

**COMMONWEALTH OF PUERTO RICO  
STATE OFFICE OF ENERGY POLICY**

**GREEN ENERGY FUND  
Tier 2 Reference Guide**  
(Revised on February 28, 2017)



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## Chapter One General

### I. Title and Introduction

This Guide shall be known as the “**Tier 2 Reference Guide**” or the “**Guide**” for the first quarter of fiscal year 2016-2017. **This version has been revised as of February 28, 2017.**

As per Regulation Num. 8601 of June 1, 2015, also known as the Green Energy Fund Regulation of 2015 (the “Regulation”), this guide publishes and defines the requirements and eligibility criteria for the Tier 2 Program of the Green Energy Fund (GEF). An updated Guide will be issued every quarter of each fiscal year. Otherwise, the terms of the previous Guide will be deemed extended to the following quarter. Applicants may apply for incentives under the GEF through the GEF website ([www.prgef.com](http://www.prgef.com)).

The purpose of this Guide is to define the terms and conditions governing the program, the Green Energy Technologies that are eligible to participate in the Tier 2 program, the maximum reimbursement percentage established for each one of these technologies, approved reference costs, among other requirements.

### II. Definitions

The following terms as used in this Guide shall have the meaning ascribed to them below. Terms not defined herein shall have the meaning ascribed to such term in Act No. 83 of July 19, 2010 and in the Regulation.

- 2.1 **Act** shall mean Act No. 83 of July 19, 2010, as amended.
- 2.2 **Green Energy Technologies (GETs)** shall mean the eligible green energy technologies for the production of Alternative Renewable Energy and Sustainable Renewable Energy, as approved from time to time by SOEP, listed in Section III of Chapter Two of this Guide.
- 2.3 **GEF Tier 2 Ranking Calculator** shall mean the system to be used by the Technical Committee to evaluate and score projects for funding under Tier 2 Program.
- 2.4 **Reference Costs** shall mean the maximum acceptable Total Project Cost per installed Watt of System Capacity. The Reference Costs will vary according to the technology and system size, as described in this Guide. Reference Costs are used to cap the Total Incentive Amount to be granted. Reference Costs are based on reasonable and supported criteria, including but not limited to the following:

- 2.4.1. National market reports;
  - 2.4.2. Local market statistics, which may be compiled by SOEP based on previous years Green Energy Projects developed in the island;
  - 2.4.3. Local constraints and particular conditions to develop Green Energy Projects in the island. As will be further specified in this Guide, a higher Reference Cost may be granted to economically deprived or underdeveloped areas in Puerto Rico, as is the case with Vieques and Culebra under Act No. 153 of August 10, 2002, "Act to Create the Special Vieques-Culebra Economic Development Zone."
  - 2.4.4. Availability of funds
- 2.5 **Solar Photovoltaic (PV) System** shall mean a system that produces electricity directly from sunlight.
- 2.6 **System Capacity** shall be defined as follows:
- 2.6.1. For Photovoltaic (PV) System, shall be based on the sum of the individual DC nameplate capacity ratings of PV Modules. Incentives may be reduced by SOEP because of potential production losses associated with shading, system orientation, tilt angle, and other factors.
  - 2.6.2. For Small Wind Power System, shall be based on the "AWEA Rate Power" definition provided in AWEA Small Wind Turbine Performance and Safety Standard (Standard 9.1-2009) for small wind power systems (turbines with rotor areas up to 200m<sup>2</sup>). Larger turbines shall be based on the turbine rated power output at 11 m/s per IEC 61400-12.
  - 2.6.3. The applicability of these standards may be revised from time to time by SOEP and published in the Reference Guides, as the GETs available in the market are improved and modified.
- 2.7 **Tier 2 GEP** means any GEP that has a System Capacity greater than one hundred (100) kilowatts (kW) and up to (inclusive of) one (1) megawatt (MW).
- 2.8 **Total Incentive Amount** shall mean the total amount determined by SOEP to be reserved for a GEP as notified in an incentive reservation notice, calculated as stated in Section IV of Chapter Two of this Guide.
- 2.9 **Total Project Cost** shall mean the total eligible projects cost as defined in the Regulation.

2.10 **Wind Energy System** shall mean a system that produced electricity through the conversion of the kinetic energy of wind, captured by turbines.

