

**SUSTAINABLE
PLACES 2025**

8-10 October 2025

Milano



Sustainable Construction and Renovation

WORKSHOP

Building Renovation in Practice
Challenges, Solutions and Collaboration



BuildUPspeed



www.sustainableplaces.eu



one click
reno

FACILITA



iEPB



LIFE Clean Energy Transition

Building renovation in practice: Challenges, solutions, and collaboration

Pierre-Antoine Vernon

Project Adviser

CINEA – LIFE Climate & Energy Unit

Sustainable Places, Milano
9 October 2025

LIFE Clean Energy Transition – Turning Policy into Action



Renewable
Energy Directive



Energy Efficiency
Directive



Energy Performance of
Buildings Directive

+



**Energy
Communities**

**Policy Support
& Energy
Efficiency 1st**

**Renovation and
Building
Performance**

Cities & Regions

**Industry,
Services &
Products**

**Energy &
Construction
Skills**

**Heating &
Cooling**

Energy Poverty

**Mobilise
investment and
private finance**

**One-Stop-Shops &
Technical
Assistance**

LIFE-CET:

- Break market barriers, change market and regulatory fundamentals
- Improve governance and capacities/skills at all levels
- Mobilise investment & improve access to finance
- Empower Citizens

Outcomes of LIFE CET Call for proposals 2024

Heating & cooling
7 projects
€ 11.9 M



Attracting private finance
3 projects
€ 5.2 M

Capacity building for
cities & regions
5 projects
€ 8.3 M



Construction skills,
industry & services
7 projects
€ 11.2 M

Renovation & smart
energy in buildings
4 projects
€ 7.2 M



Total budget
EUR 81.4 M EUR

51 projects
32 countries
449 beneficiaries



Supporting EU policy
framework
4 projects
€ 6.93 M

Citizens in the Clean
Energy Transition
8 projects
€ 13.6 M



Local & regional investment
projects
13 projects
€ 17 M

LIFE CET Sustainability in buildings - BETTERRENO

Buildings performance



Deep renovation
(NZEB, ZEB)



Data, instruments
and tools



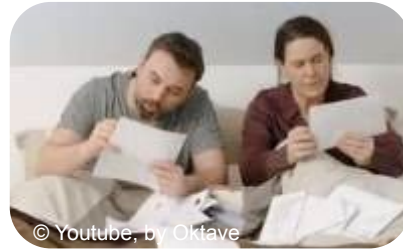
Smart buildings and
services



Policy
implementation



Project Development
Assistance



Support services
for renovation



Consumers



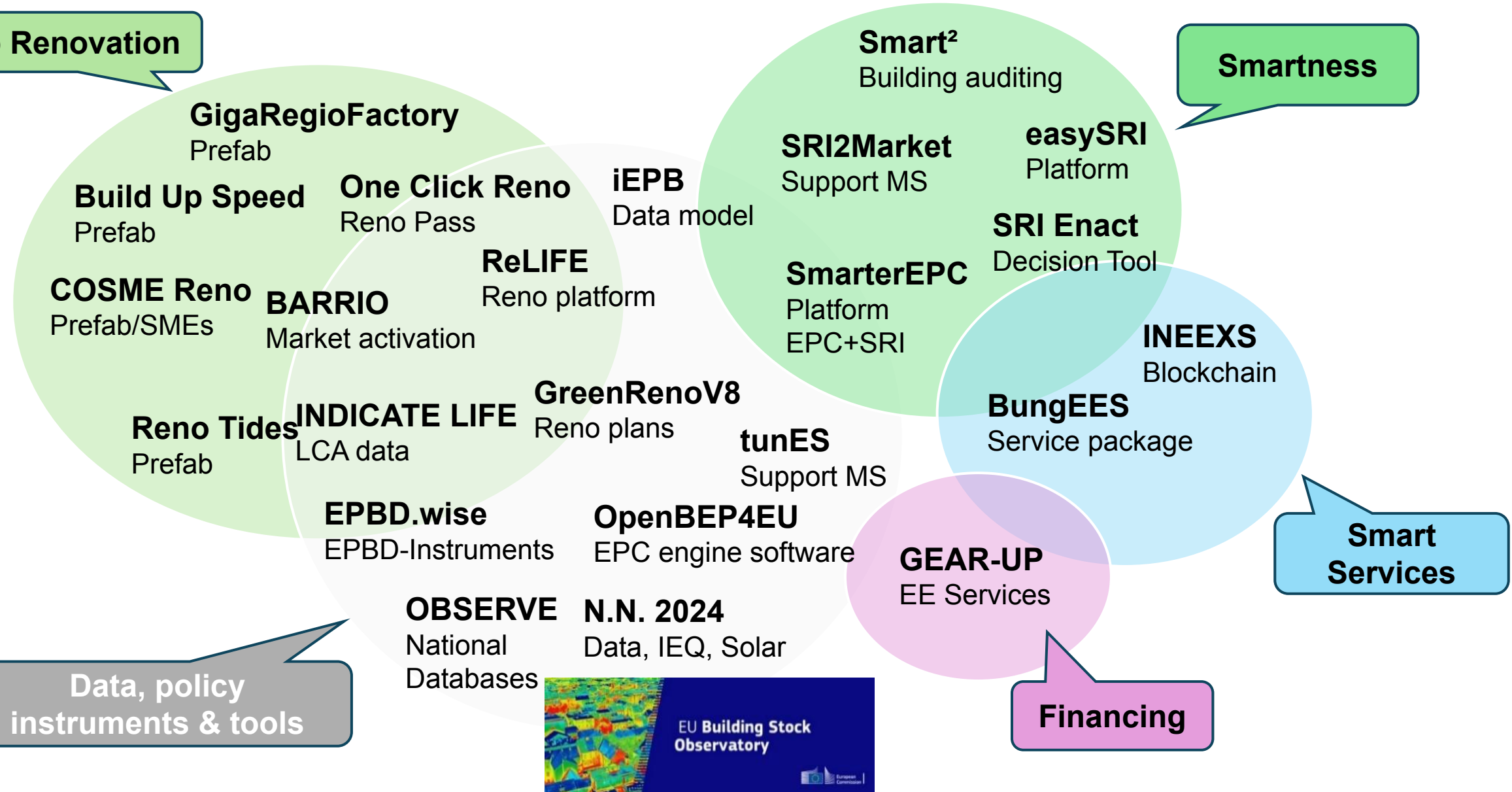
Build Up Skills

LIFE CET Buildings projects landscape

Deep Renovation

Smartness

Smart Services





CINEA stand

Meet us at the LIFE stand!



Thank you



© European Union 2025

Cinea-communication-life@ec.europa.eu

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

Slide xx: **element concerned**, source: **e.g. Fotolia.com**; Slide xx: **element concerned**, source: **e.g. iStock.com**



[LIFE Programme](#)



[LIFE Programme](#)



[LIFE Programme](#)



[@LIFEprogramme](#)

[@CleanEnergy_EU](#)

[@cinea_EU](#)



[LIFE Programme](#)

[CINEA](#)



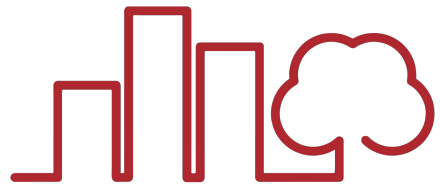
Hashtags

#LIFEProgramme

#LIFEProject

And watch our [new video](#)





