



Egyptian Electric Utility for Consumer
Protection and Regulatory Agency

Renewable Energy – Feed-in Tariff Projects’ Regulations



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EgyptERA’s crew has prepared this document so as to answer all the questions related to the renewables supporting scheme generally, and the feed-in tariff specifically



INTRODUCTION

Egypt faces a major challenge in providing a sufficient amount of electrical from its primary energy resources, especially oil and natural gas that contributes to 95% of the total energy resources needed for generating electricity in Egypt. Studies show that, even though Egypt possesses a reserve of primary energy resources; Egypt will face a deficit to cover its demand from these resources due to rapid utilization and increase of extraction costs. Expectations indicate that retaining balance between oil and natural gas production and their usage within three (3) years can be achieved after overcoming the economic challenges facing the oil and natural gas sector. However, according to the Egyptian energy strategy for 2030 and its update to 2035, it is expected that Egypt will be a net importer of oil and natural gas within ten (10) years from the start of the third decade of this century. This situation represents an additional challenge for the Egyptian economy which will become more vulnerable to the price fluctuations in the international energy markets, which can't be predicted or controlled. In addition, this will lead to Egypt's loss of foreign currency and the decrease in the competitiveness of the national economy. Therefore, there has to be diversification of the energy resources to maximize the benefits of using local resources which are characterized by continuous and stable prices such as investing in generation electricity from renewable resources that are rich in Egypt.

Moreover, on Sept. the 17th, the Cabinet of Ministers approved in its session no. 11 the issuance of feed-in tariffs for electricity projects produced from renewable energy resources (PV - Wind). A total target is to authorize 4300 MW to be achieved over the first period of applying the feed-in tariffs. This target includes 300 MW for small PV installations below 500 kW, 2000 MW for large size PV installations, which range between 500 kW up to 50 MW and the remaining 2000 MW is from wind energy installations with projects capacities ranging from 20 MW up to 50 MW. The value of the tariff will be revisited as either the target is achieved or the two years regulatory period is elapsed, which happens first.



The electricity transmission company (EETC) or distribution companies are committed to purchase the produced electricity from RE power plants at the prices announced by the Cabinet of Ministers through Power Purchase Agreements (PPA) for 25 years for the PV projects, and 20 years for the wind projects.

Accordingly, the Egyptian Electricity Utility and Consumer Protection Regulatory Authority (EgyptERA) has set the required regulations and procedures for executing the Renewable Energy Feed-in Tariff (RE - FiT) projects which includes:

- Procedures for execution of RE – FiT projects up to 500 kW of PV Installations
- Procedures for execution of RE – FiT projects more than 500 kW



Feed-in Tariffs for Renewable Energy Projects

First: PV Projects' Feed-in Tariffs:

PV Power Plant Installed Capacity	Corresponding Feed-in Tariff
Residential	84.4 P.T./kWh
Installed Capacity ≤ 200 kW	90.1 P.T./kWh
200 kW ≤ Installed Capacity < 500 kW	97.3 P.T./kWh
500 kW ≤ Installed Capacity < 20 MW	13.6 \$.Cent/kWh
20 MW ≤ Installed Capacity ≤ 50 MW	14.34 \$.Cent/kWh

- The PV projects' feed-in tariff has a flat rate during the entire 25 years contractual period.
- The PV projects' feed-in tariff, for installed capacities more than 500 kW, is being paid with Egyptian pounds according to the following equation:

PV Projects' Feed-in Tariff (L.E.) = [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]

- The upper limit for the total contractual PV installed capacities are:
 - a) 300 MW for projects with installed capacities up to 500 kW, and
 - b) 2000 MW for projects with installed capacities from 500 kW and up to 50 MW.



Second: Wind Projects' Feed-in Tariffs:

Full Operating Hours (FOH)	Feed-in Tariff for the 1 st tariff segment (5-year period) (\$/kWh)	Feed-in Tariff for the 2 nd tariff segment (15-year period) (\$/kWh)
2500	11.48	11.48
2600		10.56
2700		9.71
2800		8.93
2900		8.19
3000		7.51
3100	9.57	8.93
3200		8.33
3300		7.76
3400		7.23
3500		6.73
3600		6.26
3700		5.81
3800		5.39
3900		4.98
4000		4.60

- The wind projects' feed-in tariff has a segment tariff structure (5-year and 15-year periods) for a total of 20-year contractual period.
- The wind projects' feed-in tariff is being paid in Egyptian pounds according to the following equation:

Wind Feed-in Tariff (L.E.) = [30% of Feed-in Tariff (\$/kWh) X 7.15 (L.E.)] + [70% of Feed-in Tariff (\$/kWh) X exchange rate on the bill issuance day, as stated in the contract]

- If the value of the FOH lies in between 2 of the above FOHs, approximation is made to the nearest larger value in the same table.



