ENERGY PERFORMANCE CERTIFICATE (EPC) TRAINING PROGRAM





Preparation recommendation

Acquire the SAN\$1544:2014 and SAN\$10400XA:2011 standard from the SABS

Accreditation

- For 90% and higher attendance: Attendance Certificate with 1 ECSA CPD
- Examination pass with 70%: Certificate of Achievement / Statement of Results
- Successful Assignment through Accredited Assessor: Certificate of Competence

Background

The Minster of Mineral Resources and Energy has, under section 19(1)(b) of the National Energy Act, published regulations for the mandatory display and submission of Energy Performance Certificates(EPC) for buildings in Notice 700 of Government Gazette 43792 of 8 December 2020. Briefly, if you own or are responsible for a building which has a total net floor area of over 1,000m² in the public sector and $2,000 \text{m}^2$ in the private sector, then these regulations do affect you.

The energy performance rating on the EPC refers to the net energy consumed in kWh per m^2 per annum.

The EPC must be displayed in the foyer of the building and submitted to the South African National Energy Development Institute (SANEDI) every 5 years.

- One day training livestreamed 8am-5pm R2,800 members* R4,300 non-member*
- Voluntary online in-camera exam with the Institute of Energy Professionals Africa (IEPA) R500 first exam** R400 rewrite (max 2 rewrites)**
- Voluntary assignment to assist with practical available from IEPA
 - Own mentor and assessor @ NO CHARGE
 - Assessment and moderation @ R3,000**
 - * SAEEC Cost excl. VAT ** IEPA Cost excl. VAT

The course covers

- Relevant regulations, standards and required documentation that relates to EPC including main standards SANS1544, SANS10400-XA and linking EPC to policy, legislation, SANS50001 & SANS50002.
- Topics covering aspects around building classifications and categorization, climatic regions, building envelope, design assumptions, building orientation, external walls, fenestration, roof assemblies, floors and insulation, and hot water.
- Definitions and calculations of aspects such as floor areas, energy usage, assement periods, calorific values, occupation, exclusions as well as types of fuels, utility bills, data collection, meter calculations and calibration.
- The certificate itself will be discussed in-depth, with the various energy performance scales and what they mean, explaining the content, notable required information, and determining reference performance.
- Responsibility and custodianship discussing the role of the bodies such as South African National Energy Development Institute (SANEDI), South African National Accreditation System (SANAS), EPC Technical Signatories and EPC Inspection Bodies, the energy performance assessment process, and the duties of building owners and accounting officers responsible for displaying their EPC.
- The course is concluded with a voluntary exam with the Institute of Energy Professionals Africa (IEPA), and an assignment is available under own mentorship & assessment, or through an EWSETA assessor.



Trainers

Konrad Boshoff

B. Eng Mechanical, M. Eng Mechanical CEM®, CEA®, REP®, CWEP®

Konrad is a qualified professional mechanical engineer, currently serving as head of a strategic energy and motion research division in Transnet Engineering.

Attaining professional status in 2015, he completed his M. Eng trough NWU in 2016 (Cum Laude)

in Energy Management on rollingstock, also successfully completing his GCC (Factories), as well as achieving top student status in CEM and CEA with a 92% average.

He has experience in various energy audits, from office buildings, manufacturing and steel fabrication facilities, to foundries and has assisted in the adoption of SANS 50001 in his organisation.

In addition, he is leading energy strategy on development of hybrid power systems for mobile and stationary applications. He is currently enrolled for PhD in Electrical Engineering through Stellenbosch University.

Darius Booyens

B.Eng (Mech), CEM, SAPVIA PV GreenCard Installer and Designer

Darius Booyens is Mechanical Engineer, Certified Energy Manager (CEM®) and Certified SAPVIA PV Green-Card solar designer and installer and an approved trainer and co-developer for IEPA on Energy Performance Certification (EPC). He has been involved in mechanical and thermal design projects for energy and active cooling



(refrigeration cycle) load reduction in base transmission stations, small scale embedded generation (SSEG) feasibility study, solar system design and installation.

Darius also has experience in the physical asset management space in maintenance strategy, maintenance policy, maintenance plan development, asset register hierarchy development, maintenance system implementation (CMMS), criticality analysis (FMECA) and failure mode and effect analysis (FMEA). Darius is further interested in scalable energy optimization and monitoring systems.

al MEng Mechanical, CMVP®, CEM®

Trainer: AEE® / EVO CMVP Accredited Trainer, Energy Performance Certificate Trainer

Christo van der Merwe

Christo is the owner and director of CFJM Solutions, one of the few SANAS accredited M&V specialist entities in South Africa. He has gained vast experience in



the energy and M&V industry over the past 21 years by being involved in over 500 M&V projects within the Eskom DSM M&V processes, 12i and 12L tax incentive, DOE financed municipal energy efficiency projects and private performance contracting M&V of which the M&V results unlocked billions in financial resources for the respective clients.

These assessments has amassed Christo's vast knowledge and practical experience in industrial, commercial, mining and residential load control and energy efficiency evaluations for both project and programme based assessments. These experiences covered most systems operating on electrical, chemical, thermal and renewable energy sources.

Christo has also been in the humble position to be part of the South African M&V steering committee and assists in defining the M&V industry of South Africa as well as train other sub-Sahara African countries in the art and risk-reducing benefits of M&V application. He is also part of the training group for the Energy Performance Certificate Training and his experienced has enabled him to form part of the IEPA development group for new training, assessments and skills transfer.

Training Bookings:

training@saeeconfed.org.za

<u>084 011 5500</u>

Exams and Assessment Bookings:

