

SOLAR PHOTOVOLTAIC FEED-IN TARIFF



How to start your photovoltaic project in Egypt Under first & second rounds of feed-in tariff scheme

First round: PV Projects' Feed-in Tariff (LE) = [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]
 Second round*: PV Projects' Feed-in Tariff (LE) = [30% of Feed-in Tariff (\$/Cent) X 8.88 (LE)] + [70% of Feed-in Tariff (\$/Cent) X exchange rate of EGP at maturity date in relation to USD]

(* Initially the pre-qualified developers from the first round are eligible to participate in second round. New developers will be pre-qualified to participate, if the targeted capacity of 2 GW for solar PV projects are not met.

Abbreviations

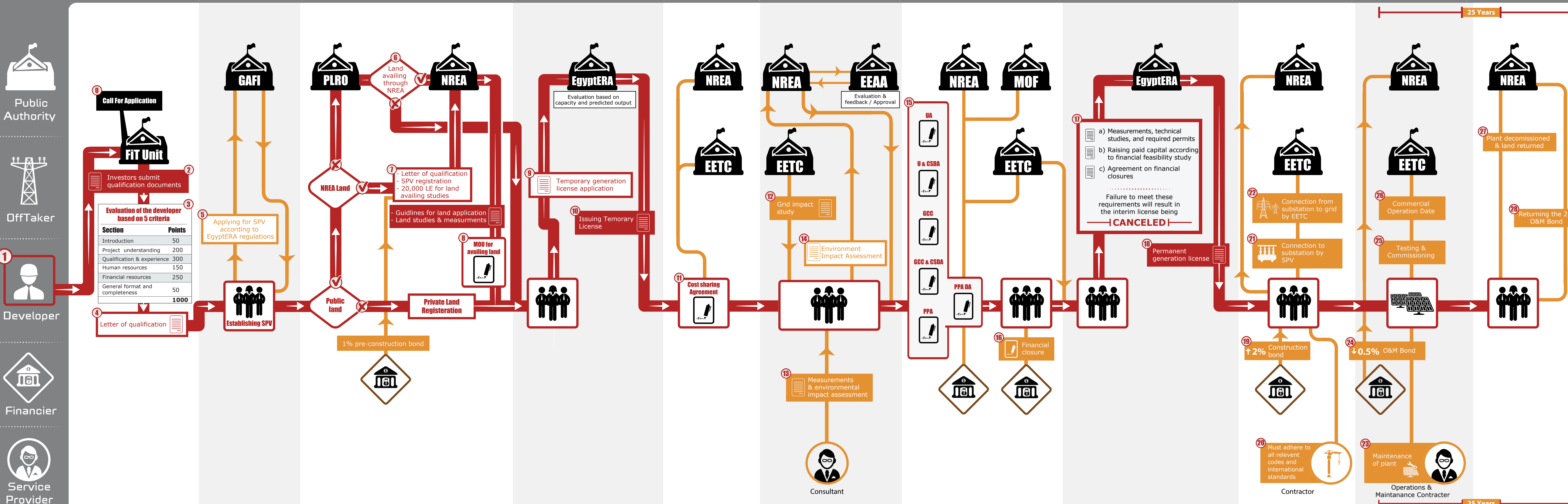
FIT Unit - Central Unit for Feed-in Tariff
 NREA - New and Renewable Energy Authority
 GAFI - General Authority for Investment
 EETC - Egyptian Electricity Transmission Company
 EEAA - Egyptian Environmental Affairs Agency
 MOF - Ministry of Finance
 SPV - Special Purpose Vehicle
 PLRP - Public Land Rights Owner
 COD - Commercial Operation Date
 O&M - Operation & Maintenance
 EgyptERA - Egyptian Electric Utility and Consumer Protection Regulatory Agency

