Built4People (B4P) Partnership (Co-Programmed)

Towards a Smart and Decarbonised Future for European Buildings: ECTP perspective

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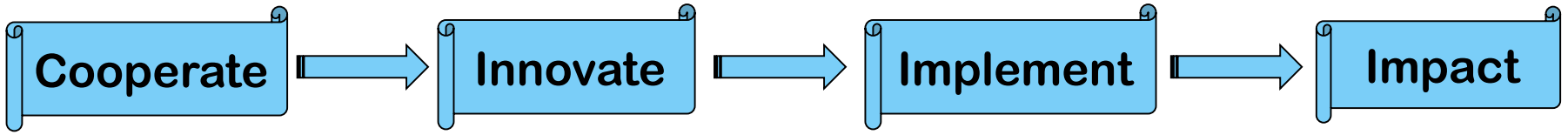
ECTP in a nutshell

European Construction, built environment & energy-efficient buildings Technology Platform

Continuously nurturing an integrated vision, roadmap and development approach on challenges such as **climate change, resources, efficiency & sustainable development** for the **Built Environment (buildings, infrastructures, utility networks…)** and **Construction sector**

- ECTP: *AISBL* legal entity, based in Brussels
- **150** member-organisations from the Construction sector and other sectors from the whole supply chain of the **Built Environment.**
- Main mission: develop new **R&D&I** strategies to improve **competitiveness**, meet **societal needs** & take up **environmental challenges**.



