



D4.2 - PILOT OPERATIONS REPORT - V2





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Executive summary

The "SRI-ENACT D4.2 Pilot Operations Report" provides a detailed analysis of the pilot phase of the SRI-ENACT project, which aims to bridge the gap between theoretical Smart Readiness Indicator (SRI) frameworks and their practical application. This initiative evaluates the effectiveness of SRI methodologies in real-world settings, offering critical insights for stakeholders, policymakers, and industry professionals committed to advancing smart building practices.

The report highlights the pilot activities conducted across eight European countries - Greece, Spain, Czech Republic, Austria, Croatia, Latvia, Bulgaria, and Romania. It examines the performance of smart technologies in diverse building environments, identifies challenges, and proposes refinements to improve SRI assessment tools. Key areas of focus include energy efficiency, technological flexibility, and user comfort.

Key findings are structured into three main chapters:

- Informational Events: summaries of awareness-raising efforts in targeted regions,
- Pilot Operations: results and reflections from country-specific pilot activities,
- Evaluation: feedback on training sessions, toolkit usability, and test phase outcomes.

The pilot phase has validated the applicability of SRI methodologies while uncovering best practices and areas for improvement. These insights are critical for scaling up SRI adoption across Europe and integrating it into regulatory frameworks. The findings contribute to advancing smart building automation, digitalization, and sustainable energy management, supporting the transition toward a more intelligent and responsive built environment.



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1. Introduction

The "SRI ENACT D4.2 Pilot Operations Report" serves as a comprehensive overview of the pilot phase of the SRI-ENACT project, a critical initiative aimed at evaluating and enhancing the practical implementation of Smart Readiness Indicators (SRI) in real-world environments. This report presents a structured analysis of the methodologies employed, the challenges encountered, and the key findings derived from the pilot operations. By examining the performance of smart technologies in various building settings, the report provides essential insights for stakeholders, policymakers, and industry professionals committed to advancing the smart building landscape.

As the global focus shifts towards energy-efficient and intelligent infrastructure, the ability to accurately assess a building's smart readiness has become increasingly significant. The SRI-ENACT project seeks to bridge the gap between theoretical SRI frameworks and their real-world application by conducting testing and validation in diverse pilot environments. Through these pilot operations, the project evaluates the effectiveness of existing SRI assessment methodologies while identifying potential refinements to enhance their applicability and accuracy.

The SRI-ENACT project aims to enhance the deployment and adoption of SRI by providing a structured and practical approach to assessing smart readiness across various building typologies. As buildings become increasingly interconnected and technologically advanced, it is crucial to develop reliable metrics that evaluate their smart capabilities in terms of energy efficiency, flexibility, and user comfort. The pilot phase plays a pivotal role in this endeavor by offering empirical data and validating theoretical frameworks in real-life scenarios.

Within this report, readers will find a detailed account of the pilot implementation process, including site selection criteria, technological configurations, and stakeholder engagement strategies. The evaluation of results focuses on the effectiveness of the SRI assessment framework, identifying potential challenges and areas for improvement. Furthermore, the report highlights best practices and provides recommendations for scaling up the adoption of SRI within the European context.

By presenting key insights from the pilot operations, this report aims to contribute to the broader discourse on smart building assessment and facilitate the integration of SRI into regulatory and market-driven frameworks. The findings will support future developments in building automation, digitalization, and sustainable energy management, ultimately promoting a more intelligent and responsive built environment.





2. Implementation of informational events in the targeted regions

The chapter focuses on the implementation of informational events in the targeted pilot regions. It details how these events were organized by project partners to raise awareness about the Smart Readiness Indicator (SRI) and engage local stakeholders, such as building owners, auditors, policymakers, and energy experts. The chapter outlines the objectives of these events, which include educating participants on the SRI tools and methodologies, presenting pilot results, and fostering discussions around smart building technologies.

Each region conducted its own informational events, and the chapter presents a summary of these activities, including the type of event (seminar, conference, workshop), the number of participants, and the key outcomes. These events played a crucial role in disseminating project findings, promoting the adoption of SRI tools, and providing an opportunity for feedback and interaction between experts and stakeholders.

The chapter also highlights the importance of these events in building momentum for the broader implementation of the SRI-ENACT methodology across Europe.

2.1. Greece

In Greece, no dedicated Info Days were organized during this period. Given the high engagement in our physical policy event, as well as in SRI-ENACT webinars, there was no identified need for additional Info Days. The strong participation in these formats ensured effective dissemination of information and meaningful stakeholder engagement. The physical policy event provided an opportunity for indepth discussions and direct interactions, while webinars offered a flexible and accessible platform for broader outreach. This combination allowed us to maximize impact without the necessity of additional Info Days.

2.2. Spain

Number of events: four (4)

There were four presentations organised in Spain. The first one was a workshop together with several stakeholders involved in the Spanish SRI implementation, aiming to introduce the project and the SRI methodology and to engage stakeholders. The other two info days were organised including basic information about the SRI and its context at the national and European level. A fourth and last event was organised within de RENOVA-T forum in Valladolid, a fair related to innovation and renewable energy, where a stand was placed in the expo and attendees got insight about the SRI-ENACT project and its methodology.

Type of event:

No.	Event	Туре	Number of participants	Level of involvement
1	SRI stakeholders' workshop Madrid, 21 st June 2023	Workshop	11	Presenter
2	SRI info day Zaragoza, 21 st November 2024	Conference	30	Presenter
3	SRI info day Valladolid, 10 th March 2025	Conference	35	Presenter
4	RENOVA-T forum Valladolid, 12 th March 2025	Fair	142	Stand

Table 1: Events in Spain





Short summary:

One workshop was organised involving key stakeholders in the Spanish context, such as CENER (SRI2Market project coordinator), the National Association of Energy Service Companies and research technology centres, among others. The event was divided into two main parts. The first part included a general introduction of the SRI framework and an overview of the current SRI landscape in Spain. The second part provided and interactive discussion through a set of predefined questions, aiming to co-create a national methodological framework for the adoption of SRI in Spain.

Two other SRI info days were held focussing on promoting the SRI to different stakeholders, mainly members of the construction sector and the building energy services sector, through a presentation about the SRI-ENACT project and the introduction to the SRI methodology and national landscape.

One last event was organised for the 12th of March 2025. This event happened within an innovation and renewable energy fair in Valladolid. It involved a stand in the expo where SRI-ENACT project was introduced to the attendees.

Photos:





Figure 1: Info day Spain (event 1 and 2)





Figure 2: Info day Spain (event 3)





Figure 3: Info day Spain (event 4)



2.3. Czech Republic

Number of events: two (2)

There were two presentations organized as Info Day in the Czech Republic. Both were arranged at For Arch fair, years 2023 and 2024.

Type of event:

No.	Event	Туре	Number of participants	Level of involvement
1	For Arch 2023	Fair	10	Presenter
2	For Arch 2024	Fair	7	Presenter

Table 2: Events in Czech Republic

Short summary:

Two SRI-ENACT info days were organized as part of For Arch, a large fair dedicated to buildings and building technologies. ForArch is one of few fairs well established in the Czech Republic. It is organized by ABF in Letňany district, Prague, Czech Republic. The fair consists of thousands of visitors, hundreds of exhibitors and dozens of presentations.

Two SRI-ENACT Info days were organized within the fair in one of the conference rooms. The presentation consisted of basic information on SRI, European and Czech context and SRI methodology introduction. The main aim was to gain more publicity for SRI.

As the overall number of Info Day participants was low, the SEVEn team decided to stress work on other communication and distribution channels. SEVEn has collaborated with both energy experts' associations in the Czech Republic: "Association of energy specialists" and "Association of energy auditors – energy specialists".

In the first case, SEVEn has participated in an education event on 31.10.2023 and reached more than 300 energy auditors. The policy event on 13.2.2025 led to another SRI training session (the fourth) on 11.3.2025 which increased the total number of trained energy experts to nearly 370 (31 external energy experts participated in the original SRI training and nearly 340 energy experts were informed and trained as "replicants").

The majority of external energy auditors were addressed via the mailing list of the second mentioned "Association of energy auditors - energy specialists".

Photos:





Figure 4: Info day 1 (Czech Republic)







Figure 5: Info day 2 (Czech Republic)

2.4. Austria

Number of events: two (2)

Two information days were organized in Austria. The events aimed to introduce the project, engage key stakeholders and encourage their participation in the SRI assessment programs as well as SRI development. The main aspects and benefits of the program were presented in detail to stimulate interest and promote active involvement from the stakeholders. Stakeholders were also asked for their opinions on the method and its applicability and added value for the Austrian building sector.

Type of event:

No.	Event	Туре	Number of participants	Level of involvement
1	Smart Readiness Indicator (SRI) Stakeholder Workshop – Event venue: Austrian Institute for civil engineering (OIB), 11 th October2023	Conference (live & online)	52	Lecturer, Presenter
2	Smart Readiness Indicator (SRI) – Stakeholder Event. Venue: "Energy Base" Technicon Wien 11th November 2024	Conference and Workshop (live)	41	Lecturer, Presenter

Table 3: Events in Austria

Short summary:

The first SRI-ENACT Info Day in Austria was organized as an event in collaboration with the Austrian Institute for civil engineering (OIB) and focused on advancing the SRI initiative within the Austrian context. The event aimed to introduce key stakeholders to the goals and benefits of the SRI Assessment Programmes and foster engagement across various sectors involved in building energy efficiency. Participants included national officials, representatives from other SRI projects, researchers from leading institutes, private individuals, and companies in the energy sector. The Info Day offered a diverse range of activities, including expert presentations and interactive panel discussions, all centred on smart readiness, energy efficiency, and renewable energy integration in buildings.

The SRI Assessment Programmes were a key focus of the day, with attendees being invited to discuss opportunities through the SRI auditor training. The event-built momentum for Austria's involvement in promoting SRI, encouraging engagement from a wide array of stakeholders.

The second SRI-Enact Info Day focused on the methodology and the and possible Austrian adaptations and implementation pathways of the SRI and was organized with partnering SRI projects in Austria. Diverse stakeholders including climate ministry, public and private sector facility managers,





representatives of the main Austrian TSO (APG), multiple representatives of DSOs, researchers and policy makers participated. First results of building assessments were presented and discussed. Inputs were gathered to further work on SRI development.

Photos:





Figure 6: Info day Austria

2.5. Croatia

Number of events: three (3)

During the first two engagement cycles in Croatia were organised three Info days to present the Project and engage with stakeholders and encourage their participation in the SRI Assessment Programmes.

Type of event:

No.	Event	Туре	Number of participants	Level of involvement
1	6th Central Conference on Sustainable Construction, 15 th November 2023	Conference (live & online)	957	Lecturer, Presenter
2	9th conference on energy-efficient lighting, smart homes, buildings and cities, 29th February 2024	Confe <mark>rence</mark> (live)	52	Lecturer, Presenter
3	Conference on sustainable financing and implementation of energy efficiency projects, 15th May 2024	Conference (live)	425	Panel (round table) discussion member

Table 4: Events in Croatia

Short summary:

SRI-ENACT info days were organized as part of large conferences on sustainable construction, energy efficiency of buildings and cities, and sustainable financing and implementation of energy efficiency projects. Info days of the project were organized as part of conferences with several topics in the field of energy efficiency and sustainable construction to gain more publicity and ensure a high turnout, thus disseminating the project as widely as possible.

Info Days included a variety of events for different target groups (e.g. building occupants, municipal employees, civil servants, stakeholder groups and politicians), such as lectures, presentations, panel discussions, around the themes of smart readiness, energy efficiency and renewable energy.

During the Info Days SRI Assessment Programmes were presented and interested participants got the opportunity to participate in the SRI Assessment Programmes (SRI auditors training).



Photos:













Figure 7: Info days Croatia

2.6. Latvia

Number of events: two (2)

During the final year of project implementation, Latvia hosted two SRI-ENACT information events. These information days had two objectives to be achieved. The first objective was to familiarize representatives of the field with the project and its implementation results; the second objective was to involve representatives of the parties involved in the project implementation in the practical implementation of SRI assessments. Considering that Latvia has not officially started SRI testing, it was important that the target group of the Information Days included both policymakers and SRI auditors, as well as building managers and users.

No.	Event	Туре	Number of participants	Level of involvement
1	SRI-ENACT information event 1 with policy makers, other major stakeholders, and practicing energy auditors at Riga City council, 23 October, 2024	Hybrid workshop (in person and online)	25 in person, 15 online	Organized by SRI-ENACT Riga team Presentation + facilitation of discussion on SRI
2	SRI-ENACT information event with users or managers of audited buildings held on 2 April 2025 at Riga City council	Hybrid workshop (in person and online)	15 in person, 63 online	Organized by SRI-ENACT Riga team in cooperation with Riga Energy Agency Presentation + facilitation of discussion on SRI

Table 5: Events in Latvia

Short summary:

In Latvia, the first project information event was organized on October 21, 2024, in connection with the results of the smart building readiness assessments (first engagement cycles) carried out by SRI-ENACT experts. The event was held in Riga on 23 October, 2024, both in person and online. The main goal of the first information event was to familiarize state construction and energy policymakers, municipalities, professional associations, and practicing energy auditors with the practical results of the project and proposals for the adoption and popularization of the SRI approach in Latvia.

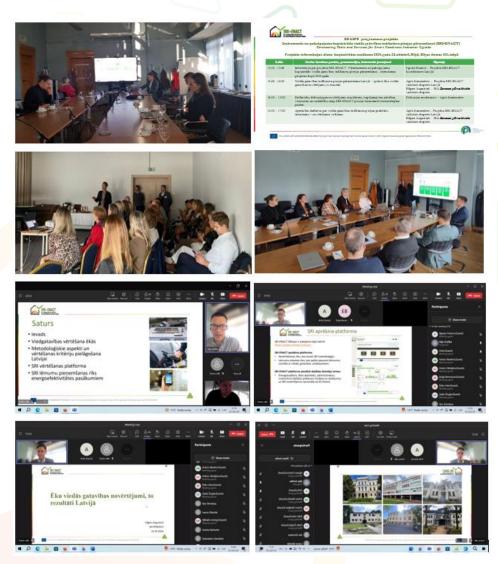
Stakeholders were also asked to express their views on the smart building readiness approach and its adoption in Latvia, taking into account EU-level regulation and the need to adapt local regulations.





The second SRI-ENACT Information Event was held on April 2, 2025, in cooperation with the largest specialized energy agency in the region—the Riga Energy Agency (REA). Taking into account that the smart building readiness assessments in Latvia were carried out in close cooperation with the Riga Municipality, there is an opportunity to use them as a basis for real improvements in the energy efficiency of buildings in the future.

The main goal of the second event was to popularize the SRI methodology and the benefits of smart building readiness as widely as possible. As part of this, the owners or users of 120 buildings were presented with individual assessments.





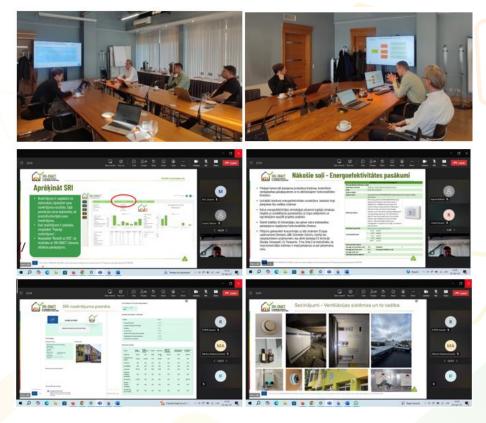


Figure 8: Info days Latvia

2.7. Bulgaria

Number of events: three (3)

During the first two engagement cycles in Bulgaria were organised three Info Days to present the Project and engage with stakeholders and encourage their participation in the SRI Assessment Programmes.

Type of event:

No.	Event	Туре	Number of participants	Level of involvement
1	Meeting of the energy agencies and centres, Gabrovo, 3-4 July 2024	Workshop (live & online)	86	Co-organized by SRI- ENACT Presentation + facilitation of discussion on SRI
2	Skills and knowledge for high performance buildings Sofia, 22 August 2024	Workshop (live & online)	120	2 SRI-ENACT panellists involved in the SRI panel
3	18 th National Conference of the Association of Bulgarian Energy Agencies, 13-14 November 2024	Conference (live & online)	45	Co-organized by SRI- ENACT, a panellist discussed SRI

Table 6: Events in Bulgaria

Short summary:

In 2024, the meeting of the energy agencies and centres was combined with the event "Mayors speak" to attract a larger audience. The hybrid meeting was 2-day long (3-4 July 2024) and gathered 59 onsite and 21 online participants, mainly representing public authorities, energy agencies, energy and facility services companies, and energy efficiency consultants. An SRI session was co-organised with





the sister project SMART2. The session featured presentations of both projects, and a discussion panel related to the future implementation of methodology and SRI assessment procedure in Bulgaria.

Additionally, on 22 August 2024, another hybrid session on SRI was organized within EnEffect workshop that gathered about 90 onsite and 30 online participants, representing a wide variety of stakeholders – public authorities, energy industry, EPB auditors, energy agencies, and EE consultants. The session consisted of a panel discussion on a variety of SRI topics – methodology, integration of SRI audit procedure in the existing practice for EPB certification, demand for SRI, etc. SRI-ENACT was represented by 2 panellist's – Mr. Petar Kamburov and Mr. Angel Nikolaev.

A third info day took place on 13th November 2024 within 18th National Conference of the Association of Bulgarian Energy Agencies (ABEA). The conference gathered more than 90 participants (approx. 70 of them in person). A discussion session on building renovation was partly dedicated to SRI (BSERC's panellist Mr. Petar Kamburov discussed SRI-ENACT and summary of SRI test in different pilot buildings in Bulgaria, while EnEffect panellist discussed SMART2).

Photos:





Figure 9: Info days Bulgaria

2.8. Romania

Number of events: one (1)

One info day has been organised in Romania during the first two engagement cycles. The aim was to engage with national stakeholders and promote the use of SRI-ENACT toolkit.

Type of event:

No.	Event	Туре	Number of participants	Level of involvement
1	From NZEB to ZEB: Performance without compromise, Bucharest, 30 January 2025	Workshop (in person)	120	1 SRI-ENACT panellist involved in the panels + facilitation of discussions on SRI

Table 7: Events in Romania

Short summary:

On January 30, 2025, an event of the Order of Energy Auditors in Romania, which focused on the technical training of specialists in construction, design, and energy performance of buildings, brought together 120 stakeholders including auditors, energy experts, public authorities, developers and industry representatives.

