

INFRASTRUCTURE SERVICES DIRECTORATE ELECTRICITY SERVICES DEPARTMENT

APPLICATION FOR THE CONNECTION OF EMBEDDED GENERATION

- Completed and signed application form must be submitted to; Infrastructure Services Directorate, Ecclesia Building, 1st Floor, 71 Plein Street, Stellenbosch, 7600 or via email: <u>engineering.services@stellenbosch.gov.za</u>. Telephone: 021 808 8343/8215/8957

- Please Note: Failure to provide all relevant information as required below may lead to delays in the application process.

1. PROPERTY DETAILS

Please complete details of the site where the embedded generator will be installed

BUILDING /COMPLEX							
UNIT / HOUSE NUME	BER						
ERF NUMBER							
PHYSICAL ADDRESS							
SURBUB/TOWNSHIP	/FARM						
POSTAL CODE							
LATITUDE (dd mm ss)		S	0	۲ ۲	"		
GPS COORDINATES	E	0	٢	"			
APPLICATION TYPE (
RESIDENTIAL			COMMERCIAL	/INDUSTRIAL/FARM			
NEW			REVISED APPLICATION				
SYSTEM MODIFICATION			CHANGE OF PROPERTY OWNER				

2. PROPERTY OWNER DETAILS

Property owner's details **must be completed** even if the proxy is completing the application on behalf of property owner

TITLE		
FULL NAME (First name and surname)		
MUNICIPAL RATES ACCOUNT NO.		
HOME TELEPHONE NO.	CELLPHONE NO.	
EMAIL ADDRESS		

FOR OFFICE USE ONLY					
APPLICATION REFERENCE NO:	DATE APPLICATION RECIEVED				
ELECTRICITY METER REPLACED(YES/NO):	METER NO(If ves)				
ELECTRICITY WETER REPLACED (TES/NO).					

3. APPLICANT DETAILS

Take note that the word applicant refers to any person authorized in writing by the property owner to complete application on his/her behalf. If the property owner is completing the application, then this part should be left blank

BUSINESS NAME						
FULL NAME (First name and surname)						
WORK TELEPHONE NO.		CELLPHONE NO.				
EMAIL ADDRESS						
COMMUNICATION	All communications regarding the status of the application and conditional approval to install the EG should be sent to:(Please tick appropriate) Property Owner Applicant Applicant					

A proxy letter must be attached when completing the application on behalf of the property owner.

4. TECHNICAL INFORMATION

EXISTING PROPERTY ELECTRICAL CONNECTION								
AMPERE(A) (Main distribution board circuit breaker		PHASE (Please tick)			SINGLE		THREE	
VOLTAGE(V) (Please tick)	LV (230/400V)	MV (11kV) OTHE			OTHER(spe	cify)		
NMD*(kVA) (non-residential)								

EXISTING PROPERTY ELECTRICAL METERING				
METER TYPE				
(Prepayment / Credit / Bi-directional)				
METER NUMBER				

EMBEDDED GENERATOR (EG) SYSTEM DETAILS														
		IERGY SOURCE appropriate)	PV		HYDRO		WIND LANDFILL BIOGAS BI						BIOMASS	
customer's e exported to				ner's elect ed to Ste	from the embedded generator to be used solely within the er's electrical installation and no excess energy to be ed to Stellenbosch Municipality's electricity distribution k at any time (reverse power blocking to be installed).									
(Please tick appropriate) Energy from the embedded generator to be used within the customer's electrical installation and excess energy to be exported to Stellenbosch Municipality's electricity distribution network.						pe								
BATT	ERY S	FORAGE (Please t	ick ap	propriat	te)									
YES (But only as a standby power – cannot operate in parallel and feed onto the grid) YES (Connected in parallel to EG and can feed onto the grid)														
kWh TOTAL BATTERY VOLTAGE(V)														
PRELIMINARY DESIGN: Attach a preliminary circuit diagram and design showing major components, proposed point of common coupling, isolating and interfacing devices with Stellenbosch Municipality's electrical network, protection schemes, customer electrical installation, earthing arrangements.														

INSTALLATION TYPE PLEASE CHOOSE TYPE OF PHOTOVOLTAIC SYSTEM APPLYING FOR (Please tick)						
1. GRID-TIED SSEG		3.STANDBY SSEG Passive standby UPS utilised as standby Hybrid SSEG				
2.GRID-TIED HYBRID SSEG		4.OFF-GRID				
5.0THER SSEG TYPE (Please specify)						

EMBEDDED GENERATOR TOTAL CAPACITY						
TOTAL AC CAPACITY OF EG (kVA AND PF)	TOTAL CAPACITY OF PV PANELS (kWp)					
(Inverter capacity if solar PV)	(If Solar PV)					

ESTIMATED CONSUMPTION AND GENERATION LEVELS					
ESTIMATED ENERGY CONSUMPTION (kWh)	LOW SEASON PERIOD				
(Consumption per Month)	(September to May)				
ESTIMATED ENERGY GENERATION (kWh)	LOW SEASON PERIOD				
(Energy generated by the generator per month)	(September to May)				
ESTIMATED ENERGY CONSUMPTION (kWh)	HIGH SEASON PERIOD				
(Consumption per Month)	(June to August)				
ESTIMATED ENERGY GENERATION (kWh)	HIGH SEASON PERIOD				
(Energy generated by the generator per month)	(June to August)				
TOTAL ENERGY CONSUMPTION (kWh)					
(Estimated Consumption per annum [12months])					
TOTAL ENERGY GENERATION (kWh)					
(Estimated generation per annum [12months])					

INVERTER DETAILS						
TOTAL NUMBER OF INVERTERS						
(Fill in for solar PV)						
MANUFACTURER						
(Fill in for solar PV)						
MODEL						
(Fill in for solar PV)						
PHASE(Please tick)	SINGLE			THREE		

PLANNED CONSTRUCTION SCHEDULE							
CONSTRUCTION START DATE		COMMISSIONING DATE					
If system is already installed (i.e a retrospective application), state "existing system" under start date							

5. INSTALLER DETAILS

INSTALLER NAME	
ACCREDITATION/QUALIFICATION	
PHYSICAL ADDRESS	
POSTAL CODE	
WEBSITE (If available)	
CONTACT PERSON	
TELEPHONE NO.	CELLPHONE NO.
EMAIL ADDRESS	

ECSA REGISTERED ELECT installations)	RICAL PROFFESIONAL (To be com	pleted for only grid-tiec	and grid-tied hybrid SSEG
FULL NAME (First name and surname)			
REGISTRATION NO.		REGISTRATION CATEGORY	
engineering technician (dou and be familiar with the tec	SA registered electrical professional e mestic installations only), must be pro chnical details of the intended genera s mandatory at the commissioning st	ovided as they must be ation technology and as	involved in the design of the system sist in the completion of this form.

6. DECLARATIONS

DECLARATION		
I/we, the owner(s) of the property, hereby declare that I/we have taken the necessary steps to ensure all information contained in this declaration form is correct. I/we further acknowledge and agree to comply with the provisions of Stellenbosch Municipality's Electricity Supply By-law.		
SIGNED (PROPERTY OWNER)		
DATE		
Note: Only the property owner may sign this declaration. Proof of property ownership must be attached to this application form. Proof can be a copy of property rates account, tittle deed or proof of registration. If the owner is a private person, a copy of his/her identity document or passport must be attached to the declaration form. If the owner is not a private person, a copy of business/trust/body corporate registration form must be attached to the declaration form, together with a copy of the signatory's identity document.		

PROXY DETAILS

If signing on behalf of the property owner(s) an approved letter of proxy must be attached to this declaration

Note: If the owner is a natural person, a letter is required wherein the property owner appoints the signatory as a proxy. The letter must be signed by the owner and accompanied by a copy of his/her identity document. If the owner is not a natural person, a resolution of board (or equivalent strategic body, depending on the nature of company) is required, authorising the signatory to sign on behalf of the company. The property owner's details should still be completed in the property owner's section. The only change is in the declaration section where, in the case of proxy, the owner's name is filled in without his/her signature and the proxy signs on behalf of the property owner in appropriate field. All other documentation required has to be submitted, including proof of ownership.

FULL NAME

(First name and surname)	
SIGNED (On behalf of property owner)	
DATE	

APPENDIX A – CONDITIONS OF APPLICATION

1. General

- 1.1. This application form is for the connection all forms of embedded generation to the electricity network of Stellenbosch Municipality (solar photovoltaic (PV), wind, diesel, hydro etc). It applies to residential, commercial or industrial customers. Applications for systems up to and including 1MVA may use this form.
- 1.2. This application form must not be dismembered or altered (Do not take it apart or put documents between its pages).
- 1.3. It is recommended that this form is filled in by personnel familiar with the technical details of the intended generation technology. 'An ECSA electrical professional person' sign-off of the Commissioning Report is mandatory.
- 1.4. If the application form is not completed by the property owner, a letter of proxy signed by the property owner, must be attached to the completed application form.
- 1.5. The following documents must be attached to the completed application form For residential applications
 - Detailed circuit diagram of the embedded generator to be installed.
 - Copy of the property owner's identity or passport document.
 - Copy of municipal rates account
 - Signed proxy letter if the application is not completed by the property owner

For business applications

- Detailed circuit diagram of the embedded generator to be installed.
- Copy of business registration certificate.
- Letter of signing authority plus copy of this person's identity or passport document.
- Copy of municipal rates account
- 1.6. If the applicant does not yet have an electricity connection, an application for a new connection will need to be submitted together with this application form.