ECTP with 6 thematic Committees

INFRASTRUCTURE MOBILITY
AN ECTP COMMITTEE

BUILT ENVIRONMENT DECARBONISATION
AN ECTP COMMITTEE FOR INNOVATIVE BUILT ENVIRONMENT

MATERIALS SUSTAINABILITY
AN ECTP COMMITTEE

European Commission

ECTP
INNOVATIVE BUILT ENVIRONMENT

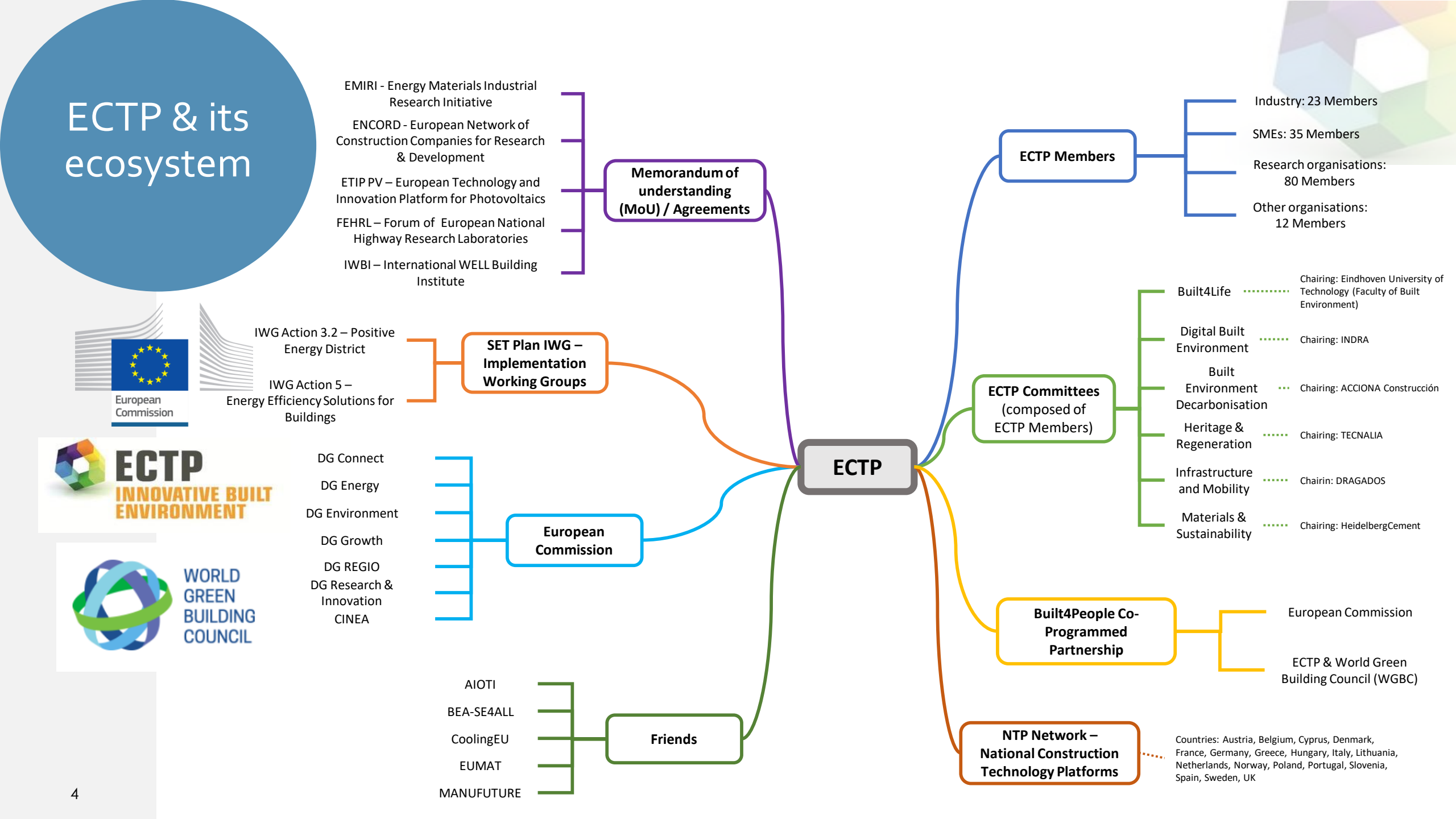
WORLD GREEN BUILDING COUNCIL

HERITAGE REGENERATION
AN ECTP COMMITTEE

BUILT FOR LIFE
AN ECTP COMMITTEE

DIGITAL BUILT ENVIRONMENT
AN ECTP COMMITTEE

ECTP & its ecosystem



Built4People (B4P) Partnership (Co-Programmed)

A policy cross-cutting initiative, addressing buildings climate-neutrality but also broadly speaking sustainability, reducing resource intensity and increasing recyclability, taking into consideration other policies relevant to buildings, including the need to preserve our European Cultural Heritage.

- *European partnership under Horizon Europe aiming to catalyse the transition to a people-centric, climate-neutral, sustainable and smart built environment*

Scope:

- Decarbonisation, sustainability and better living (Europe & beyond)
- Gather partners across the built environment value chain for a *cleaner, safer, affordable, smarter, decarbonised & sustainable Built Environment*

Aim:

Produce & deliver on the market holistic innovation
→ long-lasting transformations & behavioural change
→ deliver long-term goals set by the EGD

Approach:

- People-centric holistic innovation
- High quality architecture → low carbon, highly energy & resource efficient built environment
- Drive the societal and economic transition towards sustainability.

Coordination:

- EC: DG ENER Lead contact → co-creation process among 12 EC services responsible for the policies focusing on the BE: ENER.B2, B3, B5; RTD.D1; GROW.C1; ENV.B2; MOVE.B3; CLIMA.C1; CNECT.H5; EAC.D1, D2; EMPL.C3.
- Partners others than the EU:

https://www.ectp.org/built4people/

Built4People - Summary of objectives in MoU

3 general objectives		10 specific objectives		10 operational objectives	
GO1	**Generate holistic innovation in the built environment towards sustainability** by 2027/28	SO1	Develop holistic solutions that break "technological silos" in built environment, lower carbon and resource intensity and mainstreaming LCA-based approach	OO1	Cost-effective multi-functional and/or prefabricated holistic renovation packages
		SO2	Develop solutions that enable/increase interactions of building with networks or increase sectors integration	OO2	Set of smart-grid ready and smart-network ready buildings acting as active utility nodes
GO2	**Revitalise the sector through decarbonisation and sustainability transition** by 2030	SO3	Demonstrate profitability and job creation potential of new sustainable and circular business models	OO3	Tools and applications to facilitate a life cycle-based approach
		SO4	Demonstrate sector decarbonisation pathways across all the players in the value chain	OO4	New design models for buildings, infrastructure, public spaces and efficient and resilient cultural heritage
		SO5	Demonstrate industrialisation potential and economies of scale, as well as applicability to a large share of the EU buildings stock/infrastructure	OO5	New protocols and approaches to zero-carbo construction and retrofitting and circular and bio-based economy
		SO6	Develop strategies, methods and tools to adapt skills, culture and way of working to the opportunities arising from the new solutions	OO6	New services from home and in the community, incl. solutions for healthier indoor and outdoor environment
GO3	**Induce lasting behavioural change towards sustainable living** by 2030	SO7	Engage the whole value chain as well as policy makers and civil society in the design, development and implementation of the new solutions	OO7	New solutions and tools for public and private (green) as well as new business/financing/risk mgt models
		SO8	Orientate and demonstrate innovation to achieving outcomes for users in terms of functionality, comfort, convenience, accessibility, health, etc.	OO8	Solutions for smart and responsive buildings exploiting an improved knowledge of user experience (BaaS)
		SO9	Demonstrate safeguarding and promotion of architectural elements that represent cultural / historical value and heritage	OO9	EU-wide open databases and digital Data Management Platforms on the performance of the built environment
		SO10	Develop strategies, solutions and tools to reduce time to market of the new technologies	OO10	Innovation clusters /ecosystems integrated with the construction value chain and other sectors