ISPE participated in a debate on the role of the SRI in assessing and enhancing building performance through smart technologies and automation. The discussion also focused on strengthening the capacity of energy auditors for buildings to work with this indicator and ISPE showcased the SRI-ENACT





assessment and decision support tools highlighting their practical applications. Throughout the event, as part of the SRI-ENACT replication activities, discussions were engaged with attending technical experts, to encourage their involvement in performing SRI assessments using the SRI-ENACT toolkit.

Photos:







Figure 10: Info days Romania



3. Pilot operations

SRI-ENACT engaged stakeholders and developed SRI-ENACT toolkit, encompassing SRI assessment and decision support tools to promote informed decision making for smartness upgrades. Beyond the methodological and technological outcomes, SRI-ENACT delivered a package for the training of the prospective SRI auditors. The resulting solution was applied in 8 EU countries involving 112 SRI auditors for the SRI assessment of 1,200 buildings. The large-scale pilots provided evidence on the success of the SRI implementation to create best practices and wider uptake of the SRI-ENACT tools and services. The SRI Assessment operations were implemented in 8 pilot countries (Austria, Bulgaria, Croatia, Czech Republic, Greece, Latvia, Romania and Spain) in three engagement cycles:

- The 1st cycle where trainings and tools were developed and tested on a small set of buildings
 (2-3 buildings) per pilot.
- The 2nd cycle where second prototype with decision support tools was tested in >100 buildings per pilot considering different national contexts.
- The 3rd cycle where the replication activities at the EU level take place. In other words, a wider SRI adoption in the pilot countries take place.

The chapter provides an overview of the pilot operations and SRI assessments conducted across the partner regions as well as their aggregated results and reflections. It details the results made in each country, including the number and types of buildings assessed, as well as the number of auditors involved in the evaluations.

The chapter highlights the methodologies applied in these assessments, offering insights into the tools and processes used. Additionally, it presents results and reflections on the SRI scores, revealing the readiness levels of different building types and regions. This chapter serves as a critical reflection on the effectiveness of the pilot operations, with key data being used to refine and improve future phases of the project.

3.1. Aggregated results and reflections

This section analyzes and processes the 1,205 buildings evaluated across all eight pilot countries. Such a representative sample allows us a thorough analysis of the aggregated results, as well as insights into how each country's outcomes align with the overall project averages.

3.1.1. Pilot Buildings

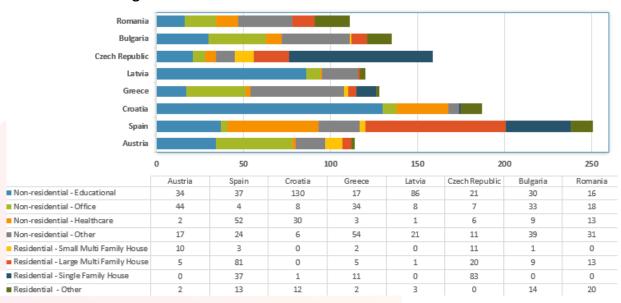


Figure 11: Overview of number of pilot buildings per country (building usage)





The Smart Readiness Indicator (SRI) methodology assesses the ability of buildings to adapt to user needs, optimize energy efficiency, and integrate with smart energy systems. The provided dataset and graph illustrate the distribution of pilot buildings across the 8 partner European countries, categorized by building type and usage.

The horizontal axis and dataset represents the number of buildings, while the vertical axis lists the countries: Romania, Bulgaria, Czech Republic, Latvia, Greece, Croatia, Spain, and Austria. The bars are segmented by color, each representing a different type of building usage, as indicated in the legend.

General Trends

- **Dominant Building Types**: Non-residential buildings appear to be the most common type of pilot building across the majority of the represented countries. One of the most striking trends is the dominance of non-residential educational buildings (blue segments) across all countries. This suggests that a significant portion of the pilot projects focuses on schools, universities, and other educational institutions. Countries such as Latvia or Croatia have a particularly large proportion of buildings in this category. The main reasons lie in the fact that education infrastructure is a priority for many governments. Schools and universities often receive public funding, making them suitable for pilot projects and educational institutions serve large populations, so improvements in their energy efficiency and sustainability can be highly impactful.
- Residential Building Prevalence: Spain stands out for its high proportion of residential buildings, particularly large multi-family houses ("Residential – Large Multi-Family House"), reflecting urban housing priorities.
- Variations Across Countries: There is considerable variation in the distribution of building types across different pilot countries. Some countries have a strong focus on non-residential for example educational facilities, while others, show a more balanced mix.

Country-Specific Observations

- Czech Republic: Displays one of the most balanced distributions of residential buildings, with significant portions of single-family houses, notable presence of large multi-family houses and some small multi-family houses. This indicates that the country is testing pilot projects in a variety of residential settings, rather than focusing solely on one type.
- **Croatia:** Croatia's pilot buildings are strongly leaning towards non-residential projects (especially educational facilities), potentially targeting improvements in energy efficiency and technology adoption in public sector buildings.
- Latvia: Latvia has the most concentrated focus on non-residential buildings among all the countries. Latvia is almost exclusively focusing on upgrading its educational infrastructure, suggesting that the residential sector is not a priority in this pilot project.
- Bulgaria: Has a high proportion of non-residential buildings, with a roughly even mix of
 educational facilities and offices, along with some healthcare and single-family houses.
 Bulgaria's pilot programs are more diverse, addressing a wider set of goals in the country.
- Romania: Shows a more balanced mix of building types compared to other countries. It has a
 significant number of healthcare facilities and residential buildings (both small and large multifamily houses), in addition to educational facilities and offices.
- Greece: Is similar to Romania in that it shows a more balanced mix of building types. Greece is
 prioritizing public infrastructure but also testing residential solutions in multi-family housing.
 The presence of a variety of non-residential categories implies a broad approach to public building improvements.
- Spain: Strongly dominated by residential large multi and single family houses and significant
 presence of non-residential healthcare and educational facilities. This highlights a focus on
 large-scale residential developments, likely in urban areas. The emphasis on healthcare and





educational facilities suggests a broader public sector interest in sustainable and smart building practices.

Austria: The distribution is relatively even across educational facilities, offices, smal and large
multi-family houses. Austria's pilot projects might be smaller in scale but diversified, testing
different technologies and approaches across multiple building types. This indicate a more
exploratory and research-oriented approach.

This data are useful for understanding the focus and priorities of pilot building projects in different European countries. It also inform decisions related to urban planning, resource allocation, and sustainability initiatives. For instance, countries with a high proportion of non-residential buildings might focus on energy efficiency in commercial spaces, while those with more residential buildings might prioritize housing policies and residential energy efficiency programs.

3.1.2. SRI Scores Overview

Based on the provided assessment results, an SRI evaluation provides several key insights: overall smart readiness score and classification, domain scores - smart functionality across key areas, impact scores - evaluating smart benefits and key functionality scores - smart readiness from three different perspectives. A presentation of individual report for sample buildings from each pilot county, including basic information about the building and an overview of all achieved results, can be seen in *Annexes 1* - 8 at the end of the report.

3.1.2.1. OVERALL SRI SCORE AND CLASSIFICATION PER COUNTRY

The total average **SRI Score** (%) represents how well the building utilizes smart technologies across various domains. *Figure 12* allows for a direct comparison of how "smart-ready" buildings are, on average, in different pilot European countries.

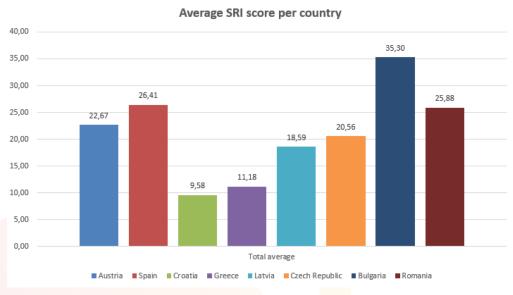


Figure 12: Average SRI Scores (%)

A higher bar indicates a higher level of smart readiness, according to the SRI metric. The SRI scores range significantly from 9.58 to 35.30, showing considerable variation in smart building adoption across these European countries.

Bulgaria has the highest average SRI score at 35.30, suggesting that, on average, the selected buildings in Bulgaria have implemented more smart technologies and functionalities compared to the other countries in the dataset. Croatia has the lowest average SRI score at 9.58, indicating a lower adoption of smart building technologies compared to the other countries. Spain (26.41) shows a relatively high average SRI score, Romania (25.88) is just slightly below Spain, Austria (22.67) and Czech Republic (20.56) have similar scores, Latvia (18.59) and Greece (11.18) have lower scores.





The graph provides a snapshot of the current state of smart building adoption across these European countries. Countries with higher SRI scores may have more supportive policies, greater investment in smart technologies, or a stronger focus on sustainability and energy efficiency in buildings. Countries can use this data to benchmark their performance against others and identify areas for improvement.

The differences in SRI scores involve examining factors such as building codes, energy efficiency standards, incentives for smart technology adoption, and the availability of skilled professionals in each country.

For the above considerations, a direct comparison of the results and individual components of the SRI test among the countries should not be perceived as uncontested due to reasons such as:

- the initial state of the energy efficiency levels of the assessed buildings: existing non-refurbished buildings and year of their commissioning, renovated and certified buildings for EPB with implemented EE measures with or without the use of RES from different classes A, B, C, new construction with different EPB classes A or B with or without RES
- differences in national scales for EPB in terms of primary energy (PE) consumption kWh/m2y
- differences in national regulatory frameworks regarding mandatory and optional TBS/Domains for buildings in operation and for new construction
- the influence of climatic zones and the differences in the norms for comfort in the occupied premises
- differences in national classifications/grouping of buildings by functional types
- differences in national regulations and policies regarding the use of renewable energy sources in the building sector, including charging stations for electric vehicles
- differences in national regulations regarding mandatory and optional functional levels of automated/intelligent control for buildings in operation and for new construction, incl. dynamic connections to local and external energy networks
- differences in national architectural and engineering norms regarding dynamically coordinated with the TBS management of the building envelope (heating, ventilation, cooling, lighting, sun and wind protection, presence of people, day/night, etc.)
- differences in the regulatory requirements for monitoring and maintenance of the TBS
- the upcoming national adaptations of the SRI in EU assessment methodology.

The SRI Class (A, B, C, D, E, F, G) categorizes the building into a specific readiness level, helping to compare its performance with other buildings. The pie "SRI Class Distribution" is divided into slices, each representing a different SRI class. The size of each slice corresponds to the number of buildings in that class. The distribution is heavily skewed towards the lower SRI classes (E and F). This indicates that most of the buildings assessed are not highly "smart-ready" according to the SRI criteria.





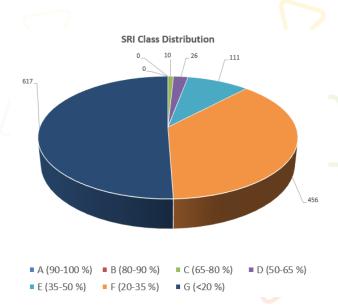


Figure 13: SRI Class Distribution

The largest slice is the one, representing SRI class G (<20%), which contains 617 buildings. This indicates that the majority of buildings in the dataset have relatively low smart readiness scores. The slice representing SRI class F (20 - 35%), is the second largest, with 456 buildings and the SRI class E slice (35 - 50%), is the third largest, with 111 buildings. This further reinforces the idea that a substantial number of buildings have only moderate levels of smart readiness. Classes A (90-100%) and B (80 - 90%) each have 0 buildings. There are only a few buildings in the higher classes: 10 in C (65 - 80%) and 26 in D (50 - 65%). This suggests that very few buildings in the dataset have achieved high levels of smart readiness.

The graph "SRI Classes Distribution per Country" (Figure 14) provides a comparative overview of the SRI class distribution across different pilot countries. It shows the proportion of buildings in each country that fall into different levels of smart readiness, as defined by the SRI. In general, the graph shows that very few buildings across all countries fall into the highest SRI classes (A and B).

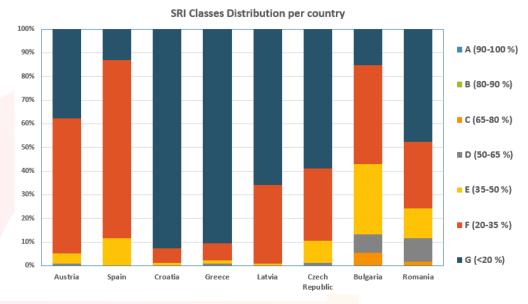


Figure 14: SRI Class Distribution per Country

Croatia and Greece are almost entirely composed of the lowest SRI class, G (<20%). This indicates that almost all the assessed buildings in these countries have very low smart readiness scores. Latvia is





dominated by class G (<20%), with a solid percentage in class F. Austria shows a significant proportion of buildings in class F (20-35%) and a smaller percentage in class G (<20%), with very small proportions in classes D and E. Spain is also predominantly in class F (20-35%), with a small percentage in class E (35-50%) and class G (<20%). In Czech Republic similar to Latvia, the most buildings are in class G. Bulgaria shows a mix of classes, with a notable proportion of buildings in the moderate and higher classes, including E, D and C class. However, most buildings are still in class F. Romania exhibits a more balanced distribution across several classes, including D, E, and F, indicating a somewhat higher level of smart readiness compared to countries like Greece or Croatia.

The charts reveals that most buildings in the sample have considerable room for improvement in terms of smart technology adoption and functionalities. The data suggests a need for upgrades and investments in smart building technologies to improve energy efficiency, comfort, and other aspects of building performance. Governments and organizations can use this information to develop policies and incentives aimed at promoting the adoption of smart building technologies. This could include financial incentives, regulatory requirements, or educational programs.

Efforts to improve smart readiness should focus on the areas covered by the SRI, such as energy management, comfort, health and well-being, information to occupants, and user empowerment. The SRI class distribution can serve as a baseline for future monitoring of progress in smart building adoption. It can also be used to benchmark the performance of different regions or building types.

In summary, this charts provides a clear visual representation of the current state of smart building readiness, showing that a significant proportion of buildings have low to moderate levels of smart technology adoption. This highlights the need for greater efforts to promote smart building technologies and improve overall building performance.

3.1.2.2. AVERAGE SRI SCORE PER TECHNICAL DOMAIN/IMPACT CRITERIA/KEY FUNCTIONALITIES

The next table presents the results of the SRI assessments for the analysed buildings across the eight pilot countries. The results are shown for all technical domains, imapet criteria and key functionalities. It can be seen that they vary significantly across different domains, reflecting regional differences in technological adoption, infrastructure investment, and policy implementation.

TECHNICAL DOMAIN/IMPACT CRITERIA/ KEY FUNCTIONALITIES	Austria	Spain	Croatia	Greece	Latvia	Czech Republic	Bulgaria	Romania
Heating Domain	25,525	26,031	15,987	15,104	30,833	26,178	39,203	30,811
Domestic hot Water Domain	31,294	25,125	9,703	5,394	35,608	30,029	43,440	32,802
Cooling Domain	7,132	5,312	6,460	14,249	0,526	3,094	31,894	22,058
Ventilation Domain	16,601	4,026	6,393	5,618	15,484	9,177	14,110	22,550
Lighting Domain	27,556	22,855	6,377	9,906	6,206	11,856	25,593	22,653
Dynamic Building envelope Domain	7,058	0,199	0,113	1,550	0,000	1,963	4,176	2,006
Electricity Domain	20,892	7,399	2,641	5,402	12,810	8,388	25,703	11,200
Electric Vehicle Charging Domain	0,286	0,268	0,327	0,596	0,000	2,952	0,850	3,052
Monitoring and Control Domain	17,648	26,856	1,691	4,196	0,394	11,421	27,846	16,916
Energy Efficiency Impact	39,325	40,994	21,219	20,543	38,063	37,904	52,933	41,804
Energy Flexibility and Storage Impact	9,451	11,731	3,319	4,183	5,904	11,419	28,321	15,686
Comfort Impact	32,429	37,688	17,640	20,195	22,576	30,234	52,433	42,180
Convencience Impact	25,635	28,466	11,220	14,990	17,222	20,249	35,166	30,242
Health and Wellbeing and accessibility Impact	28,847	28,944	17,305	22,437	17,798	22,344	40,475	32,996
Maintenance and fault predicrtion Impact	21,113	25,984	2,707	4,765	17,860	15,451	22,801	16,805
Information to occupants Impact	26,525	40,969	3,952	8,166	30,014	19,592	30,722	22,289
Building Aggregated	30,221	33,491	11,965	12,656	27,964	26,680	37,870	29,307
User Aggregated	28,360	34,018	12,530	16,448	21,904	23,106	39,700	31,928
Grid Aggregated	9,451	11,731	3,319	4,183	5,904	11,419	28,321	15,686

Figure 15: Table of Average Domain/Impact/Key Functionalities Scores (%) per country





The assessments examine smart functionalities in different building systems, measure how smart technologies contribute to different building benefits and categorize smart readiness into three main perspectives. Some main results and average scores for technical domains and impact criteria are described below:

- **Heating Domain** the highest SRI scores are observed in Bulgaria (39.203) and Latvia (30.833). while Croatia has the lowest score (15.987).
- **Domestic Hot Water Domain** Bulgaria (43.440) and Latvia (35.608) have the highest scores, whereas Croatia (9.703) has the lowest.
- Cooling Domain the Czech Republic (31.894) and Romania (22.058) score the highest, while Latvia (0.526) has a significantly low score.
- **Ventilation Domain** Austria (16.021) and Bulgaria (25.593) show the highest scores, while Croatia (6.393) and Greece (4.026) have lower values.
- **Lighting Domain** Austria (27.556) and Bulgaria (25.593) have high scores, while Latvia (6.206) scores the lowest.
- **Dynamic Building Envelope Domain** the scores in this domain are generally low across all countries, with Austria (7.058) being the highest and Croatia (0.113) the lowest.
- **Electricity Domain** Bulgaria (25.703) and Austria (20.892) perform well, whereas Croatia (2.641) and Spain (7.399) have lower scores.
- **Electric Vehicle Charging Domain** the EV charging domain scores are very low across all countries, with Austria (0.286) and the Czech Republic (3.888) having the highest scores.
- Monitoring and Control Domain Bulgaria (25.703) leads in this category, while Croatia (2.641) and Greece (5.402) have significantly lower values.
- Energy Efficiency Impact Romania (41.804) and Austria (39.325) have the highest scores, while Croatia (21.219) has the lowest among the listed countries.
- Energy Flexibility and Storage Impact Bulgaria (28.321) performs the best, whereas Croatia (3.319) and Greece (4.183) have the lowest scores.
- Comfort Impact Bulgaria (53.453) has the highest score, while Greece (14.990) and Latvia (17.222) score significantly lower.
- **Convenience Impact** the Czech Republic (20.249) and Bulgaria (32.453) lead, whereas Greece (14.990) and Latvia (17.222) have the lowest results.
- **Health, Wellbeing, and Accessibility Impact** Bulgaria (32.999) and Austria (28.847) score the highest, while Croatia (17.305) has the lowest.
- Maintenance and Fault Prediction Impact the Czech Republic (15.451) and Bulgaria (25.193) perform well, while Croatia (2.707) and Greece (4.765) score lower.
- Information to Occupants Impact Bulgaria (25.703) has the highest score, while Croatia (2.641) and Greece (5.402) are at the lower end.

