



SMART READINESS INDICATOR (SRI)

A FOCUS ON DOMESTIC HOT WATER SYSTEMS

SRI is a common EU scheme for rating the smart readiness of buildings.

Domestic Hot Water (DHW) is one of the **nine technical domains** addressed by the SRI.

In 2020, households accounted for 27% of final energy consumption in the EU. Finding ways to reduce domestic energy consumption is one of the most impactful contributions citizens can make toward climate mitigation.

In recent years, DHW has emerged as one of the key factors in the total energy use in buildings, accounting for roughly 15 % of EU households' energy consumption. The bulk of this consumption corresponds to building occupants' showering and bathing frequency.

Improving the performance of DHW through control systems, scheduled charging, and other means, could drastically reduce DHW's share of a building's total energy consumption, ultimately lowering EU citizens' energy bills and carbon footprint.

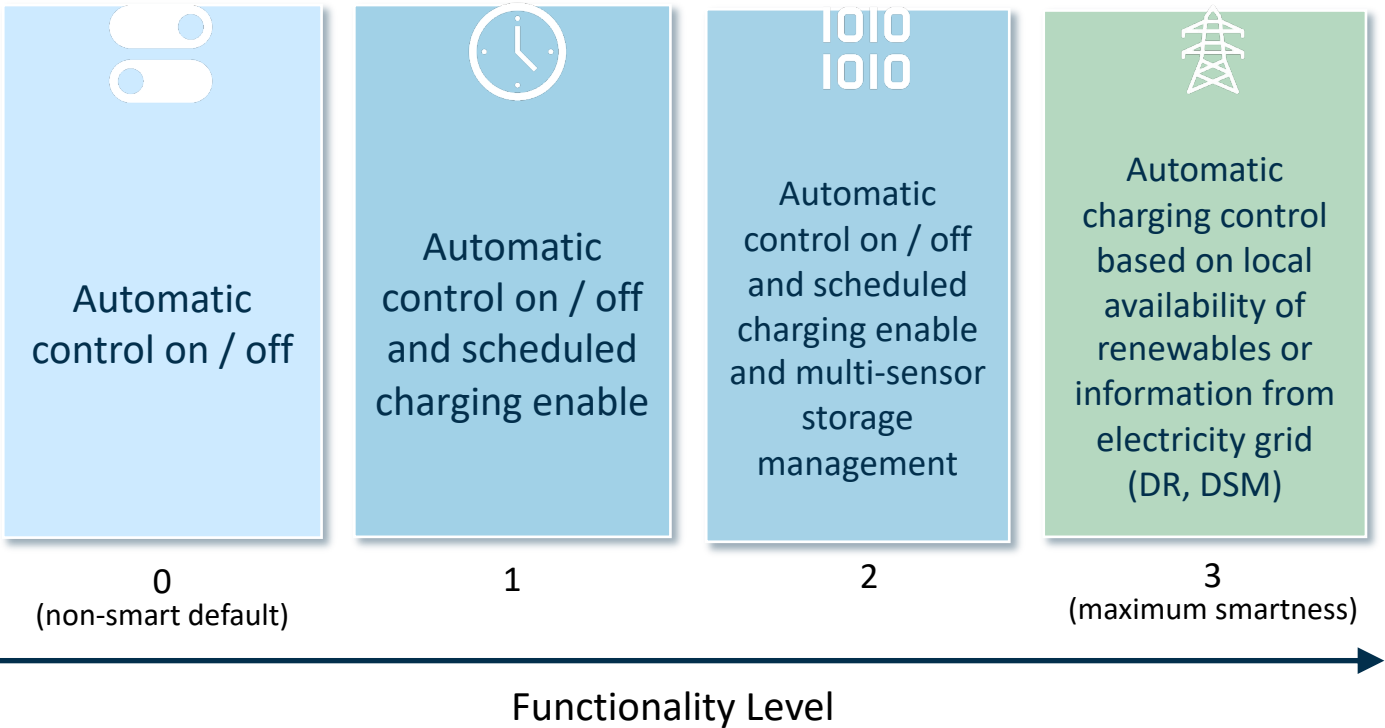
AN EXAMPLE OF SMART-READY SERVICE

The SRI implements a catalogue of smart-ready services. The next page provides one example of smart-ready service categorised under the Domestic Hot Water technical domain. An example of a full Smart-ready-services catalogue can be obtained by requesting the SRI assessment package at:

<https://ec.europa.eu/eusurvey/runner/SRI-assessment-package>








Service group: **Control DHW production facilities**
Smart-ready-service: **Control of DHW storage charging**
(with direct electric heating or integrated electric heat pump)

Standard : EN 15232



FUNCTIONALITY LEVELS CORRELATION WITH SRI IMPACT CRITERIA

Each functionality level of a given smart-ready service has corresponding individual scores for each of the **seven impact criteria** addressed by the SRI, as illustrated below.

	 Energy efficiency	 Maintenance and fault prediction	 Comfort	 Convenience	 Health, well-being and accessibility	 Information to occupants	 Energy flexibility and storage
Level 0	0	0	0	0	0	0	0
Level 1	1	0	0	1	0	0	1
Level 2	2	0	0	2	0	0	2
Level 3	2	0	0	2	0	0	3

- **Level 1** | Automatic control on / off and scheduled charging enable – offers improved energy efficiency, convenience, energy flexibility and storage.
- **Level 2** | Automatic control on / off and scheduled charging enable and multi-sensor storage management – further improves energy efficiency, convenience, energy flexibility and storage.
- **Level 3** | Automatic charging control based on local availability of renewables or information from electricity grid (DR, DSM) – offers a maximum level of energy flexibility and storage.

According to the SRI delegated regulation, Member States shall make available at least one smart-ready catalogue to be used by experts as the basis for identifying and assessing smart-ready services. Smart-ready service catalogue includes the list of smart-ready services to be considered for calculating the smart readiness score, related functionality levels, and corresponding individual scores for the impact criteria. Member States may decide to make available several smart-ready catalogues, for instance for different building types.

FURTHER READING

Examples of European and International associations to learn further about dynamic domestic hot water systems include: EH (European Heating Industry), Home Appliance Europe, and Housing Europe.



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- SRI website, newsletter, FAQ and resources: <https://ec.europa.eu/smart-readiness-indicator>
- European Commission Contact: Brigitte Jacquemont: ENER-BUILDINGS@ec.europa.eu
- Twitter: @Energy4Europe #SmartReadinessIndicator

Several projects are developing Research & Innovation activities around the SRI. Stay updated by joining the European Smart Buildings Innovation Community at: <https://smartbuilt4eu.eu/join-our-community>