Agreements & Contracts

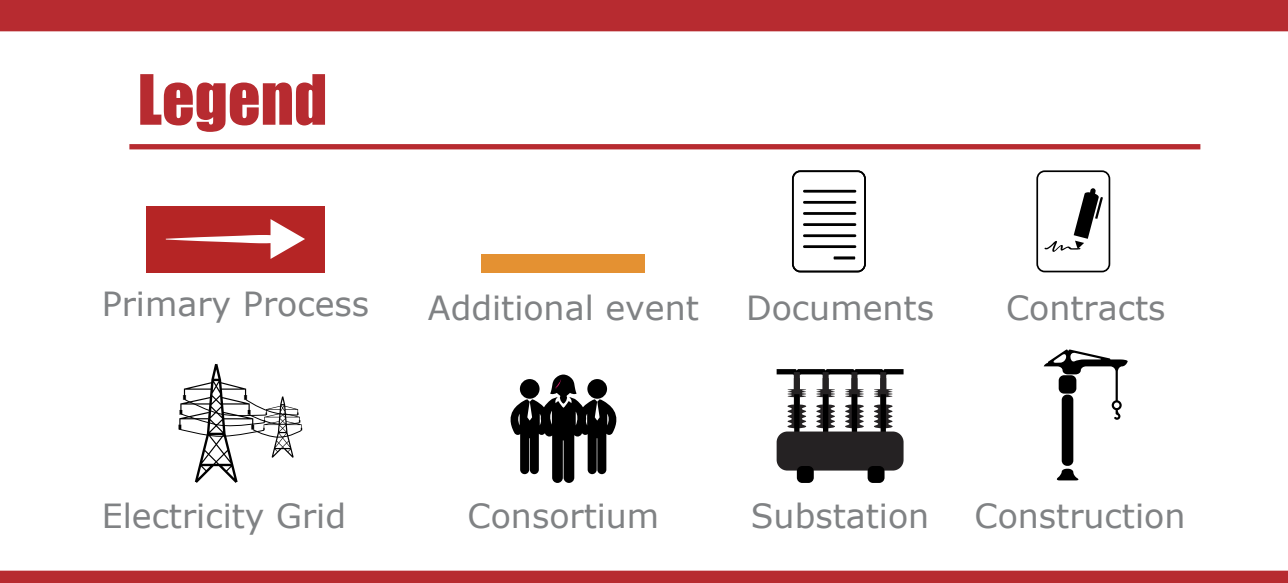
- 1- MOU for availing land
- 2- Cost Sharing Agreement (CSA)
- 3- Power Purchase Agreement (PPA)
- 4- Grid Connection Contract (GCC)
- 5- Power Purchase Agreement Direct Agreement (PPA DA)
- 6- Grid Connection Contract & Cost Sharing Agreement (GCC & CSA)
- 7- Usufruct Agreement (UA)
- 8- Usufruct & Cost Sharing Direct Agreement (U & CSDA)

Relevant laws and codes

- Renewable Energy Law 203/2014
- Public Tender Law 89/1989
- Investment Guarantees and Incentives Law 8/1997 and its Executive Regulations
- Environment Law 4/1994
- Grid Code



