CENTRAL ELECTRICITY BOARD

CARBON NEUTRAL INDUSTRIAL SECTOR (CNIS) RE SCHEME

APPLICATION FORM

FOR RENEWABLE ENERGY PROJECTS (SOLAR AND WIND SOURCES ONLY) OF CAPACITY UP TO 2 MW

Instructions to Applicant (Project Developer)

1. The Scheme is opened for CEB Industrial Customers, engaging in economic activities other than sugar production and energy generation, willing to set up a renewable energy (solar and wind sources only) project.
2. **For project capacity above 2 MW, a Project Proposal Document (PPD) should be submitted in lieu of this Application Form.** The template PPD is available for download from the webpage at: https://ceb.mu/projects/carbon-neutral-industrial-sector-cnis-scheme
3. Submit all requested documents to prevent delay in processing the application.
4. A non-refundable processing fee is payable upon submission of this Application Form.
5. **Submit the Application Form together with all requested documents in a nearest CEB Customer Service Centre during normal business hours as from 20 February 2023**.
6. Information provided in this Application Form will be used for the technical and administrative verification of the application in accordance with the requirements of the Scheme and the relevant Grid Code.
7. Information submitted in this Application Form may be used to update the Industrial Customer records in the CEB's database.
8. The person signing this Application Form and the Connection Agreement should be duly authorized.
9. Any modification, except for filling in required information, of this Form will result into its rejection.
10. Where applicable, the applicant should secure all necessary authorizations/permissions from the concerned electricity account holder(s) prior to the submission of the Application Form.
11. **Take full cognisance of the terms and conditions of the Scheme prior to submit the application.** For any further information concerning the application, please contact our MSDG Unit / SSDG Unit on 601 1100.

1.0	**The Industrial Customer (Applicant) Information**		
1.1	**Name of the Industrial Customer as per Certificate of Incorporation**		
1.2 (a)	**Name of the Authorised Official representing the Industrial Customer**		
1.2 (b)	**Designation of the person** (Director, GM, etc.)		
1.3	**Office address of the Industrial Customer**		
1.4	**Telephone Number of the Industrial Customer**	**Landline Number**	**Mobile Number**
1.5	**Tax Account Number of the Industrial Customer**		
1.6	**VAT Registration Number of the Industrial Customer**		
1.7	**Business Registration No. of the Industrial Customer**		
1.8	**Email Address of the person representing the Industrial Customer**		

Signature of the Authorized Official: _____ **Date:** _____

2.0	The Installer of the Renewable Energy (RE) Facility Contact Details			
2.1	Name of the Installer			
2.2	Postal Address			
2.3	Contact Person			
2.4	Telephone/Fax Number			
2.5	Email Address			
2.6	Accreditation/Qualification in installation of the RE Facility [Note 1]			
2.7	Qualification in the field of Electrical Engineering/ Electrical installation in buildings or similar (Electrical Contractor or Installer) [Note 2]			
2.8	Name of Consultant, if any			
2.9	Electrical Sub-contractor (*if any part of the electrical installation works is to be subcontracted*)	Company name:		Tel:
		LV ☐	MV ☐	Others ☐

Note 1*: In the interest of the Industrial Customer/project owner/promoter/customer and for safety reasons, the CEB shall accept a Certificate on the RE installation from a local or foreign institution OR from the supplier of the RE equipment certifying that the installer is well-versed with the installation of the RE technology. Furthermore, the topics covered (RE technology such as- PV panel, inverter, protection, earthing, etc.) and the duration of the training shall be mentioned on the Certificate. The CEB may also accept companies having past experience in the installation of grid connected RE technology systems.*

Note 2: *In the interest of the applicant/project owner/promoter/customer and for safety reasons: For three-phase electrical installation, a minimum certification in electrical installation in buildings (or equivalent) – Level 4 of the National Qualification Framework, as specified by the Mauritius Qualification Authority (MQA), is required*

For installations involving MV switchgear, the installer will need to demonstrate relevant training/certification (for the installer itself or the designated sub-contractor). Moreover, as mentioned in the MSDG Grid Code, the Certificate of Installation will have to be signed by a Registered Professional Engineer. For certificates obtained from foreign institutions, equivalence of qualification, certified by MQA, may be accepted. The CEB may also request course content/syllabus details of the certifications or proof of experience.

