GREEN Solar Academy

Africa's Premier Training Institute for Solar Power

SuperSolarSchool

Master the sun in 5 days

SAIEE

PVGreenCard™ Promoting safe quality Solar PV installations

*** 5 CPD Points ***

5-DAY INTERMEDIATE COURSE

The SuperSolarSchool is 5 days of training covering all important topics. In every session, we set a strong focus on practical application. You will learn about electrotechnical basics and functionality of PV systems, how to install systems correctly according to international standards and how to plan and manage a project and size the system including the battery pack according the client's requirements.

Our unique approach

The approach for all training is to be as practical as possible. All courses place considerable emphasis on hands-on exercises to not only teach theoretical knowledge but also involve practical applications. The whole course is consciously put together considering important outcomes and appropriate and modern teaching methods and aims at a pleasant and long-lasting learning experience. To further increase the practical relevance we offer frequent exchange with the PV industry and keep in touch even after the course at our alumni networking meetings.

Exploring PV principles with experiments

Learning how to connect a PV inverter

Practical installation day

Our trainers

GREEN's trainers come from across Africa and are all invested and experienced in the solar industry. All trainers undergo high quality training in teaching methods and our standardised course material before becoming accredited as GREEN trainers. Our team currently consists of over 20 trainers for all skill levels.

Accreditation

The SuperSolarSchool is accredited by the German Solar Energy Society (DGS). You receive an internationally-recognised certificate of participation issued jointly by GREEN Solar Academy and DGS. It accumulates 5 CPD Points validated by SAIEE as per ECSA policy (South Africa) and is endorsed by the South African PV Industry Association (SAPVIA) as suitable training under the PV GreenCard programme. GREEN Solar Academy is a QCTO-accredited Skills Development Provider.

24_03_01 T&Cs apply

SuperSolarSchool

Master the sun in 5 days

Target Audience

Everyone who wants a flying start in solar photovoltaics.

Join us if you:

- Want to become a PV GreenCard installer
- Have pre-knowledge already and want to formalise it and fill gaps (electricians, engineers etc.)
- Want to found a solar business
- Want to start a (technical) job in the PV industry

Join our course and begin your PV journey

Pricing

- The course costs ZAR 13,500 (excl. VAT)
- 10% discount for Alumni
- 12% early bird discount for bookings 8 weeks before
- Payment must be made 2 weeks before the start of the course
- Including lunch, coffee breaks, exercise handouts, certificate fees

Book online at solar-training.org

Prerequisites?

Recommended NQF level 4 to participate. The course is open to anyone who wants to gain knowledge in solar PV. The pace is quite brisk, and we recommend a technical or electrical background. Certainly maths skills on matric level are needed (math literacy is not sufficient). To prepare for the course, watch some videos on PV basics on our Youtube channel. Do our self-evaluation test to see if you are ready.

Main Topics

- **Basics of solar electricity (series, parallel connection, I-V-characteristic curve)**
- **Exercises with solar experimental kits**
- **PV system concepts (grid-tied, back-up, hybrid, offgrid)**
- **Components and protection elements**
- **Site survey and customer consultation**
- **Guided installation (practical exercise) of a complete system on a training roof, wiring and commissioning of inverter and battery bank**
- **Chronological overview of all the steps of a PV project implementation**
- **Sizing of PV plant components according to the client's consumption (exercise)**
- **Cost calculation and quote preparation**
- **Matching of components and cross-checks according to climate conditions**
- **Marketing and quality assurance for PV businesses**

Interested in the SuperSolarSchool? Contact us!

Tsakani Mashila | Team Leader Sales

+27 (0)10 312 6724 | info@solar-training.org

GREEN Solar Academy

Africa's Premier Training Institute for Solar Power

PV Mounter

Hands-on training for PV installers

SAIEE

* 2 CPD Points *

2-DAY BASIC COURSE

Starting with nothing but a wiring chart and material list, we plan and execute a solar installation together, up to commissioning and testing of the system. This is a practical training with minimal time in the classroom and more time in the workshop to practice PV system installations. We'll be installing on different roof types using state-of-the-art equipment.