Some main results and average scores for key functionalities are as follows:

- Buliding aggregated score the Czech Republic (26.808) and Bulgaria (27.879) have the highest aggregated scores, while Croatia (11.965) and Greece (12.655) rank lower.
- User Aggregated Score Bulgaria (31.710) and Spain (34.018) have high scores, while Croatia (12.350) and Greece (14.468) score the lowest.
- **Grid Aggregated Score** Bulgaria (28.321) leads in this category, followed by Romania (15.686). The lowest scores are in Croatia (3.319) and Greece (4.183).







AVERAGE SRI SCORES (%) PER DOMAIN/IMPACT/KEY FUNCTIONALITY CRITERIA

Figure 16: Chart of Average Domain/Impact/Key Functionalities Scores (%) per countries

The SRI assessments results indicate that Bulgaria consistently ranks highest in most domains, reflecting a strong integration of smart building functionalities. In contrast, Croatia and Greece generally score lower across multiple domains, suggesting room for improvement in their building automation and smart readiness. The results also highlight disparities in specific functionalities, such as the significantly low scores for EV charging across all countries, pointing to a common area for development in smart infrastructure.

Overall the SRI assessments highlight significant disparities in smart building adoption across Europe. While some countries have made significant progress in automation, comfort, and energy management, others still have room for improvement in energy flexibility, maintenance automation, and grid interaction. As the European Union pushes for higher energy efficiency standards and decarbonization, countries with lower SRI scores must accelerate smart building adoption through better policies, incentives, and infrastructure investments. The next decade will be crucial in bridging the gap and ensuring that all buildings across Europe are smart, efficient, and future-ready.

3.2. Results and reflections per pilot countries

3.2.1. Greece

Number of SRI assessments: 128

In Greece, the pilot SRI assessments conducted as part of the SRI-ENACT project, have been carried out by a total of **13 auditors**. These auditors were selected from a pool of 42 participants who completed the training, demonstrated further interest in assessing buildings based on the SRI, and were further filtered through the submission of a portfolio detailing the type, size, and geographic location of the buildings.

Info about buildings:

The type of assessed buildings is shown below:

TYPE OF SRI ASSESSED BUILDINGS	
Non-residential - Educational	17
Non-residential - Office	34





Non-residential - Healthcare	3	
Non-residential - Other	54	
Residential - Small Multi Family House	2	
Residential - Large Multi Family House	5	
Residential - Single Family House	11	
Residential - Other	2	
TOTAL NUMBER OF ASSESSED BUILDINGS	128	

Table 8: SRI assessed buildings in Greece / Status by February 2025

A total of 128 buildings have undergone evaluation, reflecting a diverse cross-section of both residential and non-residential structures. This diversity provides insights into how smart technologies are being integrated across several building types, aligning with the broader objectives of the European SRI initiative, which aims at enhancing building intelligence, improve energy performance, optimise occupant well-being, and smoothy interacting with the grid.

Among the non-residential buildings, offices constitute a significant proportion, with 34 assessed buildings. This trend likely reflects the increased adoption of smart technologies in commercial and office environments, where energy efficiency, operational flexibility, and user comfort are critical considerations. Educational buildings also represent a considerable share, with 17 facilities assessed. The healthcare sector, represented by three assessed buildings, shows comparatively lower engagement in smart readiness evaluation. The largest single category under non-residential buildings is labeled as "Other", with 54 buildings assessed. In the residential category, the assessments reveal some disparities. Single-family houses holds the largest share, with 11 buildings evaluated, while large multi-family residences account for five assessments. Small multi-family houses and other residential types are less represented, with only two assessments each.

Short reflection on results:

The analysis of SRI scores across the different building types in Greece reveals significant variations in the adoption of smart technologies (*Figure 17*). Among the non-residential buildings examined, educational facilities appear to exhibit the lowest average SRI score (4.98%), highlighting a gap in the implementation of smart technologies in this sector. The main reason behind it lies in the profound lack of financial incentives, regulatory challenges, and in general the slower pace of digital transformation in public infrastructure. In contrary to the educational facilities, office buildings score notably higher (13.38%), showcasing the highest SRI score among the non-residential types of buildings, which reflects a greater integration of automation, energy management, and digital solutions. Healthcare buildings, with an SRI score of 7.73%, although they fall in between, they seem to follow the same pattern with the education facilities, likely influenced by operational requirements. Other non-residential buildings also demonstrate moderate smart readiness, with an average score of 11.10%.

In the residential sector, the level of smart technology adoption fluctuates across the different categories. Small and large multi-family houses show relatively similar scores (11.46% and 11.02%, respectively), indicating a moderate level of smart system integration. Single-family homes, however, achieve a higher score (13.30%), indicating a greater adoption of smart home technologies, such as energy management systems and automated controls. Notably, the "Residential – Other" category emerges as the most technologically advanced, with an SRI score of 22.10%. This could encompass high-tech apartments, eco-friendly residences, or luxury housing with state-of-the-art smart features. However, it is worth mentioning that the limited number of buldings examined in the category, prevents from drawing meaningful and representative conclusions.



These findings align with existing SRI research, which suggests that residential buildings often display greater smart readiness compared to non-residential structures, particularly when financial incentives for smart home upgrades are available. The relatively low score for educational buildings converge with the observations in the literature that public-sector infrastructure often faces barriers to modernization and digitalisation due to funding limitations and policy constraints. Conversely, office buildings and single-family residences tend to accommodate energy efficient and IoT-enabled solutions more readily, enhancing their overall SRI scores.

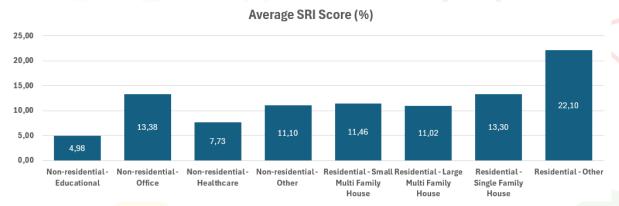


Figure 17: Average SRI score per functional type of buildings in Greece

Figure 18 illustrates the distribution of SRI classes among the assessed buildings in Greece. The overwhelming majority of assessed buildings fall into the G class (91%), representing buildings with minimal smart functionalities. This finding indicates that a significant portion of the building stock in Greece has limited adoption of advanced energy management systems, automation, and digital controls. If it is reckoned that the assessed buildings fall under the pre-1960 and 1960-1990 age categories, the results seem to follow the expected pathway. The prevalence of class G buildings aligns also with existing literature indicating that many older buildings, particularly in Southern Europe, still rely on conventional, non-digitalised energy systems and lack significant technological upgrades.

A smaller proportion of buildings are classified under class F (7%), exhibiting slightly improved smart readiness but still laying in the lower spectrum of SRI scores. These buildings appear to rely on basic automation or energy monitoring tools but lack comprehensive smart integration. Classes E and D represent an even smaller fraction, each comprising approximately 1% of the assessed buildings. These classes correspond to buildings with moderate smart functionalities, likely incorporating some level of automation. The near absence of buildings in these higher classes suggests that fully integrated smart buildings remain an exception rather than the norm in Greece.

The dominance of G-class buildings in Greece underscores a critical need for accelerated smart technology integration to enhance energy performance and sustainability. While some progress has been made, the limited representation of higher SRI classes highlights the necessity for targeted policies and incentives to promote the transition towards smart buildings.

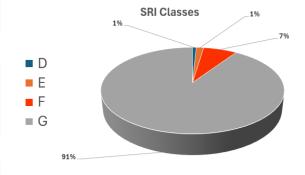


Figure 18: SRI Classes of assessed buildings in Greece



Figure 19: Average domain scores - Greece

Figure 19 illustrates the average domain scores (%) for various building functionalities assessed under the SRI framework. The data reveals a notable trend, with heating and cooling systems achieving the highest scores, both reaching approximately 15-16%. This suggests that these domains have seen significant integration of smart technologies, likely driven by the widespread adoption of automated climate control systems, smart thermostats, and energy-efficient HVAC solutions.

Other domains, such as lighting and electricity, also show moderate levels of smart readiness. The score for lighting indicates a growing presence of automated lighting control and energy efficient solutions, while the electricity domain, which is heavily dependent on grid interaction and energy monitoring, demonstrates potential although remaining lower than heating and cooling.

In contrast, several domains exhibit limited smart integration, thus highlighting areas that require further development. Domestic hot water and ventilation demonstrate moderate scores, indicating that smart water heating and automated air circulation systems are not yet widely implemented. The monitoring and control systems, essential for real-time energy optimisation, are also underutilised. Moreover, dynamic building envelopes, which include adaptive facades, smart windows, and automated shading systems, exhibit extremelly low score. Last but not least, the electric vehicle charging infrastructure shows the lowest smartness score, suggesting that the integration of smart EV-charging solutions within buildings is still in its infancy.

Overall, the results emphasise the uneven distribution of smart readiness across different technical domains, pinpointing the need for targeted improvements in underperforming areas. While the strong performance in heating, cooling, and lighting reflects positive progress, further integration of monitoring and control systems is crucial to optimise energy use. Additionally, enhancing the smart readiness of dynamic building envelopes and EV charging infrastructure is essential for aligning with future energy efficiency and decarbonisation goals.

Avg Domain Scores (%) Avg Domain Scores (%) Heating Domestic hot water Domestic hot water Cooling Ventilation Ventilation Dynamic building envelope Electricity Electric vehicle charging Monitoring and control

Figure 19: Average domain scores - Greece

Figure 20 presents the average impact scores across several key impact criteria, measured as percentages. Among the impact categories, health, well-being, and accessibility features the highest score (23%), reflecting its high potential. This dimension often involves considerations such as air quality monitoring, accessibility features for diverse occupant needs, and technologies that enhance user safety and well-being. Energy efficiency also stands out with a relatively high score (21%), highlighting the growing emphasis on reducing energy consumption and optimising building systems. Comfort receives a similarly high impact score (20%), emerging the importance of occupant satisfaction in modern building design. Smart systems that regulate indoor temperature and lighting,





seem to have contributed to this score, as literature increasingly stresses the relationship between occupant comfort and the adaptive capacity of smart technologies.

Health, well-being and accessibility, energy efficiency, and comfort, are closely followed by convenience, the score of which shows room for further improvement, suggesting that while smart technologies can streamline some aspects of user interaction (e.g., through smartphone-controlled lighting or voice-activated systems), there may still be a gap in intuitive, user-centric design. The impact score for information to occupants, although significantly lower the one of convenience, indicates that the communication of building status, energy usage patterns, and system alerts to users is becoming more relevant, yet remains underutilised.

On the lower end, energy flexibility and storage performs considerably lower than the one of well-being and energy efficiency. This trend could indicate that, while significant progress has been made in improving energy performance, major challenges remain in integrating dynamic storage solutions and flexible energy use, which are crucial for grid responsiveness and peak load management. Same thing applies to maintenance and fault prediction, which appears with low smartness. Smart readiness assessments frequently highlight predictive maintenance as a cost-saving and reliability-enhancing tool, with automated fault detection systems reducing downtime and prolonging the lifespan of building equipment.

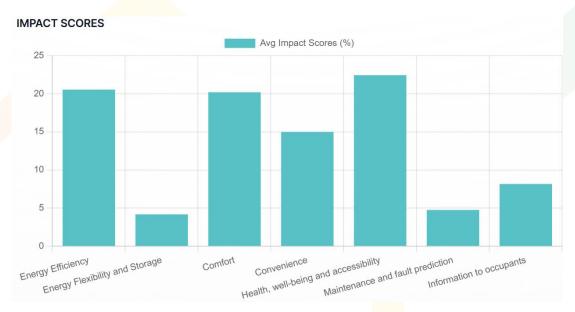


Figure 20: Average impact scores - Greece

Figure 21 illustrates the average key functionality scores, expressed as percentages, across three key categories: Building, User, and Grid. The highest average score is attributed to the User category, reflecting a strong focus on user-centric functionalities such as comfort, convenience, and accessibility enhancements. The Building category follows closely, indicating the implementation of smart systems aimed at improving energy efficiency, automation, and maintenance capabilities within the built environment. The Grid category, in contrast, shows a significantly lower average score, suggesting comparatively less emphasis on smart grid integration, which encompasses energy flexibility, load management, and interaction with external energy networks. This distribution aligns with existing SRI literature, which often emphasises user comfort and building-level efficiency while highlighting the need for greater advancement in grid-related smart functionalities to enhance overall energy resilience and grid interaction.



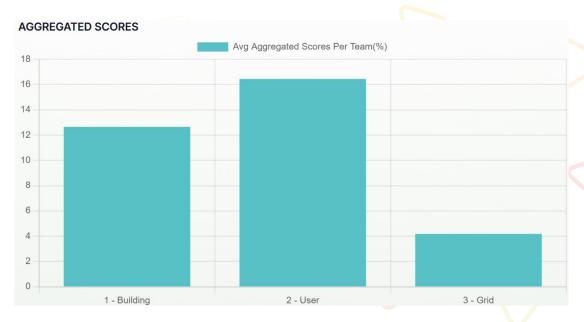


Figure 21: Key Functionalities Scores – Greece

3.2.2. Spain

Number of SRI assessments: 251

In Spain, the pilot SRI assessments have been carried out by a total of **13 auditors**, all of them in-house energy experts from Veolia, who successfully completed the SRI-ENACT training courses. A total of 251 buildings have been assessed.

Info about buildings:

The type of assessed buildings is shown below:

TYPE OF SRI ASSESSED BUILDINGS	
Non-residential - Educational	37
Non-residential - Office	4
Non-residential - Healthcare	52
Non-residential - Other	24
Residential - Small Multi Family House	3
Residential - Large Multi Family House	81
Residential - Single Family House	37
Residential - Other	13
TOTAL NUMBER OF ASSESSED BUILDINGS	251

Table 9: SRI asse<mark>ssed buildings in Spain</mark> / Sta<mark>tus by</mark> February 2025

The main criteria for selecting the assessed buildings were their availability to be visited by the assessors and their wide distribution among different building typologies, in order to have a mix with adequate proportions. Veolia is an ESCO with a significant presence in Spain, and its assessors have access to a large number of buildings managed by the company. Of the 251 assessed buildings, 117 buildings (47%) are non-residential, and 134 buildings (53%) are residential, with the majority of these being large multi-family buildings.





Short reflection on results:

The average SRI score of the 251 analysed buildings is 26.41%. The highest SRI score is in the non-residential healthcare typology (27.65%) and residential – single family houses typology (29.78%). The lowest SRI score is in the non-residential other typology (22.86%), which comprises categories such as museums, theatres, hotels or sport centres, among others and residential small multi family houses (18.73%). As shown in the graph below, the differences in the average SRI scores among the different typologies are not significant.

Average SRI Score (%) 35,00 30,00 25,00 20,00 15,00 29,78 25,96 26,20 27,65 26,16 22.86 23.10 10,00 18,73 5,00 0,00 Non-residential Non-residential Non-residential - Educational - Office - Healthcare Small Multi - Other Large Multi Single Family Other Family House Family House House

Figure 22: The average SRI score per functional type of building in Spain

Regarding the distribution of the SRI classes, most buildings (75%) fall into the F category. The rest of the buildings are distributed between G (13%) and E (12%). This means that the buildings assessed are slightly automated, but with a high margin of improvement. There are no buildings classified into the four highest categories (A, B, C or D), highlighting the need to update the facilities across Spain to make them smarter.

SRI Classes

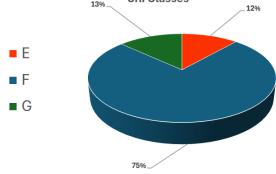


Figure 23: SRI Classes of assessed buildings in Spain

Besides these insights about the total score, the SRI Toolkit provides more detailed information, including the score per domain. As Figure 24 shows, the domains with the highest scores for the Spanish buildings are the Monitoring and Control, Heating, DHW and Lighting. The lowest scores are for the Dynamic building envelope and EV charging domains, as these are rare to be found in the buildings assessed. The low score for these two domains is not related with its lack of smartness, but with the lack of buildings that have these assets. On the other hand, M&C, Heating and DHW are the main assets and are present in most buildings, so it makes sense that the score for these domains is close to the average score (around 26%).

Regarding the impact, Figure 25 shows that the highest scores (around 40%) are related to Energy Efficiency, Comfort and Information to occupants. The lowest score (12%) is obtained in Energy Flexibility and Storage due to the lack of electric batteries in all buildings assessed and the continuous operation for the inertia tanks in the thermal facilities.

As a conclusion, the scores obtained for the Spanish pilot are not the lowest, as the mode class is F, but should definitely be improved, as none of the buildings assessed is classified above the E class. The integration of smart technologies in new buildings and in the renovation of existing ones is key in order to enhance the smartness and, thus, improve the SRI score of the building stock in Spain.



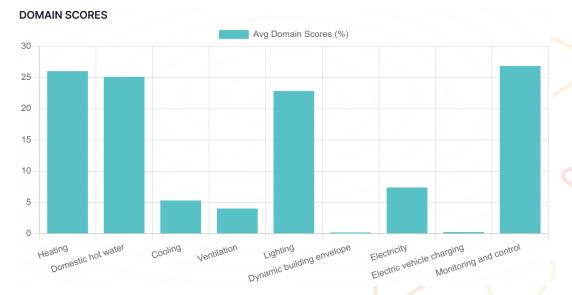
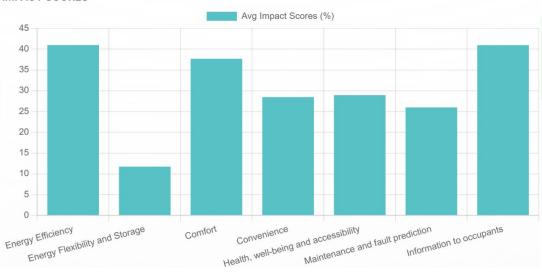


Figure 24: Domain scores for SRI assessments in Spain

IMPACT SCORES



AGGREGATED SCORES

Avg Aggregated Scores Per Team(%)

25

20

1 - Building

2 - User

3 - Grid

Figure 26: Key Functionalities Scores in Spain.





3.2.3. Czech Republic

SEVEn's team has extensive experiences with building stock in the Czech Republic and participated in several projects concerning buildings efficiency, assessments and involvement of energy experts (notably EU Building Stock Observatory and GreenDeal4Buildings — National Roundtables). This experience and leading position in Energy Performance Contracting projects created access to relevant buildings.

Number of SRI assessments: 159

SEVEn has formed an SRI team consisting of 6 inhouse energy experts and trained 31 external SRI energy experts during three SRI training sessions. In total, 37 SRI auditors were trained to accomplish the pilot SRI assessments. The external SRI auditors were mostly certified energy experts (so called energy specialists). The total number of assessed buildings is 159.

Info about buildings:

During the assessment, the following types of buildings are covered:

TYPE OF SRI ASSESSED BUILDINGS					
Non-residential - Educational	21				
Non-residential - Office	7				
Non-residential - Healthcare	6				
Non-residential - Other	11				
Residential - Small Multi Family House	11				
Residential - Large Multi Family House	20				
Residential - Single Family House	83				
Residential - Other	-				
TOTAL NUMBER OF ASSESSED BUILDINGS	159				

Table 10: SRI assessed buildings in Czech Republic/ Status by February 2025

The selection of building types was based on several key criteria and principles:

- The agreed requirements of buildings to have heating, cooling and lighting was modified because cooling function is still not common and thus it would affect the selection of building significantly.
- The selection of pilot SRI assessment buildings consists only of entire buildings, not flats or part of buildings.
- There were several "axes" for selections: buildings selected by internal SRI auditors (mainly buildings part of projects SEVEn has worked on), the pre-selected buildings SEVEn asked external SRI auditors to assess and buildings selected by external SRI auditors (mainly the buildings they prepared Energy Performance Certificate or had access to).
- Although the majority of SRI assessments consists of residential buildings, and more precisely family houses, it is also the broadest and the most heterogeneous group of assessed buildings.
 For example, the lowest SRI score (0 %) and the highest score (61,8 %) received family houses in the Czech Republic.
- SEVEn's team had to set definition of "historic buildings" as buildings built in 1940 or earlier which
 are fully used but are somehow affected by the age of the bulding: mainly difficulty of insulation.
- The ownership of buildings is various, there are public healthcare, schools, municipal) with public ownership and private held buildings (residential, commercial, hotels).





 The selection of buildings is independent on geographical position in the Czech Republic and nearly all regions are represented. The geographical distribution of buildings is quite uniform and not centrist oriented.

Short reflection on results:

The total number of assessed buildings was 159. The average SRI score of Czech buildings is 20.56%, the median is 17.9%. This shows generally lower scores of SRI assessments. The highest scores (above 25%) was reached by office and commercial buildings. The lowest scores (below 15%) was achieved by historic and nursing buildings.

Even the selection of buildings is not strictly statistically accurate, SEVEn's analysis shows that historic buildings with renovation difficulties and some public buildings have lower scores and the commercial buildings have got higher scores.

Regarding average technical domaines, the highest results were obtained in "heating" and "domestic hot water" technical domains which are traditionally important for Czech buildings. The lowest is for "cooling", "dynamic building envelope" and "electric vehicles charging". All these domains, especially "cooling", are not regularly present in Czech buildings.

Regarding average impact crieria, the highest was achieved unsuprisingly in "energy efficiency" which has been emphasized in recent years. The lowest impact criteria is "energy flexibility and storage", probably because there is low energy flexibility market and high prices for batteries.

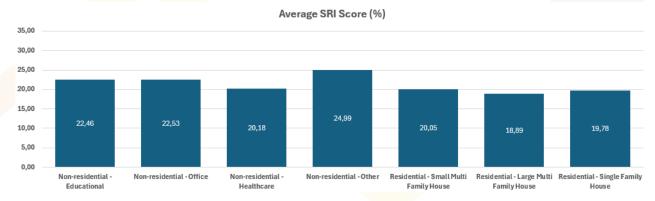


Figure 27: The average SRI score per functional type of building in Czech Republic

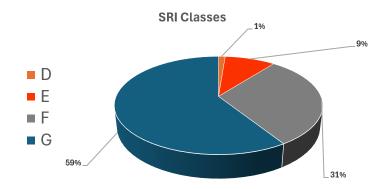


Figure 28: SRI Classes of assessed buildings in Czech Republic

The average achieved technical domain scores and impact criteria scores are presented in the following graphs:



DOMAIN SCORES

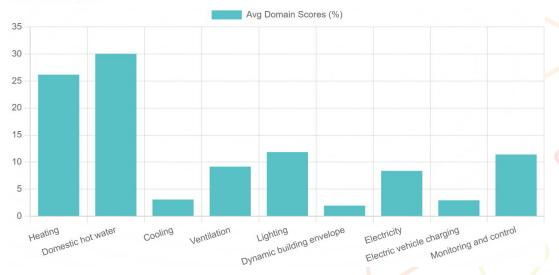


Figure 29: Domain Scores Czech Republic

IMPACT SCORES

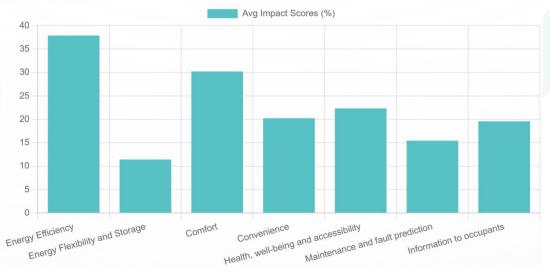


Figure 30: Impact Scores Czech Republic

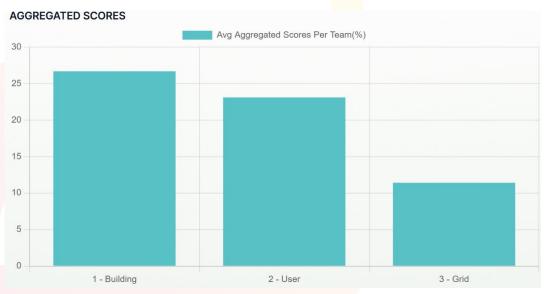


Figure 31: Key Funcionalities Scores Czech Republic



Comments on result:

The low score represents the reality of Czech building stock in terms of low digitalization, low automation and low interconnection among individual building services. It also reflects the overall low energy efficiency of Czech building stock.

Nevertheless, SEVEn's observation is that even quite smart buildings have rather low SRI score. This is caused mainly by underdeveloped energy flexibility services in the Czech Republic, low use of smart technologies and generally lower SRI scale setting with significant reserve for the future. This is useful for ongoing market shift for smart technologies but serves as a "marketing" problem for existing SRI assessments. The very modern, cutting edge and smart family house gained "only" SRI score 61.8 %, class D.

The analysis of results could also serve as an opportunity to further develop digitalization and smart technologies and services into the existing funding schemes and technological upgrades.

The distribution of SRI assessments in time shows that there was little interest in SRI in general in the beginning of the project (this was obvious during the fairs For Arch in 2023 and 2024 which usually has thousands of visitors and Info Days have only several participants). However, during the SRI-ENACT trainings and especially in the beginning of 2025 the interest in the SRI subject raised significantly. The SRI pilot assessments have created the first SRI market of SRI auditors.

3.2.4. Austria

In Austria, buildings were pre-selected by BPE. In the first step, public and private building owners were contacted, and the respective partners were interviewed regarding their building stock. This process enabled the selection of suitable buildings that differ in size, type, year of construction and usage.

Additionally, collaboration with various stakeholders provided valuable insights and perspectives, ideas and expectations on SRI. Subsequently, the buildings were initially assessed for their suitability and then forwarded to the auditors for the actual SRI evaluation.

Number of performed SRI assessments: 114

A total of 16 trained auditors are responsible for the evaluation in Austria, including 4 internal and 12 external auditors. The auditors are exclusively experts with experience in energy performance certificates, energy consulting, facility management or building automation.

At the time of this report, the building assessments have not yet been fully completed. However, no significant changes in the average SRI results are expected, as the remaining buildings to be assessed follow a similar pattern to those already audited. In any case, the additional audits will be included in the final report.

To ensure quality and consistency in the building assessments, the auditors maintained constant communication with the project managers of BPE, allowing questions to be addressed promptly throughout the assessment phase. After completing the assessments, a review of the certificates was conducted with the respective auditors, including clarification in case of any discrepancies.

Info about buildings:

The type of assessed buildings are shown below:

TYPE OF SRI ASSESSED BUILDINGS					
Non-residential - Educational	34				
Non-residential - Office	44				
Non-residential - Healthcare	2				
Non-residential - Other	17				





Residential - Small Multi Family House	10		
Residential - Large Multi Family House	5		
Residential - Single Family House	-		
Residential - Other	2		
TOTAL NUMBER OF ASSESSED BUILDINGS	114		

Table 11: SRI assessed buildings in Austria / Status by February 2025

The selection of these buildings was based on their representativeness of Austria's building stock, ensuring that the assessment included a variety of structures with different functions, ownership models and technological implementations.

Large office buildings and schools were highlighted due to their significant energy consumption and potential for automation, while historical and municipal buildings were included to assess the challenges in retrofitting older structures with smart technologies, as public buildings in Austria tend to be older than average.

Residential buildings were considered essential due to their general importance and commercial buildings were examined to understand additional private-sector adoption of smart readiness solutions.

Short reflection on results:

The SRI scores in Austria varied depending on building type, with the highest scores observed in office and residential buildings, while historical and municipal buildings showed the lowest levels of smart readiness. In general, the SRI score is relatively low, with an average value of 22.67%. The provided table presents the average SRI values achieved, categorized by the considered building types.

Average SRI Score (%)

35,00 30,00 25,00 20,00 15,00 26,34 23,64 23,54 23,19 10,00 20.15 19.85 17,72 5.00 0.00 Non-residential -Non-residential -Non-residential -Non-residential - Residential - Small Residential - Large Residential - Other Educational Healthcare Other Multi Family House Multi Family House

Figure 32: The average SRI score per functional type of building in Austria

Following the proposed categorization of the SRI results, the distribution of the 114 test buildings across the respective classes is shown in the graphic below in percentage terms (Figure 33). The majority of the test buildings fall within the lowest categories, G and F, with only a few achieving classifications of E and D. Moreover, none of the test buildings were able to attain higher ratings.



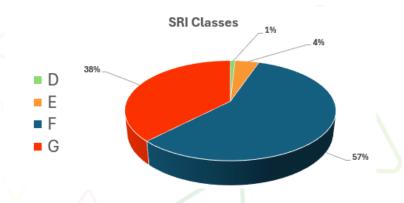


Figure 33: SRI Classes of assessed buildings in Austria

Key observations:

- Non-residential educational (23.64) and office buildings (23.54%) as well as residential buildings large multi family houses (26.34%) achieved the highest SRI scores, indicating that these sectors have a relatively higher level of smart integration compared to average Austrian building stock. One contributing factor is the higher proportion of private buildings, which tend to exhibit greater smartness.
- Non-residential other i.e. historical buildings (19.50%) and municipal/governmental buildings (15.04%) scored significantly lower, suggesting barriers to implementing smart solutions in older structures and public-sector buildings. In this analysis, the historic buildings performed better because they exclusively consist of structures that have been renovated recently.
- Non-residential helthcare buildings (20.15%) had moderatly lower levels of smart readiness than educational, office and residential buildings, reflecting similar adoption of automation, particularly in heating and lighting systems.

Conclusion:

The assessment of smart readiness across Austria's building stock highlights both progress and critical areas for improvement in smartness. Heating and lighting systems have achieved relatively high levels of automation compared to other domains, particularly in office and residential buildings, where technologies such as smart thermostats, automated radiator controls, and occupancy-based lighting contribute to energy efficiency and user comfort. Schools and nursing homes also benefit from moderate smart readiness, particularly in ventilation and lighting, which enhance indoor air quality and operational efficiency. Furthermore, office and commercial buildings demonstrate better integration of digital technologies, with many modern structures adopting Building Energy Management Systems (BEMS) to optimize heating, cooling, and lighting based on real-time demand.

Historical buildings, due to their structural limitations and heritage conservation requirements, face significant barriers to modernization and smartenss in this respect. Many rely on manual heating controls and lack dynamic insulation or adaptive facades, making it difficult to improve their smart readiness without compromising historical integrity. Similarly, municipal and governmental buildings lag behind due to financial constraints and slower investments. While some progress has been made in adopting smart heating systems, their integration with other digital services, such as automated shading or real-time energy monitoring, remains limited.

Additionally, the development of dynamic building envelopes and electric vehicle charging infrastructure is still in its infancy. The lack of adaptable facades and shading systems restricts the potential for energy efficiency and climate responsiveness. The weakest domain—electric vehicle charging—has seen minimal integration across residential, public and commercial buildings, highlighting an opportunity for improvement. Charging facilities in austria are currently being realised





rather independently of buildings Encouraging investments in grid-responsive EV infrastructure could significantly improve SRI scores.

An analysis of the separated domain scores further underlines the uneven implementation of different smart technologies. The highest scores were observed in domestic hot water (31.29%) and lighting (27.56%), reflecting a widespread adoption of relatively advanced water heating systems and occupancy-based lighting controls, particularly in public and office buildings. Heating (25.52%) also demonstrated moderate progress, supported by ongoing modernization efforts and government incentives. However, lower scores in ventilation (16.60%) and monitoring & control (17.65%) indicate that these technologies, while present, are not yet fully optimized or widely deployed. The most significant deficiencies are found in dynamic building envelopes (7.05%) and cooling (7.13%), signaling a lack of investment in adaptive shading and climate-responsive cooling solutions. Electric vehicle charging infrastructure, at just 0.28%, is the weakest area.

Avg Domain Scores (%) Avg Domain Scores (%) Avg Domain Scores (%) Lighting Domestic hot water Cooling Ventilation Lighting Dynamic building envelope Electricity Electric vehicle charging Monitoring and control Electric vehicle charging Monitoring and control

Figure 34: Domain scores Austria

The impact scores reveal that Energy Efficiency (39.33%) is the strongest-performing category, indicating a high level of smart technology implementation aimed at reducing energy consumption. Comfort (32.43%) and Health, Well-being and Accessibility (28.85%) also score relatively high, reflecting the presence of automated systems that enhance indoor environmental quality. Information to occupants (26.53%) and Convenience (25.64%) suggest that while some user-oriented smart functionalities are available, they are not yet fully optimized. Maintenance and Fault Prediction (21.11%) has a moderate score, pointing to the use of basic monitoring systems but limited predictive analytics. The lowest score, Energy Flexibility and Storage (9.45%), highlights a critical gap in demand-side management and energy storage capabilities, suggesting that most buildings do not actively contribute to grid flexibility or integrate storage solutions.



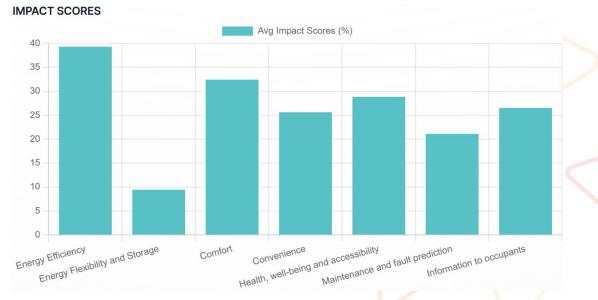


Figure 35: Impact scores Austria

The Key Functionalities Scores scores indicate that the highest smart readiness is in the building dimension (30.22%), reflecting a first solid implementation of automated systems in areas such as lighting, heating, and ventilation. The user dimension (28.36%) is also relatively strong, suggesting a certain level of control and interaction with smart technologies, though not yet fully optimized. The significantly lower grid dimension score (9.45%) reveals a lack of integration between buildings and the energy system, due to limited grid-interactive control, insufficient demand response capabilities, and inadequate infrastructure for electromobility.

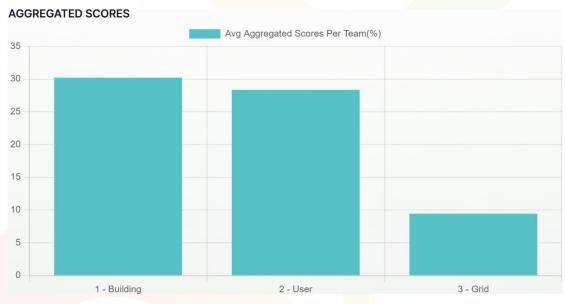


Figure 36: Key Functionalities Scores Austria

3.2.5. Croatia

REGEA, as a regional energy and climate agency, was actively involved in the decision-making process regarding the selection of buildings for assessment and the assignment of buildings to auditors. Given the extensive experience in energy renovation projects and continuous monitoring of energy consumption, REGEA played a key role in identifying suitable buildings based on their energy performance, technical characteristics, and renovation potential. This allowed s to prioritize buildings that would benefit most from the SRI assessment and ensure an efficient allocation of auditors.





Additionally, due to REGEA's long-standing involvement in energy renovation projects for their founding institutions and its role in monitoring energy consumption, it had privileged access to relevant documentation and on-site access to buildings. Its extensive database of building consumption parameters and technical conditions enabled us to prioritize buildings for renovation and smart readiness assessments more effectively.

Number of SRI assessments: 187

In Croatia, pilot SRI assessments have been conducted as part of the SRI-ENACT project and carried out by a total of 18 auditors - 6 in-house energy experts from REGEA and 12 external auditors, who were selected primarily from licensed energy certifiers and building designers and who successfully completed the SRI-ENACT training courses. A total of 187 buildings have been assessed, with 120 assessments conducted by external auditors.

Info about buildings:

The type of assessed buildings are shown below:

TYPE OF SRI ASSESSED BUILDINGS	
Non-residential - Educational	130
Non-residential - Office	8
Non-residential - Healthcare	30
Non-residential - Other	6
Residential - Small Multi Family House	-
Residential - Large Multi Family House	-
Residential - Single Family House	1
Residential - Other	12
TOTAL NUMBER OF ASSESSED BUILDINGS	187

Table 12: SRI assessed buildings in Croatia / Status by February 2025

The selection of building types was based on several key criteria:

- Ownership structure and accessibility: Public buildings, particularly schools, were more easily
 accessible for pilot assessments due to REGEA's ongoing collaboration with their founding
 institutions and management bodies. Additionally, as REGEA actively participates in energy
 renovation projects and energy monitoring for these institutions, relevant documentation and
 access to buildings were readily available.
- Energy consumption and optimization potential: Schools are among the more significant energy consumers within the public sector due to their continuous daily operation and heating/cooling demands. Conducting SRI assessments provides valuable insights into how digitalization and automation can enhance their energy performance. However, the results indicate that energy renovations alone do not ensure good smart readiness, emphasizing the need to integrate smart technologies into future renovation strategies.
- Demonstration effect: The application of the SRI methodology in schools serves as a useful reference for promoting smart readiness improvements in other public buildings. Given their structured operation and consistent occupancy patterns, schools provide an ideal testing ground for implementing smart energy management solutions that could later be replicated across the broader public sector.
- Regulatory and strategic framework: Through REGEA's involvement in designing renovation projects and developing guidelines for building design, it is strived to ensure that smart readiness is considered alongside traditional energy efficiency measures. Schools, as publicly owned and





systematically managed facilities, represent a suitable starting point for implementing these measures, provided that future renovation efforts go beyond conventional upgrades and actively incorporate smart readiness improvements.

Short reflection on results:

The overall results of the SRI assessments indicate a generally poor state of smart readiness in Croatian public buildings, particularly in the educational sector. The average SRI score across all assessed schools was 8.94 percent (Figure 37), highlighting the lack of automation, absence of key technical domains, and limited smart functionalities. This low level of smart readiness reflects the current condition of many schools, where building management systems are either outdated or completely absent.

Average SRI Score (%) 20,00 15,00 10,00 17,40 13,16 5,00 9.24 9,3 9,13 8.94 0,00 Non-residential -Non-residential -Non-residential - Non-residential -Residential -Residential - Other Educational Office Healthcare Other Single Family House

Figure 37: The average SRI score per functional type of building in Croatia

The distribution of SRI classifications presented in Figure 38 further emphasizes this issue:

- The vast majority of assessed buildings fall into the lowest SRI classes, with 174 buildings (over 90 percent) classified in SRI Class G.
- Only 14 buildings reached Class E an F, and none were classified in the higher categories (A, B, C, or D).

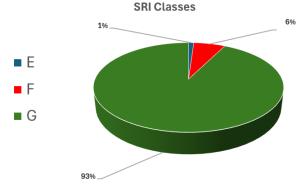


Figure 38: SRI Classes of assessed buildings in Croatia

To provide further insights into the smart readiness performance of assessed buildings in Croatia, the following section presents an analysis of domain scores, impact scores, and key functionalities scores. The analysis of SRI domain scores reveals significant insights into the strengths and weaknesses of assessed buildings in Croatia. These results highlight not only the overall smart readiness performance but also pinpoint specific technical areas where improvements are most needed. Understanding these results is crucial for guiding future renovation strategies.

The chart below illustrates the average domain scores (%) across the assessed buildings.



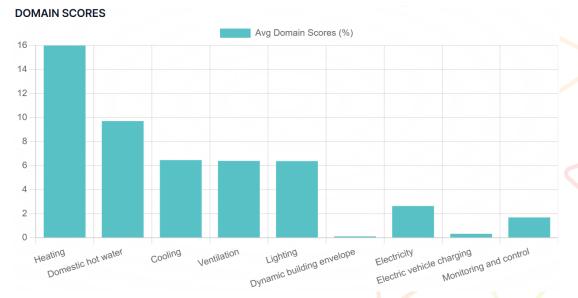


Figure 39: Domain scores Croatia

The results indicate that the best-performing domains are heating and domestic hot water, suggesting that some basic energy-related functionalities are at least partially optimized. Cooling, ventilation, and lighting received moderate scores, indicating some level of control in these areas, but with considerable room for improvement.

The lowest scores were recorded in the domains of dynamic building envelope, electric vehicle charging, and monitoring and control systems, confirming a general lack of advanced automation solutions and integration with the energy grid.



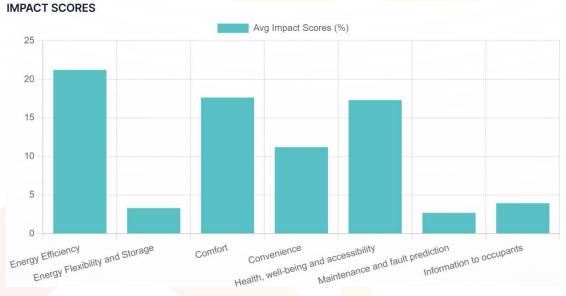


Figure 40: Impact scores Croatia

The highest impact was observed in the categories of energy efficiency and comfort, indicating that although technical domain scores were relatively low, some benefits in terms of rational energy use and basic occupant comfort are still present.

A reasonable impact score was also recorded in the categories of maintenance, accessibility, and convenience, suggesting that certain building systems contribute positively to the functionality and management of the buildings. Conversely, the lowest impact scores were observed in the categories



of information to occupants and maintenance and fault prediction, highlighting poor digital connectivity and limited data availability for building users and managers.

Figure 41 below presents the average **key functionalities scores** (%) across the three main SRI dimensions.

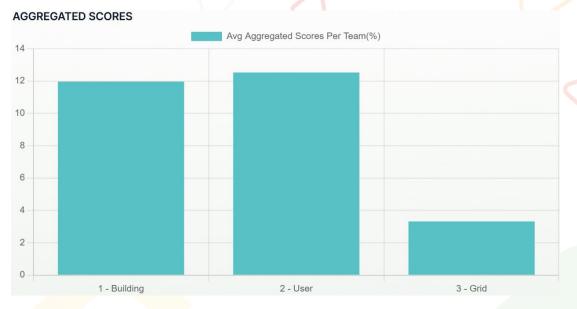


Figure 41: Key Functionalities Scores Croatia

The highest-rated dimension was the User, indicating that some building functionalities are designed to enhance user comfort and interaction, albeit with limited smart automation.

The Building dimension also achieved a relatively high score, likely due to the implementation of basic energy management solutions such as heating and ventilation systems.

The Grid dimension recorded the lowest score, clearly illustrating that buildings are poorly integrated with the energy grid. This demonstrates a significant lack of smart features such as demand response capabilities, energy storage integration, or flexible energy consumption.

Conclusion:

Such results confirm the urgent need for systematic improvements in the digitalization and automation of Croatian public buildings, particularly in the educational sector. Schools, as significant energy consumers within the public sector, are a good area for future smart upgrades and energy efficiency measures due to their consistent use and high number of occupants. However, the findings also highlight that energy renovations alone do not necessarily result in good smart readiness levels.

Many renovated buildings still lack adequate automation and smart functionalities, indicating that future renovation efforts should place greater emphasis on integrating smart technologies. The insights gained from this assessment provide a strong foundation for prioritizing future renovations and technological upgrades, ensuring that smart readiness becomes an integral part of energy planning and building modernization strategies.

The SRI evaluation of buildings in Croatia highlights both strengths and areas for improvement across different functional domains, impact categories, and key functionalities dimensions. While Croatian buildings demonstrate solid smart readiness in heating, user experience, and energy efficiency, there is a clear need for further advancements in energy flexibility, grid interaction, and predictive maintenance. Enhancing these aspects will contribute to greater sustainability, operational efficiency, and resilience in future smart building developments.



3.2.6. Latvia

Number of SRI assessments: 120

In Latvia, the smart readiness assessment of buildings began in July 2024, and 120 assessments were completed by the end of September 2024 (5 initial or test SRI assessments in the 1st cycle and 115 assessments in the core phase).

SRI assessments were carried out by 2 in-house experts of the Riga Planning Region (members of the SRI-ENACT team) and 12 selected professional building energy auditors who were trained according to the methodology and tools developed in the project. These professionals participated in the training workshops organized by the SRI-ENACT Riga team on 09.05.2023 and 23.07.2024.

All assessments were conducted from the perspective of assessing the level of automation of building engineering systems and their elements, as well as the ability to effectively manage the building's energy supply and climate control equipment.

The initial auditor training was implemented by the SRI-ENACT Riga team. The first 12 trained auditors were those who also performed the assessments in practice, surveying and assessing 120 buildings in the city of Riga. An umbrella contract was concluded with these specialists, supervised by the RPR, for the development of smart readiness assessments of 115 buildings. The first five benchmark assessments were carried out by representatives of the project team.

The aim of such an approach was to ensure that the involved external experts could transfer their newly acquired knowledge and skills to other energy auditors or interested parties in a professional manner without direct mediation by the project team. Such action ensures the exchange of project knowledge outside the project consortium.

Method A was used to complete the tasks for the five benchmark assessments. It includes 27 smart readiness assessment services, applied to existing residential buildings and small non-residential buildings; the method provides for a short assessment time and the possibility of self-assessment, and involves the participation of certified organizations. As part of the SRI assessment, a comprehensive inspection of key building systems was performed.

The scope of the assessment included:

- Inspection of the building's thermal substation and heating system distribution networks located in the attic and basement,
- Evaluation of the heating boiler, domestic hot water (DHW) system, and DHW boiler (where installed),
- Assessment of selected heating system radiators to determine their regulation potential,
- Inspection of mechanical ventilation or cooling systems (where present), including access to air handling units,
- Visits to selected working areas such as offices, classrooms, and other occupied spaces.

To ensure a smooth and efficient assessment process, access to all relevant technical spaces and systems was arranged in advance.

The selection of buildings for SRI assessments was done in direct cooperation with the only full-service energy agency in the Riga planning region, "Riga Energy Agency." This cooperation model was chosen to link SRI assessments as much as possible to those buildings in which real municipal investments will potentially be made in the following years. Thus, the practical contribution of SRI assessments is promoted.



Information about buildings:

Most of the SRI assessments were conducted in buildings used for public functions, including schools (51 buildings), preschool education institutions (35), nursing/elderly homes (14), and municipal administration buildings (16).

Other assessed buildings included educational institutions and facilities serving various public purposes, such as municipal department offices, police stations, and senior or youth centres.

The different types of assessed buildings are summarized in the table below.

TYPE OF SRI ASSESSED BUILDINGS					
Non-residential - Educational	86				
Non-residential - Office	8				
Non-residential - Healthcare	1				
Non-residential - Other	21				
Residential - Small Multi Family House	-				
Residential - Large Multi Family House	1				
Residential - Single Family House	-				
Residential - Other	3				
TOTAL NUMBER OF ASSESSED BUILDINGS	120				

Table 13: SRI assessed buildings in Latvia / Status by February 2025

Short reflection on results:

Comparing the number of SRI scores for different types of buildings (*Figure 42*), it can be concluded that the differences are not significant - the SRI score ranges from 17.26 (non-residential office buildings) to 25.80 (residential – large multifamily houses).

The difference between the mean and average SRI scores is also small - 18.8 and 18.1. These results allow to state that the majority of public (non-commercial) buildings in Riga have a similar, unfortunately low, level of smart readiness.





Figure 42: The average SRI score per functional type of building in Latvia

The summary of assessments does not indicate a high readiness of the surveyed buildings for the implementation of smart solutions. Most of the assessed buildings (66%) belong to SRI class G *Figure 43*). Out of the 120 assessed buildings, only one showed a result that allows this building to be classified as SRI E class.



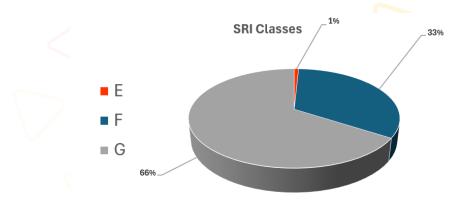


Figure 43: SRI Classes of assessed buildings in Latvia

For the assessments, buildings that perform functions of importance to the common good of society, such as educational institutions, police institutions, and other municipal enterprises, were deliberately selected. In order to obtain the most accurate picture of the current situation, buildings of different ages were selected, including those built several decades ago.

The results (a large number of buildings with a low score) obtained indicate the need for systematic improvements in the smart readiness of public buildings in Latvia and Riga. The level of digitalization of many public buildings and automation of equipment in buildings is still low. Unfortunately, this also applies to buildings built or renovated after the 1990s. Therefore, the improvements made in the energy efficiency of buildings in recent years do not always mean that the readiness of buildings for smart solutions is also significantly increased.

Many renovated buildings still lack appropriate automation and smart solution functions. This means that greater emphasis should be placed on the integration of smart technologies in future renovation efforts. The lessons learned from this assessment provide a strong foundation for prioritizing future renovations and technological improvements, ensuring that smart readiness becomes an integral part of energy planning and building modernization strategies.

Based on the application of Method A and the developed SRI-ENACT assessment tool, it should be noted that the auditors' evaluation may vary and contain a degree of subjectivity, as it is influenced by individual interpretation and judgment during the site visit.

Specifically, in relation to system control, there are situations where multiple ventilation systems serve different zones of a building. For example, one ventilation unit may serve the sports hall, while another serves a large auditorium used for events. Each of these systems may have a different level of control functionality, which makes it challenging to assess and characterize the building's overall ventilation system performance. Overall, the auditors were satisfied with the functionality and usability of the SRI assessment tool.

It should be noted that the on-site inspection and review of building systems required more time than initially anticipated. Although the assessment process does not involve any physical measurements, it still requires a site visit, during which all relevant systems must be inspected and documented through photographs. Depending on the complexity of the building, a single site visit (excluding travel time) can take between one to three hours. In addition, time must be allocated for travel to the site and for completing the evaluation using the SRI-ENACT tool.

In the assessments conducted, the overall SRI scores of the evaluated buildings were relatively low. The primary focus of the assessments was on the regulation potential of the heating systems and mechanical ventilation systems where applicable.

To ensure a meaningful and efficient assessment - especially when it must be completed within a limited timeframe - it is essential that a building facility manager be present during the SRI assessment





to provide access to all relevant technical systems and explain the management of the technical systems.

For broader application of the SRI-ENACT tool and improved usability across a wider audience, it is recommended to consider integrating standard solution templates or predefined upgrade scenarios within the tool. This would help building operators identify practical and effective measures to improve their building's smart readiness level.

Domain scores

The results in Latvia show that some basic energy-related functions have improved at least slightly, with domestic hot water and heating being the best-performing categories. Ventilation, electricity, and lighting were given average scores, indicating some degree of control in these areas but significant potential for improvement.

The lowest scores were received in the categories of electric vehicle charging, dynamic building envelope, and monitoring and control systems, indicating a general lack of sophisticated automation solutions and network integration.

The average domain scores (percentage) for each building assessed are shown in the chart below.

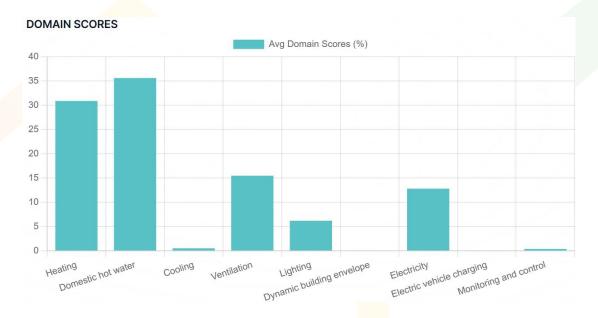


Figure 44: Domain scores Latvia

Impact scores

The areas of energy efficiency, information to residents, and comfort had the greatest impact, suggesting that despite the relatively low technical domain ratings, there are still some advantages in terms of sensible energy use and basic occupant comfort.

The maintenance, accessibility, and convenience categories also showed a respectable impact score, indicating that specific building systems have a beneficial effect on the structures' management and operation. On the other hand, the energy flexibility and storage categories showed the lowest impact values.

The average impact scores (percentage) for each performance aspect are displayed in Figure 45.





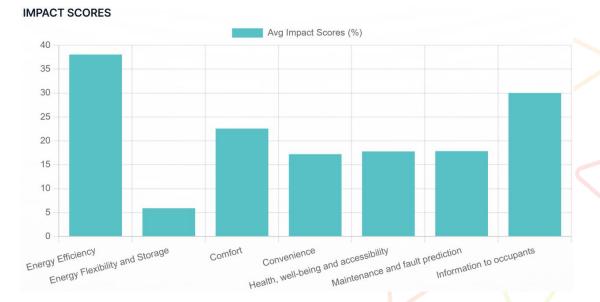


Figure 45: Impact scores Latvia

Key Functionalities scores

The category "Building" received the highest rating, most likely as a result of the installation of fundamental energy-management features, including heating and domestic water supply systems.

The "User" also received a comparatively good grade, suggesting that certain building features are intended to improve user comfort and interaction despite the low level of intelligent automation.

The buildings' weak energy grid integration is evident from the "Grid" dimension, which received the lowest score. This indicates a notable deficiency in intelligent features, including variable energy use, energy storage integration, and demand response capabilities.



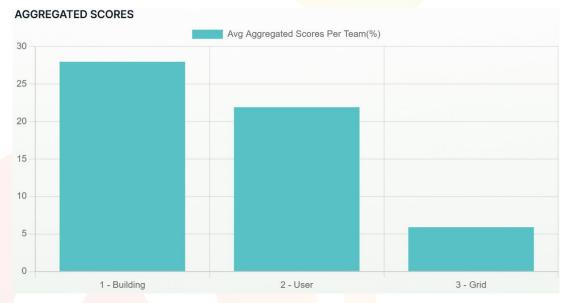


Figure 46: Key Functionalities scores Latvia

Conclusion:

The SRI assessments conducted in Latvia across multiple buildings revealed consistent patterns across the evaluated technical domains, impact criteria, and key functionalities. The average SRI scores per technical domain show that Energy Efficiency and comfort functionalities scored highest overall,





indicating that most buildings possess relatively well-developed systems for optimizing energy use and ensuring occupant comfort. In contrast, Maintenance & Fault Prediction and Energy Flexibility domains scored the lowest, suggesting that these areas present the greatest potential for improvement.

In terms of impact criteria, buildings performed strongest in Energy Savings on Site, followed by Comfort and Convenience, while Flexibility for Future Requirements and Information to Occupants scored lower highlighting a need to strengthen adaptability and user engagement.

When broken down by key functionalities, those related to heating, cooling, and domestic hot water systems generally performed better than those related to dynamic energy management and integration of renewables, again pointing to maturity in conventional building systems but limited advancement in smart grid interaction and digital controls.

These results align with initial expectations given the building stock and technology baseline in Latvia, and they provide a clear direction for future interventions, especially in enhancing predictive maintenance capabilities, user information systems, and energy flexibility functionalities.

Overall, the findings support Latvia's pressing need for methodical advancements in the automation and digitization of public facilities. However, the results also demonstrate that high levels of smart readiness cannot be guaranteed by energy efficiency improvements alone.

New construction and renovation projects should focus more on incorporating smart technologies because many refurbished buildings still lack sufficient automation and smart features. The evaluation's conclusions offer a solid basis for setting priorities for upcoming repairs and technology advancements, guaranteeing that smart readiness is incorporated into energy planning and building modernization plans.

Across a variety of functional domains, impact categories, and important functionality factors, the SRI assessment of Latvian buildings identifies both areas of strength and room for development. Further developments in energy flexibility, grid interface, and predictive maintenance are obviously needed, even though Latvian buildings show a sufficient level of smart readiness in terms of heating, user experience, and energy efficiency. Improving these elements will help future smart building innovations be more resilient, sustainable, and operationally efficient.