Signature of the Authorized Official: _____ **Date:** _____

3.0	**The RE Installation (Facility) Site - Project Details**			
3.1	**Installation site address**		**On-Site** ☐	**Off-Site** ☐
3.2	**Telephone Number (installation site)**			
3.3	**Electricity Contract Account Number(s) of installation site**			
3.4	**Electricity Tariff of the electricity contract account number(s) of installation site (please refer to the Industrial Customer electricity bill for the installation site)**			
3.5	**Total electrical load as declared in the CEB electricity contract account(s) (kW/kVA) which will be linked to the RE Facility (please consult your CEB Customer Service Centre)**			
3.6	**Is the site located within the internal electricity network of a medium-voltage CEB customer? (Yes / No)**			
3.7 (a)	**Is the Industrial Customer the owner of the installation site?**	**If Yes, to provide copy of Registered Title Deed.**		
3.7 (b)		**If No, to provide copy of Registered Title Deed of owner, copy of Registered Lease Agreement, copy of National Identity card of owner (if applicable) and Letter of Authorization from owner.**		
4.0	**Details of Interconnection with CEB**			
4.1	**Existing CEB Metering (specify if LV or MV metering)**			
4.2	**For Low Voltage (LV) Metering**	**Is the building being supplied by a dedicated CEB transformer? (Yes / No)**		
4.3	**For Medium Voltage (MV) Metering:**	**Manufacturer & Model of MV Switchgear**		
		Is existing client-side MV cubicle equipped with Circuit Breaker or Fuse?		
4.4	**For MSDG capacity greater or equal to 1 MW:**	**Proposed communication medium (refer to Grid Code)** [Note 3]		
		Details of wireless technology (3G, 4G, LTE, other) – Submit communication layout. [Note 3]		
		Will a SCADA be installed for monitoring & control of all inverters parameters (e.g., ramp rate, frequency response, reactive power, etc.) [Note 4]		

Note 3: *See Section 3.11 of MSDG Grid Code 200 kW – 2 MW*

Note 4: *See Section 3.10 of MSDG Grid Code 200 kW – 2 MW*

Signature of the Authorized Official: _____ **Date:** _____

5.0	The RE Installation Details	
5.1	Type of RE Technology - Solar PV, Wind, Hydro, Biomass, other (specify).	
5.2	Total proposed capacity of the RE Facility [Note 5]	kW_{ac}
5.3	Expected annual generation	MWh
5.4	Will the RE installation be Ground or Roof mounted? If applicable.	
5.5	Any other known SSDG/MSDG on the installation site? (Yes/No) If yes, specify capacity & RE technology if known.	
5.6	Manufacturer, Model & Type of RE Installation	
5.7	Country of Origin of the RE Installation	
5.8	Manufacturer, Model & Type of Inverter/Alternator, etc.	
5.9	Country of Origin of Inverter/Alternator, etc.	

Note 5:

- *The total proposed capacity of RE installation should correspond to the AC output capacity. Oversizing is not recommended. Surplus energy exported will be remunerated at the rate of Rs 1.86 per kWh. The rate for the purchase of excess energy will be valid during the four initial years of the RE facility. After the initial four years, excess energy generated will be banked and rolled over to successive billing periods. However, the counter of the banked energy shall be reset to zero on 1st January every year thereafter.*

- *In case the total inverter output capacity exceeds the RE capacity applied for, the inverter AC active power has to be limited.*

- *The total installed DC capacity of solar panels/RE technology shall **not exceed 2%** of the applied AC capacity.*

Signature of the Authorized Official: _____ **Date:** _____

RE System Guaranteed Particulars (Up to 2 MW)

