



CEB Medium-Scale Distributed Generation (MSDG) RE Scheme



OVERVIEW OF THE CEB MEDIUM-SCALE DISTRIBUTED GENERATION (MSDG) RE SCHEME

This new **CEB MSDG RE Scheme** has been prepared in response to the growing interest for the setting up of small-scale and medium-scale solar photovoltaic (PV) renewable energy (RE) projects.

Subject to the terms and conditions defined for this Scheme, an interested Customer can install a solar PV installation to meet its total annual electricity requirement.

The aim of this Scheme is to interconnect a **total of 10 MW MSDG RE projects**. Consideration will also be given to entertain small-scale distributed generation (SSDG) sized solar PV projects under this Scheme.

Interconnection of the SSDG/MSDG RE projects shall be made strictly in accordance with the applicable Grid Codes ([download Grid Codes](#)) and terms & conditions defined for the Scheme.

Note: In the event that the allocated 10 MW capacity is not fully taken up, the capacity will be reallocated to other RE Schemes.

Processing of application for the grid interconnection of the SSDG/MSDG projects will be made on the basis of ***first-come, first-serve*** principle, as from the date of submission of the duly filled application form accompanied with all relevant documentation.

Interested Customers participating in this Scheme can choose one of the following options to select a supplier/installer for the setting up of their respective solar PV installation:-

Option 1: Self search and select own supplier-installer or

Option 2: Contact CEB's enlisted Suppliers-Installers.

Under the Option 2, the Customers may benefit significant reduction in the investment cost, as the enlisted Suppliers/Installers are expected to pass through the benefits of economies-in-scale gained from bulk purchase of solar PV equipment.

The enlistment of potential Suppliers-Installers will be carried out by CEB after expression of interest for the setting up of at least 2 MW cumulated capacities of MSDG/SSDG projects, under the Scheme, have been received.

While rooftop solar PV installation is encouraged in this Scheme, Customers having limited or no rooftop spaces may opt for the setting up of greenfield off-site solar PV installation.

The processing of requests from interested Customers to participate in this Scheme will follow a two-steps procedure, as explained below.

Step 1: Fill and submit the **CEB MSDG RE SCHEME EOI FORM** and

Step 2: Submit details of the intended solar PV project together with the application form.

In the **Step 1**, interested Customers shall express their interest for the Scheme. The **expression of interest (EOI)** can be made by an authorised representative of the Customer by filling the **CEB MSDG RE SCHEME EOI FORM**. The Form is downloadable from CEB website: <http://ceb.mu> under the tab “*CEB MSDG Renewable Energy Scheme*”.

In the **Step 2**, on the basis of the *first come, first serve* principle, after the evaluation of an EOI Form, a **Letter of Invitation (LoI)** to fill and submit the relevant MSDG application form with all required documentation will be issued by CEB. More information will be provided in the LoI.

Interested Customer is hereby notified that a no-reply or a late reply following the issue of the LoI shall be construed as a deferment of its solar PV project. Accordingly, the MW slot shall be reallocated to other existing or in-waiting projects in the same or other Schemes, as deemed appropriate by CEB.

Subject to the terms and conditions for the Scheme, the capacity of each solar PV project (SSDG or MSDG) will be determined based on the expected annual electricity (kWh) demand of the Customer.

In the following sections, important information on the Scheme is given. Interested Customers and the public at large are advised to **read carefully** the provided information.

WHAT IS THE CEB MSDG RE SCHEME?

The CEB MSDG RE Scheme is a Scheme launched by CEB especially to enable CEB’s non-Residential Customers to participate in electricity generation using solar photovoltaic technologies.

Under the present pilot phase of the Scheme, CEB plans to integrate a total cumulated capacity of **10 MW** of MSDG and/or SSDG projects in the Mauritian grid.

All proposed RE projects, under this Scheme, will be subject to either a network impact assessment or a network survey, whichever would be warranted.

The CEB MSDG RE Scheme has been officially opened on 29 November 2019. The EOI will remain open until the 10 MW is fully allocated or until 31 December 2020, whichever comes first.

MAIN GOALS OF THE CEB MSDG RE SCHEME

The CEB MSDG RE Scheme is in line with Government Long Term Energy Strategy and the Renewable Energy Roadmap 2030. It has as main objective to contribute in achieving the national target of 35% RE in the electricity mix by 2025.