- The upper limit for the total contractual wind installed capacity is 2000 MW.

What are the Facilities Provided by the Government for the Supporting Schemes?

1. Setting the necessary regulations for public land allocation for projects, which are in need for this, through usufruct rights covering the Power Purchase Agreement (PPA) lifetime.
2. The grid, either transmission or distribution depending on the case, is committed to offer priority on dispatch for renewable energy, and offers PPA based on take or pay.
3. Issuing the necessary sovereign guarantees for projects above 20 MW.
4. Provision of concessions from Ministry of Finance through soft loans: 4% interest rate for residential projects and up to 200 kW and 8% interest rate for projects ranging between 200 kW and 500 kW.
5. Forcing the Supreme Council of Energy decisions to inject investments of 2 Billion Egyptian Pounds for establishing transmission and distribution grids.

How to Apply for the Feed-in Tariff Mechanism?

Concerning the PV projects that are below 500 kW, the applications are to be handled to the department of renewable energy and energy efficiency in each distribution company. However, for the PV projects that are greater than 500 kW and Wind projects, applications are to be handled to the Central Unit for Feed-in Tariff located at EETC's headquarters.



Applicants have to attach the necessary documents according to the types of projects which are available in the above mentioned locations and at the following websites:

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| www.egyptera.org | Egyptian Electric Utility for Consumer Protection and Regulatory Agency (EgyptERA) |
| www.egelec.com | Egyptian Electricity Holding Company (EEHC) |
| www.eetc.net.eg | Egyptian Electricity Transmission Company (EETC) |
| www.nrea.gov.eg | New and Renewable Energy Authority (NREA) |



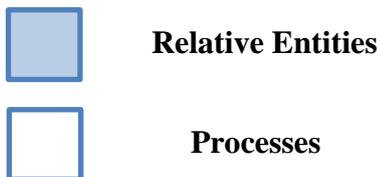
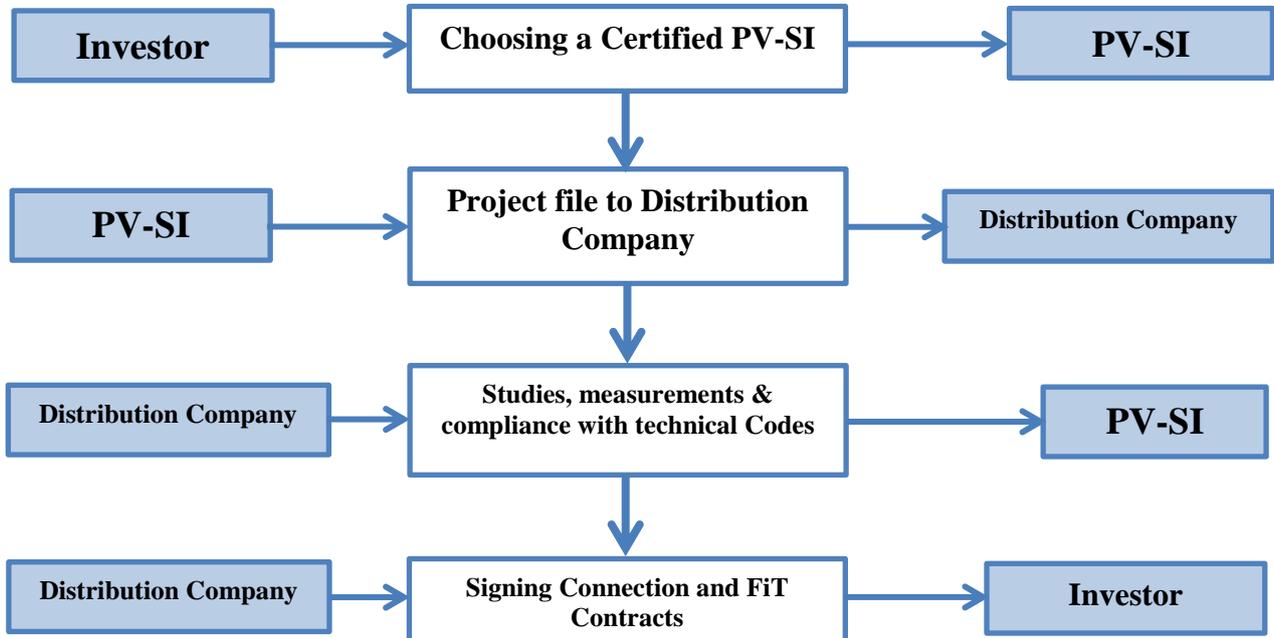
Procedures for Establishing RE projects under the FiT Program

