

Printing SA Webinar Discusses the Energy Performance Certificate

An Energy Performance Certificate (EPC) is valid for five years and quantifies and displays the Energy performance of any building as the nett energy consumed in kilowatt-hours per square metre (kWh/sqm) and which includes heating, hot water, cooling, ventilation and lighting.

This is an attempt to develop a national benchmark for buildings. All EPC's must be submitted to the South African National Energy Development Institute (SANEDI) who is Government's appointed and mandated custodian.

Regulations published by the Minister of Mineral resources and Energy under section 19(1)(b) of the National Energy Act now require the mandatory submission and display of an EPC for buildings that fall under Notice 700 of Government Gazette 43792 of the 8th December 2020. Owners of buildings greater than 2000sqm are required to display an EPC at the entrance to their building by 31 December 2022.

Printing SA hosted a free webinar which unpacked the EPC. Gregory Diana, Energy Efficiency and Energy Management Expert, presented on the EPC. He focused on understanding buildings better, and in this case focused on non-residential buildings - outside of manufacturing facilities - as such facilities fall under a different legislative context.

While government still needs to determine the energy efficiency benchmark, businesses need to audit their buildings to get a clearer understanding of their energy consumptions, and have about two years to comply. Once the certificate has been issued, it will be valid for five years.

The value 'kWh/sqm per annum' gives an indication of a building's electrical consumption. This includes the likes of heating, hot water, cooling, ventilation and lighting. Car parks, being external areas do not count as part of this consumption as they fall outside of the building itself. However, they must still be included if their energy consumption exceeds 10% of the total building annual energy usage per sqm

Other factors that determine a building's energy efficiency include: climate, occupancy levels and the building itself. Standards have been developed, and it is imperative that an owner sees what classification the building falls under. Once all this information has been compiled, the owners need to submit to an Inspection body to be Certified following which their Financial Officer must submit the certificates at SANEDI.

The concept of an EPC started off for the labelling of appliances and slowly moved on to green buildings. The matter varies around the world. For example, in the UK you cannot sell your house without an EPC, while just the commercial and industrial sectors are being targeted in South Africa for the time being.

The buildings in question include entertainment and public assembly, theatrical and indoor sport, places of instruction, places of worship, large shops and offices. The buildings are categorised and classified with limitations in terms of maximum energy demand and maximum energy consumption, as well as according to design occupancy times (hours per day and days per week).

The phases involved in registering an energy certificate involve a client gathering and processing their own data and then validating the results. Consultants such as Diana evaluate the data and compile a report according to the South African National Standards (SANS), before which it is submitted to the Inspection Body. Once the certificate is ready, it is displayed on the building in question.

To watch the full presentation, click here: <https://www.youtube.com/watch?v=3DZKZq413Yg>

The webinar gave attendees the opportunity to ask questions:

What is the cost of the certification and does it depend on the size of your building?

It has nothing to do with the size of the building, and to avoid the cost of a consultant, the work/audits can be done by the owner. The size of the building is immaterial.

What about buildings that are mixed use, e.g., buildings that consist of theatres, hotels, offices and retail in one?

In such mixed usage buildings where several categories are present each one will have to exceed 2000sqm, then you would break them down into those categories. You would take that centre, break it down into those individual spaces and give it an overall aggregate. That would be classified as G1 overall, but it has different categories within it. Each category would have a different reference value.

If one's offices are within the manufacturing plant, are they included in the calculation?

No, unless it is a single contiguous office space greater than 2000sqm

You touched on gaps in the electricity metering data, could you please clarify this?

Data gaps will occur, mainly due to factors beyond the owner's control, such as the non-availability of building plans, or electricity bills which can fall under the responsibility of the municipality. However, this needs to be explained and brought up during the process of registration.

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