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The Energy Performance Certificate (EPC) has become a crucial document in the field of energy efficiency, particularly concerning buildings, construction areas, and energy management. This certificate informs of the energy performance of buildings. It is a measure designed to give visibility to the energy performance of buildings, and with that, promoting sustainable construction, to evaluate existing structures, and to gradually improving them in an environmentally friendly way.

The EPC classifies buildings on a scale from A to G depending on their energy consumption. If a building is rated A, it is considered highly efficient, which is the opposite of what the G label represents. In addition, being a measure of energy efficiency, the EPC allows property owners, building managers, and potential buyers or tenants to better understand how energy is being used in a building, either if it is a dwelling, an office building or a commercial building. The EPC is usually calculated by qualified and certified professionals in the field of energy performance of buildings.

PHOENIX is innovating in the field of EPCs with the development of the Automatic EPC Evaluation. The Automatic EPC Evaluation service uses an algorithm to process building data and to calculate its energy efficiency. The required data to perform this calculation are:

- Energy consumption or power of the buildings or specific areas within.
- Temperatures both inside and outside the building.
- The total floor area that is covered by the energy consumption or power device.

This automated approach offers several advantages over traditional EPC evaluation methods:

- Season Differentiation: The service distinguishes between the heating and cooling seasons, adapting to seasonal variations in energy consumption.
- **Updating:** It is designed to be updated when required always with consumption pertaining to cooling and heating seasons.
- **Speed:** The service can process the data and issue an assessment quickly. This makes it easy to obtain the EPC quickly.
- **Ease of Use:** With the Automatic EPC Evaluation service, it is only need the required data and the algorithm will do the rest. No qualified professional is required for this calculation making possible large scale roll outs of calculations.
- **Climate Adaptation:** Climate adaptation: The service can calculate the EPC in different zones. It adapts to different climates using climate data for a more accurate assessment that takes into account the weather of the region.
- **Visualization:** Visualisation: End-users will see the result of the EPC both in numerical value and its corresponding label. Like the original EPC, it goes from A to G.
- **Initiative for Change:** As it is updatable, it encourages building managers or end-user to take action to improve the energy efficiency of their building based on the results of the EPC evaluation.

The aim of the automatic EPC evaluation service is to contribute to a more sustainable and energy efficient future for buildings. Simplifying the process of obtaining the EPC and making it updatable will allow more end-users to make informed and improved decisions about their energy efficiency.