**Chapter Two  
Tier 2 Projects**

**I. Fund Assignments**

Every quarter, SOEP shall open a new application period for Tier 2 GEPs. The quarters shall be the following for each fiscal year:

<b>Quarter</b>	<b>Application Period</b>
Q1	July 1 through September 30
Q2	October 1 through December 31
Q3	January 2 through March 31
Q4	April 1 through June 30

Incentives are expected to be available through June 30, 2016 or until funds are fully committed, whichever occurs first. Unused funds from one quarter may be added to the next quarter's allocation. Funding allocations for each quarter shall be as described below:

**Funding Allocation by Quarter**

<b>Quarter</b>	<b>Amount</b>
Q1	\$1,000,000
Q2	\$1,000,000
Q3	\$1,000,000
Q4	\$1,500,000

Proposals shall be submitted not later than the fifth day of each quarter, namely:

<b>Quarter</b>	<b>Deadline</b>
Q1	July 5 of the fiscal year in progress.
Q2	October 5 of the fiscal year in progress.
Q3	January 5 of the fiscal year in progress.
Q4	April 5 of the fiscal year in progress.

Final determination notifications shall be issued by electronic mail, followed by certified mail, within 40 calendar days from the application deadline, namely:

<b>Quarter</b>	<b>Deadlines</b>
Q1	August 14 of the fiscal year in progress.
Q2	November 14 of the fiscal year in progress.
Q3	February 14 of the fiscal year in progress.
Q4	May 15 of the fiscal year in progress.

If the deadline falls on a non-business day, notifications will be issued on the following business day.

## **II. Application and Reservation Fees**

### Application Fee

Applicants will be required to pay a non-refundable Application Fee in order to submit an Application. The Fee structure is described below.

#### **Application Fees**

<b>GEP System Capacity</b>	<b>Application Fee</b>
Greater than 100 kW, up to 300kW	\$ 2,000
Greater than 300 kW, up to 1MW	\$ 4,000

\*A waiver for the payment of the Application Fee will be granted for all Green Energy Projects (GEP) that successfully completed the application process in the previous Tier 2 application period, but did not receive the incentive due to lack of funds. For example, a GEP successfully presented during the First Quarter of a Fiscal Year that did not receive the incentive due to lack of funds will not have to pay for the Application Fee during the Second Quarter of that Fiscal Year.

### Reservation Guarantee

Applicants will be required to pay a Reservation Guarantee and present evidence thereof for execution of the Reservation Agreement. This Guarantee will assure completion of the GEP on schedule and in accordance with the terms and conditions of Act 83, the Regulation and the Reservation Agreement executed thereunder.

The Reservation Guarantee may be satisfied by Applicant through (i) the deposit with SOEP of the amount provided below, payable as shall be instructed by SOEP, or (ii) presenting SOEP a Performance Bond in form and substance acceptable to SOEP to secure an amount equal to the Reservation Guarantee. SOEP may make draws under the Reservation Guarantee to the extent that, as determined by SOEP, Applicant fails to develop, construct and initiate operation of the GEP on schedule or in accordance with the terms and conditions of Act 83, the Regulation and the Reservation Agreement. Forfeiture of the Reservation Guarantee shall be in addition to not receiving the incentive. The Reservation Guarantee shall be retained by SOEP and its validity maintained until the later of six (6) months after the date of scheduled

completion of the GEP or the date when claims thereunder shall have been paid to SOEP.

SOEP will return the Reservation Guarantee to the Applicant upon successful completion of the GEP. The applicable Reservation Guarantee structure is detailed below:

**Reservation Guarantee Amount**

Proposed GEP System Capacity	Reservation Guarantee
Greater than 100 kW, up to and including 1MW	1% of Total Project Cost

**III. Eligible Green Energy Technologies (GET)**

Applicants will be eligible to submit Proposals during FY 2016-2017 for GEPs utilizing GETs that fall within the following categories:

- Solar Energy (photovoltaic “PV”),
- Wind Turbines

Unless otherwise published by SOEP, the same technologies will be eligible for subsequent Quarters.

**IV. Incentive Amounts**

Incentives are limited and awarded on a competitive basis. Projects that are more cost-effective and that require less incentive are more likely to receive funding. For each application, Customers may request their desired Total Incentive Amount. However incentives shall never exceed the Maximum Reimbursement Percentages, Reference Costs and Maximum Incentives listed below.

**Eligible GETs and GET Reference Cost**

Eligible GET	System Capacity	Maximum Reimbursement Percentage (%)	Reference Cost	Maximum Incentive
Solar Photovoltaic (PV)	Greater than 100 kW, up to (inclusive of) 1MW	40%	\$3.0/W	\$300,000
Wind Turbines (WT)	Greater than 100 kW, up to (inclusive of) 1MW	40%	\$3.0/W	\$300,000

Higher GET Reference Costs will be allowed for GEPs to be developed in the Special Vieques-Culebra Economic Development Zone, as defined in Act No. 153 of August 10, 2002 and taking into consideration the costs of transporting equipment and materials to these islands. In any case, the Reference Costs in these circumstances shall not exceed \$3.25/W.

