



sanedi

South African National Energy
Development Institute (SOC) Ltd.



Energy Performance Certificate Practitioner Skills Programme

OVERVIEW

Data and Knowledge Management

April 2022



Implemented by:

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

ENERGY INNOVATION FOR LIFE



sanedi

South African National Energy
Development Institute (SOC) Ltd.



OUTLINE

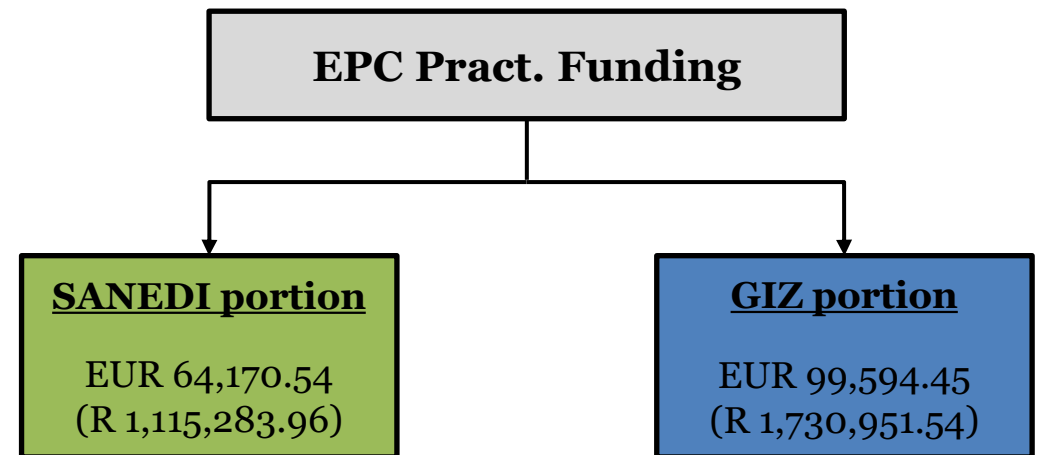
- **Background**
- **Energy Performance Certificates (EPC's)**
- **Objectives**
- **Skills Programme Progress**
- **Impact**
- **Next steps**

Background



EPC Practitioner Skills Programme (EPC Pract.)

- The EPC Practitioner Skills Programme is jointly funded by SANEDI and GIZ through the Skills Development for a Green Economy.
- The programme is jointly implemented by SANEDI and the Institute of Energy Professionals Africa (IEPA).
- The **aim** of the programme is to equip electricians with skills related to data collection, processing and understanding of EPCs and the issuing of mock Energy Performance Certificates.
- The EPC Practitioner Skills Programme is a dual-structured short course which will run over **3 months** (January – April) and it constitutes theoretical learning, practical sessions, assignment and assessments, and work experience under mentorship.



Energy Performance Certificates (EPCs)



- The Energy Performance Certificate (EPC) Regulation was Gazetted on the 8th of December 2020 in Gazette No 700 of 2020 by the Minister of Mineral Resources and Energy under, section 19(1) of the National Energy Act, 1998 (Act No 34 of 2008).
- The deadline for implementation is 9 December 2022.
- The EPC Regulation promotes the improvement of the energy performance of buildings through the mandatory requirement to display EPCs, and the submission of EPCs to establish a National Building Energy Performance Register (NBEPR).
- An EPC is a certificate that displays the energy consumption per square meter of a building. This energy performance is measured against a benchmark based on two factors: Building occupancy class and Climatic zone (where the building is located)
- Energy efficiency rating is determined by measuring a building's energy use intensity and giving it a colour coded score from A to G. An A score indicates that a building is most energy efficient and G is the lowest score.