**SUSTAINABLE
PLACES 2025**

8-10 October 2025

Milano

Ana Sanchis Huertas



www.sustainableplaces.eu

Ana Sanchis Huertas - Arquitecta
Instituto Valenciano de la
Edificación: IVE



one click
reno

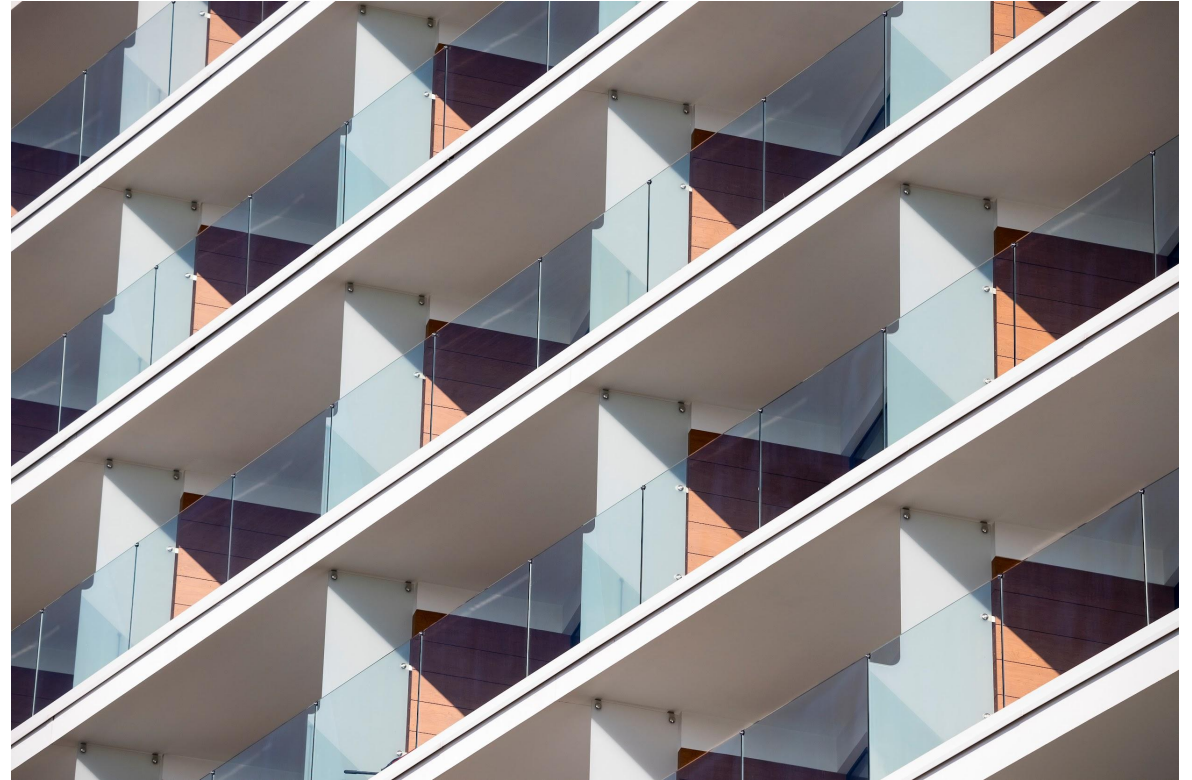


Co-funded by
the European Union

Goal

Turn EPBD into practice by giving every building a clear, tailored roadmap to zero emissions

we are not just building digital tools — we are building trust, alignment, and pathways that make the EPBD objectives tangible for citizens. Our ambition is to turn regulation into action, and action into transformation





OCR & EPBD ☐ RP

(19) 'renovation passport' means a tailored roadmap for the deep renovation of a specific building in a maximum number of steps that will significantly improve its energy performance;

- Member States shall **introduce**
- Based on the **common** framework
- Issued jointly with the **EPC**
- Digital format suitable for **printing**
- **Best steps** to ZEB before 2050
- **Tool** allowing simulate a draft RP
- national **DB** & accessed via **DBL**

Article 12

Renovation passport

1. By 29 May 2026, Member States shall introduce a scheme for renovation passports based on the common framework set out in Annex VIII.

2. The scheme referred to in paragraph 1 shall be of voluntary use by owners of buildings and building units, unless the Member State decides to make it mandatory.

Member States shall take measures to ensure that renovation passports are affordable and shall consider whether to provide financial support to vulnerable households wishing to renovate their buildings.

3. Member States may allow for the renovation passport to be drawn up and issued jointly with the energy performance certificate.

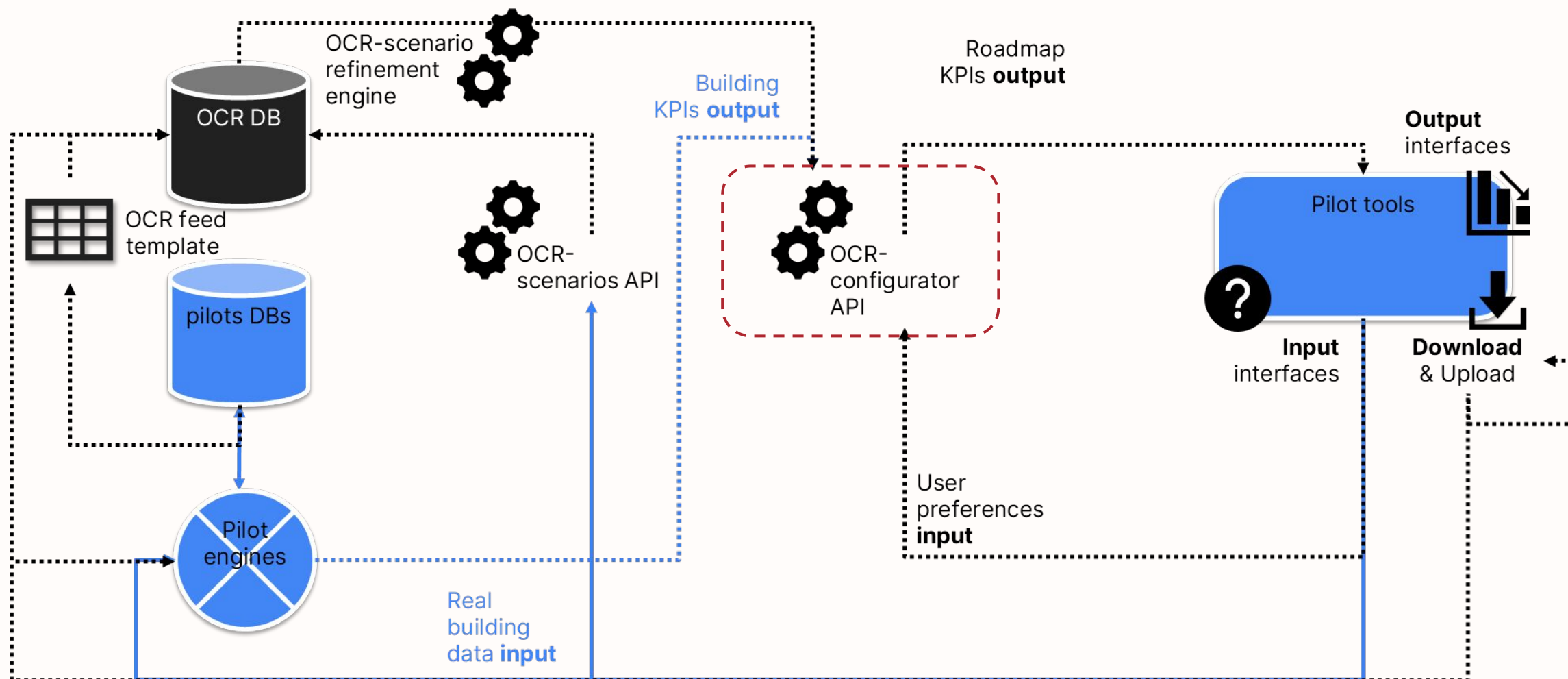
4. The renovation passport shall be issued in a digital format suitable for printing, by a qualified or certified expert, following an on-site visit.

When a passport is issued, a discussion with the expert referred to in paragraph 4 shall be suggested to allow the expert to explain the best steps by which to transform the building into a zero-emission building.

ANNEX VIII

Requirements for renovation passports

1. The renovation passport shall include:





OCR RP DM

• According to EPBD ANNEX VIII & EPC data

Tabla 2: Elementos del Informe XML v2.1. Identificación del edificio

Campo	Etiqueta	Múl.	Opc.	Tipo	Valores admitidos / Formato	Descripción	Ejemplo
IDENTIFICACIÓN DEL EDIFICIO	• <IdentificacionEdificio>						
Nombre del edificio	• • <NombreDelEdificio>			string	-	Identificación del edificio	Centro juvenil "L álamos"
Dirección	• • <Direccion>			string	-	Dirección postal del edificio	C/Tribulete, 5
Municipio	• • <Municipio>			string	-	Municipio correspondiente al edificio	Madrid
Código Postal	• • <CodigoPostal>			string	-	Código postal correspondiente al edificio	28001
Provincia	• • <Provincia>			string	-	Provincia del edificio	Madrid
Comunidad Autónoma	• • <ComunidadAutonoma>			string	-	Comunidad autónoma del edificio	Comunidad de M
Zona Climática	• • <ZonaClimatica>			string	A0	Zona climática en la que se sitúa el edificio	D3
Año Construcción	• • <AñoConstruccion>			string	aaaa ó aaaa-aaaa	Año de construcción del edificio	1979-2006
Normativa vigente	• • <NormativaVigente>			string	-	Normativa vigente en el momento de la construcción o rehabilitación del edificio o local	2008
Referencia/s catastral/es	• • <ReferenciaCatastral>			string	-	Referencia o referencias catastrales de la finca o fincas, separadas por comas	12341324123D5 12346336423D5
Tipo de Edificio o parte que se describe	• • <TipoDeEdificio>			string	ViviendaUnifamiliar, BloqueDeVivienda-Completo, ViviendaIndividualEn-Bloque, EdificioUsoTerciario, LocalUsoTerciario	Tipo de edificio o parte del edificio certificado	EdificioUsoTerciario
Procedimiento de calificación energética utilizado y versión	• • <Procedimiento>			string	-	Procedimiento aplicado para la calificación energética y verificación del cumplimiento del DB-HE	CE3 v1.0.1661.423 Fecha: 7- nov-2012
Alcance de la información del XML	• • <AlcanceInformacionXML>			string	CertificacionExistente, VerificacionExistente, CertificacionVerificacionExistente, CertificacionNuevo, VerificacionNuevo, CertificacionVerificacionNuevo	Alcance de la información incluida en este XML. Indica si la información ha sido generada con el objetivo de la verificación del DB-HE y/o certificación energética y el tipo de edificio analizado (Existente o Nuevo/Ampliación).	VerificacionExistente

Tabla 3: Elementos del Informe XML v2.1. Datos del técnico certificador

Campo	Etiqueta	Múl.	Opc.	Tipo	Valores admitidos / Formato	Descripción	Ejemplo	Id
DATOS DEL TÉCNICO CERTIFICADOR	• <DatosDelCertificador>							
Nombre y Apellidos	• • <NombreyApellidos>			string	-	Nombre y apellidos del técnico certificador	José Pérez Pérez	13
NIF	• • <NIF>			string	-	NIF o NIE del técnico certificador	44880365Z	14
Razón Social	• • <RazonSocial>		o	string	-	Razón social, en su caso, de la entidad certificadora	Estudio de Arquitectura Pérez, S.L.	15
NIF entidad certificadora	• • <NIFEntidad>		o	string	-	NIF, en su caso, de la entidad certificadora	Q1230540D	16
Domicilio	• • <Domicilio>			string	-	Dirección postal correspondiente al domicilio del certificador o entidad certificadora	Paseo de los Olmos	17
Municipio	• • <Municipio>			string	-	Municipio del domicilio	Madrid	18
Código Postal	• • <CodigoPostal>			string	-	Código Postal del domicilio	28001	19
Provincia	• • <Provincia>			string	-	Provincia del domicilio	Madrid	20
Comunidad Autónoma	• • <ComunidadAutonoma>			string	-	Comunidad autónoma del domicilio	Comunidad de Madrid	21
e-mail	• • <Email>			string	-	Correo electrónico de contacto	joseperez@perez.es	22
Teléfono	• • <Telefono>			string	-	Teléfono de contacto	+34914440023	23
Titulación habilitante	• • <Titulacion>			string	-	Titulación del certificador	Arquitecto	24
Fecha	• • <Fecha>			string	dd/mm/aaaa	Fecha de emisión del certificado	17/01/2014	30



- | Query Params | |
|--|--------------------|
| ☒ Key | Value |
| ☒ country | ES |
| ☒ yearConstruction | 1985 |
| ☒ climateZone | ES.B3 |
| ☒ numberDwellings | 2 |
| ☒ system | ES.CS_A_Cf-ET_C_EL |
| ☒ nuts2 | ES61 |

```

184         "element": "ES.02",
185         "details": {
186             "name": "Floor",
187             "original_name": "Suelo",
188             "description": "Floor description",
189             "original_description": "Descripción Suelo",
190             "icon": "Floor_icon.png"
191         },
192         "envelopeCatalogue": [
193             {
194                 "idEnvelopeCatalogue": "ES.S_04f",
195                 "name": "ENG: Forjados sobre locales",
196                 "description": "ENG: Soleras o Forjados de separación con soportales o bajos c",
197                 "original_description": "Soleras o Forjados de separación con soportales o baj",
198                 "cost_perm2": null,
199                 "transmittance": 1.06,
200                 "lifespan_years": null,
201                 "image": "S_04.jpg",
202                 "list": {
203                     "area": 199.31,
204                     "contact": "building"
205                 }
206             }
207         ]
208     }
209 }

```

[illegible]

```

264         "results": {
265             },
266             "calculatedKPIs": {
267                 "energy": {
268                     "stageConsumptionSavings=(ResultingVSResulting)": {
269                         "%GlobalEPNRconsumptionSavings": 0.28,
270                         "%CalEPNRconsumptionSavings": 0.47,
271                         "%RefEPNRconsumptionSavings": 0.32,
272                         "%AcsEPNRconsumptionSavings": 0.49,
273                         "NLetterEPNRconsumptionImprovement": 1
274                     },
275                     "stageDemandsSavings=(ResultingVSResulting)": {
276                         "%GlobaldemandSavings": 0.48,
277                         "%CaldemandSavings": 0.21,
278                         "%RefdemandSavings": 0.03,
279                         "%AcscdemandSavings": 0.25
280                     },
281                     "stageEmissionsSavings=(ResultingVSResulting)": {
282                         "%GlobalCO2emissionsSavings": 0.6,
283                         "%CalCO2emissionsSavings": 0.03,
284                         "%RefCO2emissionsSavings": 0.27,
285                         "%AcsCO2emissionsSavings": 0.3,
286                         "NLetterCO2emissionsImprovement": 1
287                     },
288                     "stageConsumptionCoveredByRES=(ResultingVSResulting)": {
289                         "%Global": ,
290                         "%Cal": ,
291                         "%Ref": ,
292                         "%Acs":
293                     },
294                 },
295                 "economic": {
296                     "RenoCost=(Resulting)": {
297                         "Cost": ,
298                         "Grants/subsidies": ,

```



OCR RP tools

- Interfaces using OCR RP calculator

1 renUEva: Get to know and improve

1

2

3

4

5

0. Datos de tu edificio

1. Tu edificio se corresponde con el tipo:

2. Sus características constructivas son:

3. Selecciona las instalaciones más frecuentes en tu edificio:

Estas son las intervenciones que te proponemos... ¿Te animas?

Actuación integral + fotovoltaica

Más información

Oficinas de vivienda

Profesionales

+ Ayudas

BERWOW Building Renovation Passport

Download PDF

3. Scenario – Envelope First

Energy Usage

GHG Emissions

Economics

Comfort

Energy Class:

4. Measures by Year

2026

2030

2035



OCR RP report

• Harmonized customizable ou



¿Qué es un pasaporte de

Un pasaporte de renovación es una hoja de ruta adaptada a las etapas que mejorará significativamente su eficiencia energética para 2050.

La estrategia consiste en reducir primero la demanda energética. Esto te permitirá planificar inversiones de forma progresiva. Según el EPBD revisado, los Estados Miembros establecen la demanda energética para 2050, con hitos intermedios para 2030 y 2040. España participa en los fondos NextGenerationEU).

¿Por qué renovar tu edificio?

- ✓ Cumplir con los estándares europeos (EPBD - D de descarbonización al 2050).
- ✓ Preparar tu edificio para futuras exigencias legales.
- ✓ Mejorar el confort térmico y acústico para los ocupantes.
- ✓ Reducir el consumo de energía y ahorrar en tu factura.
- ✓ Revalorizar el inmueble y aumentar su vida útil.
- ✓ Contribuir a la lucha contra el cambio climático.
- ✓ Acceder a subvenciones o ayudas públicas por parte de la administración.

¿Sabías que...?

- ✓ Existe un registro de profesionales cualificados.
- ✓ Hay oficinas de ventanilla única que te asesoran y encuentran la tuya [aquí](#).
- ✓ Puedes acceder a ayudas y subvenciones públicas. Comunidad Valenciana [aquí](#).



Paso 1 | 2025 | Cambio de ventanas

Sustitución de ventanas por otras con marcos de PVC con rotura de puente térmico y doble vidrio bajo emisivo.

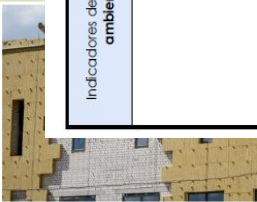


Mejorar la carpintería exterior es clave para optimizar el aislamiento térmico y acústico y reducir la demanda energética del edificio. La intervención consiste en instalar o renovar ventanas, puertas exteriores y otros huecos para minimizar las pérdidas de calor, la infiltración de aire y mejorar el confort. Incluye marcos con rotura de puente térmico, vidrios con cámaras de aire y sellados de alta calidad para cierras herméticos. También se pueden añadir sistemas de sombreado, como persianas o toldos, que regulan la radiación solar y eviten ganancias térmicas no deseadas en verano.

2-5 días/vivienda
30-40 años
3.582,99 €/vivienda
Carpintero o instalador especializado.

Paso 2 | 2028 | Aislamiento de la envolvente

Aislamiento de la fachada con poliestireno expandido.



La fachada de un edificio está expuesta a diferencias extremas de temperatura entre el interior (21-25°C) y el exterior (menos de 0°C en invierno o más de 40°C en verano), generando importantes flujos de calor y pérdidas energéticas si no está bien aislada. Incorporar un aislamiento térmico adecuado, con materiales de calidad y el espesor correcto, reduce el consumo energético y mejora el confort. El aislamiento exterior es especialmente recomendable, ya que no reduce la superficie útil de la vivienda y limita los puentes térmicos.

3-6 semanas
30-50 años
3.744,33 €/vivienda
Empresa de rehabilitación o especialista en SATE

Paso 3 | 2033 | Aerotermia

Instalación de una bomba de calor geotérmica.



Los servicios de calefacción, refrigeración y agua caliente sanitaria suponen una parte importante del consumo energético en el hogar. Ante los retos del cambio climático y la dependencia de combustibles fósiles, es esencial promover la eficiencia y la electrificación de estos sistemas. Sustituir equipos antiguos por bombas de calor de agua de alta eficiencia reduce el consumo energético, las emisiones de gases de efecto invernadero y los costes. Además, mejora el confort interior y contribuye a un modelo energético más limpio y sostenible.

1-2 semanas
15-20 años
4.299,56 €/vivienda
Instalador de climatización o empresa especializada

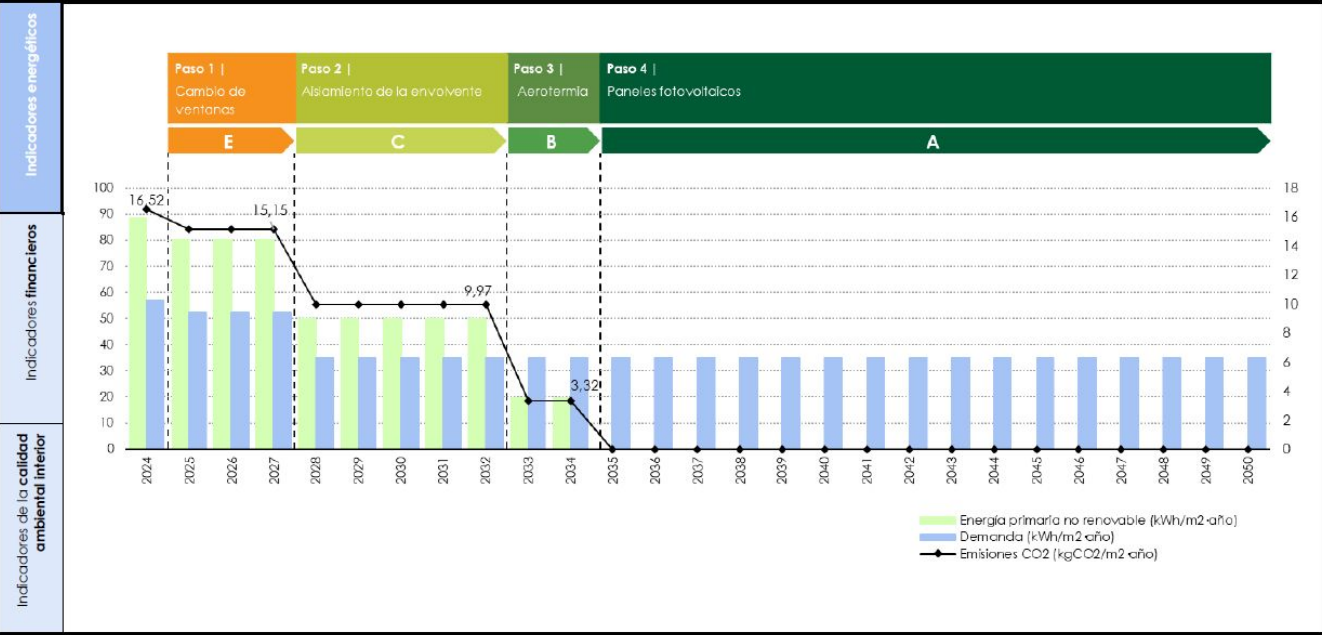
Paso 4 | 2035 | Paneles fotovoltaicos

Instalación de paneles solares fotovoltaicos.



La electricidad del hogar proviene de la red, que combina fuentes renovables y no renovables, generando emisiones variables de CO₂ según su mix. Instalar paneles solares fotovoltaicos para autoconsumo permite generar energía renovable in situ, reducir la huella de carbono y disminuir la factura eléctrica. Además, ayuda a protegerse de la volatilidad de los precios energéticos, aportando un beneficio tanto económico como ambiental.

2-5 días
25-30 años
65,96 €/vivienda
Instalador eléctrico autorizado o empresa de renovables





- | Query Params | |
|--|--------------------|
| ☒ | Value |
| ☒ Key | ES |
| ☒ country | 1985 |
| ☒ yearConstruction | ES.B3 |
| ☒ climateZone | 2 |
| ☒ numberDwellings | ES.CS_A_CF-ET_C_EL |
| ☒ system | ES61 |
| ☒ nuts2 | |

 JSON  Preview  Visualize 

2134901YJ2723S

ES.ME.AB.05

country	ES
region	ME
type	AB
period	5
systems	CS, AC
climate zone	B3
date	2022-11-09T20:20:49.522Z



Thanks !!!

- Ana Sanchis Huertas
- **asanchis@five.es**
- **<https://www.five.es/>**
- **<https://www.oneclickreno.eu/>**



Co-funded by
the European Union

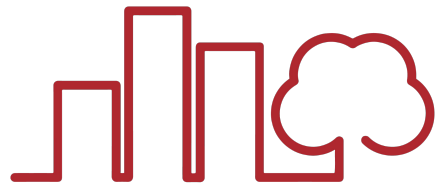


www.oneclickreno.eu



**Co-funded by
the European Union**

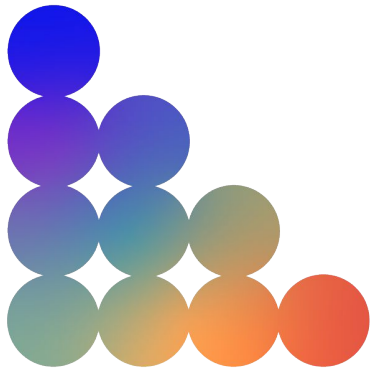
Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.