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WORLD GREEN BUILDING COUNCIL

Built4People - Summary of KPIs in MoU

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KPI's on general objectives			KPI's on specific objectives
GO1	**Generate holistic innovation in the built environment towards sustainability**	1. R&I investment in the sustainable built environment area catalysed by the partnership 2. # innovative products/services/processes linked to sustainability that are catalysed by the partnership and number of jobs created 3. Contribution to the successful deployment of relevant EU instruments and frameworks 4. # training programmes developed for the sustainable built environment	SO1 SO2 SO3 SO4
GO2	**Revitalise the sector through decarbonisation and sustainability transition**	5. Energy savings (MWh) 6. GHG emission reduction (tCO2e) / Pollution reduction 7. Share of reused/recycled materials used in construction (%) 8. Share of buildings designed and constructed based on a life cycle approach. 9. # buildings with on-site RES production 10. # of workers trained on working methods and tools in the fields covering the B4P objectives	SO5 SO6 SO7 SO8
GO3	**Induce lasting behavioural change towards sustainable living**	11. Share of the EU population living and working in green neighbourhoods 12. # of private and public building owners with sustainable behaviour in their building stock	SO9 SO10

13. # demonstrated innovative solutions and packages for sustainable construction and renovation
14. # demonstrated innovative solutions for the sustainability of the built environment value chain
15. # innovative services developed and demonstrated
16. # living labs established and involved in the partnership's projects
17. Total floor area and # buildings (residential or non-residential) directly involved in the partnership's projects demonstration activities
18. # and type of heritage buildings involved in/enhanced by the partnership's projects, in line with the safeguarding of the historical environment and architectural values of the building stock
19. # building occupants and users involved in the partnership's projects demonstration activities
20. # people trained across the whole value chain in the deployment of innovative sustainable technologies, systems and methods

Built4People Contact details

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https://built4people.eu

https://www.ectp.org/built4people/

https://worldgbc.org/europe/built4people/

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https://www.worldgbc.org/our-regional-networks/europe

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Smart Built4EU

The European Smart Buildings Community

SmartBuilt4EU highlights

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 956936.

SmartBuilt4EU in a nutshell

Support to the coordination of European smart buildings innovation community

- *Call: Building a low-carbon, climate resilient future: secure, clean and efficient energy*
- 01/10/2020 – 31/03/2023
- Duration: 30 months
- SmartBuilt4EU has supported the emergence of a smart buildings market in Europe. In addition to promoting exchanges between innovators, the project has coordinated a large stakeholder's community in promoting and testing the Smart Readiness Indicator (SRI).

Main objectives & activities

- **Consolidate & support** the innovation ecosystem in the SB value chain
- **Reference and promote** key innovators and innovations in SB

1

Mapping and consolidation of the Smart Building Innovation Community

Referencing & promotion of innovators web-platform

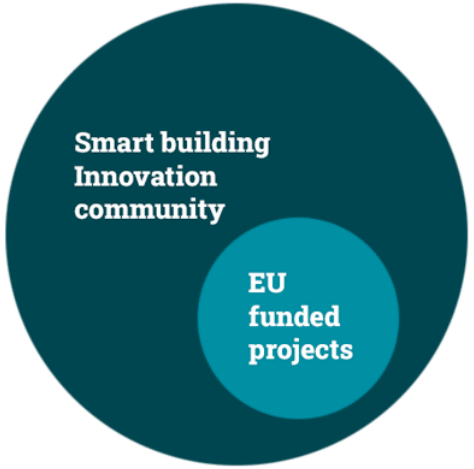
Join the SBIC!

