

Consultation on the establishment of a smart readiness indicator for buildings

Fields marked with * are mandatory.

PART 1: General information about the respondent

Questionnaire supporting the development of the Smart Readiness Indicator in accordance with the provisions of the Energy Performance in Buildings Directive.

For more information on the use and collection of personal data, please read through the [privacy statement](#).

- * 1. Please provide your name and surname (Note that submissions that are sent anonymously will not be taken into consideration):

Femke de Jong

- * 2. Please provide your email address in case we need to follow up with you about your reply:

femke.dejong@eurima.org

3. Please provide your telephone number in case we need to follow up with you about your reply:

+32489772637

- * 4. Please select your country of residence:

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czechia
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece

- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- United Kingdom
- Non EU

* 5. Please indicate whether you are replying as/on behalf of:

- A citizen/consumer
- A local public authority
- A regional public authority
- A national public authority
- An international public authority
- A standardisation organisation
- A non-governmental organisation representing societal interests (for example, environmental or consumer interests)
- A company or a business organisation
- Other

* Please briefly describe the authority/company/organisation and main field of activity:

Eurima is the European Insulation Manufacturers Association and represents the interests of all major mineral wool producers throughout Europe. Mineral wool insulates new and existing buildings of all types - be they residential, commercial or public. Mineral wool insulation can make a tangible contribution to the improved well-being of people by making houses more comfortable, healthy and affordable places to live, in addition to contributing to climate mitigation by reducing buildings' energy demand.

* Please provide the name of your authority/company/organisation:

Eurima

* Please indicate the size of your authority/company/organisation

- self-employed
- micro (1-9 employees)
- small (10-49 employees)

- medium-sized (50-249 employees)
- large (250 employees or more)
- Not applicable

* Which of the following activities are performed or represented by your authority/company/organisation:

at least 1 choice(s)

- Property owner
- Facility management
- Property development
- Architecture
- Engineering
- Construction
- Manufacturer / supplier of construction products
- Manufacturer / supplier of technical building systems
- Energy supplier
- Energy service company and aggregators
- Grid operator
- Supplier of energy management solutions
- Supplier of ICT solutions
- Other
- Not applicable

* In which country is your authority/company/organisation most active?

at least 1 choice(s)

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czechia
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland

- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- United Kingdom
- Other
- Not applicable

* Is your authority/company/organisation registered with the EU Transparency Register? If not, you may do so [here](#). However, please note that registration is not compulsory to complete this questionnaire.

- Yes
- No
- Not applicable

If you answered yes, please provide the registration number:

9834563163122

* 6. Do you consent to the Commission publishing your replies?

Note that, whatever the option chosen, your answers may be subject to a request for public access to documents under Regulation [\(EC\) N°1049/2001](#).

Note: respondents who select the option "only anonymously" should not include personal data in documents submitted in the context of the consultation.

- Yes** *(I consent to the publication of all information in my contribution in whole or in part, including my name or my organisation's name, and I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication)*
- Only anonymously** *(I consent to the publication of any information in my contribution in whole or in part (which may include quotes or opinions I express) provided that I remain anonymous. I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication)*

PART 2: Questions about the audience and scope of the SRI

7. Who should be the audience(s) for the SRI? (If more than one, list them in order of priority)

Please enter your response below against the options provided. For each row, you can select a number from 1 to 11, with 1 being the most important and 11 the least important. Please note that you can rank as many options as you want, but each number can be selected only once. If you select "Other", please state your preference in the follow-up question.

at most 11 answered row(s)

	1	2	3	4	5	6	7	8	9	10	11
Building occupants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building visitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Property owners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facility managers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Property developers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Architecture, construction and engineering companies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy service companies and aggregators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy utilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grid operators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. To which categories of buildings should the SRI be applicable? (multiple answers are permitted)

- All categories of buildings
- Non-residential buildings
- Collective residential buildings
- Individual houses
- Large buildings (e.g. above 1000 m² surface area)
- Other

9. Should the SRI be applicable to new buildings, existing buildings, or both?

- New buildings
- Existing buildings
- Both new and existing buildings

10. Should it be possible to adapt the scope and calculation methodology of the SRI depending on specific conditions, e.g. the type of building or climatic conditions?