**SUSTAINABLE
PLACES 2025**

8-10 October 2025

Milano



iEPB

Eva Lucas Segarra



www.sustainableplaces.eu



iEPB

Integrated EPB Assessments. A pathway for effective EPBD implementation

Eva Lucas Segarra | Phd Architect

IVE | Valencia Institute of Building | www.five.es



Co-funded by
the European Union



GENERALITAT
VALENCIANA

Vicepresidència Segona i
Conselleria de Serveis Socials,
Igualtat i Vivenda



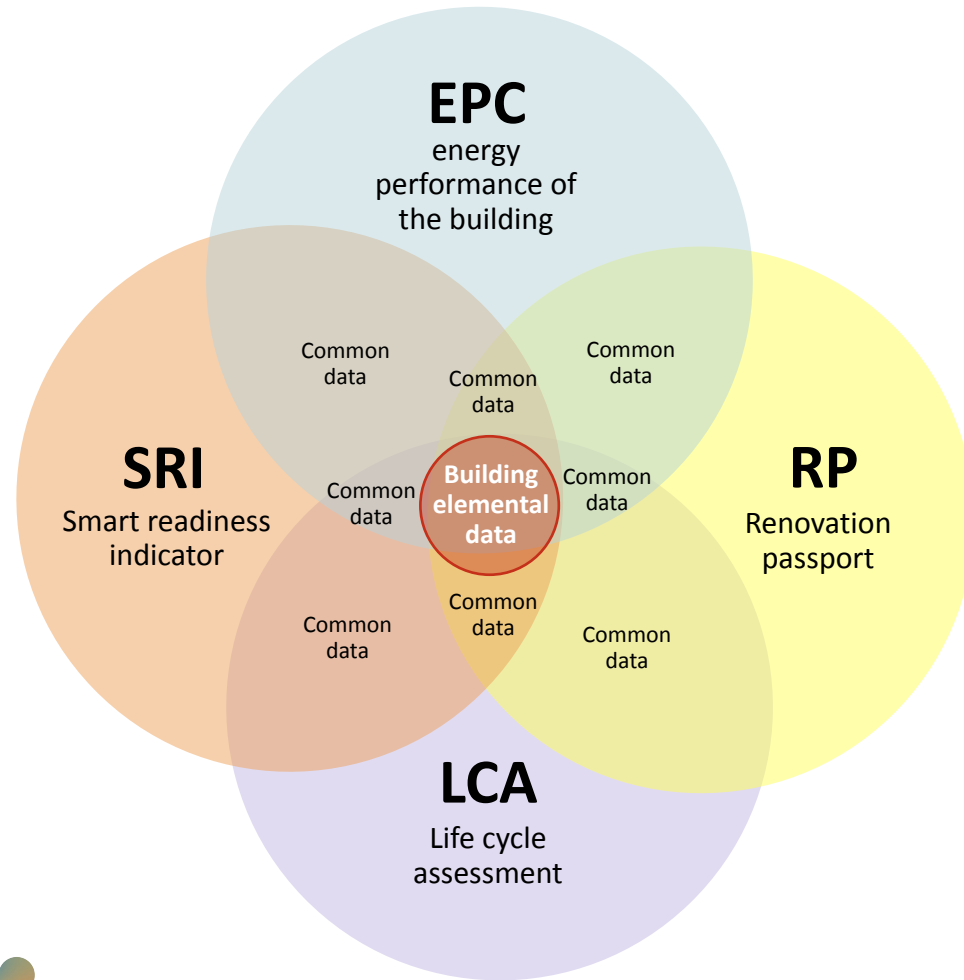
IVE
Instituto Valenciano
de la Edificación

EPB
energy
performance of
the building

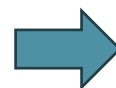
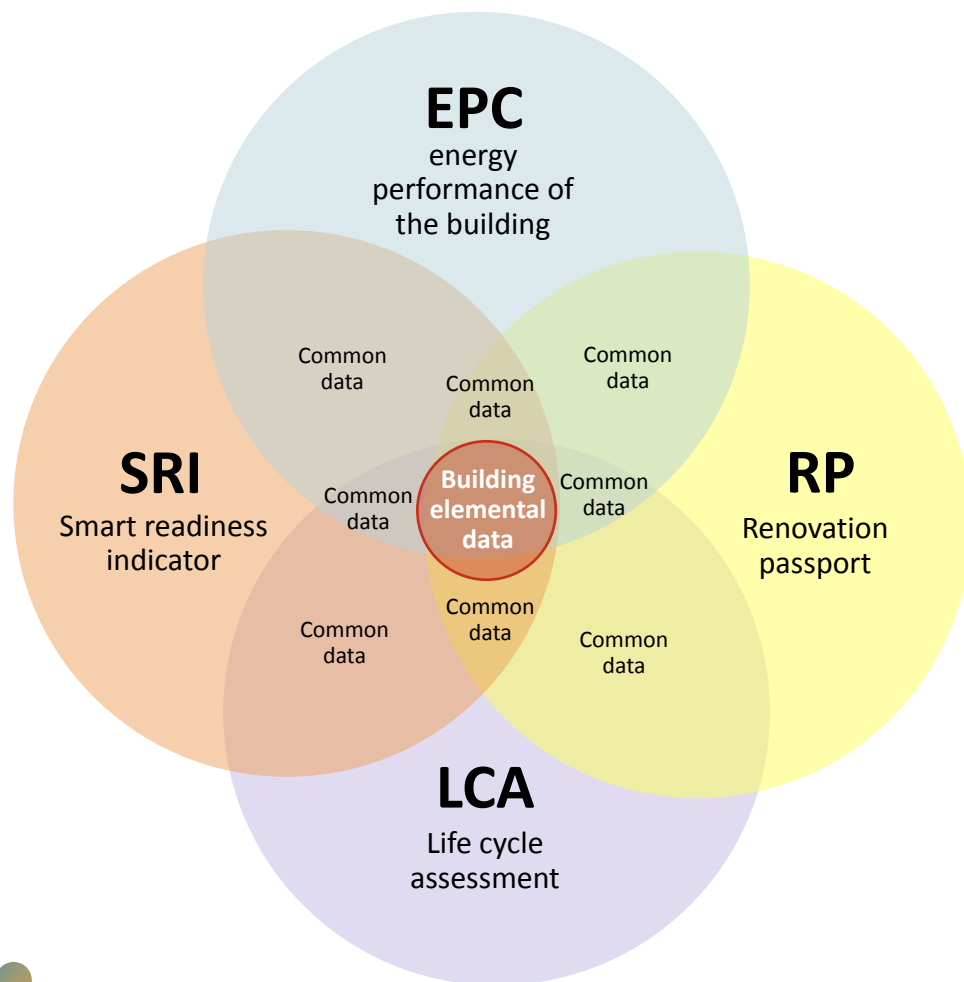
Main objective - Common data model

RP
Renovation
passport

Main objective - Common data model



Main objective - Common data model

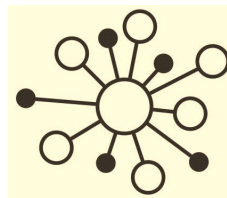
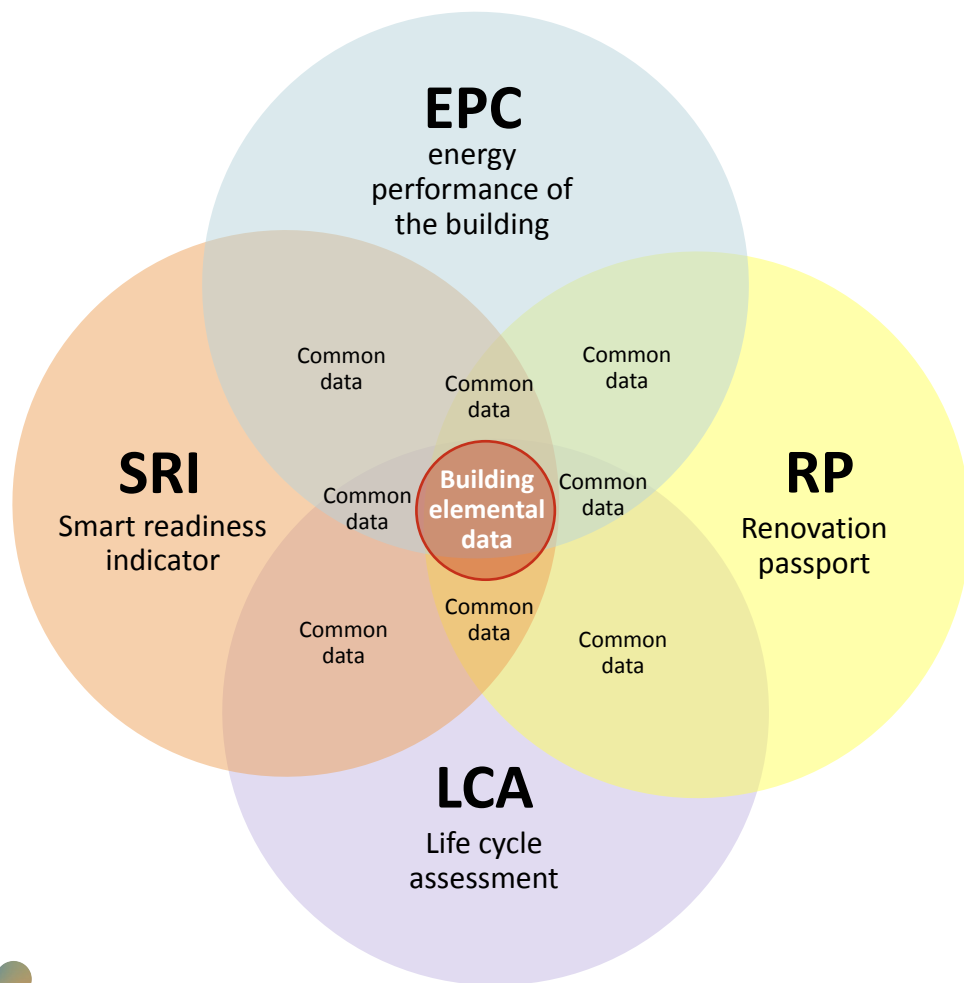


**Common
data model**

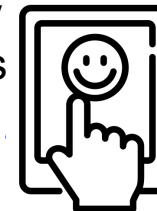
iEPB schema

Improve the synchrony between multiple building performance assessments - notably among EPCs, the SRI and RP - by developing a **Common data model for EPB Assessments**

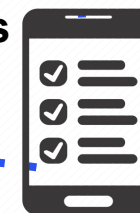
Other objectives



Improving **data accessibility** and user friendliness of EPCs



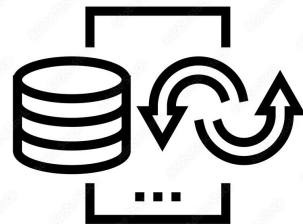
Easing collection, aggregation, and analysis of **data for building's performance assessments**



Supporting EPB Assessments and Certification schemes to be more **EU-compliant, consistent, and accurate**



iEPB concept

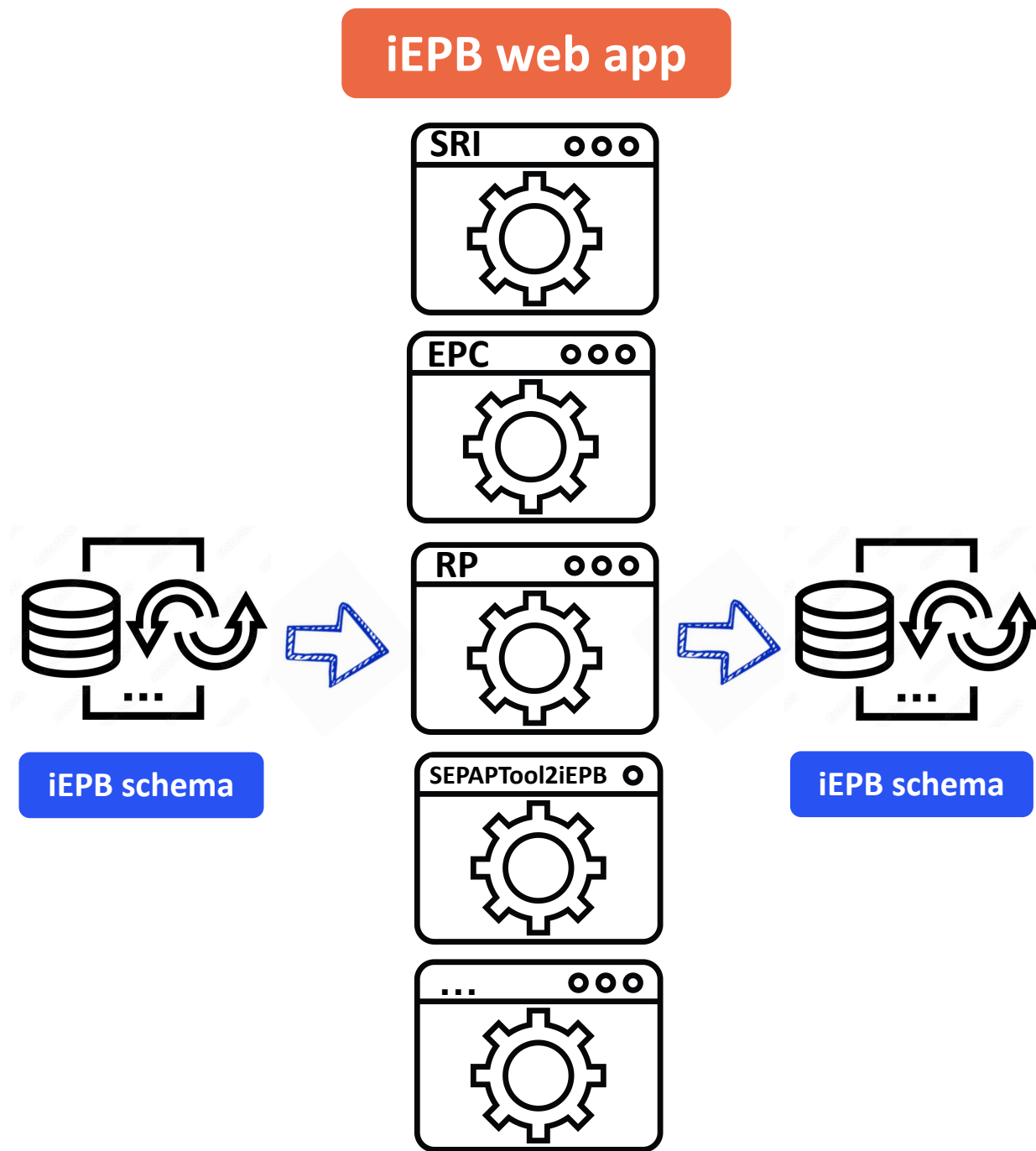


iEPB schema



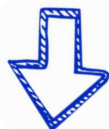
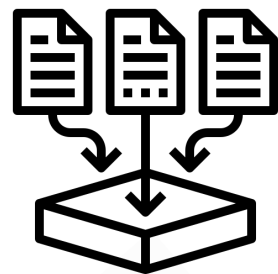
Co-funded by the European Union

