

SMART READINESS INDICATOR (SRI)

Case study n°2

THE BUILDING:

Building type
Location
Surface area
Specificities

MAIN TECHNICAL CHARACTERISTICS:

EPC* class B 4-in-1 heat pump providing heating, cooling, ventilation and domestic hot water Heating mainly via ventilation + electric floor heating system

Electric vehicle charging PV solar panels and Li-Ion batteries

* EPC = energy performance certificate

HOW THE SRI WAS ASSESSED:

Assessment carried out by <u>LIST</u>. Use of the simplified service catalogue available in the SRI assessment package (available on request at <u>https://ec.europa.eu/eusurvey/runner/SRI-assessment-package</u>).

OUTCOMES OF THE SRI ASSESSMENT:

Overall SRI score: 40%

Scores per impact criteria:

Energy efficiency		51%
Maintenance and fault prediction		27%
Comfort		44%
Convenience		46%
Health, well-being and accessibility	۲	32%
Information to occupants		35%
Energy flexibility and storage	*	51%

* One of the highest scores observed for residential buildings which have an average score of 19%, according to a survey conducted in Q1 2023 (cf. <u>webinar presentation</u> slides 66-68)

Scores per technical domains:

Heating		65%
Cooling	*	69%
Domestic hot water	\bigcirc	31%
Ventilation	۲	19%
Lighting	٢	42%
Dynamic building envelope		16%
Electricity	9	51%
Electric vehicle charging	S	44%
Monitoring and control		31%

FOCUS ON ONE SERVICE:

MC-13 "Central reporting of technical building systems performance and energy use"

The building is equipped with an interface providing information to occupants on ventilation, heating, cooling and domestic hot water. Therefore, the functionality level for this service is 2.

Functionality level 0 (non-smart default)	Functionality level 1	Functionality level 2	Functionality level 3 (smartest level)
None	Central or remote reporting of real- time energy use per energy carrier	Central or remote reporting of real- time energy use per energy carrier, combining TBS* of at least 2 domains in one interface	Central or remote reporting of real- time energy use per energy carrier, combining TBS* of all main domains in one interface

Status pompe à chaleur	chauffage
≎AC dégeler	Non
Débit d'air pulsion	217 m3/h
Débit d'air extraction	239 m3/h
Temp. de l'air pulsion	44.5 °C
Temp. de l'air extraction	21.9 °C



* TBS = technical building system

ASPECTS POSITIVELY IMPACTING THE EVALUATION:

Heat control by room (ventilation supplemented by floor heating) Combined system for HVAC and DHW systems with control and providing feedback to users

Automatic blinds management (depending on sunlight and wind) Energy storage and self-consumption optimisation General switch board for lighting, areas with dimming, areas with occupancy detection

Photovoltaic production Electric vehicle charging (shared garages)

IMPROVEMENT POTENTIAL:

To increase the overall SRI score from 40% to 70%:

* HVAC = heating, ventilation and air conditioning * DHW = domestic hot water



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