2. Additional Safety requirements

- 2.1. It is the responsibility of the applicant to arrange with the electricity distribution utility for the disconnection or reconnection of the mains supply to the premises when it becomes necessary to install the alternative. Please note that the latest electricity distribution tariffs will apply for this service.
- 2.2. A CoC shall be completed for the installation and submitted to the relevant electricity utility before reconnection of supply to the premises.
- 2.3. A permanent red label (PVC or aluminium) with white lettering (of height of at least 10 mm) shall be affixed to the Main distribution board inside the premises as well as to all other distribution boards fed from the main board and the Main incoming Utility supply circuit-breaker. The label shall read, "Alternative Supply onsite". Where only parts of the installation are supplied by alternative means, only these circuits shall be labelled.
- 2.4. FIREMEN SWITCH (type and position) as approved by the Fire brigade; A permanent white label (300 x 300 aluminium) with red lettering of height of at least 30mm shall be affixed next to the fire switch. The label shall read, "**NOTICE In case of emergency shut down**"





Size 300 x 300 Label to be fitted next to the firemen switch

Size 300 x 300 Label to be fitted on the entrance(s) of the property

2.5. Where any form of alternate supply (generator, UPS, etc.) is connected and automatically supplies power to circuits on the distribution board, a visible indicator (light) shall be provided on each distribution board where such circuits are live after the main supply on that board has been switched off.

APPENDIX B – FINAL COMMISIONING REPORT FOR GRID-TIED SSEG

The Commissioning Report must be completed by an ECSA registered professional once you have received permission to install and your system has been installed. The following SSEG Commissioning Report must be submitted for each installation, confirming compliance with the Stellenbosch Municipality's requirements.

SITE DETAILS					
PROPERTY ADDRESS	ADDRESS				
SUBURB	POSTAL CODE				
ERF NO					
MUNICIPAL RATES ACCOUNT NO.					
		CONTACT DETAILS			
SSEG PROPERTY OWNER					
CONTACT PERSON					
CONTACT NUMBER					
		SSEG DETAILS			
INVERTER MANUFACTURE& MODEL TYPE					
SERIAL NUMBER(S) OF INVERTER(S	i)				
TOTAL CAPACITY OF EMBEDDED G (KVA&PF)	ENERATION				
SINGLE OR THREE PHASE					
		INSTALLER DETAILS			
INSTALLER					
ACCREDITATION / QUALIFICATION					
ADDRESS					
CONTACT PERSON					
WORK NO	CELLPHONE NO				
EMAIL ADDRESS					
		INFORMATION TO BE ATTACHED			
FINAL COPY OF CIRCUIT DIAGRAM	ELECTRICAL INSTALLATION CERTIFICATE OF COMPLIANCE INTERMS OF SANS 10142-1 /SANS10142-2 SIGNED CONTRACT FOR SSEG		SSEG		
COMPULSORY DECLARATION – TO BE COMPLETED BY ECSA REGISTERED PR ENG, PR TECH ENG, PR CERT ENG FOR ANY SSEG INSTALLATION OR PR TECHNI ENG FOR RESIDENTIAL SSEG INSTALLATIONS ONLY.			OR PR		
THE SSEG INSTALLATION COMPLIES WITH THE LATEST EDITIONS AND RELEVANT SECTIONS OF NRS 097-2-1 AND SOUTH AFRICAN GRID CODES					
THE LOSS OF MAINS PROTECTION HAS BEEN PROVED BY A FUNCTIONAL TEST CARRIED OUT AS PART OF THE ON-SITE COMMISSIONING (e.g a momentary disconnection of the grid supply to the SSEG to prove that the loss of mains protection operates as expected)					
PROTECTION SETTINGS HAVE BEEN SET TO COMPLY WITH THE LATEST EDITION OF NRS 097-2-1 AND THE APPROVED GENERATION CAPACITY MAXIMUM OUTPUT OF THE INVERTER HAS BEEN LIMITED BY APPROPRIATE HARDWARE OR SOFTWARE SETTINGS.					
SAFETY LABELS HAVE BEEN FITTED IN ACCORDANCE WITH THE LATEST EDITION OF NRS 097-2-1, SANS 10142-1 AND SANS 10142-2 MV INSTALLATION SAFETY REPORT					
THE GRID-TIED SSEG INSTALLATION COMPLIES WITH THE RELEVANT SECTIONS OF SANS 10142-1 AND AN INSTALLATION CERTIFICATE OF COMPLIANCE AND TEST REPORT FOR ELECTRICAL INSTALLATIONS, ARE ATTACHED.					
WHERE APPLICABLE FOR A GRID-TIED HYBRID SSEG INSTALLATION, THE SUITABLY INTERLOCKED CHANGE-OVER SWITCH CONFORMS TO THE REQUIREMENTS OF THE GUIDELINES FOR SSEG DOCUMENT					
REVERSE POWER FLOW BLOCKING PROTECTION HAS BEEN INSTALLED AND COMMISSIONED TO PREVENT REVERSE POWER FLOW INTO THE ELECTRICITY DISTRIBUTION NETWORK (where applicable)					
COMMENTS (continue on a separate sheet if necessary)					

APPENDIX B – FINAL COMMISIONING REPORT FOR GRID-TIED SSEG (Continued)

NAME AND SURNAME	
ECSA PROFESSIONAL CATEGORY	
ECSA REGISTRATION NO.	
SIGNATURE	
DATE	