Please note that SRI calculation framework is not yet developed: the aim of this question is to assess what update period would in principle be most adequate.

- Yes
- No

11. What should be the update period of the SRI calculation framework (in particular in relation to technological progress)?

Please note that SRI calculation framework is not yet developed: the aim of this question is to assess what update period would in principle be most adequate.

Please select one of the choices indicated below:

- 1 to 3 years
- 3 years
- 5 years
- More than 5 years
- Other

Part 3: Questions on communication of the SRI

12. Do you think that other aspects of buildings (e.g. energy performance or broader life cycle aspects) should be expressed conjointly with the SRI?

Please select one of the choices indicated below:

- Yes
- No

If you answered “Yes”, please state your preference on which other aspects should be expressed in the box below. In addition, if you wish to explain your answer please add an explanation in the box below.

The energy performance and broader life cycle aspects related to the comfort of buildings should be expressed conjointly with the SRI.

The transformation of the European building stock into a highly energy-efficient and decarbonized building stock by 2050 (as stipulated in the EPBD) should fulfill multiple benefits for the consumers and society alike: creating a comfortable, healthy, sustainable and user-friendly living environment for people, while alleviating energy poverty. To increase the usefulness for people, information on the building's energy performance, and the building's performance in terms of acoustics, indoor air quality and thermal comfort (using the Level (s) tool) should be reported conjointly with the building's SRI. This will give prospective buyers or tenants valuable insights in the overall performance of the building they want to buy or rent.

It can also increase consumers' awareness on the interaction between the different elements of a building's performance and might thereby help avoid sub-optimization where automation on a leaky building leads to a slight increase in energy efficiency but a decrease in comfort.

From the perspective of the energy system, well-insulated buildings offer the flexibility necessary to receive energy when it is available, mitigating the peaks of power demand on the electricity grid (when all inefficient buildings instead require power) and manage moments of overabundance and scarcity of energy from renewable sources. This is how physically smart buildings with their flexibility will allow the effective integration of renewables in the energy system during the entire year. Only expressing the smartness of a building, without also communicating on the building's energy performance, can hence give a misleading picture, in light of the importance of insulation for the flexibility of a building's overall electricity demand.

13. Do you think that, where relevant, smart ready accessibility* services should be communicated jointly with the SRI? Please select one of the choices indicated below:

- Yes
- No

*For persons with disabilities

14. Should the SRI of a building be presented as an overall smartness score, or sub-scores for each of the three key SRI functionalities highlighted in the EPBD*, or sub-scores by specific technical domains **, or sub-scores by specific impacts ***, or all of these?

- An overall smartness score for the whole building
- Smartness scores along the three key SRI functionalities
- Smartness scores per technical building system or technical domain

- Smartness scores per impact criterion
- Other smartness scores

“(a) the ability to maintain energy performance and operation of the building through the adaptation of energy consumption for example through use of energy from renewable sources; (b) the ability to adapt its operation mode in response to the needs of the occupant while paying due attention to the availability of user-friendliness, maintaining healthy indoor climate conditions and the ability to report on energy use; and (c) the flexibility of a building’s overall electricity demand, including its ability to enable participation in active and passive as well as implicit and explicit demand response, in relation to the grid, for example through flexibility and load shifting capacities.”

** The following domains were identified for SRI assessment in the first technical study: heating, cooling, domestic hot water, controlled ventilation, lighting, dynamic building envelope, on site renewable energy generation, demand side management, electric vehicle charging, monitoring and control. Note – there could be changes to these in the course of the development of the SRI.