The Scheme will enable CEB's non-Residential Customers to produce, to the extent possible, their electricity requirements while benefitting the reliability of the CEB grid. The grid will provide the required support to mitigate power supply risks associated with solar PV distributed generation.

Through this Scheme, CEB confirms its support to the setting up of MSDG or SSDG solar PV projects by the non-Residential Customers with the common objective of ensuring the sustainable development of the National Power System.

METERING PRINCIPLE UNDERLYING THE CEB MSDG RE SCHEME

The Scheme will operate under the **gross metering method**.

For the purpose of the gross metering method, all the RE projects (SSDG or MSDG) under this Scheme shall be equipped with production and import-export meters.

The meters will be provided by CEB and the latter will keep total control – administrative and/or technical controls, whichever would be applicable – of the meters and their associated metering equipment. All related costs for metering shall be borne by the concerned Consumers, also referred as Prosumers.

The location of the meters and metering equipment within the electrical setup of each concerned RE project will be determined during the mandatory network impact assessment or mandatory network survey, whichever would be warranted. On a case-to-case basis, special consideration will be given to ensure the optimal solution for the metering of the RE project purposely to ensure best commercial practices.

KEY COMMERCIAL TERMS OF THE CEB MSDG RE SCHEME

In accordance with the gross-metering principle, as formulated for this Scheme, all energy produced by the MSDG/SSDG RE projects (solar PV systems) shall be injected or shall be considered as injected into the grid.

In accordance with the terms and conditions of the Scheme, as from the **commercial operation date (COD)** of a solar PV system, developed under this Scheme, CEB will buy all the energy (kWh) production, as metered by the production meter, at the fixed **Tariff (T)**.

The **Tariff (T)**, denominated in Mauritian rupees, will be revised every year. It is expected that the **revised T** will be determined and approved by the Utility Regulatory Authority (URA) after it has been filed by CEB. The revised T will be published at the start of each calendar year.

For the current year 2019, T is fixed at MUR 3.50 per kWh. T will be allocated at the time of the signing of the Connection Agreement.

Note: Where electricity tariff(s) lower than the Tariff (T) has/have been allocated to the electricity contract account(s) linked to the intended solar PV project, **the Tariff (T) will be adjusted to the Tariff (T_w)**, which shall be a weighted average of T and the applicable electricity tariff(s) allocated to the account(s). The weights will be the shares of energy imported, under each electricity contract account, and the energy production by the solar PV project.

For each solar PV system, a Connection Agreement shall be agreed before initiating procedure for the procurement of the system. A draft version of the Connection Agreement will be provided for each project following the network impact assessment or network survey, whichever would be warranted.

BENEFITS OF THE CEB MSDG RE SCHEME

The benefits of the Scheme are as follows:-

- Subject to the compulsory network impact assessment or network survey, whichever would be warranted, interested Customers (Prosumers) will participate in the production of clean electricity.
- The Prosumers will secure a 20 years revenue stream for their RE projects; a worthy financial risk mitigation security for their respective RE projects.
- The Prosumers' solar PV systems will be supported by CEB grid to stabilize the intermittent power generation of the solar PV systems; hence no investment for energy storage system.
- The Prosumers will be able to lower their investment costs in the Solar PV projects as an energy storage system (ESS) will not be required. This will enable them to minimize their exposure to financial, technological and/or operational risks associated with ESS.
- By engaging in this Scheme, the Prosumers will participate in promoting the use of renewable energy; hence, upholding national and international commitment for sustainable energy development.
- The Prosumers will have the opportunity to contribute in energy supply security and protection of the environment, while participating in the strengthening and supporting the inclusive development of the National Power System.