3.2.7. Bulgaria

In Bulgaria, BSERC was involved in the selection of buildings, aiming to ensure good representation of different types of buildings. Each auditor nominated a number of buildings, and the final list was agreed with BSERC. One of the main requirements for the nominated buildings was the availability of EPB certificate and ESM listed in the corresponding EE buildings' audits prior to the SRI assessment.

Number of SRI assessments: 135

In Bulgaria, the pilot SRI assessments were carried out by 13 SRI assessors who have previously successfully completed the SRI-ENACT training course and obtained a certificate. The SRI assessors are licensed EPB auditors with substantial auditing experience.

The national SRI-ENACT target for 130 assessed buildings was exceeded. In the first assessment cycle when trainings and tools were developed, 4 SRI assessments were caried out by 3 in-house (BSERC) SRI auditors. During the second assessment cycle a total of 131 buliding SRI assessments were completed by both the internal and external SRI auditors.

All assessment results were verified by BSERC's SRI-ENACT team and, if needed, updated by the assessors based on the feedback.



Info about buildings:

The type of assessed buildings are shown below.

TYPE OF SRI ASSESSED BUILDINGS					
Non-residential - Educational	30				
Non-residential - Office	33				
Non-residential - Healthcare	9				
Non-residential - Other	39				
Residential - Small Multi Family House	1				
Residential - Large Multi Family House	9				
Residential - Single Family House	-				
Residential - Other	14				
TOTAL NUMBER OF ASSESSED BUILDINGS	135				

Table 14: SRI assessed buildings in Bulgaria / Status by February 2025

The selection of building types was based on several key criteria:

- It was aimed to select as diverse building types as possible, so that the assessments provide a representative picture for the whole building stock in Bulgaria.
- Considering the expected SRI obligation for non-residential buildings with large energy consumption (in EPBD), these buildings were prioritized.
- The requirement for EPB certificate and detailed audit reports ensured that the data necessary for SRI assessment is available and no additional data collection efforts are needed.

Short reflection on results:

The overall results of the SRI assessments indicate high SRI score - the average score was 35.3%. The distribution of SRI score across building types (*Figure 47*) provides a more detailed picture:

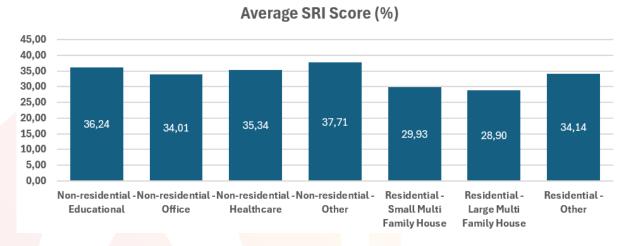


Figure 47: The average SRI score per functional type of building in Bulgaria

Additionally, *Figure 48* below demonstrates a diverse SRI classes across buildings, the main ones being E (30%) and F (42%):



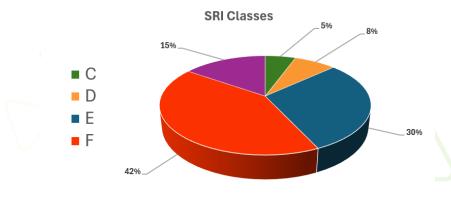


Figure 48: SRI Classes of assessed buildings in Bulgaria

One reason for the relatively high SRI scores is that all buildings have energy performance class A or B and available EPB audits and the prescribed EE measures were considered in the SRI assessments. The high average SRI level is largely attributable to the utilisation of renewable energy sources and their high level of control and monitoring in the buildings sector. In Bulgaria, due to the availability of incentives, EPB auditors often prescribe measures such as PV systems with inverters that transmit control and monitoring signals from the grid, electric vehicle charging stations, high-efficiency heat pump systems for heating, cooling, ventilation and hot water, and, in some cases, the integration of existing building technical systems' monitoring and control into a single building automation and control system (BACS)/building management system (BMS), etc.

The experience with SRI assessments indicates that:

- The absence of specific legal and regulatory requirements and incentives for the application of intelligent technologies for management of technical building systems (TBS) in new and renovated buildings constitutes a substantial impediment to their adoption.
- The Building Management System (BMS/BACS) is not yet a mandatory component of the measures prescribed in the energy efficiency audits, nor is it a standard feature of investment projects for new and renovated buildings.
- Technical building systems (TBS), such as electric vehicle (EV) chargers, dynamic building envelope and building automatic control systems, which operate with signals from external or local power grids, are also not legally binding parts of TBS and are therefore absent in the majority of buildings
- In light of the interdisciplinary nature of the concept of a 'smart' building, it is evident that the detailed catalogue of 54 intelligent control technologies for TBS management, the wireless data transfer, and the remote TBS control should be the subject of specific training for professional EPB auditors, MEP design engineers, facility managers, building owners, and all other users of the SRI-ENACT toolkit.
- The online SRI-ENACT Toolkit has been met with considerable acceptance by SRI auditors and other users.
- It is not always the case that a building with high energy efficiency class (nZEB, A) will have a
 high SRI. This is, because the TBS are not always built-up or set-up for intelligent, coordinated
 and integral operation, and because the methodology for SRI introduces criteria as building's
 users feedback, TBS dinamic interaction with building envelope and the power grids, etc.

The following section presents a short analysis of scores achieved in technical Domains, Impacts, and Key functionalities.

The analysis of SRI on Domain scores indicates the strengths and weaknesses of assessed buildings. The results highlight specific building technical systems where potential for improvements are most suitable. The presented results could be used for future SRI improvement and quality increase of intended energy efficiency measures and intelligent operation of new and renovated buildings.





The chart below illustrates the averaged technical Domain scores (%) across 135 different buildings in Bulgaria.

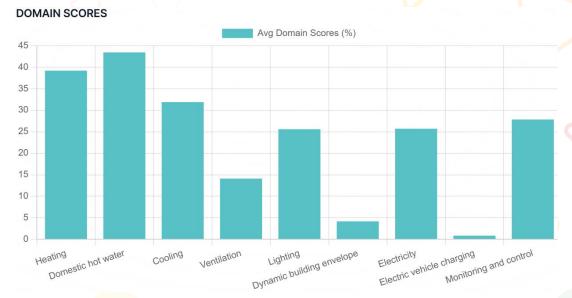


Figure 49: Domain scores Bulgaria

The results indicate that the best-performing domains are Heating, domestic Hot Water, and Cooling suggesting that these building technical systems have higher level of efficiency, dynamic control and monitoring due mostly to the large application of heat pumps and renewable energy.

Lighting, Electricity from RES, and Monitoring and control received moderate scores, indicating "standard" level of control and monitoring in these building systems, but with considerable room for improvement. The lowest scores were recorded in the domains of Ventilation Dynamic Building Envelope, and Electric Vehicle charging, confirming a general lack of advanced automation solutions, regulatory supporting measures, and necessity for integration with the BMS and energy grid.

Figure 50 shows the averaged impact scores (%) across seven performance criteria.

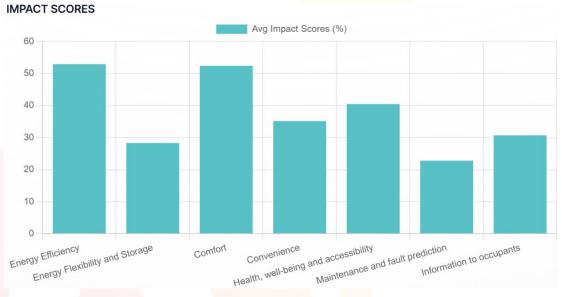
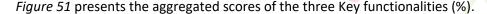


Figure 50: Impact scores Bulgaria

The highest impact was observed in the categories of Energy Efficiency, Comfort, and Health and well-being confirming the positive influence of the applied more sofisticated technical domains as Heating, Hot Water and Cooling in terms of flexible energy use and user's comfort.



A reasonable impact score was recorded in the categories of Convenience, Information to occupants, and Energy flexibility and Storage suggesting that the above-mentioned building systems contribute to good level of functionality of the buildings. The lowest impact scores were observed in the criterion of Maintenance and Fault prediction, highlighting poor digital connectivity and limited data availability for building users and maintenance staff.



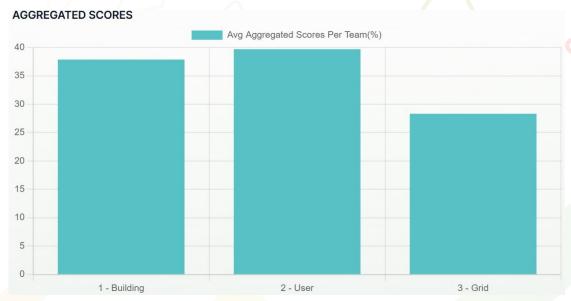


Figure 51: Key Functionalities scores Bulgaria

The highest-rated dimension was the User, indicating that some building functionalities are designed to enhance user comfort and interaction, despite the limited smart control and feedback of the building technical domains.

The Building key functionality also achieved a relatively high score, likely due to the implementation of higher energy control solutions in Heating, Hot Water, and Cooling systems.

The Grid dimension recorded the lowest score, clearly illustrating that buildings are poorly integrated with the energy grid.

This demonstrates a significant lack of BACS/BMS, smart features such as dynamic energy grid interaction, demand response capabilities, energy storage control and monitoring, flexible energy supply.

3.2.8. Romania

The initial phase of the second engagement cycle involved training of external auditors, which took place online at the end of July 2024. Over 100 experts registered for the event, with 68 attending the seminar. Upon completing the training, all participants received an SRI-ENACT certificate of participation.

Number of SRI assessments: 111

Among the trained external experts who expressed interest in conducting building assessments using the SRI toolkit, 10 participants were selected based on their responses to the questionnaire that they were requested to fill-in after the training. These individuals, primarily energy auditors for buildings, were invited to submit a portfolio of buildings chosen based on specific criteria, providing detailed descriptions including size, type, year of construction and geographic location.

The final selection of buildings has been established after a thorough review of the proposed buildings by considering the specified criteria. Contracts were subsequently signed with the selected assessors to officially confirm their participation in the project.





In Romania, the SRI assessments were conducted by 10 external auditors and one internal auditor, collectively assessing a total of 111 buildings.

Info about buildings:

The type of assessed buildings are shown below:

TYPE OF SRI ASSESSED BUILDINGS						
Non-residential - Educational	16					
Non-residential - Office	18					
Non-residential - Healthcare	13					
Non-residential - Other	31					
Residential - Small Multi Family House	-					
Residential - Large Multi Family House						
Residential - Single Family House	-					
Residential - Other	20					
TOTAL NUMBER OF ASSESSED BUILDINGS	111					

Table 15: SRI assessed buildings in Romania / Status by February 2025

The table shows that a well-balanced mix of buildings has been selected, with non-residential other buildings representing the largest share at 28% of the total, followed by residential – other (18%) and non-residential office buildings (16%), educational buildings (14%), and non-residential healthcare buildings and residential large multifamily houses, each accounting for 12%.

During the building selection process, efforts were made to achieve a balanced distribution of building types and an even representation of different construction periods. It was mandatory for all selected buildings to have an energy certificate.

Additionally, the buildings chosen for the pilot phase were required to have heating, cooling and lighting systems, these technologies being considered the minimum necessary requirements for a building to qualify for the SRI assessment program. The reality showed that not many buildings had centralized cooling systems; therefore, buildings without such systems were also selected for assessment.

On the other hand, the building selection was done with consideration for covering most of Romania's five climate zones (*Figure 52*), which were defined based on the winter conventional temperatures used to calculate heating demand, as specified in Ministerial Order 386/2016 issued by the Ministry for Regional Development and Public Administration:

- Zone I (-12°C) covers the most south-eastern part of Romania close to Black Sea and the western part
- Zone II (-15°C) covers the southern part of the country and some parts on the western side
- Zone III (-18°C) covers central part up to the north and the eastern part
- Zone IV (-21°C) covers most part of the north area and goes along the Carpathians
- Zone V (-24°C) covers the central part of Oriental Carpathians.





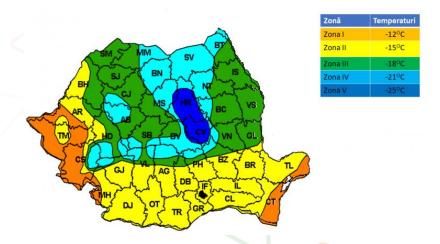


Figure 52: Climate zones of Romania (Source: MDRAP 2016)

Short reflection on results:

The analysis of the assessed buildings shows that more than half of them (about 63%) are located in climate zone II, 18% are from zone III, 11% from zone I and 8% from zone IV (Figure 53).

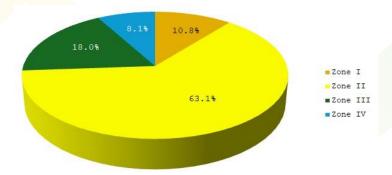


Figure 53: Coverage of Romanian climate zones

The obtained results reveal the correlation between climatic zones and smart readiness performance. Buildings in the milder climate of zone I received the lowest SRI scores (class F and G), indicating limited smart readiness. Zone II, which includes the largest portion of the assessed buildings, displayed a broader range of SRI classes (C to G), suggesting a mix of building performance levels.

This reflects differences in renovation rates or investment in smart technologies - some buildings have adopted smart solutions, while others remained less equipped. In zones III and IV, where winter temperatures are more severe, buildings primarily scored in lower SRI classes (D to G), indicating challenges in smart readiness. Here the existing building stock is older and has not been upgraded with smart features.

The results indicate that climatic conditions may influence the adoption of smart-ready solutions, with harsher climates potentially requiring more targeted interventions to improve building performance.

The SRI analysis across different building types (Figure 54) reveals significant variations in smart readiness.



Average SRI Score (%)

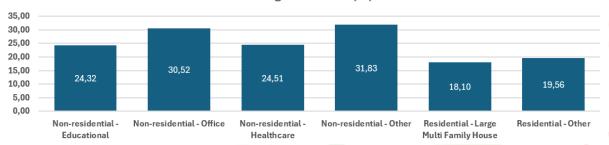


Figure 54: The average SRI score per functional type of building in Romania

The average SRI score across all assessed buildings was 25.88%.

Non-residential other (commercial) buildings achieved the highest average SRI score (31.83%), which means that these buildings are more likely to integrate smart technologies, possibly due to operational cost optimization and occupant comfort improvements.

Similarly, non-residential office buildings (30.52%) also performed relatively well, reflecting targeted smart upgrades in certain facilities. The assessed office buildings are relatively new benefiting from modern smart technologies, and certain features - such as EV charging - are mandatory for new constructions in Romania, further contributing to their higher smart readiness.

Non-residential educational and healthcare buildings also scored nearly the overall average, which can be attributed to a growing emphasis on automation for energy management, security and user experience enhancement in these sectors.

In contrast, residential buildings scored lower, indicating limited smart-readiness adoption. This is generally due to budget constraints, regulatory factors, or the slower integration of smart solutions in these sectors.

The lowest scores were observed in cultural buildings, where smart-readiness adoption is less of a priority due to conservation considerations or lower investment in modernization.

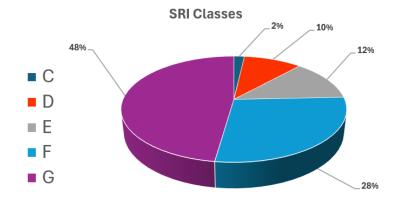


Figure 55: SRI Classes of assessed buildings in Romania

The SRI classes analyses (Figure 55) indicate that the majority of the assessed buildings fall into the lowest smart readiness classes, with 48% in class G and 28% in class F, meaning that over three-quarters (76%) of the buildings have minimal smart capabilities. Only 12% reached class E, while 10% achieved class D, and just 2% attained class C, reflecting a limited adoption of smart technologies across the analysed building sample. These findings highlight the need for targeted interventions, policies and incentives to improve building intelligence and efficiency, particularly in lower-performing segments.





DOMAIN SCORES

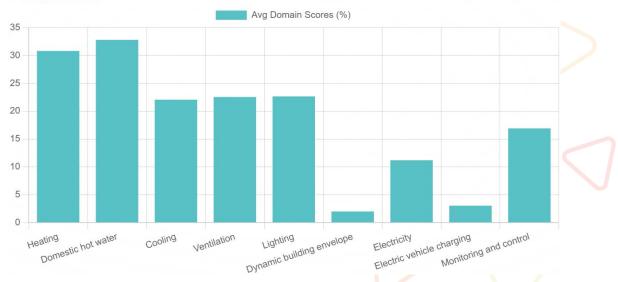


Figure 56: Domain scores for SRI assessments in Romania

The average domain scores presented in *Figure 56* show the following:

- With average scores of 33% and 31%, the domains of Domestic Hot Water (DHW) and Heating lead the way, meaning that most of the assessed buildings have reasonably smart or automated heating systems in place (e.g., advanced thermostats, zone controls or scheduling features) or well-optimized domestic hot water systems with effective technologies like smart water heaters or intelligent scheduling. The higher scores in DHW and Heating reflect that traditional systems are receiving more attention in terms of smart upgrades, these being key focus areas for energy efficiency and occupant comfort.
- With a 22% score, cooling systems appear to be less advanced compared to DHW and heating.
 This indicates a reliance on traditional cooling technologies without much automation or energy optimization.
- Ventilation (22.5%) and Lighting (22.6%) domains are in a similar mid-range band. The scores show that while some automation exists (such as occupancy sensors or daylight-linked dimming for lighting and basic sensor-controlled ventilation), there is significant room for more integrated and intelligent solutions.
- At a score of 17%, the Monitoring and Control domain shows that individual systems have some smart features, but the overall integration in central management systems and datadriven control of building operations need improvement.
- Electricity reached only a score of 11% which points to the fact that, beyond basic metering, few buildings have implemented advanced energy management systems. This limits the potential for optimizing electricity use, especially in response to dynamic pricing or demand response.
- The very low score obtained by the Electric Vehicle Charging (3%) shows minimal integration of EV charging infrastructure. As electric vehicles have become mandatory in Romania for new buildings or buildings undergoing major renovations, this score is likely to rise in the future.
- The Dynamic Building Envelope domain shows the lowest average score (2%) indicating that smart technologies for dynamic control of building envelopes (like automated shading systems, smart windows, or adaptive facades) are rarely implemented.

The analysis of the average impact scores of the assessed buildings (Figure 57) highlights both strengths and critical gaps in their smart readiness.