The maximum eligible PV (DC) array to inverter (AC) ratio is 1.25%. Any GEP with a larger ratio will only receive incentives that correspond to the aforementioned ratio. For example, a GEP with a 200 kW inverter may install up to 250 kW DC in PV modules.

$$200 \text{ kW AC} \times 1.25 = 250 \text{ kW DC}$$

The AC capacity of the inverters that exceeds the DC capacity of the PV modules will not be eligible for incentives.

## V. Technology Specific Requirements

Eligible GET	Technical Requirements
Solar Photovoltaic (PV)	<p>Estimated production (kWh) shall be based either on a precise system modeling using local resource and meteorological data or on at least six (6) months of solar resource data at the site.</p> <p>Under no circumstances shall the estimated annual production for a given Solar PV system be less than eighty percent (80%) of the established minimum rated output.</p> <p>The PV system shall not be sized so that the annual production of the system is greater than the facility's annual consumption based on the past twelve (12) months' of usage data. Any solar system sized above this amount will not be eligible to receive an incentive.</p>
Wind	<p>Applicant must have collected at least twelve (12) months of wind resource data at the propose hub height or have a wind resource assessment report from a qualified meteorological station or a professional and reputable wind mapping service, provided any such source or service is typically acceptable to financial institutions when evaluating bankability of a project.</p> <p>Estimated production (kWh) shall be calculated using wind data obtained, and all energy production calculations should use a field-tested power curve for the wind turbine and consider key factors such as tower height, wind shear, turbulence, Weibull K factor, and site altitude.</p> <p>The tower height must be a minimum of 60 feet and wind turbine blades must be 30 feet above any obstruction objects (i.e. trees, building or other obstacles within a 300-foot radius). At the applicant's chosen eligible hub height, there must be a minimum annual average wind speed of 10 mph (approximately 4.5 m/s).</p> <p>The equipment shall not be sized greater than the facility's highest peak load in any one hour, based on the past twelve (12) months' of usage</p>

	data. Any wind system sized above this amount will not be eligible to receive an incentive.
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## **VI. Competitive Evaluation Criteria**

Renewable energy incentives under Tier 2 are available on a competitive tendering basis for non-residential customers seeking to construct a Green Energy Project with a capacity greater than 100 kW, but not exceeding 1 MW. Incentive applications received each quarter will be given a score and ranked against other applications in the same quarter. The scoring system shall be based on the overall benefit to public interest and conformity with public policy as it relates to the development of the GEP receiving funds from the GEF. Particularly relevant will be, but will not be limited to, the following criteria and its assigned scoring percent:

- 6.1 Project Benefits - 20%
  - 6.1.1. Expected green energy production over the first year of operation of the GEP (kWh).
  - 6.1.2. Local economic development. GEPs to be developed in economically deprived municipalities, measured by their unemployment rate, will receive additional points in the scoring system, e.g GEPs established pursuant to Act No. 153 of August 10, 2002, "Act to Create the Special Vieques-Culebra Economic Development Zone".
- 6.2 Incentives requested – 20%
  - 6.2.1. Incentive amount requested which will include:
    - 1. The total amount requested under this Program; and
    - 2. Any other incentive or benefit received by the GEP under other programs or assistance.
  - 6.2.2. Incentive amount per kWh of green energy produced (cost-effectiveness measure)
- 6.3 Cost per System Capacity (\$/W) – 20%
- 6.4 Project location and siting – 15%
  - 6.4.1. Demonstrated availability of adequate green energy resources to support the proposed project on the site.
  - 6.4.2. A review of the Applicant's statements with regard to any required permit applications.
  - 6.4.3. Potential interconnection issues.

- 6.5 Project Financing – 15%
  - 6.5.1. Audited financial statements
  - 6.5.2. Proven ability to provide, through self- funding or through commitment letters, at least 50% of expected project costs.
- 6.6 Project development knowledge and experience – 5%
  - 6.6.1. The qualifications, professional reputation and experience of personnel assigned by the Applicant to the GEP with emphasis on documented experience in successfully completing required services of a similar size and scope to those required by this solicitation. Applicants will be required to describe overall Megawatts installed in and outside of Puerto Rico.
  - 6.6.2. Documented local experience and approach to meet the requirements and conditions under the Regulation.
- 6.7 Local economy support – 5%
- 6.8 Any other particular criteria deemed applicable by SOEP

In the event two or more GEPs obtain the same score, the following in the listed order will be used as tie breakers:

1. Cost per System Capacity (\$/W)
2. Incentive amount requested
3. Incentive amount per kWh produced over the first year of operation

This Reference Guide may be modified from time to time, as SOEP may deem necessary, to elaborate or modify the scoring system and criteria for future quarters.