KEY TERMS & CONDITIONS OF THE CEB MSDG RE SCHEME

The key terms and conditions of the Scheme are:-

1. After having received an invitation letter, the authorised representative of each prospective Prosumer should fill and submit the relevant application form with full details of the intended solar PV project.
2. Upon the submission of the duly filled application form, the Customer pays the applicable non-refundable processing fee ([click to view the applicable processing fee](#)). Payment of the processing fee does not guarantee registration into the Scheme.
3. The Customer's premises', where the solar PV system will be installed, electrical load is effectively declared to CEB. If required, CEB will perform a site survey to ascertain the accuracy of the declared load. For this purpose, the Customer would authorize and provide CEB's personnel necessary permission and access to carry out the detailed load survey.
4. As would be warranted, the declared or assessed electrical load of the Customer's premises, linked to an electricity contract account, will be updated in the CEB's information system for billing purposes.
5. The installation of the solar PV system shall be completed within a period of 1 year as from the date of the signing of the Connection Agreement.
6. The solar PV system shall at all times comply with all requirements of the relevant applicable Grid Code ([download the Grid Codes](#)) including its subsequent amendments.

Note: For safety and quality reasons, the concerned Customer is strongly advised to seek the support of a qualified person in the field of RE technology prior to filling the application form.
7. The Prosumer shall provide CEB with web-link access, free of charge, for the downloading of the power output of the SSDG or MSDG facility.
8. Where necessary, as and when required, the Prosumer shall give full free access to CEB for downloading data series directly from the inverter and/or energy management system of the solar PV system. For the on-site and/or off-site data downloading, the Prosumer shall provide CEB a free copy of the required operating software and application(s).
9. Following a notice from CEB, the Prosumer shall give full and free access to CEB personnel and/or its associate(s) to the solar PV system.
10. The Prosumer shall pay all relevant charges and costs, including the connection fee, for the setting up of the solar PV system.
11. Until properly remedied, a solar PV system not complying with the applicable Grid Code and not satisfying all terms and conditions of this Scheme and other regulatory requirements, will not be considered for the grid interconnection.
12. The Prosumer shall obtain all necessary applicable authorizations, licenses, permits, etc. prior to the commissioning by CEB of the solar PV system.

13. Where applicable, the total monthly electricity (kWh) consumption of the concerned Prosumer shall be calculated by the formula below.

$$C = P + I - E$$

Where, **C** is the total monthly electricity (kWh) consumption;
P is the total energy (kWh) production by the RE facility;
I is the total energy (kWh) imported from CEB; and
E is the total energy (kWh) exported to CEB.

Note: Where an electricity contract account linked to the Prosumer solar PV system is in a 3rd party name, prior to the signing of the Connection Agreement, the concerned Prosumer shall obtain the written acceptance of the 3rd party for the above formula and for reclassifying the account in a specific CEB Customer Category for the purpose of billing and invoicing of the monthly electricity consumption of the account.

14. Further to the network impact assessment or network survey, whichever would be warranted, the Prosumer and any of its associates would have no objection to the addition of other necessary terms and/or conditions for the grid interconnection of the solar PV system.
15. As notified by CEB, the Prosumer shall implement all recommendations of the network impact assessment or network survey, whichever would be applicable, in time.
16. For each solar PV system, the Prosumer should submit the Certificate of Compliance confirming compliance to the applicable Grid Code, CEB's network impact assessment's or network survey's recommendations and terms & conditions of the Scheme. The Certificate of Compliance shall be certified by an independent qualified technical officer or an independent registered engineer, whichever would be applicable, after the latter has performed all technical and non-technical verifications.
17. The Prosumer shall sign the legally-binding Connection Agreement prior to initiating the procurement of the solar PV system.
18. By submitting the **CEB MSDG RE SCHEME EOI FORM** for a solar PV project, the Customer and its representatives unreservedly authorize CEB or its associates, suppliers, contractors, etc. to share the information provided in the form. In addition, the Prosumer would have no objection that any of the mentioned parties contacting it for administrative or non-administrative matters in respect of the setting up of the solar PV system.

SIZING OF SOLAR PV SYSTEMS UNDER THE CEB MSDG RE SCHEME

In this Scheme, the final capacity (size) of each solar PV system shall be determined after the network impact assessment or network survey has been carried out by CEB and the declared electrical load of the active electricity contract account(s) linked to the intended solar PV system is effectively updated in the CEB information system.

Subject to the terms and conditions for the Scheme, the capacity of each solar PV project (SSDG or MSDG) will be determined based on the expected annual electricity (kWh) demand of the Customer.

Upon request from a Customer, future electrical load may be considered in the sizing of a solar PV system only if there is remaining capacity (MW) in the Scheme.