(All information given hereunder should be substantiated by documents from the Manufacturer)

6.0	Guaranteed Particulars			
6.1	Rating of PV Panel or Turbine or Other Technologies (Tech.)	To specify Wattage		
6.2	Number of PV Panels or Turbine or Other Tech. to be installed	To specify Nos.		
6.3	Central Inverter, Alternator or Micro Inverter, etc. (Output 3 phase)	To specify		
6.4	Manufacturer's Inverter, Alternator Reference, etc.	To specify		
6.5	No. of Inverter, Alternator, etc. & Capacity (No. & kW)	To specify	No.	kW
6.6	Total Active Power Limit (kW)	To specify		

7.0	Parameters [Note 7]		Requirements		To specify System settings		
	Protection Parameters Settings (applicable to Inverters only)		Trip Setting	Clearance Time	Trip Setting	Clearance Time	Trip Indication Provided
7.1	SSDG up to 50 kW [Note 7a]	Over Voltage (230 V + 10 %)	253 V	0,2 s			
7.2		Over Voltage (230 V + 6 %)	243.8 V	1,5 s			
7.3		Under Voltage (230 V – 6 %)	216.2 V	1,5 s			
7.4		Over Frequency (50 Hz + 2 %)	51 Hz	0,5 s			
7.5		Under Frequency (50 Hz - 6 %)	47 Hz	0,5 s			
7.6		Loss of Mains (df/dt - Vector shift)	2.5 Hz/s 10 degrees	0,5 s			
7.8	MSDG Greater than 50 kW up to 2 MW [Note 7b]	Over Voltage (230/400 V + 9 %)	250.7/436 V	0,2 s			
7.9		Over Voltage (230/400 V + 6 %)	243.8/424 V	1,5 s			
7.10		Under Voltage (230/400 V – 10 %)	207/360 V	3 s			
7.11		Over Frequency (50 Hz + 2 %)	52 Hz	0,5 s			
7.12		50 < MSDG <= 500 kW — Under Frequency (50 Hz - 6 %)	47 Hz	3 s			
7.13		500 < MSDG <= 2 MW — Under Frequency (50 Hz - 6 %)	47 Hz	3 s			
7.14		Loss of Mains (df/dt - Vector shift)	2.5 Hz/s 10 degrees	0,5 s			

Signature of the Authorized Official: _____ **Date:** _____

8.0	Parameters Settings [Note 7]	Requirements	To specify System settings
8.1	Islanding Detection	Yes / No	
8.2	Isolated Generation possible	Yes / No	
8.3	Reconnection Time	3 mins.	
8.4	Max. DC Current injection to grid (if applicable)	To specify	
8.5	Rated AC output Current per phase (A)	To specify	
8.6	Total Harmonics Distortion (Voltage)	To specify	
8.7	Total Harmonics Distortion (Current)	To specify	
8.8	Surge Withstand Capability (kV)	To specify	
8.9	Power Factor (leading & lagging)	0.95	
8.10	Will the isolators in the Joint-Use-Facility (if applicable) have visible contacts with lockable facilities in open position?	Yes	
8.11	Will Earthing System be TT?	Yes	
8.12	Will Batteries be Installed? (Yes/No and capacity)	Yes / No	
8.13	Is a standby generator installed on site?	Yes / No	

Note 7: *For RE technologies other than inverters, to submit proposal of appropriate protection settings for review and approval.*
Note 7a: *Refer to the SSDG Grid Code for parameters settings.*
Note 7b: *Refer to the MSDG Grid Codes for parameters settings.*

9.0	Information on the RE Facility (for specific off-site cases)	
9.1	Site Address of the RE Facility	
9.2	Electricity Contract Account Number(s) of the Facility associated with the RE Facility	
9.3	Expected ancillary services at the RE Facility, if any	

Note: *The Industrial Customer may be required to make an official application for a separate electricity supply for the RE facility, which shall be metered through a dedicated set of metering equipment under a specific electricity contract account.*