After the course, you'll be able to plan physical installations, mount PV systems on various roof types, know how to stay safe on site and handle components appropriately, how to plan and install the wiring of a PV system with storage and what it takes to build safe and long-lasting PV systems.

PV Mounter is a good choice if you've done our 5-day SuperSolarSchool and are looking for more practical training for yourself or your team. Team discounts are available.

Work practically with solar equipment

Learning how to connect a PV inverter

Understand commissioning of a PV system

Our trainers

GREEN's trainers undergo high quality training before we allow them to teach at any of our courses. Also, all have experience in the PV industry and the majority runs their own solar business for first-hand practical experience.

Accreditation

This course is accredited by the German Solar Energy Society (DGS). Certificate of participation issued jointly by GREEN Solar Academy and DGS. Accumulates 2 CPD Points validated by SAIEE as per ECSA policy (South Africa). GREEN Solar Academy is a QCTO-accredited Skills Development Provider.

24_03_01 T&Cs apply

PV Mounter

Hands-on training for PV installers

Target Audience

- New solar installers looking for practical experience
- Technicians and Electricians who need a crash course on solar installation
- SuperSolarSchool alumni who want a refresher on PV installation and commissioning
- Installation teams who need fast and efficient practical training and at an affordable price

Pricing

- The course costs ZAR 4,900 (excl. VAT)
- 10% discount for Alumni
- 12% early bird discount for bookings 8 weeks before
- Payment must be made 2 weeks before the start of the course
- Including lunch, coffee breaks, exercise handouts, certificate fees

Book online at solar-training.org

Prerequisites?

This course is completely hands-on. Anyone who is interested can join the course - a qualification as an electrician is not required. For theoretical basics and knowledge on PV system components, design, and planning, please book the SuperSolarSchool.

To prepare for the course, you can watch some videos on PV basics here. If you are unsure if you should participate, contact us.

Join our course and begin your PV journey

Main Topics

The course focuses on how to stay safe on the roof and how to install PV systems correctly. Topics are:

- **Planning an installation based on wiring charts and material lists**
- **Preparing the site, tools and equipment**
- **Dos & Don'ts on site**
- **On-site safety**
- **Hands-on PV installation on different roof types**
- **Wiring of PV Systems**
- **Commissioning and programming of inverters (different manufacturers)**

Interested in the PV Mounter? Contact us!

Tsakani Mashila | Team Leader Sales

+27 (0)10 312 6724 | info@solar-training.org

GREEN Solar Academy

Africa's Premier Training Institute for Solar Power

The SAPVIA PV GreenCard Programme

Frequently Asked Questions

Discover what the SAPVIA (South African PV Industry Association) PV GreenCard is and how to get the qualification:

PVGreenCard

Promoting safe quality Solar PV installations

What is the PV GreenCard Programme? The PV GreenCard programme is an industry-led quality assurance, skills development and business support program to ensure a high standard of quality for small-scale solar PV installations.

What is a PV GreenCard? A PV GreenCard is an as-built report on a solar installation. It is not a physical card you keep in your wallet.

Who may issue a PV GreenCard? Certified PV GreenCard Installation Companies, which are registered on the PV GreenCard portal, may issue a PV GreenCard.

Who can register on the SAPVIA PV GreenCard website? Certified PV GreenCard Installation Companies can register on the website. A Certified PV GreenCard Installation Company is registered as an electrical contractor with the DoEL and employs an assessed PV GreenCard Installer.

How do you become an assessed PV GreenCard installer? Register for the assessment at an accredited Assessment Centre, like GREEN Solar Academy, and pass to receive your SAPVIA Certificate. Training before is recommended.