Because SOEP expects to receive requests for funding in excess of the amounts available, it is likely that not all projects will be funded in any given period. Also, since this is a competitive process, scores, criteria and incentive rates may change each period based on SOEP experience with volume and details of applications received in previous quarters.

## **VII. Insurance Requirements**

Applicants, directly or through Installers or System Owners, must meet and maintain the same policies of insurance required in OGPe Joint Regulation of Permits for Construction Works and Land Use (Joint Regulation), Title XII, Chapter 55, Rule 55.6(d), as such requirements may be amended from time to time. Policies shall be issued by insurance companies authorized to do business in Puerto Rico, and to that effect they shall provide in original certificates of insurance and endorsements, as follows:

- (a) Include as Additional Insured, using ISO Additional Insured Endorsement CG 20 26 11 85 or a substitute providing equivalent coverage:

State Office of Energy Policy  
P.O. Box 41314  
San Juan, Puerto Rico 00940  
Tel.787-332-0914  
Fax: 787-332-0915

- (b) Include as Additional Insured, using ISO Additional Insured Endorsement CG 20 26 11 85 or a substitute providing equivalent coverage:  
Puerto Rico Electric Power Authority
- (c) A thirty (30) Days' cancellation or non-renewal notice to be sent by certified mail with return receipt to the above address.
- (d) An endorsement including the GEP under contractual liability coverage and identifying it by application number, Customer and project address.
- (e) Waiver of Subrogation in favor of SOEP.
- (f) The breach of any of the Warranties or Conditions in these policies by the Applicant, Installer or System Owner, as applicable, shall not prejudice SOEP rights under the policies.

#### **VIII. System Performance Metering Requirements**

As required in the GEF Regulation, all GEP recipients are required to install, as part of their Total Project Cost, a System Performance Meter to account for and to determine the amount of green energy production of the GEP. Meters must be in the California Energy Commission's list of Eligible System Performance Meters. Only meters marked with a Y(Yes) in the PBI Eligible Column will be eligible in this Program.

The California Energy Commission's list of Eligible System Performance Meters can be found on the GoSolarCalifornia website or currently under the following link:

[http://www.gosolarcalifornia.ca.gov/equipment/system\\_perf.php](http://www.gosolarcalifornia.ca.gov/equipment/system_perf.php)

Any project with a meter not included in the aforementioned list or not complying with the requirements established by SOEP will not receive incentives.

All System Performance Meters must be installed with some form of communication capability that will provide energy production data that can be collected, accessed remotely through the internet, and downloaded for processing by SOEP without the need to purchase or install additional software. Energy production data shall clearly demonstrate the energy production in kWh by day, month, and year.

All GEF Customers must provide SOEP staff with access to their facilities in order to re-inspect and/or verify reported production. Customer shall have the right to accompany SOEP staff during such visits. Re-inspections may occur when production data is not available at any moment during the first five (5) years of operation of the GEP or for any other malfunction of the system.

A Customer may be invoiced an amount not to exceed \$500, if more than one(1) inspection is required due to any malfunction or non-performance of the metering system. If these

visits occur prior to disbursing incentive to Customer, inspection costs will be deducted from the final incentive amount.

### **IX. Project Reporting Requirements**

Until the GEP is complete, each quarter the Applicant and/or Customer shall present a report to SOEP regarding the status of the project development according to the schedule presented in the application. The report shall be submitted within the first five (5) days of each quarter of the current fiscal year, according to the following table, as applicable:

<b>Quarter</b>	<b>Deadline</b>
Q1	July 5 of the fiscal year in progress.
Q2	October 5 of the fiscal year in progress.
Q3	January 5 of the fiscal year in progress.
Q4	April 5 of the fiscal year in progress.

SOEP may cancel applications whose reports reveal lack of activity or progress towards completing the GEP or show significant delays or demonstrate that Applicants and/or Customers have not been diligent in addressing delay issues. Failure to present a report may result in the application being cancelled.

