



Boosting buildings' smartness with quantitative metrics in the Smart Readiness Indicator

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The adoption of the Energy Performance of Buildings Directive (EPBD) in May 2024 marks a significant step toward decarbonizing the EU's building sector. The overarching goal is to make buildings zero-emission by 2050. Achieving this objective requires buildings to be smart, efficient, flexible, and powered by clean energy.

A key tool in this effort is the Smart Readiness Indicator (SRI), which measures in qualitative terms building's smartness and flexibility capabilities, following a pan-European methodology defined in 2020 via Implementing and Delegated Regulations. smartEn acknowledges the value of the SRI and in particular the assessment of the demand-side flexibility functionality. We welcome that 14 Member States are currently testing it at the national level and we are keen to keep contributing through the SRI Platform, also in view of the report that the European Commission should submit by June 2026 on the outcome from these tests.

Among the 3 functionalities contemplated in the SRI, we believe that the one on flexible demand requires particular attention. An accurate assessment of the flex-readiness of buildings is necessary, notably in the testing phases.

Both national training bodies and assessors must have an accurate and updated understanding of demand-side flexibility in order to attribute the correct score. smartEn is ready to provide support.

With regard to further evolutions of the SRI, smartEn believes that it is crucial to explore its upgrade into an actual energy and carbon performance metric of a building and its integration into a single tool, to avoid confusion and overlaps among EPC, Building Renovation Passports, SRI and Digital Logbooks.

We welcome this is currently contemplated by Sub-groups 3 and 4 of the WG 3 gathering interested stakeholders of the SRI Platform. We call on Member States and the Commission to contemplate this approach, eventually already in the current testing phase.

In this light, smartEn has developed three metrics that measure a building's flexibility and carbon footprint. These metrics have been tested by several companies in real-life scenarios¹:

- **kWh of activated volume of energy per season.** This metric considers the amount of energy dispatched resulting of the flexibility schemes. It highly relies on the market conditions as well as the price signals of where the building is located. Seasonal conditions also have an impact (e.g., for residential heating).
 - **Max kW of shiftable capacity at different times of the day per season.** This metric highlights the maximum power capacity available from the participating assets in a building. It should be considered for a specific period of time (during the day, depending on the season etc.). Such a metric should ensure consumer comfort to avoid negative impacts.
- Kg CO₂/time/m².** This metric provides the carbon footprint of a building, which can be affected by the flexible consumption of clean energy from the grid and/or generated on-site. As such, it does not necessarily provide valuable information as a stand-alone metric: it needs to be complemented with the two other metrics to understand the carbon implications of flexibility.

Such metrics would allow for:

- Value for Consumers and Building Industry Stakeholders: Quantitative SRI would help consumers and prosumers make informed decisions about their building's energy use and

¹ https://smarten.eu/wp-content/uploads/2022/05/FINAL_demonstration-trials-report.pdf

smartness. This also applies to building owners, operators, developers, architects, consultants or energy managers.

- Value for System Operators and Flexibility Service Providers: Accurate data on the flexibility of buildings via a quantitative SRI will help these parties understand the flexibility potential of connected buildings which could be activated to provide system services, including congestion management and balancing. Both the new requirement in the Renewable Energy Directive addressed to System Operators to make available data on the carbon and renewable content on the electricity supplied, and data used by flexibility service providers from their own dedicated measurement devices would further reinforce these metrics.
- Accurate financial support: Quantitative SRI metrics allow better tracking of improvements in building renovations and easier linking with financial incentives.

To unlock these benefits, smartEn recommends the Commission, Member States, as well as the SRI Platform to:

- Take into account these metrics and evolution of SRI into a quantitative tool, including in the test phases currently conducted by Member States.
- Consider including these metrics in specific EU projects. When the SRI is being tested in an EU project, quantitative metrics should be contemplated.
- Include the results of this quantitative approach in the Commission's report and the Commission's future Delegated Act in 2027 requiring the application of the SRI for large non-residential buildings.
- Align the SRI with the Energy Performance Certificates (EPCs). This tool already needs to disclose whether a building is flexible or not, but it should go one step further by providing consumer information on how much flexible capacity is available, based on the above performance-based metrics. The link between these two tools would also ease consumers' readability into the different buildings' tools they have at their disposal.
- Enable the new SRI performance-based metrics to be used by System Operators to prioritise connection request for new buildings and/or major renovation with high flexibility capacity. In fact, a high SRI score due to a building's flexibility can support and provide services to the grid. This approach would simplify the prequalification process of decentralised assets and ease their participation to DSOs' services and wholesale electricity markets.

smartEn calls for these recommendations to be taken into consideration and remains ready to support the SRI development.

About smartEn - Smart Energy Europe

smartEn is the European business association integrating the consumer-driven solutions of the clean energy transition. We create opportunities for every company, building and car to support an increasingly renewable energy system. Our membership consists of the following companies:



The positions expressed in this document represent the views of smartEn as an association, but not necessarily the opinion of each specific smartEn member.

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