What is the PV GreenCard Assessment? It is a 2-day on-site competency assessment for PV Installers, which includes practical and theoretical aspects.

Who can undertake the PV GreenCard assessment? All suitably-trained and knowledgeable PV installers can attempt this competency assessment.

Who issues your Certificate of Approval if you pass the PV GreenCard assessment? SAPVIA will issue the certificate. The certificate bears the name of the individual who passed the assessment (not the company name).

Who can issue the CoC that forms part of a PV GreenCard Report? Only a DoEL-registered installation electrician may issue the CoC.

How to become a PV GreenCard Installer

Where to start and what you need to do

Step 1: Assess your skill level

The PV GreenCard Assessment is an industry competency test. You need to have a certain skill level to pass. Have a look at the SAPVIA installer guidelines to get a feeling for the kind of knowledge required: pvgreencard.co.za

Step 2: Get the right training

To prepare for the assessment, attend our 5-day SuperSolarSchool, which is endorsed by SAPVIA as suitable PV GreenCard training. Choose between our academies in **Cape Town, Jo'burg, Gqeberha, Ballito & Pretoria.**

Step 3: Do the PV Assessment

Sign up to do the assessment at one of our registered assessment centres. **The cost is R5 900 ex VAT** and the event takes place over 2 days. **Day 1 is the theory exam** (8am to 3pm) and **Day 2 is the practical exam** (8am to 1pm) where you will be placed in groups and tasked with completing an installation on a mock roof. The PV GreenCard Assessment is available at these locations:

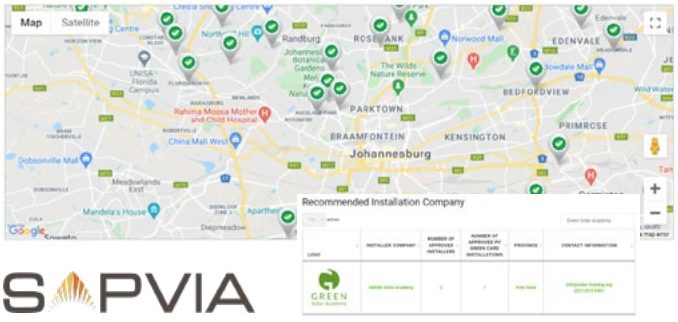
- GREEN Solar Academy **Johannesburg**
- GREEN Solar Academy **Cape Town**
- GREEN Solar Academy **Ballito**

Book Online

www.solar-training.org

Step 4: Get registered

Upon successful completion of your assessment, you can register your company on pvgreencard.co.za for an annual fee, given that you are an Electrical Contractor.

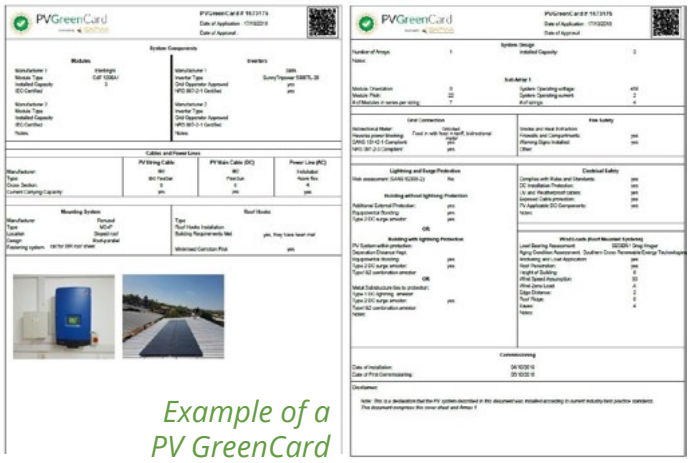


SAPVIA

Step 5: Issue PV GreenCards

Upload the relevant project information to the SAPVIA online portal and use your company's login to issue a new PV GreenCard for the project.