iEPB concept



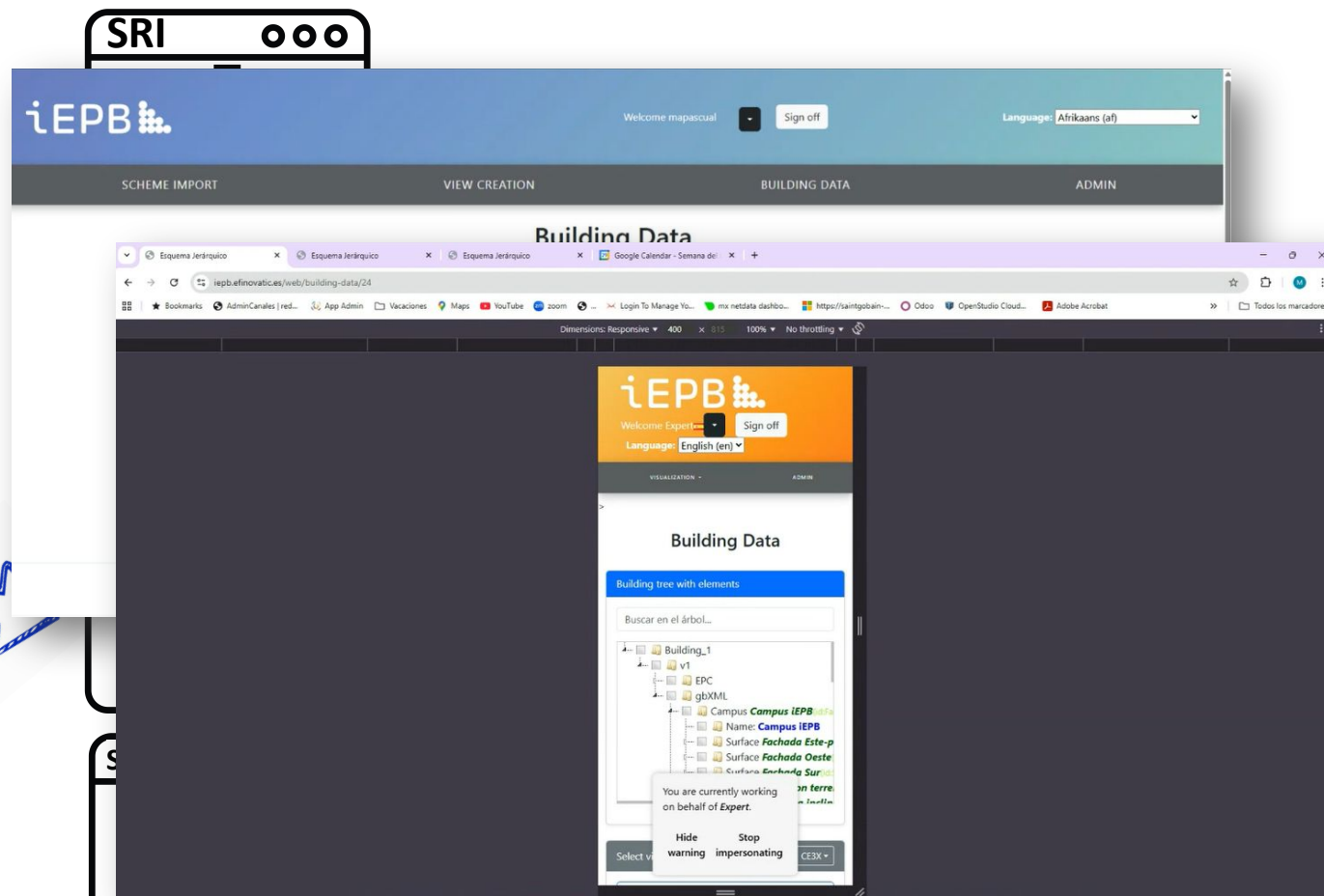
iEPB concept

BUILDING
DATABASES



iEPB schema

iEPB web app



iEPB web app

PROFESSIONALS

Building professionals



End-users



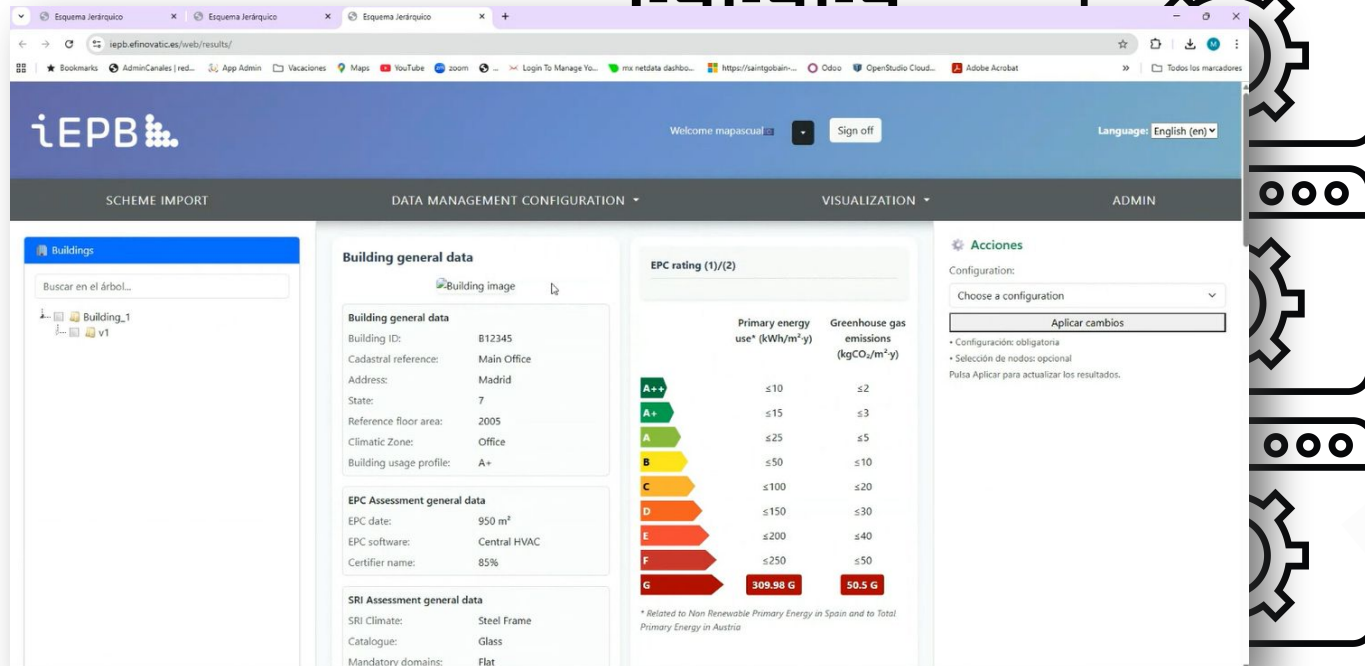
Co-funded by
the European Union

iEPB concept

BUILDING
DATABASES



iEPB web app

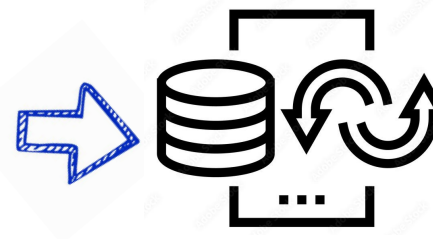
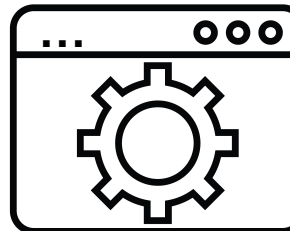
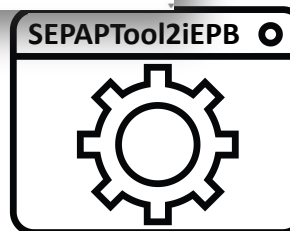
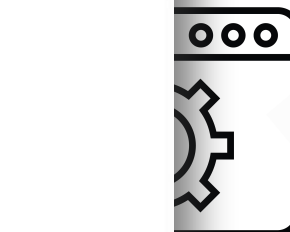
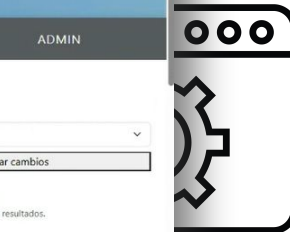


iEPB schema

iEPB web app

PROFESSIONALS

Building professionals



iEPB schema



iEPB web app

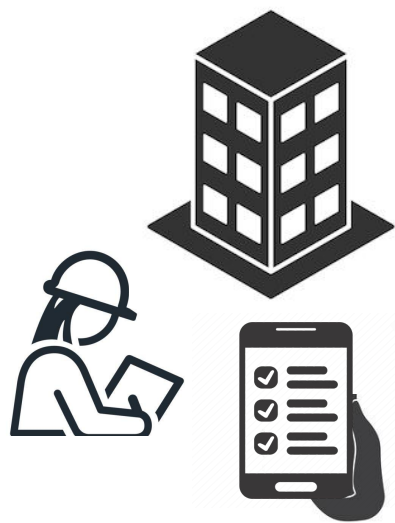
END USERS

End-users



Co-funded by
the European Union

iEPB concept

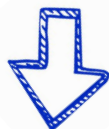
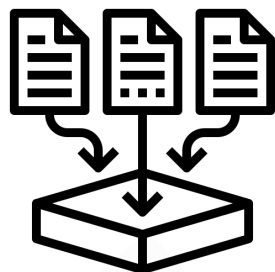


iEPB web app

PROFESSIONALS

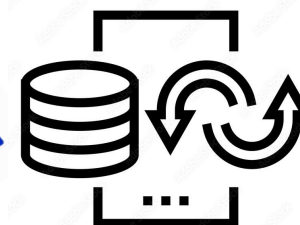
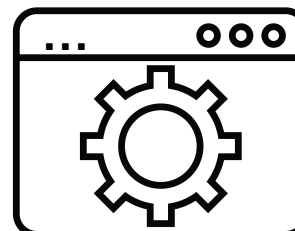
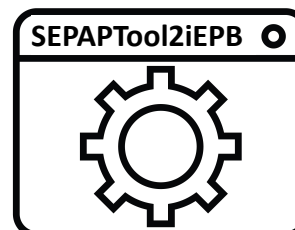
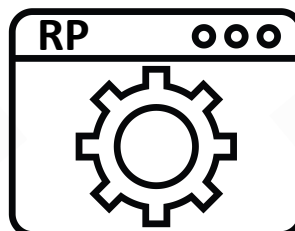
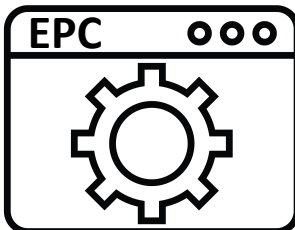
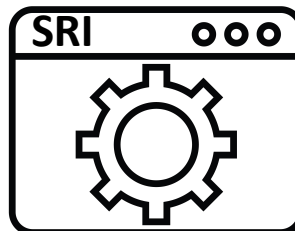
Building professionals