Note: Solar PV systems of capacity greater than 2 MW will NOT be considered under this Scheme.

ELIGIBILITY TO APPLY FOR THE CEB MSDG RE SCHEME

All CEB non-Domestic Customers can submit an SSDG or MSDG application for this Scheme.

Customers not submitting the duly filled CEB MSDG RE SCHEME EOI FORM ([click to download the EOI FORM](#)) will not be eligible to apply for the Scheme.

A Customer who is in litigation with CEB, unless the litigation is effectively settled, or already operating an SSDG or MSDG for the same electricity contract account(s) under another Scheme, unless the existing agreement is terminated, will not be considered for this Scheme.

WHERE TO SUBMIT THE EOI FORM FOR CEB MSDG RE SCHEME?

The duly filled **CEB MSDG RE SCHEME EOI FORM** together with all relevant requested documents, enclosed in a properly sealed, clearly labelled envelope, should be addressed to:-

**The Strategic & Business Planning Executive
Central Electricity Board
CEB Corporate Office,
Rue du Savoir,
Cyber City, Ebène
Republic of Mauritius**

HOW TO APPLY FOR THE CEB MSDG RE SCHEME?

Following the review of the information given by the Customer in the EOI Form and after CEB has determined the capacity of all the solar PV project, the eligible Customer will be invited to fill an application form for the solar PV project.

An authorised representative of the Customer should then fill and submit the application form **“CEB MSDG RE SCHEME APPLICATION FORM”**.

A period of one month, which may be extended upon request, will be allowed for the submission of full details of the intended solar PV project together with the relevant application form.

Note: Unless CEB is duly notified of probable delays, a no-reply after the given period of one month or a late reply for a prospective solar PV project shall be construed as a deferment of the project by the concerned Customer. Accordingly, the MW slot(s) shall be reallocated to other existing or in-waiting projects in the same or other categories (SSDG, MSDG or Others), as deemed appropriate by CEB.

FOR MORE INFORMATION ON THE CEB MSDG RE SCHEME

Interested Prosumers, wishing to benefit from this Scheme, can obtain additional information on the Scheme:-

- On CEB's website <http://ceb.mu> . This is highly recommended to save time and effort.
- By sending an email to queryremsdgscheme@ceb.intnet.mu , or
- By contacting CEB Strategic & Business Planning Unit on telephone numbers 404-2038 or 404-2045.

NOTIFICATION REFERENCE, DATE AND TIME

Upon receipt of the CEB MSDG RE SCHEME EOI FORM, a notification with a reference number, date and time will be created in the CEB information system.

Note: Authorized representatives of the prospective Prosumers may call the CEB on 404-2000 requesting for Ext. 2129 to learn about the status of their respective EOI.

IMPORTANT ADVICE

- Given technicalities and financial implications in setting up of renewable energy project, sufficient care should be exerted when soliciting third party's supports. Contracting the services of an experienced consultant in the field is strongly recommended.
- The solar PV projects need to be fully compliant with the applicable Grid Codes. To properly design the solar PV system, seek support from knowledgeable qualified people who shall be able to prepare not only the technical part but equally the financial assessment of your investment in the system. Keep regular contacts and work closely with CEB.
- To avoid delays in the implementation of the project, ensure that all documentation together with the application form is submitted to the CEB. Ensure that the form is submitted as indicated.
- Securing a Connection Agreement for grid interconnection of the intended solar PV system is mandatory. Make sure that it has been agreed and signed prior to the setting up of the system. It is strongly advised that payment(s) for equipment of the solar PV system be initiated only after all agreements, licenses and permits, as applicable, have been properly secured.
- Whenever needed, seek the support services of CEB, who may provide useful guidance.
- The solar PV system is an investment which shall bring benefits. Therefore, it is necessary to ensure its security all over its life. This will enable maximizing the return on the investment. In addition, carrying out regular maintenance of the solar PV system, with the support of a technically qualified person or the supplier of the equipment, will also contribute in maximizing gain.
- Ensure full compliance, at all times, with the applicable Grid Code and its amendments and the Connection Agreement.

- Modification of the setup of the solar PV installation, without prior CEB's authorization, will result in an automatic disconnection of the solar PV facility from CEB's network and the suspension of the Connection Agreement and thereof all CEB's therein obligations.