### **X. Minimum application documentation required**

Minimum documentation required to apply for an incentive under this program is listed below:

- 10.1 Last electric utility bill for the facility where the GEP will be installed. Electric utility bill shall be under the Customer's name. If the facility is off the grid or is new and has yet to be connected to the electric utility, an electrical load estimate should be provided signed by an electrical engineer duly licensed and registered as a Professional Engineer (PE) in Puerto Rico.
- 10.2 PREPA initial evaluation of proposed project for the Facility. SOEP may cancel applications whose PREPA evaluation notes any issues that may result in interconnection or construction delays (ex. Right-of-way issues, equipment replacement other than electrical meter, outstanding debts, and major construction). PREPA requests for supplementary studies or any other letter that does not officially constitute a formal initial evaluation will not be accepted.
- 10.3 Site drawing and Layout – A single page document in PDF format and prepared in a computer drawing software, indicating at a minimum the locations of major components (e.g.,

- photovoltaic panels, inverters, wind turbines, meter), layout, positioning, true north orientation symbol, and property lines;
- 10.4 Signed project price quote - containing the following components:
- a. Equipment brand, model number, quantity and costs;
  - b. Engineering design and permitting cost;
  - c. Construction, installation and mounting cost;
- 10.5 When applicable for a commercial application, a corporate resolution by a company's official indicating the names of individuals of that same corporation authorized to act and sign documents on behalf of the corporation. For DBA, Societies, and other legal entities, a letter of authorization;
- 10.6 When applicable for a Customer renting the facility from a landlord, a Tenant Authorization Form (available at the website stated in Section 6.2.1 of Chapter One of this Regulation).
- 10.7 Audited financial statements from the previous two (2) years - Audited financial statements shall correspond to the Customer, but if the owner of the GEP at the time the incentive will be paid, will be a third party System Owner, the audited financial statements from the System Owner shall also be submitted. Audited financial statements shall include the report's notes duly signed or sealed by a Certified Public Accountant (CPA) or accounting firm.
- 10.8 Sworn Statement – In compliance with Article 2.8(a)(2)(H) of the Act, Customers shall present a Sworn Statement disclosing whether or not at the time of submittal, the GEP object of the application is covered by, or receives other state and/or federal incentives, in the form of tax or production credits, accelerated depreciation, rebates, grants, industrial incentives or otherwise, and under what laws. Additionally, the Sworn Statement must indicate if the Customer belongs to a Controlled Group and if so, list the corporations belonging to the Controlled Group and each Employer Identification Number (EIN);

- 10.9 Property Title Deeds or a sworn statement from owner indicating land and/or building ownership;
- 10.10 The Proposal for project funding through the template available at the Green Energy Fund website;
- 10.11 A valid GEF Orientation Certificate issued to the Customer;
- 10.12 Government Certifications specified in Section 6.19 of the First Chapter of the GEF Regulation corresponding to the Customer; and
- 10.13 Any other document indicated in the Proposal template or as required by SOEP as part of the application process.

#### **XI. Reservation Agreement documentation**

For awarded GEPs, Applicants and/or Customers will then be required to present the following at the time the Reservation Agreement is signed:

- 11.1 Evidence of payment of Reservation Guarantee;
- 11.2 Evidence of insurance to cover the construction;

#### **XII. Incentive Claim documentation**

Once the GEP is completed, the Applicant shall submit an Incentive Claim, including all documents indicated in the Reservation Agreement. Required documents to be submitted with the Incentive Claim include, but shall not be limited to, the following:

- 12.1 Evidence of payment of GEP costs, when the GEP is purchased by the Customer, and a final project cost certification when the GEP is financed by a Third Party. Evidence of payment must be signed by both Customer and Sales Representative;
- 12.2 Executed Interconnection Agreement with PREPA;
- 12.3 Renewable Energy System Installation Certificate in accordance with OGPe Joint Regulation, Title XII, Chapter 55, Rule 55.6;
- 12.4 Metering Communication information including webpage address, system name, and if applicable username and password;
- 12.5 Project Closing Report; and
- 12.6 Any other documentation specified in the Reservation Agreement or required by SOEP at the time of payment.

#### **XIII. Administrative Service Charges**

In order to cover the administrative costs of several services, Applicants shall pay the following Administrative Service Fees prior to receiving the services by SOEP or its consultants:

- 13.1 Information Request Notices caused by Applicant's omissions or errors - \$150
- 13.2 Reservation period extension requests (maximum of 6 months) – 0.5% of Total Incentive Amount up to \$500
- 13.3 Second extension request (maximum of 6 additional months) - 0.5% of Total Incentive Amount up to \$500
- 13.4 Additional inspections - \$500
- 13.5 Project specific queries - \$150