Signature of the Authorized Official: _____ **Date:** _____

10.0	Checklist for Documents to be submitted with the Application Form	
	Documents Submitted	**(Y/N)**
1	Copy of National Identity Card or Passport of the Authorized Official (whichever is applicable) representing the Industrial Customer	
2	Official letter authorizing the Authorized Official to sign the Application Form stating the name and position of the person signing the document	
	Copy of National Identity Card or Passport of a high-ranked official of the Industrial Customer signing the letter of authorization (whichever is applicable)	
3	Copy of recent CEB electricity bill of the Industrial Customer	
4	Copy of Business Registration Card of the Industrial Customer	
5	Copy of VAT Registration Certificate of the Industrial Customer	
6	Copy of Certificate of Incorporation of the Industrial Customer	
7	If the Industrial Customer is the owner of the installation site: Copy of Registered Title Deed	
8	If the Industrial Customer is not the owner: Copy of Registered Title Deed of owner, copy of Registered Lease Agreement, copy of National Identity card of owner (if applicable) and Letter of Authorization from owner.	
9	Installer Training Certificate in the field of installation of the RE systems	
10	Certification in electrical installation in buildings (or equivalent) – Level 4 of the National Qualification Framework, as specified by the Mauritius Qualification Authority (MQA) (for the electrical contractor or installer).	
11	Electrical schematic diagram as per the CEB Grid Code requirements	
12	Location/Site Plan of installation site	
14	Manufacturer datasheet of the RE equipment (e.g., solar PV panels, turbines, etc.)	
15	Type Test Certificate of the RE equipment (e.g., solar PV panels) from Independent Lab	
16	Manufacturer datasheet of inverter/ alternator, etc.	
17	Type Test Certificate of inverter/ alternator, etc. from Independent Lab	
18	Manufacturer's Declaration for Inverter's / alternator's, etc. Conformance to the CEB SSDG Grid or MSDG Grid Codes (whichever is applicable) and CEB requirements.	
19	Certificate of Compliance with the Electrical Equipment Safety Regulations and/or the Electromagnetic Compatibility Regulations (CE marked)	

Signature of the Authorized Official: _____ **Date:** _____

Declaration - To be completed by Industrial Customer Authorized Official (as applicable) Note 8(a)		
(a) "I declare that the RE installation proposed in this Application have been designed to comply with the requirements of the CEB as detailed in the prevailing applicable Grid Code and I have taken cognizance of the terms and conditions of the Carbon Neutral Industrial Sector (CNIS) Scheme, as detailed on the CEB website, and I also confirm that the information contained in this Form is true and correct."		
(b) "I declare that the Industrial Customer is not in litigation with the CEB."		
Name of the Authorized Official		
Designation (e.g. GM / PS / Director, etc.)		
National Identity Card (NIC) or Passport No.		
Signature		**Date:**

To be completed by the person submitting this Application Form Note 8(b)		
Name of Person submitting this Application Form		
Position within the Industrial Customer or Relationship (whichever is applicable)		
National Identity Card (NIC) No. or Passport of the Person		
Signature		**Date:**

To be completed by CEB Representative *(office use)*			
Serial No. Note 9		**Application Date**	
Industrial Customer SSDG/MSDG Contract Account Number:			
Name			
Title of the Officer (CSA or CSO)			
CEB Customer Service Centre			
Signature			**Date:**

Note 8(a): *The CEB shall not be liable for delays in processing the application if wrong, incomplete or incorrect information has been provided in the Application Form. The CEB may reject the application if the missing, incomplete or incorrect information are not submitted by the deadline given to the applicant/installer.*

Note 8(b): *The person submitting this Application Form, whether a private individual or an employee of the Industrial Customer, should produce a duly authorized letter signed by an official or the Authorized Official of the Industrial Customer, whichever is applicable, when submitting the Application Form.*

Note 9: *Serial No. to be filled by MSDG Unit or SSDG Unit.*