**Energy
Performance
Certificates**

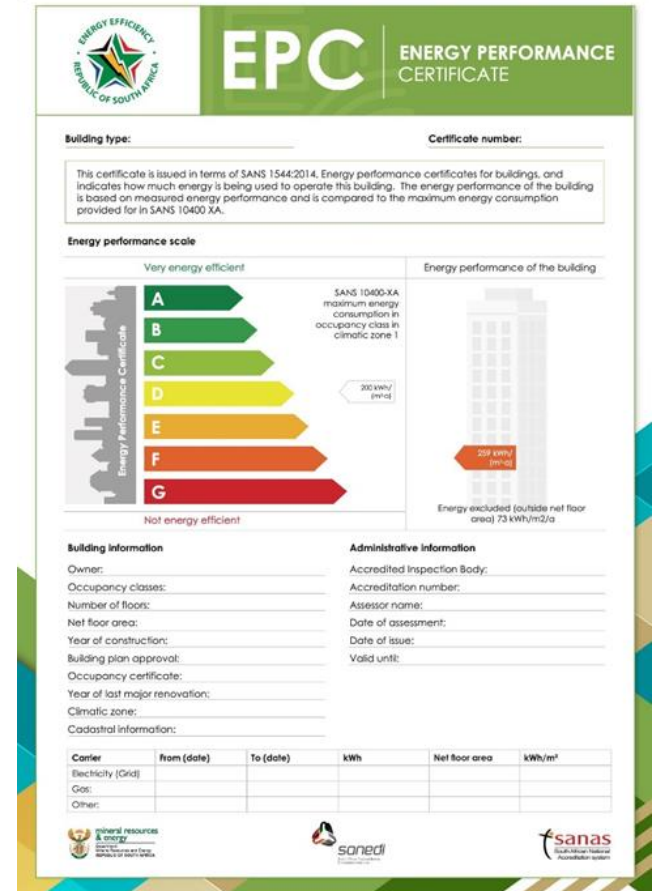


Figure 1: Example of EPC to be displayed on buildings

Objectives



- The development of the Skills Programme to enable data collection, processing, and understanding of EPCs in South Africa.
- The development of assessment tools for EPC through the Skills Programme.
- The training of Fifty (**50**) students in both Gauteng and the Western Cape, with a minimum of N4 qualifications in electrical engineering as EPC Practitioners.
- Have two (**2**) TVET colleges on the programme (College of Cape Town & Ekurhuleni East TVET College) for practical assignments.
- Ten (**10**) TVET lecturers with NQF Level 6 in electrical engineering or higher to enter the programme to qualify as lecturers for EPC-Practitioner Skills Programme.
- Twenty-five (**25**) or more companies to participate in implementing the dual qualification program by hosting students for workplace assignments.
- Sixty six percent (**66%**) of students successfully achieving EPC Practitioner status.

Skills Programme Progress



Activity	Progress Status
Two months of training incorporating theoretical and practical modules	Complete
Assessments at the end of theoretical and practical training	Complete
Work Experience – placing students in various companies under the guidance of mentors	In-progress
Review of the training material with four (4) trainers that were part of the progress for improvement recommendations	In-progress

Impact



- A group of **50** electricians have the opportunity of working towards qualifying for income-generating employment. It is anticipated that at the end of the program at least **66%** of students will be permanently employed.
- The programme has created an alternative career pathway for TVET electrician graduates/electrician artisans. **92%** of the electricians are youth and **58%** are female.
- The TVET colleges selected for this programme may present the EPC for Buildings short course to qualify their engineering students as Energy Performance Certificate Practitioners.
- TVET lecturers to enter the programme to qualify as lecturers for Energy Performance Certificate Practitioner Skills Programme.
- The programme has raised awareness for the Energy Performance Certificates (EPCs) in South Africa.
- EPC Practitioners are a cheaper alternative of collecting EPC data as opposed to SANAS Accredited Inspection Bodies.

Next Steps



Qualification of EPC Practitioners

- Once qualified, the EPC Practitioner will be able support companies to prepare their buildings, or their clients' buildings, for the EPC Regulation
- This will contribute to the National Building Register hosted by (SANEDI).
- It is anticipated that at the end of the program at least **66%** of students to be permanently employed.

Raise Awareness

Leverage of this platform to spread awareness on EPCs in South Africa.

Registration with QTCO

Continuous development of the already registered Skills Programme with the Quality Council of Trades and Occupations (**QCTO**).

Financing

Future financing of the EPC course.



sanedi

South African National Energy
Development Institute (SOC) Ltd.



Thank You

ENERGY INNOVATION FOR LIFE



german
cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH