



# CEB SOLAR PV SCHEME FOR CHARGING OF ELECTRIC VEHICLES



## INTRODUCTION

The **CEB SOLAR PV SCHEME FOR CHARGING OF ELECTRIC VEHICLES** is an initiative launched pursuant to the measure enunciated at Paragraph 107 of the Government Budget Speech 2021-2022.

In this initial and current phase of the Scheme, the CEB will consider application from Domestic, Commercial and Industrial Customers who are supplied with electricity via the CEB low-voltage network and have installed or intend to install an electric charger for four-wheel electric vehicles (EVs).

Other CEB Customers can make application for renewable energy (RE) installations for the purpose generating electricity to charge electric vehicles under the other presently active Schemes (MSDG RE Scheme, Public Sector Entities RE Scheme and Smart City RE Scheme).

For this phase of the Scheme in Mauritius, a total cumulated capacity of ten (10) megawatts (MW) has been allocated. Applications received after the allocated 10 MW capacity for the scheme has been reached will be placed on a waiting list.

Interconnection of the 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.

The grid interconnection of the RE projects will be planned for commissioning in sequential order based on the effective date of completion of each project, as would be agreed by the parties. After the allocation of the 10 MW capacities, projects which could not be considered will be placed in a waiting list.

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

## WHAT IS THE CEB SOLAR PV SCHEME FOR CHARGING OF ELECTRIC VEHICLES?

The CEB SOLAR PV SCHEME FOR CHARGING OF ELECTRIC VEHICLES has been officially launched on **05 November 2021**.

The primary objective of the Scheme, as stipulated in the National Budget Speech 2021-2022, is *“to further promote the demand for electric vehicles (EV) whereby EV owners will be allowed to install a Photovoltaic system not exceeding 10 kW to charge their vehicles and export any surplus to the grid.”*

While the Scheme will enable the eligible Customers (also referred to as prospective Prosumers) to participate in renewable electricity generation using solar photovoltaic technology, it will provide the Prosumers the opportunity to achieve net-zero carbon emission in the use of their electric vehicles.

## MAIN GOALS OF THE CEB SOLAR PV SCHEME FOR CHARGING OF ELECTRIC VEHICLES

Amongst others, the main goals of the CEB SOLAR PV SCHEME FOR CHARGING OF ELECTRIC VEHICLES are as follows:-

- The Scheme is part of Government's mitigation strategy to abate CO<sub>2</sub> emission in the Transport Sector.
- The Scheme will help in pursuing the decarbonisation of the national electricity grid and contribute in achieving the national target of 35% and 60% shares of RE in the electricity mix by 2025 and 2030 respectively.
- The Scheme offers the opportunity to democratize the electricity generation business by allowing electricity Customers, whose premises are connected to the CEB low-voltage network, to engage in electricity production.
- Through this Scheme, CEB confirms its support to the setting up of solar PV projects with the common objective of ensuring the sustainable development of the National Power System.

## METERING PRINCIPLE UNDERLYING THE SCHEME

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

For the purpose of the gross metering method, each solar PV installation shall be equipped with a production meter and an import-export meter.

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 prospective Prosumers.

The location of the meters and metering equipment within the electrical setup of each concerned Solar PV installation shall be in accordance with the Schematic Diagram provided in the relevant Grid Code(s) and the CEB standard practices.

Notwithstanding the published streamlined procedure ([click to read the procedure](#)) for grid interconnection of distributed renewable energy generation (small-scale and medium-scale), on a case-to-case basis, special consideration will be given to ensure the optimal solution for the metering of the RE installation purposely to ensure best commercial practices.

## KEY COMMERCIAL TERMS OF THE SCHEME

In accordance with the gross-metering principle, as formulated for this Scheme, all energy produced by the 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) produced, as metered by the production meter, at the fixed **Tariff (T)**.

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

For the current year, **the Tariff (T) is MUR 3.73 per kWh**. The Tariff (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<sub>w</sub>)**, 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 installation under this Scheme, the relevant Connection Agreement shall be signed within three days after the submission of the application form. The standard Connection Agreement is available on the CEB website <http://ceb.mu>

## BENEFITS OF THE SCHEME

The benefits of the Scheme are as follows: -

- Subject to satisfying the established streamlined procedure ([click to read the procedure](#)), interested Customers (Prosumers) will participate in the production of clean electricity.
- The Prosumers will secure a 20 years revenue stream for their solar PV 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.

### **Note:**

Customers in the Domestic Category, participating in the Scheme, can also benefit from the special Time-Of-Use (TOU) tariff offered by the CEB for electric vehicle charging. The TOU tariff will enable the concerned Customers to reduce their electricity bills amounts, provided they ensure an effective management of their respective daily electrical load.

The TOU tariff is in process of being published in the Government Gazette. In line with the prevailing legislation, the TOU tariff will be in effect after its publication.