Remember: Both a registered electrician and an assessed PV GreenCard installer need to sign off on the PV GreenCard together. This may be the same person or two different people employed by the same company. Of course, this doesn't replace the official CoC!



Example of a PV GreenCard

Partners: lifechoices SOLARVest Renewable Energy Solutions Grünel DGS SolarSchool German Solar Energy Society e.V

Do you still have questions? Contact us!

Tsakani Mashila | Team Leader Sales

+27 (0)10 312 6724 | info@solar-training.org

GREEN Solar Academy

Africa's Premier Training Institute for Solar Power

Compliance for PV Systems

Commission and test with confidence!

SAIEE

* 1 CPD Point *

This 1-day advanced course is for those who are serious about installing safe and compliant PV systems, and want to know how to interpret and apply standards in real-world PV installations.

We will present a thorough review of key wiring standards, including SANS 10142-1, SANS 60364-7-712, and NRS regulations, highlighting the most relevant aspects and how to interpret them. The course will address critical compliance topics such as neutral-earth bonding, surge protection, and battery safety.

Once we have discussed the theory we get practical. We conduct commissioning and testing procedures in our workshops, and guide you through the preparation of the comprehensive test report specifically tailored to PV installations that is required for the Certificate of Compliance (CoC). This hands-on approach covers everything essential for SSEG applications and PV GreenCard submissions, including documenting installation details, creating single-line diagrams, and correctly labelling components on site.

Explore wiring regulations and how they relate to PV

Work with real installations and PV systems set up at the academy

Our trainers

All Compliance for PV Systems course trainers are electricians with installation and training experience.

Accreditation

This course is accredited by the German Solar Energy Society (DGS). Certificate of participation issued jointly by GREEN Solar Academy and DGS. Accumulates 1 CPD Point validated by SAIEE as per ECSA policy (South Africa). GREEN Solar Academy is a QCTO-accredited Skills Development Provider.

Learn how to complete a test report guided by our experienced trainers

Compliance for PV Systems

Commission and test with confidence!

Target Audience

- Electricians
- Advanced solar installers who want to be able to advise electricians and check compliance
- Pr Engineers
- Municipality inspectors for PV systems

Disclaimer: Only electricians are allowed to work on distribution boards. We are happy to share knowledge with everyone but legal restrictions apply and our training does not enable unregistered persons to carry out any tasks that exceed their qualification.

Pricing

- The course costs R3,950.00 (excl. VAT)
- 10% discount for Alumni
- 12% early bird discount for bookings 8 weeks before
- Payment must be made 2 weeks before the start of the course
- Including lunch, coffee breaks, exercise handouts, certificate fees

Book online at solar-training.org

Prerequisites?

This is an advanced course and a very specialised topic. Participants should have either an electrical background (electricians, electrical engineers with practical experience) or be solar installers with site experience.

This course serves as an excellent advanced training for those who have completed our comprehensive 5-day SuperSolarSchool.

Get to grips with SANS 10142-1, SANS 60364-7-712 and NRS regulations as they apply to PV

Main Topics

The course focuses on regulations and legislation of wiring for PV systems and the practical application of these regulations. The topics are:

- **Overview of relevant standards and implications for PV installations (SANS 10142-1, SANS 60364-7-712, NRS097)**
- **Wiring in practice, including inspection of a demo installation and discussing its compliance with regards to specific site conditions**
- **Commissioning procedures and testing (string voltage and polarity, insulation resistance, bonding resistance, earth-neutral test, anti-islanding test)**
- **Test report completion**

Interested in the Course? Contact us!

Tsakani Mashila | Team Leader Sales

+27 (0)10 312 6724 | info@solar-training.org

GREEN Solar Academy

Africa's Premier Training Institute for Solar Power

Commercial PV System Design

Masterclass on the design of C&I PV systems

In this 3-day advanced course, you'll learn how to grow from residential to commercial PV markets.