- 1 Call for Application from FIT unit (Functional unit from EETC)
- 2 Developer (investor) addresses the "Central Unit for Feed-in-Tariff Projects" to acquire the evaluation application for projects >500 KW.
- 3 Investor submits the required documents in **three** hard copies to Central Unit for FIT and **one** soft copy to: fitunit@moe.gov.eg.
- 4 Letter of approval is sent to qualified investors outlining the next steps of land acquisition.
- 5 Qualified investors must establish a joint stock Single Purpose Vehicle (SPV) under the investment law
 - The qualified consortium shall have at least 51% of the company shares
 - The share of the leader investor shall be at least 25%, and does not go below this share for two years after the COD
- 6 **Case of NREA land**
 NREA has set regulations for its allocated land, these include 1% bond for pre-construction, **increasing** to 2% during construction and **reducing** to 0.5% during first ten years of operation, which is then **raised** on equal steps to reach 2% by the end on the project term.
- 7 **Case of Public Land Rights Owner (PLRO)**
 Relevant Approvals and Permits
 1. Ministry of Petroleum
 2. Armed Forces Authority
 3. Civil Aviation Authority
 4. Ministry of Agriculture and Reclamation
 5. Antiquities Authority
 6. National Center for the Usage of State-Owned Lands
 7. Ministry of Information and Communication
 8. Ministry of Housing and Development
 9. Governorate where the project will be implemented
- 8 Signing MOU between NREA and investor.
- 9 SPV established by qualified investors (consortium), which cease a land and conducted a pre-feasibility study, is eligible to apply for an interim license.
- 10 Egypt ERA evaluates and provides a temporary generation license valid for one year and which can be extended for another year. The interim license cannot be assigned to another SPV without a prior approval from EgyptERA.
- 11 NREA and EETC have set a cost sharing agreement for the infrastructure, development and interconnection.
- 12 The Grid Connection Study is done by EETC to verify the right of way, as well as to define the point(s) of common coupling.
 - Scheme of defining losses shall be defined;
 - The study will define the necessary connection and transmission facilities.
- 13 The SPV shall make upfront studies (by specialist consultant) which include the climate measurements (such as wind speeds, wind direction, temperatures, solar radiation, etc.) and Environmental Impact Assessment.
- 14 Accordingly, SPV sends Environment Impact Assessment to NREA, for which evaluation, feedback and approval should be acquired from EEAA after a public hearing session according to the environment law 4/1994. Then EEAA returns it to NREA after approval and NREA will forward it to SPV.
- 15 - An UA is signed between the SPV and land owner (NREA/PLRO) for the project's life time. In case of the PLRO, the contract will be pending on granting the generation license. This contract should be registered in case of private land.
 - U & CSDA is signed between NREA, Bank & SPV.
 - GCC & PPA are signed between EETC & the SPV.
 - GCC & CSDA is signed between EETC, Bank & SPV.
 - PPA DA is signed between MOF, EETC, Bank & the SPV.
 - All contracts will be effective once the SPV is granted the generation license.
- 16 Financial closure is reached with the financing institution.
- 17 **Requirements to attain permanent generation license:**
 - Measurements, technical studies and required permits
 - Raising paid capital according to financial feasibility study
 - Agreement on financial closures
- 18 The permanent generation license is granted covering the life time of the PPA including the construction period.
 - Having the permanent license entitles the effectiveness of all agreements and contracts.
 - The generation license shall not be terminated unless the PPA is terminated.
- 19 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. (see number 9)
- 20 Construction of the plant occurs in compliance with all environmental regulations, standards and stipulations.
- 21 It indicates that the last deposit of the cost sharing is already paid (by the SPV).
- 22 While the connection facility is constructed and connected, an O&M contract will be signed with EETC.
- 23 Before the commissioning process of the plant, an O&M contract will be signed with specialist contractor.
- 24 Construction bond is **reduced** to 0.5% operation & maintenance bond, to be **increased in equal steps** to reach 2% by end the project term.
- 25 Commissioning of the plant will be held with attendance of EETC experts.
- 26 The Commercial Operation Date (COD) **should not** exceed 180 days from the requested COD
- 27 Decommissioning occurs at the end of the PPA term.
- 28 At the end of the 25 years of operations, NREA **returns** the 2% operation and maintenance bond to the SPV



References

Law No. 8 of 1997 Concerning Investment Guarantees and Incentives
 Amereller - Investing in Renewable Energy in Egypt - January 2015
 Requirements for Qualifications requested from investors for eligibility to participate in feed-in tariff scheme
 EgyptERA - Renewable Energy Feed-in-Tariff Projects' Regulations - October 2014
 EETC - Power plant grid connection contract
 EgyptERA - Licensing procedures
 Renewable Energy Law 203/2014

- ### Organizations
- Ministry of Electricity and Renewable Energy (MOERE) www.moe.gov.eg
 - New and Renewable Energy Authority (NREA) www.nrea.gov.eg
 - Egypt Electricity Transmission Company (EETC) www.egelec.com
 - Egypt Electricity Utility and Consumer Protection Regulatory Agency (EgyptERA) www.egyptera.org
 - Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH www.giz.de
 - The Regional Center for Renewable Energy and Energy Efficiency (RCREEE) www.rcreee.org



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