## KEY TERMS & CONDITIONS OF THE CEB SOLAR PV SCHEME

The key terms and conditions of the Scheme are: -

1. Interested Customers should submit duly filled-in application form ([click to download the application form](#)) in any CEB Customer Services Centre and pay the applicable non-refundable processing fee of Rs 2000/-. Payment of the processing fee does not guarantee registration into the Scheme.
2. 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.
3. 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.
4. The installation of the solar PV system will have to be completed within a period of six (6) months as from the date of the signing of the Connection Agreement.
5. 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.

6. The Prosumer shall provide CEB with web-link access, free of charge, for the downloading of the power output of the installed facility.
7. 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).
8. 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.
9. The Prosumer shall pay all relevant charges and costs, including the connection fee, for the setting up of the solar PV system.
10. 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.
11. The Prosumer shall obtain all necessary applicable authorizations, licenses, permits, etc. prior to the commissioning by CEB of the solar PV system.
12. 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 3<sup>rd</sup> party name, prior to the signing of the Connection Agreement, the concerned Prosumer shall obtain the written acceptance of the 3<sup>rd</sup> 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.

13. The Prosumer and any of its associates would have no objection to the addition of other necessary terms and/or conditions, identified following the inspection of the installation, required for the grid interconnection of the solar PV system.
14. As notified by the CEB, the Prosumer shall implement all recommendations in time.
15. The Prosumer shall sign the legally-binding Connection Agreement within three days as from the submission of the application for the installation and grid interconnection of the solar PV system.
16. By participating in this Scheme, the Customer and its representatives unreservedly authorize CEB or its associates, suppliers, contractors, etc. to share all information provided. 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 SCHEME**

The CEB will advise on the allowed capacity of the individual solar PV installation based on the electrical setup, declared (connected) electrical load of the premises of the Customer, capacity of the EV charger and the daily electricity requirement for charging of the EV.

**In any case, the maximum allowed capacity shall not exceed ten (10) kilowatts-peak (kWp) DC.** A three-phase electrical configuration on the premises may be required.

For the purpose of the solar PV capacity determination, the declared electrical load of the active electricity contract account(s) linked to the intended solar PV system should be effectively updated in the CEB information system.

The capacity of an EV charger, which the Customer intends to install in the future, may be considered in the sizing of a solar PV system, only if there is remaining capacity (MW) in the Scheme.

## **ELIGIBILITY TO APPLY FOR THE SCHEME**

All Domestic, Commercial and Industrial Customers who are supplied with electricity via the CEB low-voltage network and have installed or intend to install an electric charger for a four-wheel electric vehicle (EV) would be eligible to apply for the Scheme.

Prior to the commissioning of the Solar PV system, the Customer should submit the proof of ownership of the EV.

**Application from Customers who do not submit the duly filled-in application form ([click to download the application form](#)) will not be considered for the Scheme.**

Application from a Customer who is in litigation with the CEB, unless the litigation is effectively settled, or already operating a renewable energy installation under the same electricity contract account(s), unless the existing agreement is terminated, will not be considered for this Scheme.

## **WHERE TO SUBMIT THE APPLICATION FORM?**

The duly filled-in application form accompanied with all required documents should be submitted at one of the CEB's Customer Service Centres. The application form and other information on the Scheme are available on the CEB website <https://ceb.mu>

A non-refundable processing fee of Rs 2000/- is payable upon submission of the application form.

## **FOR MORE INFORMATION ON THE SCHEME**

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

- On the CEB's website <http://ceb.mu> . This is highly recommended to save time and effort.
- By sending an e-mail to [querypvevscheme@ceb.intnet.mu](mailto:querypvevscheme@ceb.intnet.mu) .
- By contacting one of the Customer Service Centres (CSCs): click <https://ceb.mu/contact-us> to get telephone numbers of the CSCs.

## **NOTIFICATION REFERENCE, DATE AND TIME**

Upon submission of the application form at one of the CSCs, a notification with a reference number, date and time will be created in the CEB information system.

## **IMPORTANT ADVICE**

- Given technicalities and financial implications in setting up of solar PV project, sufficient care should be exerted when designing system.
- 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 the investment in the facility. Keep regular contacts and work closely with the CEB.
- Ensure full compliance, at all times, with the applicable Grid Code(s) and its amendments and the connection agreement.
- To avoid delays in the implementation of the project, ensure that all documentations together with the project details are submitted to the CEB. Ensure all materials are submitted as indicated.
- Securing an agreement for the grid interconnection of the intended solar PV system is mandatory. Make sure 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 facility be initiated only after all agreements, licenses and permits, as applicable, have been properly secured.

- Whenever needed, seek the support services of the CEB for 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.
- Modification of the setup of the RE facility, without prior CEB's authorization, will result in an automatic disconnection of the facility from the CEB's network and the suspension of the agreement and thereof all the CEB's therein obligations.