- Consolidate findings into a **SRIA**
- Feed the design of future HEu calls on SB
- Recommendations to policy makers

4

R&I roadmap and policy recommendations

Strategic R&I agenda



2

Knowledge sharing and supporting activities for the SBIC

Setting up Task Forces & drafting of white papers, success stories, participation to major events

- **Collaborative** work
- **Break silos**, **share** information
- Identify **barriers**, **opportunities** & **best practices** for the further uptake of SB

- **Develop and test tools** to support the deployment of the SRI

3

Contribution to the promotion, experimentation and roll-out of the SRI as a base for the smart building business case

Tools and coaching for the smart readiness indicator

5th activity: communication & enhance visibility of the SBIC

Key results and outcomes

Smart Built4EU

[Brochure on Smart Buildings EU-funded innovations]

Success stories

1

Mapping and consolidation of the Smart Building Innovation Community

Referencing & promotion of innovators web-platform

Join the SBIC!

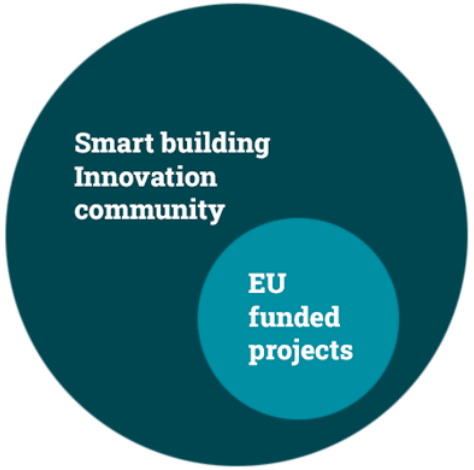
[SRIA]

[Policy Recommendations]

4

R&I roadmap and policy recommendations

Strategic R&I agenda



2

Knowledge sharing and supporting activities for the SBIC

Setting up Task Forces & drafting of white papers, success stories, participation to major events

[12 White Papers]

[Brochure on Smart Buildings Future Technologies]

[Co-benefit indicators]

[Factsheets]

[Solution packages]

Awareness sessions on SRI ([recordings])

3

Contribution to the promotion, experimentation and roll-out of the SRI as a base for the smart building business case

Tools and coaching for the smart readiness indicator

SRI not binding yet to EPBD

5th activity: communication & enhance visibility of the SBIC

12 White papers – 4 Task forces

TF1: Interactions with users	TF2: Efficient building operation	TF3: Interactions with the external environment	TF4 : Crosscutting issues
• End user acceptance and attractiveness • Occupant-centric building for enhanced quality of life • Responsive end-user	• Interoperability • Optimised building costs • Smartness to reduce building's environmental impacts	• Providing flexibility to power grids • Smart building integration into multiple networks • Data driven indicators	• Smart financing & business models • Data governance • Education and upskilling

BARRIERS

DRIVERS

R&I gaps
(R&D, demo, scaling up & industrialisation, awareness raising, regulation, certification & standardisation)

Strategic Research & Innovation Agenda

Policy Recommendations

White papers available here.

SRIA – overview of topics covered

1. Interoperability in buildings
2. Interoperability for grid flexibility
3. Innovative Business Models
4. Testing Facilities And Living Labs
5. Co-benefits
6. Life Cycle Environmental Impacts
7. Making Better Use Of The Data
8. Supporting Increased Public Awareness
9. Dataprivacy And Cybersecurity
10. Support Policy Developments

Policy Recommendations – overview of topics covered

1. smart buildings data governance
2. open data culture/framework
3. dynamic building certificates (e.g. logbook)
4. national or local regulations supporting the smartening of the building stock
5. interoperability of smart solutions and flexibility of smart buildings
6. SRI implementation support
7. labelling of devices and building certification
8. regulatory sandboxes
9. (green) public procurement
10. upskilling

Smart Built4EU

The European Smart Buildings Community

Thank you for the attention!

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