First: Procedures for Establishing PV project under a FiT Program for Installed Capacities less than 500 kW:

- A. The PV-System Integrator(s) (PV-SIs) should seek “Certification” from New and Renewable Energy Authority (NREA) in order to be allowed to work in the field of installing, operating and maintaining on-grid PV projects (Annex 1).
- B. Projects with such small capacity, according to NREA’s requirements, are exempted from obtaining generation license from EgyptERA.
- C. Project Execution:
 1. The investor chooses one of the certified PV-SIs.
 2. The PV-SI carries out the necessary studies and prepares the project’s technical file (Annex 2) to be submitted to the “Department of Energy Efficiency & Renewable Energy” in the concerned distribution company (Annex 3).
 3. Within two (2) weeks from the date of receiving the application, the distribution company shall study connecting the project to the distribution network and carry out the necessary measurements to assume compliance with the relevant distribution and PV installation low voltage codes. The PV-SI shall complete the project within six (6) months from getting the approval from the distribution company.
 4. The distribution company shall sign a connection contract and a PPA according to the current FiT with the investor.
 5. The distribution company shall check the computability of the project installation with the submitted and approved technical file. The distribution company shall connect the project to the distribution network and install a meter after paying the required fee according to Annex 3. Finally, the distribution company shall ensure the operation’s soundness open a bank account for the investor with five (5) working days from the date of completion the project.



**Procedures for Establishing PV project under the FiT Program
for Installed Capacities less than 500 kW**





Second: Procedures for Establishing a RE project under the FiT Program for Installed Capacities more than 500 kW

A. Evaluation

1. The investor addresses “The Central Unit for Feed-in Tariff Projects” (Annex 4) to acquire an “Evaluation Application” for establishing either a PV project with installed capacity more than 500 kW or a wind project of at least 20 MW, according to the “Qualification Requirements for Renewable Energy Investors wishing to Participate in the Feed-in Tariff Program” (Annex 5).
2. The Central Unit evaluates and answers the investors’ inquiries one (1) month from the date of receipt of the application, according to the requirements and the evaluation mechanism stated in Annex 5.

B. Land Acquisition for the Project

1. The investor, who wants to acquire state-owned land for his/her project, has to address “The Central Unit for Feed-in Tariff Projects”. This unit studies the investor’s request and facilitates his/her land acquisition for the project.
2. The authority that provides the land signs a usufruct agreement with the investor.

C. Establishment of the Project Company

1. The investor establishes the Project Company in accordance to law (8) for year 1997, that governs the guarantees and incentives of investments.
2. The investor shall conduct the technical and financial feasibility studies for the project.



D. Temporary Generation License

The Project Company acquires a temporary generation license for one (1) year that can be renewed only once from EgyptERA according to the license requirements. However, the license can be renewed for a third year if the investor provides logical reasons to EgyptERA's committee. In the meanwhile, the Project Company will fulfill the following requirements:

1. All measurements, technical studies, and required permits.
2. Raising the capital of the Project Company to the level of equity share according to technical and financial feasibility studies.
3. Agreement on financial closure

E. Permanent Generation License and Final Signing of the Contracts

After the completion of all requirements mentioned in "D", a permanent generation license is obtained, and consequently, the Project Company signs the contracts with relevant authorities' and PPA under the current FiT program.

F. Construction

The power plant must be built within eighteen (18) months from the obtained temporary generation license date.

G. Commissioning and Commercial Operation

The commissioning and commercial operation shall be completed.



Procedures for Establishing a RE project under the FiT Program for Installed Capacities more than 500 kW

