

Energy efficiency: an essential element for transparent residential valuation

How homeowners can contribute to more reliable assessments

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SUMMARY

In today's housing market, energy efficiency has become a crucial determinant of property value. It not only affects the cost of living for homeowners but increasingly influences the conditions set by mortgage providers. Ensuring that this factor is transparently reflected in property valuation is therefore essential—both for the market and for public trust in government-assessed values such as the Dutch WOZ-value.

Energy Efficiency as a Value Driver

Energy performance plays an increasingly significant role in how properties are valued. In the open market, energy performance certificates (EPC) have contributed to transparency by providing clear information to potential buyers. When a home is for sale, an EPC is typically available, allowing prospective buyers to compare energy performance across properties and arrive at a realistic price.

Challenges in Large-Scale Valuation

In mass appraisal processes—such as those conducted for property taxation—energy efficiency should ideally also be taken into account. However, not all properties have an up-to-date EPC that accurately reflects their current condition.

This challenge is particularly evident in the annual assessment of the WOZ-value in the Netherlands, where approximately 8.2 million homes must be assessed each year. It is practically impossible to issue or update an official EPC for each property annually.

A Practical Solution: Estimating Energy Efficiency through Targeted

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Questions

To overcome this, a system has been developed that allows assessors to make a reliable estimate of a property's energy efficiency using a limited number of targeted questions. By tailoring these questions to factors such as construction year and dwelling type, the number of questions can be minimized while maintaining accuracy.

For example:

- Homes built within the past five years can generally be assumed to belong to the highest efficiency class.
- Older homes—those built more than 50 years ago—require more detailed input, since some remain poorly insulated while others have undergone extensive energy retrofits.

The questions are designed so that homeowners can easily answer them, typically through a digital questionnaire. Their responses classify the home into one of five energy efficiency categories.

While this is less granular than the 11-class system used in official Dutch EPC's, the five-level approach is accurate enough for use in mass appraisal models. It allows property assessors to account for relevant differences between homes and aligns with the transparent classification systems already used for factors such as maintenance, quality, and amenities.

Building Trust through Homeowner Participation

By involving homeowners directly in the estimation of their property's energy efficiency, the valuation process becomes more transparent and participatory. This engagement is expected to enhance public confidence in the WOZ-values assessed by the government and strengthen the legitimacy of property taxation.