

SMART READINESS INDICATOR (SRI)

Case study n°1

THE BUILDING:

Building type	Non-residential (office building)		
Location	Bettembourg, Luxembourg		
Surface area	2200 m ²	Construction year	2014
Specificities	The NeoBuild building is a pilot project for environmental performance and renewable energy production. It allows testing novel technologies, materials and building components		



MAIN TECHNICAL CHARACTERISTICS:

EPC*
class A

Heat pumps
(ground to water &
air to air)

Solar panels (thermal
& PV) on the roof and
on several sides

Energy
storage on
site

No active
cooling

* EPC = energy performance certificate

HOW THE SRI WAS ASSESSED:








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










OUTCOMES OF THE SRI ASSESSMENT:

Overall SRI score: **67%**

Scores per technical domains:

Scores per impact criteria:

Energy efficiency		81%
Maintenance and fault prediction		52%
Comfort		75%
Convenience		61%
Health, well-being and accessibility		62%
Information to occupants		59%
Energy flexibility and storage		68%

Heating		74%
Cooling		-
Domestic hot water		57%
Ventilation		60%
Lighting		85%
Dynamic building envelope		45%
Electricity		43%
Electric vehicle charging		0%
Monitoring and control		60%

FOCUS ON ONE SERVICE:

DE-4 "Reporting information regarding the performance of dynamic building envelope systems"

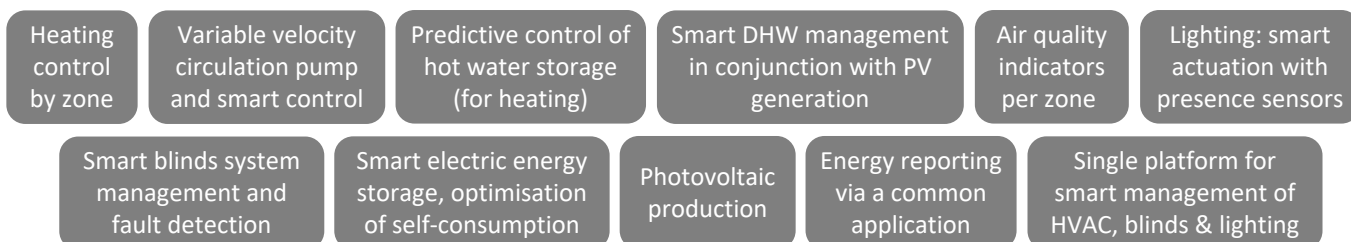
The building is equipped with a weather station and sensors providing real-time information. Therefore, the functionality level for this service is 3.



Functionality level 0 (non-smart default)	Functionality level 1	Functionality level 2	Functionality level 3	Functionality level 4 (smartest level)
No reporting	Position of each product & fault detection	Position of each product, fault detection & predictive maintenance	Position of each product, fault detection, predictive maintenance, real-time sensor data (wind, lux, temperature...)	Position of each product, fault detection, predictive maintenance, real-time & historical sensor data (wind, lux, temperature...)

Température du vent :	1.4 °C
Direction vent :	129.3 °
Vitesse vent :	0.7 m/s
Humidité relative :	88.2 %
Précipitations :	0.0 mm
Précipitations moy. Jour :	71.8 mm/j
Température acoustique :	0.9 °C
Précipitation active (éteint = non) :	<input checked="" type="radio"/>
Type de précipitation :	40
Luminosité Nord :	1989.0 lux
Luminosité Est :	1905.0 lux
Luminosité Sud :	1874.0 lux
Luminosité Ouest :	1947.0 lux
Pression absolue :	98316.0 hPa
Pression relative :	101691.0 hPa
Point de rosée :	1.4 °C

ASPECTS POSITIVELY IMPACTING THE EVALUATION:

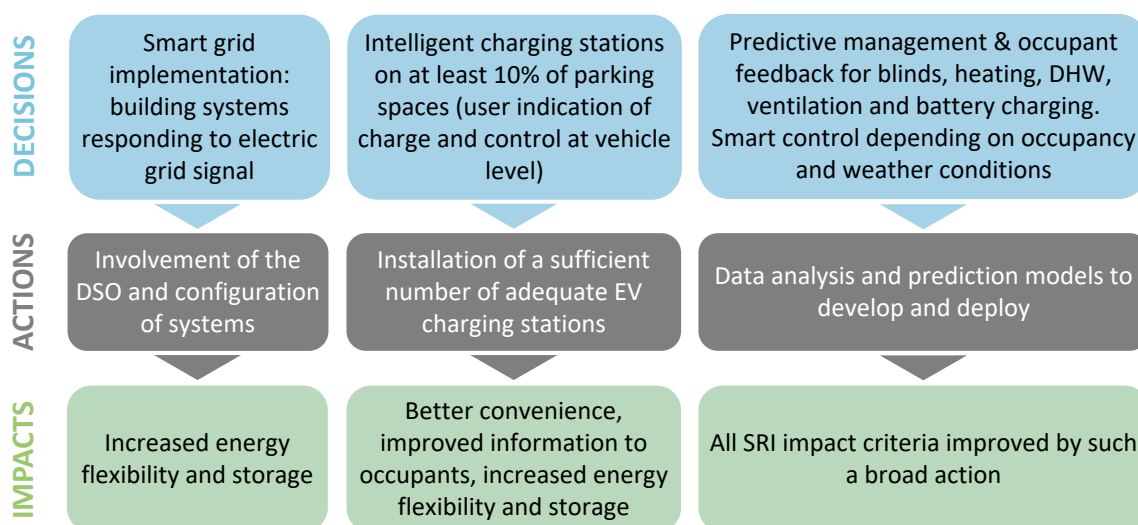


* DHW = domestic hot water

* HVAC = heating, ventilation and air conditioning

IMPROVEMENT POTENTIAL:

To increase the overall SRI score from **67%** to **91%**:



FOLLOW AND CONTACT US!

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