*** The following impact criteria were considered for the SRI assessment in the first technical study: energy consumption, flexibility for the grid, self-generation, comfort, convenience, well-being & health, maintenance & fault prediction, information to occupants. Note – there could be changes to these in the course of the development of the SRI.

If you answered "Other smartness scores", please state your preference in the box below. In addition, if you wish to explain your answer please add an explanation in the box below.

As mentioned in our response to question 12, the SRI will need to be combined with energy performance certificates (EPCs). In terms of the key SRI functionalities, both the flexibility of a building's overall electricity demand and the ability of a building to respond to the needs of the occupants (thermal comfort, indoor climate etc.) depend to a great extent on how the building has been designed or renovated. It hence needs to be ensured that the SRI assessment is presented holistically and alongside information on the building's energy performance as well as the building's performance in terms of comfort and health.

15. When the SRI is reported to the users should it include recommendations on the options to improve a building’s smart readiness?

- Yes
- No

16. What presentational format should the SRI have?

Please select one of the choices indicated below:

- Reporting the SRI score(s) as percentages from 0% (no smart readiness) to 100% (maximum currently achievable smart readiness)
- Reporting the SRI score(s) on a mnemonic scale (such as A to G, or 1 to 10 stars, etc.)
- Reporting the SRI score(s) as both percentages (from 0% (no smart readiness) to 100% (maximum currently achievable smart readiness)) and on a mnemonic scale (such as A to G etc.)
- Other

17. What form should the SRI have?

Please select one of the choices indicated below:

- A printed certificate
- Presented electronically (i.e. in an on-line database and/or sent via an email)

Other

18. Should the SRI be presented in accessible formats for persons with disabilities and older persons?

Please select one of the choices indicated below:

- Yes
 No

PART 4: Questions on the implementation of the SRI

19. Should the SRI operate independently, or should it be combined with existing schemes (e.g. energy performance certificates) or future schemes (e.g. life cycle performance of buildings, with the Level(s) tool)?

- Independently
 In combination

Please elaborate on your answer in the box below, if you wish.

500 character(s) maximum

See also our answer to question 12. The SRI should be combined with existing schemes (the energy performance certificates) as well as future schemes (the life cycle performance of buildings, using the Level (s) tool). This will increase the usefulness towards consumers by giving them information on the building's overall performance in terms of smartness, energy performance, comfort and health.

20. Who should be responsible for the implementation of the SRI (multiple answers are permitted)

- Member states
 European Commission
 Private sector
 Other

21. How should the SRI be assessed?

Please select one of the choices indicated below:

- Independent inspection process
 Self-assessment
 Both self-assessment and independent inspection process
 Other

22. If in the future it becomes possible to assess the smart readiness of a building through remote measurement of the technical building systems, should this option be permitted?

Please select one of the choices indicated below:

- Yes
 No

23. Who should pay the costs of the SRI assessment? (Please note that these costs are not yet known; however, the Impact Assessment accompanying the proposal for amending the Energy Performance of Buildings estimated these at a fraction of the costs of an energy performance certificate).

Please indicate which of the options below are appropriate, noting that they are not mutually exclusive, so more than one or all options may be selected:

- Building owners and occupants
- Member States
- Utilities
- Smart services and technology industry
- Other

24. Should other measures be used to support the implementation of the SRI? If so, which?

- Yes
- No

25. How else should the SRI be implemented to overcome barriers to the uptake of beneficial smart technologies?

Please enter your answer in the box below or leave it empty if all your implementation preferences have previously been expressed. Note, you may include an explanation of your answer too.

500 character(s) maximum

26. What measures, and standards, if appropriate, should be developed and used to support the implementation of the SRI in line with the GDPR, having regard in particular to data protection by design and by default?

Please enter your answer in the box below.

500 character(s) maximum

PART 5: Additional opportunity to provide comment

27. Are there further comments you would like to make on anything that is not covered above? If so, please use the box below.

2000 character(s) maximum

Contact

ENER-C3-BUILDINGS-CONSULTATION@ec.europa.eu