



SSEG

SMALL SCALE EMBEDDED GENERATION

Solar PV Small Scale Embedded Generation (SSEG) Introductory Training

Understanding embedded generation in the municipal & customer care context

This course provides the information needed to understand how the small-scale solar market is reshaping the energy industry in South Africa without compromising municipal service deliver, proving a reasonable business case for commercial and residential municipal customers, whilst supporting the supply of additional energy to the grid to support mitigation of energy supply shortages.

Course Outcomes for Municipalities:

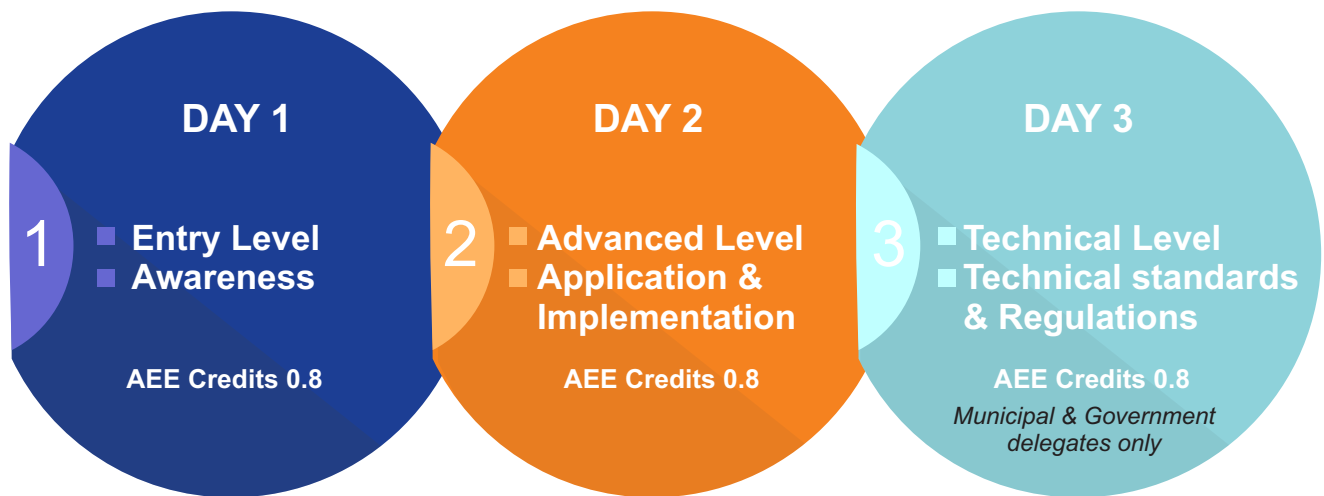
- Information on SSEG and how it impacts municipal operations.
- The various standards and regulations that are applicable.
- A resource pack of documents and templates endorsed by SALGA/AMEU.
- Understand what is required to customise the documents and templates for your own municipality.
- Navigating the online SSEG application system.
- Ability to determine the way forward to develop a policy, and implement SSEG application and approval processes, as well as record keeping within your municipality.
- Identify the level of future assistance required to implement SSEG in your municipality.

Course Outcomes for Municipal Customers and EG Installers:

- Information on SSEG and what municipalities will require in future.
- The various standards and regulations that are applicable.
- Documentation that will be required and how they are developed for a municipality.
- Be knowledgeable on the aim of SSEG municipal requirements to understand what EG installers need to do and what customers that must comply need to know.
- Know what a contractor needs to comply with.

SSEG INTRODUCTION TRAINING

- Virtual with trainer access for Q&A
- 15 hours of training over 3 days
- Attendance certificate after completion of the full day
- Full attendance of all 15 hours calculates to **2.4 AEE renewal credits**



A win-win approach for both municipality and customers with solar

Well-functioning Small Scale Embedded Generation (SSEG) processes are important to avoid illegal systems that are a safety risks to users and the national grid, managing power quality, protect municipal revenue and service delivery, and support the green economy - which is set to provide employment, sustainable power solutions, and renewable energy that can be utilized not only by the SSEG owner, but excess fed back into the national grid.

