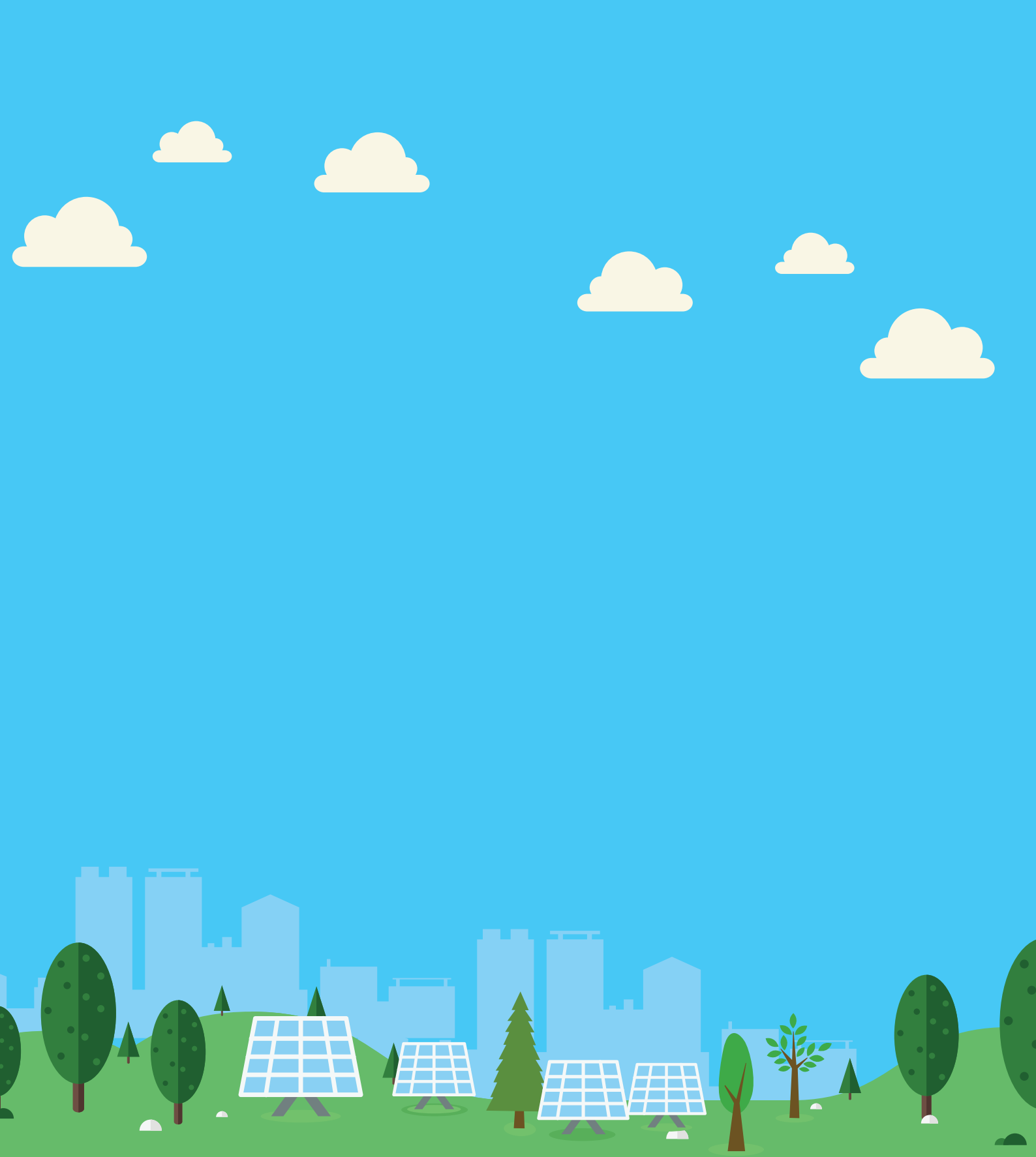
3 Relevant Laws and Documents

	Document	Description	Location of document
Legal	Electricity law	Major description of electricity utility in Egypt	http://egyptera.org/Downloads/Laws/law2015.pdf
	Renewable Energy law	Law governing the production and sale of electricity from renewable energy sources	http://egyptera.org/en/kwa3d%20tanzmia.aspx
	Renewable Energy Feed-in Tariff Regulations	An outline of the regulations and process of establishing a renewable energy project under the feed-in tariff scheme	http://egyptera.org/en/kwa3d%20tanzmia.aspx
	Renewable Energy Feed-in Tariff Regulations	An outline of the regulations and processes of establishing a renewable energy project under the feed-in tariff scheme	http://egyptera.org/en/kwa3d%20tanzmia.aspx
Procedures	Transmission code	Code that regulates the transmission and supply of electricity	http://egyptera.org/en/kwa3d%20tanzmia.aspx
	Procedure of issuing electricity generation/transmission/distribution license	Details the procedure that an investor must go through in order to attain an electricity generation license.	http://egyptera.org/en/kwa3d%20tanzmia.aspx
	Frequently Asked Questions	A list of questions frequently asked by investors about the regulations and processes of the FiT scheme and answers from Egypt ERA	http://egyptera.org/en/kwa3d%20tanzmia.aspx
	Organizational framework of the Central Unit for Feed-In Tariffs	An outline of the role and responsibilities of the FiT Unit (Arabic Only)	http://egyptera.org/en/kwa3d%20tanzmia.aspx
Licensing and qualifications	General conditions for generation license	Outlines the conditions an electricity generator must meet in order to attain a license. (Arabic only)	http://egyptera.org/en/rules.aspx
	Qualification requirements for investors to participate in feed-in tariff scheme	Details the process and requirements investors must provide to the Feed-in Tariff Unit in order to qualify as able to establish renewable energy projects in Egypt	http://egyptera.org/en/kwa3d%20tanzmia.aspx
Contracts	Power plant grid connection contract	A general contract between EETC and the power plant operator to connect to the transmission grid	http://egyptera.org/Downloads/taka%20gdida/Download%20the%20Power%20Plant%20-%20Grid%20Connection%20Contract.pdf



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