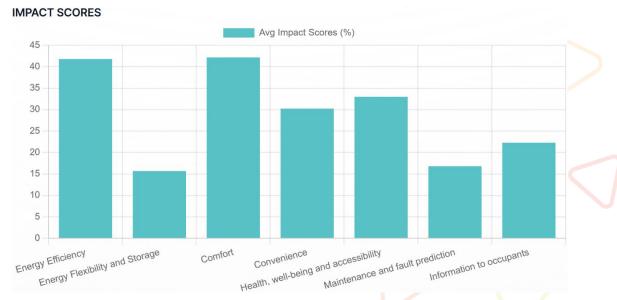


Figure 57: Impact scores for SRI assessments in Romania

The impact criteria of Comfort and Energy Efficiency achieved the highest scores (42.2%, respectively 41.8%), indicating that some smart technologies are in place to optimize indoor conditions and reduce energy consumption. However, these scores remain moderate, as many buildings still rely on conventional systems with limited automation.

In contrast, Energy Flexibility and Storage (15.7%) and Maintenance and Fault Prediction (16.8%) recorded the lowest scores, pointing to a major gap in advanced energy management systems, demand-response capabilities and predictive maintenance tools.

Convenience (30.2%), Health, Well-being, and Accessibility (33%), and Information to Occupants (22.3%) scored moderately but remain far from optimal. This implies that some smart features enhance user experience and occupant awareness, but there is a clear opportunity to improve interactive and automated systems that provide real-time information and personalized user control.

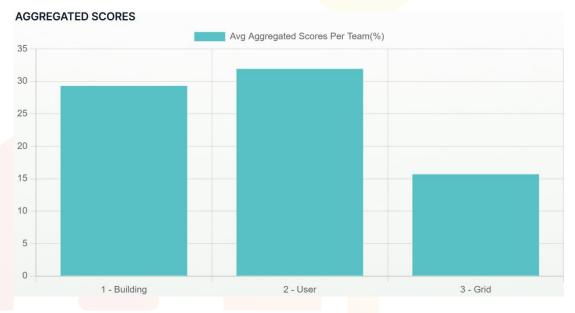


Figure 58: Key Functionalities Scores Romania

The key functionalities scores (Figure 58) are represented for the three key smart functionalities in the assessed buildings. Thus, "user needs" achieved the highest score (about 32%), suggesting that some technologies are in place to enhance occupant experience, convenience, and accessibility.





"Maintenance and efficiency of the building" scored slightly lower (29.3%), pointing to a moderate level of smart features aimed at optimizing building performance. "Adaptation to signals from the grid" scored the lowest (15.7%), highlighting a significant weakness in the ability of buildings to interact dynamically with the power grid.

Final remarks:

The analysed buildings present a low overall smart readiness performance. The majority of buildings fall into the lowest SRI classes, with 76% classified as F or G and no buildings achieving class A or B. The findings suggest that while some progress has been made, particularly in energy efficiency and comfort, most buildings lack advanced smart capabilities that would enable greater energy flexibility, automation and grid interaction.

The SRI assessment of the Romanian building lot highlights significant gaps in smart technology adoption across various building types. Certain building types such as those from commercial, office and hospitality sectors demonstrate higher smart-readiness scores, likely due to modern construction standards, while public and residential buildings show significantly lower adoption of smart technologies, possibly due to budget constraints, lack of policy incentives or older infrastructure and require more targeted strategies and incentives to enhance their SRI performance.

During the work on SRI assessments, it was observed that a building with a high energy efficiency rating (class A, for example) does not necessarily achieve a high SRI score. The explanation is that technical building systems are not always designed or configured for smart functionality. Additionally, the SRI assessment considers not only the building's energy performance but also its capacity to meet user needs and interact efficiently with the power grid.

Given the low smart-readiness scores, targeted strategies and incentives are necessary to enhance SRI performance across all building types. Policy measures could include financial support for smart-building upgrades, stricter regulatory requirements for new constructions and awareness campaigns to promote the benefits of smart technologies.



4. Monitoring and evaluating the success of SRI-ENACT

The effectiveness of the SRI-ENACT training was assessed by analysing the responses of 96 participants who offered feedback based on a specific questionnaire (see Annex 9). The responses provide insights into participant satisfaction, relevance, interactivity and areas for improvement.

The evaluation of the SRI-ENACT methodology/toolkit applicability was made based on a feedback form (see Annex 10) by collected responses from 94 respondents regarding the effectiveness and usability of the SRI-ENACT Toolkit, including both the Assessment Tool and the Decision Support Tool. The responses offered a view into the tools' user-friendliness, functionality, comprehensiveness and perceived business value.

4.1. Feedback on the SRI-ENACT training

The survey gathered responses from 96 professionals across all eight partner pilot countries: Austria, Bulgaria, Croatia, Czech Republic, Greece, Latvia, Romania, and Spain. The participants held various positions such as consultants, energy auditors for buildings and energy specialists.

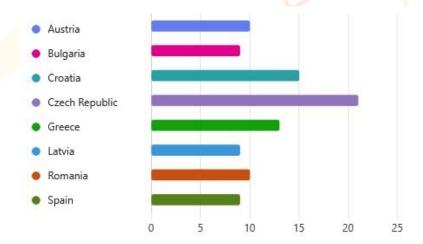


Figure 59: Survey participants (number)

Overall, 94% of respondents were either very satisfied (56%) or somewhat satisfied (38%) with the structure of the training package (*Figure 60*).

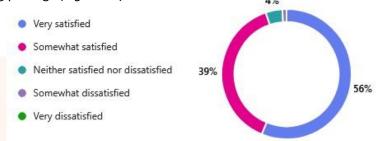


Figure 60: Degree of satisfaction with the training package structure

When asked about the clarity and effectiveness of the training materials provided (e.g., informative documents, presentations, handouts, practical applications), 94% rated the training materials as excellent or good, with no ratings of poor or very poor. 95% found the topics highly or somewhat relevant, with no negative ratings. No respondents indicated that any important topics were missing.

Most participants (93%) perceived the training as engaging and interactive, with 43% rating it as very engaging. In terms of depth of coverage of the SRI concept and methodology the expectations of all respondents have been met with 20% stating that it exceeded expectations.





When rating the effectiveness of the trainers in delivering the content and facilitating discussions, 96% rated the trainers as excellent or good. All respondents found the exercises helpful in reinforcing their understanding of the SRI toolkit, with 68% stating that they were very helpful.

Among the most valuable aspects of the training, 45 respondents highlighted the opportunity to deepen their understanding of the SRI methodology and its role in enhancing building smartness. They particularly appreciated the hands-on experience of conducting practical assessments using the SRI Assessment Tool. Others found the most valuable aspect to be the optimization process, learning how to elevate the SRI indicator to a higher class using the Decision Support Tool, which enables the evaluation of different improvement scenarios.

Regarding aspects of the training found unclear, 7% of respondents indicated that grasping all 54 technical services posed a challenge.

In terms of likelihood to recommend the training course to colleagues or peers, 89% were likely or very likely to recommend the training, while the rest remained neutral.

30 respondents also provided several suggestions for enhancing future editions of the SRI-ENACT training. They recommended additional focus on practical tips, clearer explanations of technical services and more case studies on both residential and non-residential buildings. Participants proposed a complete start-to-finish example to clarify the assessment process. Interactive materials, such as videos or quizzes, were suggested for better engagement of participants. Lastly, a virtual tour of a smart building or a training video demonstrating an SRI assessment was proposed to provide real-world context.

Overall, 92% were either extremely or very satisfied with the training course, with no respondents expressing dissatisfaction *Figure 61*.

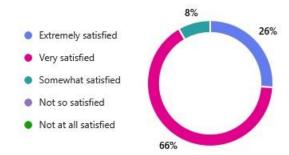


Figure 61: Degree of satisfaction with the training course

4.2. Feedback on the SRI-ENACT toolkit

After completing the pilot SRI assessments, the assessors were invited to share their experience with the toolkit by responding to a questionnaire. A total of 94 professionals from all eight partner pilot countries took part in the survey.

Both Assessment Tool and Decision Support Tool were evaluated by respondents from three perspectives: usability, social acceptance and business value.

When evaluating the usability of the SRI-ENACT Assessment Tool (AT):

- 67% of respondents found the tool easy or very easy to use, while 31% rated it as neutral;
- A majority of 68% rated as user-friendly the navigation on the tool, with only 11% finding it somewhat difficult;
- 67% reported facing few or no difficulties in using the tool, while 19% experienced some navigation challenges or found features less intuitive, suggesting a need for refinements in the interface and instructions;





- Regarding the speed to complete the tasks on the SRI-ENACT Assessment Tool, 60% completed tasks quickly or very quickly, with 37% rating it as moderate;
- 62% found the tool's features and functionalities very or extremely understandable, while 10% found it somewhat or not at all understandable;
- To the question if the tool covers all relevant aspects of building systems for a comprehensive SRI assessment 95% gave a positive answer. Respondents who provided negative feedback cited difficulties in describing complex building systems within the tool. Some also suggested allowing Method A assessments to simplify evaluations for smaller buildings like single-family homes by limiting the technical services.
- Respondents suggested several improvements to the metrics and fields in the assessment tool. They recommended adding explanatory links or examples for complex functions and refining the percentage-based approach, which may not always accurately reflect a functionality's impact or relevance. Some fields, particularly those related to building creation, were seen as redundant and that could be merged for better usability. Terms like "Building description," "Building characteristics," and "Floor" were unclear and would need clarification on what type of information is expected. Respondents suggested also including more questions related to Lighting to ensure a more comprehensive evaluation of this domain. Additionally, they proposed automatically eliminating unnecessary fields and providing in-app descriptions to reduce reliance on external documents.

In terms of likelihood to recommending it to others the AT received an average recommendation score of 8.07/10.



Figure 62: Recommendation score for Assessment Tool

The tool's business value was rated 3.85/5.

The same questions were used for the evaluation of the **SRI-ENACT Decision Support Tool (DST)** usability:

- 64% found it easy or very easy to use, while 36% rated it neutral;
- The tool navigation was found extremely and/or very remained neutral;
- an equal 63% of respondents faced few or no difficulties in using the DST;
- 64% were able to complete tasks quickly or very quickly in DST and 35% completed them at moderate pace;
- 64% found the tool very or extremely understandable and only 14% found it somewhat understandable;
- 96% appreciated that all relevant aspects of building systems are covered by the tool for a comprehensive SRI assessment;
- Finally, respondents highlighted several areas for improvement in the DST. They noted that selected scenarios position shifts depending on the ranking metric applied (i.e., total cost, SRI





gain, cost-effectiveness), making it difficult to track preferred scenarios. They suggested that the selected scenario should remain highlighted for easy identification. Additionally, cost calculations were considered unclear by some, particularly whether costs were per measure or per equipment and how they relate to the total cost.

In terms of likelihood to recommending it to others the DST received an average recommendation score of - 7.72/10.



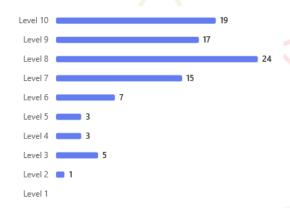


Figure 63: Recommendation score for Decision Support Tool

The business value was rated 3.78/5.

4.3. Evaluation of the test phase outcomes

Four main Key Performance Indicators (KPIs) are used to quantify the impact of the SRI assessments in SRI-ENACT:

- Final Energy Savings, in GWh/year (estimated),
- Primary Energy Savings, in GWh/year (estimated),
- Amount of cumulative investments in sustainable energy, in Euro (estimated),
- Reduction of greenhouse gas emissions, in tons of CO2 equivalent per year (estimated).

For calculating the energy savings (in kWh/year) and the total investment costs (in €) for the SRI building upgrades the following method has been used for each building involved in the pilot assessments.

Firstly, the necessary inputs have been extracted from the SRI-ENACT toolkit (i.e., SRI Assessment Tool & Decision-Making Tool). In particular, the SRI target score (set by the user) and the initial score of the Energy Efficiency impact criterion from the SRI-ENACT Assessment Tool were retrieved.

Also the ranking metric applied (i.e., cost-effectiveness, SRI gain, total cost), the new score met within the Energy Efficiency front after the upgrade and the total investment cost of the implemented scenario were retrieved from the SRI-ENACT Decision Support Tool. Furthermore, an input value that represents the percentage of the energy efficiency that corresponds to the building energy savings was set. To specify, if the value is set to 50%, this means that 50% of the energy efficiency gain (after the upgrade scenario is implemented) corresponds to actual energy savings. Finally, a value related to the average annual building consumption in kWh/year, for the location under examination, was drawn from each country's national official sources.

Given the above-mentioned inputs, the gain of the Energy Efficiency impact criterion was initially computed as the subtraction of the initial value from the new one:



$$EE_{gain} = EE_{new} - EE_{initial} \tag{1}$$

where:

- *EE_{new}* stands for the new score of the Energy Efficiency impact criterion after the implementation of the upgrade scenario, as calculated from the Decision Support Tool,
- *EE*_{initial} stands for the initial score of the Energy Efficiency impact criterion, as calculated from the SRI Assessment Tool.

The energy efficiency gain was then multiplied by its correlation to the energy savings and the final percentage of energy savings was produced:

$$ES_{\%} = EE_{gain} \cdot ES_{cor} \tag{1}$$

where:

• *ES_{cor}* stands for the percentage of the energy efficiency that corresponds to the building's energy savings.

Next, the actual value of annual energy savings was calculated in kWh/year, through the product of the energy savings percentage by the estimated annual building energy consumption:

$$ES_{kWh} = ES_{\%} \cdot EC \tag{3}$$

where:

EC stands for the estimated annual building energy consumption.

Lastly, to estimate the cost effectiveness of the upgrade scenario in €/kWh, the total investment cost was divided by the energy savings, as computed in the previous step:

$$CE = \frac{IC}{ES_{kWh}} \tag{4}$$

where:

• *IC* stands for the total investment cost of the upgrade scenario.

Next table shows the results of the pilot operations:

COUNTRY	No. of buildings	No. of assessors	Final energy savings (MWh/year)	Primary energy savings (MWh/year)	Total investment cost (€)	Cost effectiveness (€/MWh)	Reduction of GHG emissions (kg CO ₂ echiv/year)
Austria	114	16	503.71	1,007.42	641,846	1,274.24	55.91
Bulgaria	135	13	1,483.77	2,967.54	<mark>1,</mark> 103,208	743.52	497.06
Croatia	187	18	1,570.30	3,140.60	<mark>1,</mark> 728,411	1,100.69	321.91
Czech Republic	159	14	1,633.91	3,267.83	834,384	510.67	735.26
Greece	128	13	591,51	1,183.02	439,901	743.69	199.34
Latvia	120	14	2,708.21	5,416.42	516,873	190.85	333.11
Romania	111	11	1,8 <mark>96.84</mark>	3,793.67	392,244	206.79	457.14
Spain	251	13	5 <mark>24.16</mark>	1,048.32	698,585	1,332.76	91.20
TOTAL	1205	112	10,912.41	21,824.82	<mark>6,</mark> 355,452	582.41	2,690.94

Table 16: Pilot operations results





As shown in *Table 16* a total of 1205 buildings were evaluated across all partner countries by 112 assessors; this is a significant sample size, providing an important dataset for SRI assessment.

The total estimated final and primary energy savings achieved through the SRI interventions amounts to 10,91 GWh/year, respectively 21.82 GWh/year; the achieved energy savings are substantial across the assessed buildings, showcasing the effectiveness of the selected smart readiness measures in reducing energy consumption.

The total estimated investment cost resulted at €6,355,452. While the required investment in intelligent technologies is considerable, it should be weighed against long-term benefits, including reduced operational costs, increased property value and compliance with future regulatory requirements.

The cost effectiveness, which indicates how much investment is required for each unit of energy saved, amounts to 583.24 €/MWh.

The almost 2.7 kt CO₂echiv./year reduction obtained reflects a meaningful contribution to reducing greenhouse gas (GHG) emissions.

Conclusions:

The feedback on the SRI-ENACT training indicates that the training was well-received, with high satisfaction rates and positive assessments of its structure, relevance and effectiveness. The engagement level was also strong, although there is room for enhancing interactivity and practical applications.

Some lessons that can be extracted for further enhancing effectiveness and impact of the SRI-ENACT training are:

- Expand hands-on exercises to deepen understanding of the SRI toolkit;
- Address minor challenges by clarifying complex topics based on participant feedback;
- Regularly update materials to reflect advancements in the SRI methodology;
- Continue monitoring feedback to ensure continuous improvement in future iterations.

The feedback received from the assessors on the SRI-ENACT Toolkit indicates that both the Assessment Tool and the Decision Support Tool are generally well-appreciated, with high ratings for usability and comprehensiveness. However, some areas require attention, particularly in improving navigation, streamlining unnecessary metrics, and enhancing clarity of some functionalities.

For further enhancing the toolkit's applicability, effectiveness and user satisfaction a few aspects need to be addressed:

- Refine user interface for smoother navigation and enhanced intuitiveness;
- Adding explanatory links or examples for complex functions;
- Review and address gaps in building system coverage based on feedback;
- Streamline or clarify metrics that were flagged as unnecessary or unclear;
- Improve user guidance to assist those who found functionalities less understandable;
- Monitor future user feedback to ensure continuous improvement.

From the analysis of the SRI assessments implementation results, some key takeaways can be extracted:

 The assessment of such large number of buildings indicates that the methodology has been applied on a large scale, making the results relevant for broader policy and market considerations.





- The obtained values for energy savings highlight the potential of smart building technologies in contributing to energy efficiency goals and demonstrate that they can deliver tangible energy savings, making a strong case for their integration into energy efficiency policies.
- The total estimated investment cost resulted at €6,355,452. While the required investment in technologies, such as smart sensors, heat pumps or thermal energy storage solutions, is considerable, it should be weighed against long-term benefits, including reduced operational costs, increased property value and compliance with future regulatory requirements.
- The cost-effectiveness figure suggests a moderate return on investment but further optimizations, such as policy incentives, financing mechanisms or improving technological solutions, could enhance financial viability.
- The total GHG reduction amounting to several thousand tons of CO₂echiv. per year highlights the environmental value of SRI measures, positioning them as a meaningful contributor to climate targets when deployed at scale and combined with renewable energy solutions.

The results emphasize the value of SRI assessments in driving energy efficiency and emissions reductions, but further refinements in technology adoption and financial models are needed to enhance impact. In conclusion, the project demonstrates effective cost efficiency and significant environmental benefits, which provide a solid foundation for scaling and replicating the efforts in other regions or projects.



Annex 1 - SRI Assessment Report of pilot buildings - Greece





Annex 2 - SRI Assessment Report of pilot buildings - Spain



The building:

Building information

EPC (Energy Performance Certificate)
A
Building type
Non-residential
Location
Calle de San Quirce 10
Surface area Construction year
500-1000 m² > 2010
Specificities
Senior residence with double and single rooms



How the SRI was assessed:

CHOSEN METHOD: #B
Detailed method contains all services,
preferred for large and more complex
buildings.