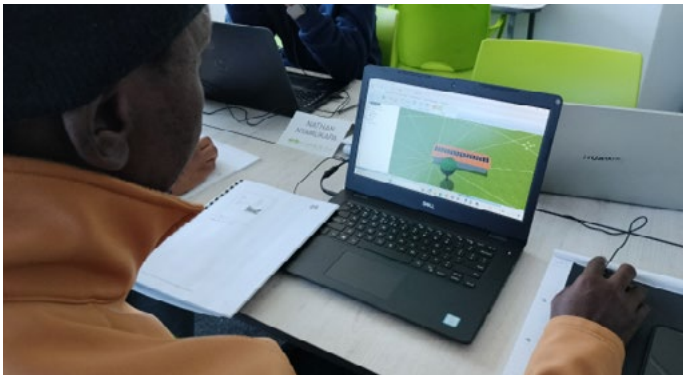
We will explore key components of commercial systems, such as the latest module technologies, 3-phase grid-tied and hybrid inverters, high-voltage batteries, and the integration of generators into grid-tied systems.

You will master the design of commercial PV systems with or without battery storage, including load profiles, site assessment, system sizing, component selection, wiring diagrams, grid integration, and the SSEG application process.

And together we'll examine typical obstacles that arise during project implementation, including project organisation and problem-solving strategies.

Additionally, you'll gain hands-on experience using software like PV*SOL premium and Excel to size commercial systems based on real-life installations.

Understand commercial PV system design



Learn efficient and precise design

Practice on real case studies

Pricing

- The course costs ZAR 7,200 (excl. VAT)
- 10% discount for Alumni
- 12% early bird discount for bookings 8 weeks before
- Including lunch, coffee breaks, exercise handouts, certificate fees

Book online at solar-training.org

Accreditation

This course is accredited by the German Solar Energy Society (DGS). You receive an internationally-recognised certificate of participation issued jointly by GREEN Solar Academy and DGS and 3 CPD Points validated by SAIEE as per ECSA policy (South Africa).

SAIEE

*** 3 CPD Points ***

24_09_27 T&Cs apply

Commercial PV System Design

Masterclass on the design of C&I PV systems

Target Audience

Anyone looking to advance their PV knowledge and venture into commercial PV design:

- Technicians, engineers and architects with advanced knowledge of solar PV
- PV business owners or planners who want to realise larger PV projects in the C&I sector
- Advanced professionals who want to specialise in PV design rather than the practical installation
- ECSA-registered engineers (3 CPD points)

After this course, you will be able to design & supervise construction sites and commission commercial PV systems.

Our trainers

Our design trainers all have comprehensive experience and share valuable knowledge from actual projects. All GREEN trainers undergo high quality training in teaching methods and our standardised course material before becoming accredited as GREEN trainers.

Prerequisites?

This advanced training course is designed for PV practitioners with a solid foundation in solar PV fundamentals and grid-tied PV system design. It is also suitable for graduates of our SuperSolarSchool programme.

To prepare for the course, you can watch some tutorials on the basics of PV*SOL premium here.

Our unique approach

This course has been consciously created with input from experienced planners and project managers. It focuses on practical examples and exercises to ensure maximum retention of the learning material.

Main Topics

- **Modules and mounting systems for rooftop & ground-mounted systems >50kWp, generator integration**
- **Electrical safety for PV systems, anti-islanding, protection devices, lightning, shock and thermal risk protection**
- **Financial and technical planning for commercial-sized PV systems, procurement**
- **Exercise on design of a 150kWp rooftop PV system based on a case study**
- **Storage integration and commercial-sized hybrid inverters**
- **Expert session with Q&A on a real-life case study**
- **Design exercise using PV*SOL premium simulation software** *(trial license included)*

PV*SOL premium

Interested in the Designer course? Contact us!

Tsakani Mashila | Team Leader Sales

+27 (0)10 312 6724 | info@solar-training.org