The training includes a resource pack of documents and templates for municipalities that are customisable. These were developed from lessons learnt over more than 10years, and are endorsed by SALGA/AMEU.

Attending the training will assist in understanding the background information necessary to utilize the resource pack by municipalities, and support installers and property owners in understanding the background to municipal process changes, how to comply with the requirements in the renewable energy generation landscape within municipalities, and highlighting the aspects that could differ from municipality to municipality throughout South Africa.

This course is ideal for:

- Property owners (residential and/or commercial);
- Junior, senior & technical staff of municipalities and energy regulators;
- Municipal customer care liaisons
- Municipal staff dealing with electricity or EG installations & applications
- Installers of renewable energy such as solar PV
- Consultants and contractors such as electricians, energy service consultants, professional engineers and energy managers

This course aims to provide an overview and high-level understanding of SSEG in relation to:

- Defining SSEG
- Terminology in the SSEG landscape
- Regulations, standards and specifications
- Factors driving payback periods for solar installations
- Benefits of small-scale solar installations for municipalities and customers
- A cost of supply study example for SSEG
- Tariff models for reasonable business cases for both municipalities and customers
- Documents you need to know about ie, requirements, application forms, assessment processes, approval requirements, by-law samples and contracts, commissioning a system and what is currently required at various municipalities
- EG application platform introduction

Course Outline

DAY 1 Entry Level

AEE Renewal
Credits: 0,8

- Introductory day with general overview into the understanding of PV SSEG
- Types of EG systems
- Flow of energy and the effect on the national grid
- Understanding metering and tariffs
- Reasoning for the win-win business case between municipalities and customers
- Relevant standards and regulations to be informed about
- Identifying accredited installers and the recognition procedures
- Recourse for illegal installations

DAY 2 Advanced Level

AEE Renewal
Credits: 0,8

- Unpacking the resource documents in detail looking at policy and required documentation
- Communicating with the public
- Record keeping, application, assessment and commissioning
- Working with SSEG applications and understanding commissioning of SSEG systems

DAY 3 Technical Level

AEE Renewal
Credits: 0,8

Municipal and Government delegates only

- Detailed overview of NRS and SABS standards
- Utility interface technical requirements
- Safety, protection and control
- An example of a successful implementation at a municipality

About the training and trainers

This training was developed by a team that provided guidance to close to 100 municipalities in South Africa, and other African countries, to establish and run SSEG application, assessment and permission processes towards well-functioning SSEG systems.

Your trainers for this program:

Danie Esterhuizen

Director at Dan Electrical Contractors, Master Installation Electrician

Danie Esterhuizen is a seasoned Master Electrician and the Director at Dan Electrical Contractors, a company he has led since January 2006. With over 18 years of experience, Danie specializes in electrical and security hardware installations and the maintenance of existing installations across the domestic, commercial, and industrial sectors. Danie holds a National Diploma in Engineering Studies, specializing in Electrical, Electronics, and Communications Engineering.



Faure van Schalkwyk

Energy Research Engineer and Training Manager - Solar Training Centre (SUNCybernetics)

Nicolaas Faure van Schalkwyk, an M.Eng. Electrical & Electronic Engineer (NWU) is currently providing technical training and consultancy services in the Solar PV environment to both the public and private sector. He formed part of the SAPVIA Skills committee and SANS 10142-1-2 working group (Specific requirements for embedded generation).



Mogatle David Mehlape CEM® & CEA®

Sustainability Specialist at Vodacom

Mogatle holds a National Diploma in Electrical and Electronics Engineering from the University of Johannesburg, he is also an Internationally Certified Energy Manager and Certified Energy Auditor by the Association of Energy Engineers. His expertise includes solar energy, energy management, electrical works, and project management. Known for his disciplined work ethic, innovative mindset, and continuous learning, Mogatle ensures he stays current with global technologies in his field.