OUTCOMES OF THE SRI ASSESSMENT:

OVERALL SCORE 40.4%

SCORES PER IMPACT CRITERIA:

Domain	Score
Energy Efficiency	54.92%
Energy Flexibility and Storage	14.79%
Comfort	61.9%
Convenience	47.14%
Health, well-being and accessibility	64.13%
Maintenance and fault prediction	41.14%
Information to occupants	60.85%

DETAILED SCORE:

Domain	Energy Efficiency	Energy Flexibility and Storage	Comfort	Convenience	Health, well- being and accessibility	Maintenance and fault prediction	Information to occupants
Heating	58.8%	11.1%	50%	37.5%	66.7%	25%	66.7%
Domestic hot water	16.7%	0%	0%	0%	0%	50%	66.7%
Cooling	55.6%	11.1%	37.5%	37.5%	66.7%	25%	66.7%
Ventilation	78.6%	0%	90%	87.5%	77.8%	50%	33.3%
Lighting	33.3%	0%	40%	40%	0%	0%	0%
Dynamic building envelope	0%	0%	0%	0%	0%	0%	0%
Electricity	25%	0%	0%	0%	0%	25%	50%
Electric vehicle charging	0%	0%	0%	0%	0%	0%	0%
Monitoring and control	50%	33.3%	100%	52.9%	75%	54.5%	66.7%





Annex 3 - SRI Assessment Report of pilot buildings - Czech Republic



Building image

The building:

Building information

EPC (Energy Performance Certificate)

Building type Location

Surface area 1-10000 m²

Specificities



How the SRI was assessed:

Detailed method contains all services, preferred for large and more complex buildings.

OUTCOMES OF THE SRI ASSESSMENT:

OUTCOMES OF THE SRI ASSESSMENT:

OVERALL SCORE 8.8%

SCORES PER IMPACT CRITERIA:

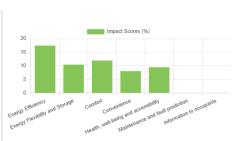
Domain	Score
Energy Efficiency	17.46%
Energy Flexibility and Storage	10.43%
Comfort	11.95%
Convenience	8.03%
Health, well-being and accessibility	9.47%
Maintenance and fault prediction	0%
Information to occupants	0%
Information to occupants	0%

DETAILED SCORE:

Domain	Energy Efficiency	Energy Flexibility and Storage	Comfort	Convenience	Health, well- being and accessibility	Maintenance and fault prediction	Information to occupants
Heating	30%	0%	36%	25.7%	60%	0%	0%
Domestic hot water	30%	25%	0%	30%	0%	0%	0%
Cooling	0%	0%	0%	0%	0%	0%	0%
Ventilation	0%	0%	0%	0%	0%	0%	0%
Lighting	1.7%	0%	2%	2%	0%	0%	0%
Dynamic building envelope	0%	0%	0%	0%	0%	0%	0%
Electricity	0%	0%	0%	0%	0%	0%	0%
Electric vehicle charging	0%	0%	0%	0%	0%	0%	0%
Monitoring and control	9.4%	8.3%	25%	4.4%	0%	0%	0%

Building Address: Year of construction: Date: Assessor Name:

IMPACT SCORES Energy Efficiency: 17.46% **Energy Flexibility and** 10.43% Comfort: Convenience: 8.03% Health, well-being and 9.47% Maintenance and fault prediction: Information to occupants: 0%



U Smaltovny 14

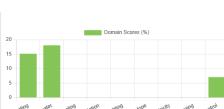
Residential < 1960

13-02-2025

Jakub Kvasnica



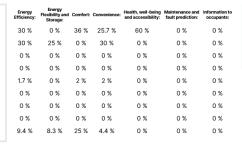
DOMAIN SCORES Heating: 15.15% Domestic hot water 18.07% Cooling: 0% 0% 0% Lighting: Dynamic building envelope: 0% 0% Electric vehicle charging: Monitoring and control: 7.07%



Total SRI Score: 8.8 %

SRI Class: G

DETAILED SCORES
Heating:
Domestic hot water:
Cooling:
Ventilation:
Lighting:
Dynamic building envelope:
Electricity:
Electric vehicle charging:
Monitoring and control:



AGGREGATED S	CORES
1 - Building:	8.73%
2 - User:	7.36%
3 - Grid:	10.43%



Annex 4 - SRI Assessment Report of pilot buildings - Austria







Electricity

Electric vehicle charging

and control

60%

12.5%

10.9%

66.7%

0%

0%

0%

40%

5.9%

33.3%

9.1%

77.8%

66.7%

11.1%



Ventilation:

Dynamic building envelope:

Electric vehicle charging:

Monitoring and control:

Lighting:

0 %

20 %

0% 0%

0% 0%

33.3 % 0 % 40 % 40 %

0 % 20 %

60 % 66.7 % 0 % 40 %

0 % 25 % 0 % 83.3 %

0 %

0 %

0 %

0 %

0 %

0 %

0 %

0 %

0 %

0 %

0 %

0 %

66.7 %

33.3 % 77.8 %

3 - Grid:



Annex 5 - SRI Assessment Report of pilot buildings - Croatia



The building:

EPC (Energy Performance Certificate)

Building type Non-residential

Location Ulica Grada Gospića 1

Specificities



How the SRI was assessed:

CHOSEN METHOD: #B
Detailed method contains all services,
preferred for large and more complex

OUTCOMES OF THE SRI ASSESSMENT:

SCORES PER IMPACT CRITERIA:

Domain	Score
Energy Efficiency	51.58%
Energy Flexibility and Storage	22.3%
Comfort	58.06%
Convenience	47.37%
Health, well-being and accessibility	61.11%
Maintenance and fault prediction	8.75%
Information to occupants	16.67%

DETAILED SCORE:

Domain	Energy Efficiency	Energy Flexibility and Storage	Comfort	Convenience	Health, well- being and accessibility	Maintenance and fault prediction	Information to occupants
Heating	66.7%	16.7%	62.5%	37.5%	66.7%	0%	0%
Domestic hot water	40%	33.3%	0%	40%	0%	0%	0%
Cooling	46.7%	16.7%	50%	37.5%	66.7%	0%	0%
Ventilation	42.9%	0%	80%	87.5%	77.8%	50%	33.3%
Lighting	16.7%	0%	20%	20%	0%	0%	0%
Dynamic building envelope	0%	0%	0%	0%	0%	0%	0%
Electricity	25%	66.7%	0%	50%	0%	25%	33.3%
Electric vehicle charging	0%	0%	0%	0%	0%	0%	0%
Monitoring and control	0%	0%	0%	0%	0%	0%	0%

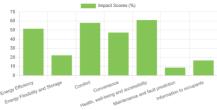
Building Address: Building Type:



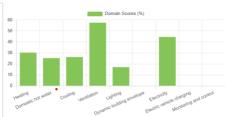








DOMAIN SCORES	
Heating:	30.3%
Domestic hot water:	25.3%
Cooling:	26.26%
Ventilation:	57.58%
Lighting:	17.07%
Dynamic building envelope:	0%
Electricity:	44.58%
Electric vehicle charging:	0%
Monitoring and control:	0%



Heating:
Domestic hot water:
Cooling:
Ventilation:
Lighting:
Dynamic building envelope:
Electricity:
Electric vehicle charging:
Monitoring and control:

DETAILED SCORES

Energy Efficiency:	Energy Flexibility and Storage:	Comfort:	Convenience:	Health, well-being and accessibility:	Maintenance and fault prediction:	Information to occupants:
66.7 %	16.7 %	62.5 %	37.5 %	66.7 %	0 %	0 %
40 %	33.3 %	0 %	40 %	0 %	0 %	0 %
46.7 %	16.7 %	50 %	37.5 %	66.7 %	0 %	0 %
42.9 %	0 %	80 %	87.5 %	77.8 %	50 %	33.3 %
16.7 %	0 %	20 %	20 %	0 %	0 %	0 %
0 %	0 %	0 %	0 %	0 %	0 %	0 %
25 %	66.7 %	0 %	50 %	0 %	25 %	33.3 %
0 %	0 %	0 %	0 %	0 %	0 %	0 %
0 %	0 %	0 %	0 %	0 %	0 %	0 %





Annex 6 - SRI Assessment Report of pilot buildings - Latvia









Annex 7 - SRI Assessment Report of pilot buildings - Bulgaria



CASE STUDY



SMART READINESS INDICATOR (SRI)

The building:

Building information

EPC (Energy Performance Certificate)

Location улица "Г. С. Раковски" 108

Surface area

Construction year



How the SRI was assessed:

buildings.

CHOSEN METHOD: #B Detailed method contains all services, preferred for large and more complex

OUTCOMES OF THE SRI ASSESSMENT:

/ERALL SCORE 43.3%

SCORES PER IMPACT CRITERIA:

Score
54.14%
44.44%
70.73%
47.54%
34.52%
25.23%
30.45%

DETAILED SCORE:

Domain	Energy Efficiency	Energy Flexibility and Storage	Comfort	Convenience	Health, well- being and accessibility	Maintenance and fault prediction	Information to occupants
Heating	62.5%	33.3%	71.4%	71.4%	66.7%	25%	0%
Domestic hot water	100%	66.7%	0%	66.7%	0%	50%	66.7%
Cooling	100%	100%	80%	100%	0%	100%	100%
Ventilation	42.9%	0%	70%	75%	44.4%	0%	0%
Lighting	33.3%	0%	40%	40%	0%	0%	0%
Dynamic building envelope	0%	0%	0%	0%	0%	0%	0%
Electricity	0%	0%	0%	0%	0%	0%	0%
Electric vehicle charging	0%	0%	0%	0%	0%	0%	0%
Monitoring and control	37.5%	33.3%	100%	29.4%	25%	18.2%	22.2%

Building address: Building type: Year of construction: Date:

IMPACT SCORES Energy Efficiency: 54.14% Energy Flexibility and Storage: 44.44% Comfort: 70.73% Health, well-being and accessibility: 34.52% Maintenance and fault prediction

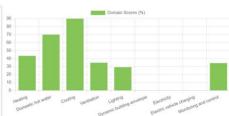
улица "Г. С. Раковски" 108

Non-residential

23-02-2025

< 1960

DOMAIN SCORES 69.88% Cooling: 89.9% 34.85% 29.27% Dynamic building env 0% Electricity: Monitoring and control: 34.34%



Total SRI Score: 43.3 %

SRI Class: E

DETAILED SCORES
Heating:
Domestic hot water:
Cooling:
Ventilation:
Lighting:
Dynamic building envelope:
Electricity:
Electric vehicle charging:
Monitoring and control:

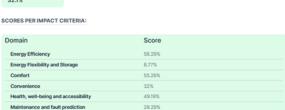
Energy Efficiency:	Energy Flexibility and Storage:	Comfort:	Convenience:	Health, well-being and accessibility:	Maintenance and fault prediction:	Information to occupants:
62.5 %	33.3 %	71.4 %	71.4 %	66.7 %	25 %	0 %
100 %	66.7 %	0 %	66.7 %	0 %	50 %	66.7 %
100 %	100 %	80 %	100 %	0 %	100 %	100 %
42.9 %	0 %	70 %	75 %	44.4 %	0 %	0 %
33.3 %	0 %	40 %	40 %	0 %	0 %	0 %
0 %	0 %	0 %	0 %	0 %	0 %	0 %
0 %	0 %	0 %	0 %	0 %	0 %	0 %
0 %	0 %	0 %	0 %	0 %	0 %	0 %
37.5 %	33.3 %	100 %	29.4 %	25 %	18.2 %	22.2 %





Annex 8 - SRI Assessment Report of pilot buildings - Romania





Information to occupants

DETAILED SCORE: Domain Heating 83.3% 0% 75% 50% 66.7% 25% 33.3% 33.3% 33.3% Cooling 45.5% 16.7% 57.1% 42.9% 25% 78.6% 90% 87.5% 88.9% 50% 66.7% Dynamic building 0% 0% 0% 11.1% 0% 33.3% 55.6% 0% 0% 0% 0% charging Monitoring and control 25.6% 11.1% 35% 23.8% 25% 27.7% 33.3%





1. Name Surname:

Annex 9 – Feedback Form: Effectiveness of the SRI-ENACT Training

Thank you for your participation in the SRI-ENACT training course!

Your feedback is essential in helping us evaluate the effectiveness of the training package and make necessary improvements for future sessions.

Please take a few moments to share your thoughts and insights by completing the following feedback form. Your responses will remain confidential and will be used solely for evaluation purposes.

2.	Country:
	Austria Bulgaria Croatia Czech Republic Greece Latvia Romania Spain
3.	Position/Title:
4.	Organization/Company:
5.	How satisfied were you with the overall structure of the SRI-ENACT training package? Very satisfied Somewhat satisfied Neither satisfied nor dissatisfied Somewhat dissatisfied Very dissatisfied
6.	documents, presentations, handouts, practical applications):
	☐ Excellent ☐ Good
	Average Poor Very Poor
7.	Were the topics covered in the training package relevant and adequately addressed?
	Highly relevant and adequately addressed Somewhat relevant and adequately addressed Neutral Not relevant or adequately addressed
8.	If you found any topics not adequately addressed or irrelevant, please specify:



9.	How engaging and interactive did you find the training sessions?
	 Very engaging and interactive Engaging but could be improved Neutral Not very engaging and interactive Not engaging and interactive at all
10.	Did the training sessions meet your expectations in terms of depth of coverage of the SRI concept and methodology?
	Exceeded expectations Met expectations Partially met expectations Did not meet expectations
11.	How would you rate the effectiveness of the trainers in delivering the content and facilitating discussions?
	Excellent Good
	☐ Average ☐ Poor ☐ Very Poor
12.	Did the practical exercises / case studies helped reinforce your understanding of the SRI concept and methodology?
	Yes, very helpful Yes, somewhat helpful No, not very helpful No, not helpful at all
13.	What were the most valuable aspects of the training course for you personally?
14.	Were there any aspects of the training course that you found particularly challenging or unclear?
	☐ Yes ☐ No
15.	If yes, please explain:
16.	How likely are you to recommend this training course to your colleagues or peers?
	Very likelyLikely
	 Neutral Unlikely
	o Very unlikely
17.	Do you have any suggestions for improving future iterations of the SRI-ENACT training course?





18. Overall, how satisfied were you with the training course?	
Extremely satisfied Very satisfied Somewhat satisfied Not so satisfied Not at all satisfied	
19. Do you have any additional comments or feedback you would like to share about you experience with the training course?	ur



1. Name Surname:

Annex 10 – Feedback Form: Effectiveness of the SRI-ENACT Toolkit

The user satisfaction plan of the SRI-ENACT project aims to evaluate the usability and acceptance of its outcomes by gathering feedback from SRI assessors who were trained in the context of the project and conducted the SRI assessments using the Toolkit developed within the project, i.e. the SRI Assessment Tool and the Decision Support Tool.

The evaluation includes separate questions addressing both the functionality and effectiveness of the tools, as well as the overall experience of the assessors throughout the process. This structured approach will help identify strengths and areas for improvement, ensuring that the tools effectively support SRI assessments in practice.

2.	Country:
	Austria Bulgaria Croatia Czech Republic Greece Latvia Romania Spain
3.	Position/Title:
4.	Organization/Company:
Usabili	ity perspective
	SRI-ENACT Assessment Tool
5.	How would you rate the overall ease of use of the SRI-ENACT Assessment Tool?
Э.	The world you rate the overall case of the six Elwie 7 issessment room
	Very difficult
	Difficult
	Neutral Neutral
	Easy
	Very easy
6.	How user-friendly is the navigation on the SRI-ENACT Assessment Tool?
	☐ Not at all
	Somewhat
	Neutral Neutral
	Very
	Extremely
7.	To what degree did you face difficulties while using the SRI-ENACT Assessment Tool?







	Faced a lot of difficulties Faced some difficulties Neither easy nor difficult Faced few difficulties Faced no difficulties
8.	How would you rate the speed you were able to complete your tasks on the SRI-ENACT Assessment Tool?
	 Very slow (1) Slow (2) Moderate (3) Quick (4) Very quick (5)
9.	How understandable were the features and functionalities of the SRI-ENACT Assessment Tool?
	Not at all understandable Somewhat understandable Neutral Very understandable Extremely understandable
10.	Did the tool cover all relevant aspects of building systems for a comprehensive SRI assessment?
	☐ Yes ☐ No
11.	If no, please elaborate
12.	Were there any metrics or fields that seemed unnecessary or could be improved?
	Yes No
13.	If yes, please elaborate:
	SRI-ENACT Decision Support Tool
14.	How would you rate the overall ease of use of the SRI-ENACT Decision Support Tool?
	Very difficult Difficult Neutral





	Easy	
	☐ Very easy	
15.	How user-friendly is the navigation on the SRI-ENACT Decision Support Tool?	
	☐ Not at all	
	Somewhat	
	Neutral	
	Very	
	Extremely	
16.	To what degree did you face difficulties while using the SRI-ENACT Decision Support	Tool?
	Faced a lot of difficulties	
	☐ Faced some difficulties	
	☐ Neither easy nor difficult	
	☐ Faced few difficulties	
	Faced no difficulties	
17.	How would you rate the speed you were able to complete tasks on the SRI-ENACT E Support Tool?	Decision
	☐ Very slow	
	Slow	
	Moderate	
	Quick	
	☐ Very quick	
18.	How understandable were the features and functionalities of the SRI-ENACT Decision Support Tool?	on
	Not at all understandable	
	Somewhat understandable	
	Neutral	
	☐ Very understandable	
	Extremely understandable	
19.	Did the tool cover all relevant aspects of building systems for a comprehensive SRI assessment?	
	☐Yes	
	□ No	
20	If no, please elaborate	
۷٠.	ii iio, picase elaborate	
21.	Were there any metrics or fields that seemed unnecessary or could be improved?	
	Yes	
	□ No	





22. If yes, ple	ease elabora	ite:	
		·····/	

Social acceptance perspective

23. On a scale between 0-10, how likely are you to recommend the developed SRI-ENACT Assessment Tool to others?

1	2	3	4	5	6	7	8	9	10
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24. On scale of 0 to 10, how likely are you to recommend the SRI-ENACT Decision Support Tool to others?

1	2	3	4	5	6	7	8	9	10

Business value perspective

25. How would you assess the business value gained from the SRI-ENACT Assessment Tool on a scale of 1 to 5, where 1 represents very low recognition and 5 represents very high recognition?

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26. How would you assess the business value gained from the SRI-ENACT Decision Support Tool on a scale of 1 to 5, where 1 represents very low recognition and 5 represents very high recognition??

1	2	3	4	5



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