BUILDING
DATABASES

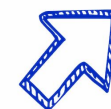


iEPB schema

iEPB web app



iEPB schema



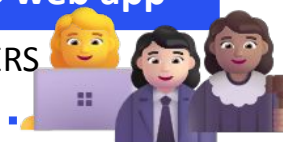
API Data integration
national databases



iEPB web app

END USERS

End-users



Co-funded by
the European Union

iEPB concept

BUILDING
DATABASES

```
C:\Program Files\SriStandAlone>SRIStandAlone.exe -h
usage: SRIStandAlone.exe [-h] [-i IMPORT_FILE] [-o OUTPUT_FILE] [-p [RESULT_FILE]] [-s [RESULT_SRI]]
                        [-kf1 [RESULT_KF1]] [-kf2 [RESULT_KF2]] [-kf3 [RESULT_KF3]] [-x [EXTRACT_FILES]]
                        [-e PACKAGE_FILES PACKAGE_FILES] [-v [SHOW_VERSION]]

SRI Stand Alone Application!

options:
  -h, --help            show this help message and exit
  -i IMPORT_FILE, --import_file IMPORT_FILE
                        Input file
  -o OUTPUT_FILE, --output_file OUTPUT_FILE
                        Output file
  -p [RESULT_FILE], --result_file [RESULT_FILE]
                        Print result
  -s [RESULT_SRI], --result_sri [RESULT_SRI]
                        Print main result
  -kf1 [RESULT_KF1], --result_kf1 [RESULT_KF1]
                        Print Kf1
  -kf2 [RESULT_KF2], --result_kf2 [RESULT_KF2]
                        Print Kf2
  -kf3 [RESULT_KF3], --result_kf3 [RESULT_KF3]
                        Print Kf3
  -x [EXTRACT_FILES], --extract_files [EXTRACT_FILES]
                        Extract files
  -e PACKAGE_FILES PACKAGE_FILES, --package_files PACKAGE_FILES
                        Package files
  -v [SHOW_VERSION], --show_version [SHOW_VERSION]
                        Show version
```

iEPB

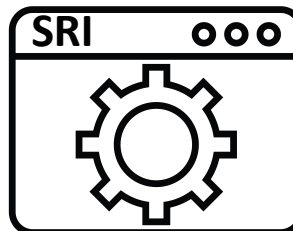
Standalone application for the SRI calculation
/D3.3

WP 3, T 3.3

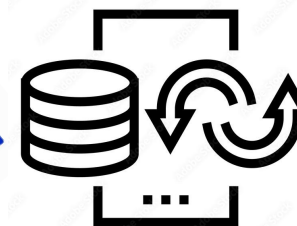
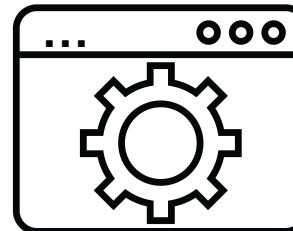
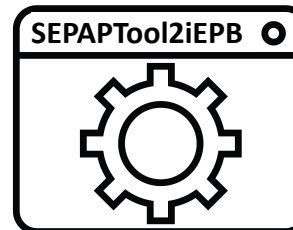
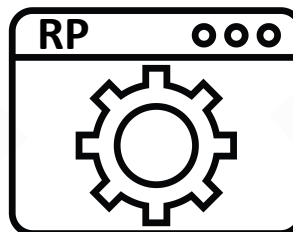
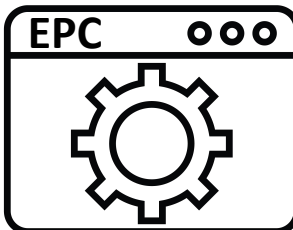
Authors: Miguel Ángel Pascual (EFINOVATIC), Daniel Jimenez (EFINOVATIC) and Marta Sampedro (CENER)

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or (name of the granting authority). Neither the European Union nor the granting authority can be held responsible for them.

iEPB web app



SRI Standalone
application



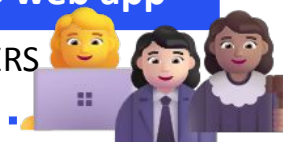
iEPB schema

API Data integration
national databases



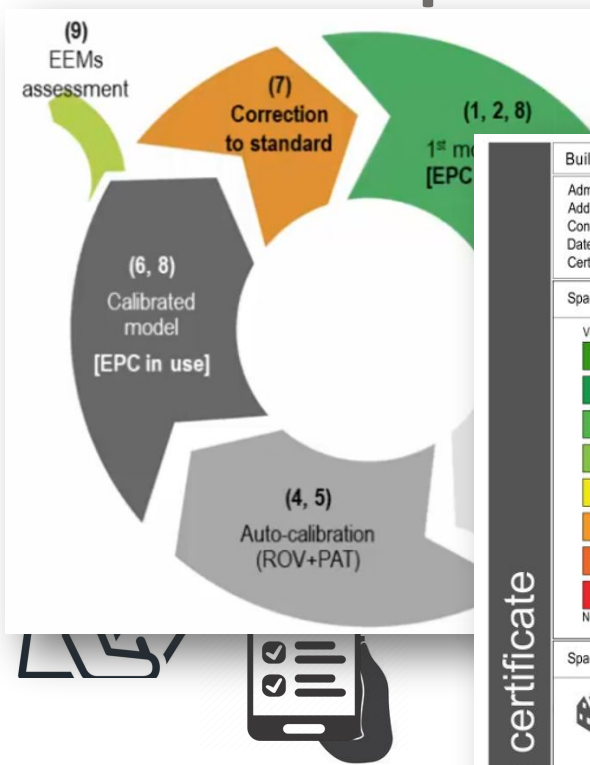
iEPB web app

END USERS



End-users

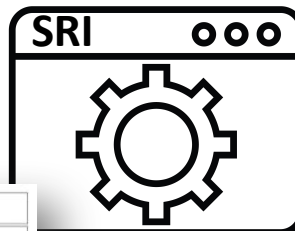
iEPB concept



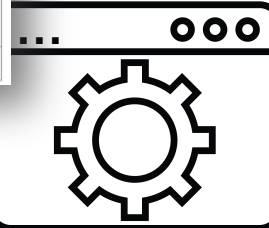
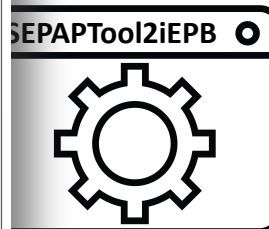
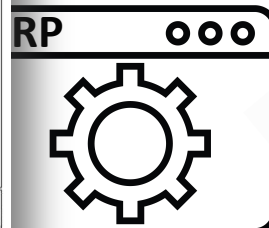
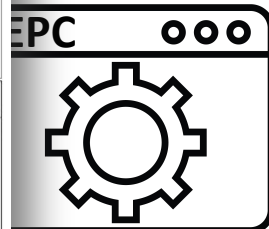
BUILDING
DATABASES



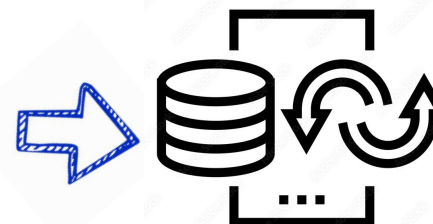
iEPB web app



SRI Standalone
application



API Data integration
national databases



iEPB schema



iEPB web app

END USERS



End-users

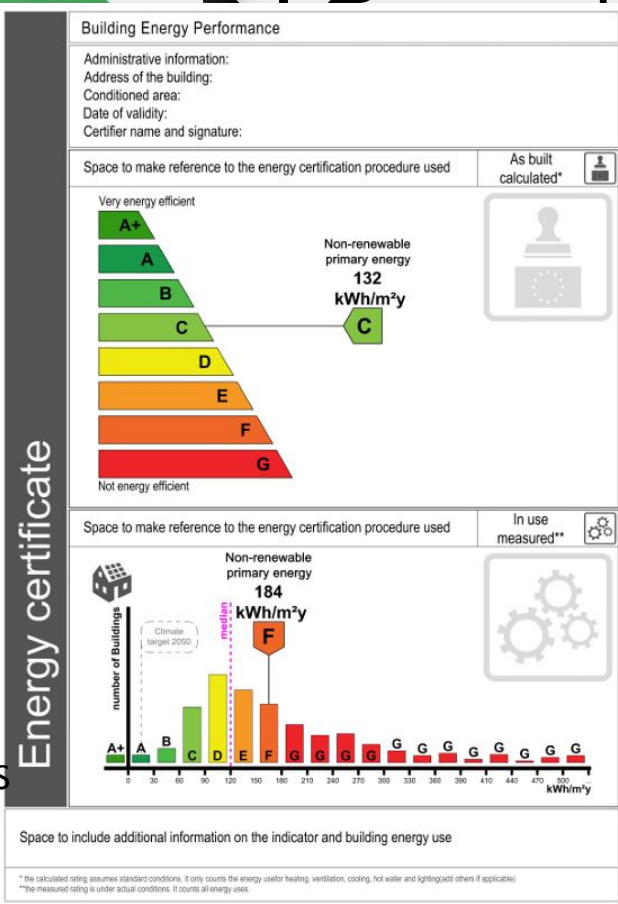
SEPAPTool2iEPB

iEPB web app

PROFESSIONALS



Building



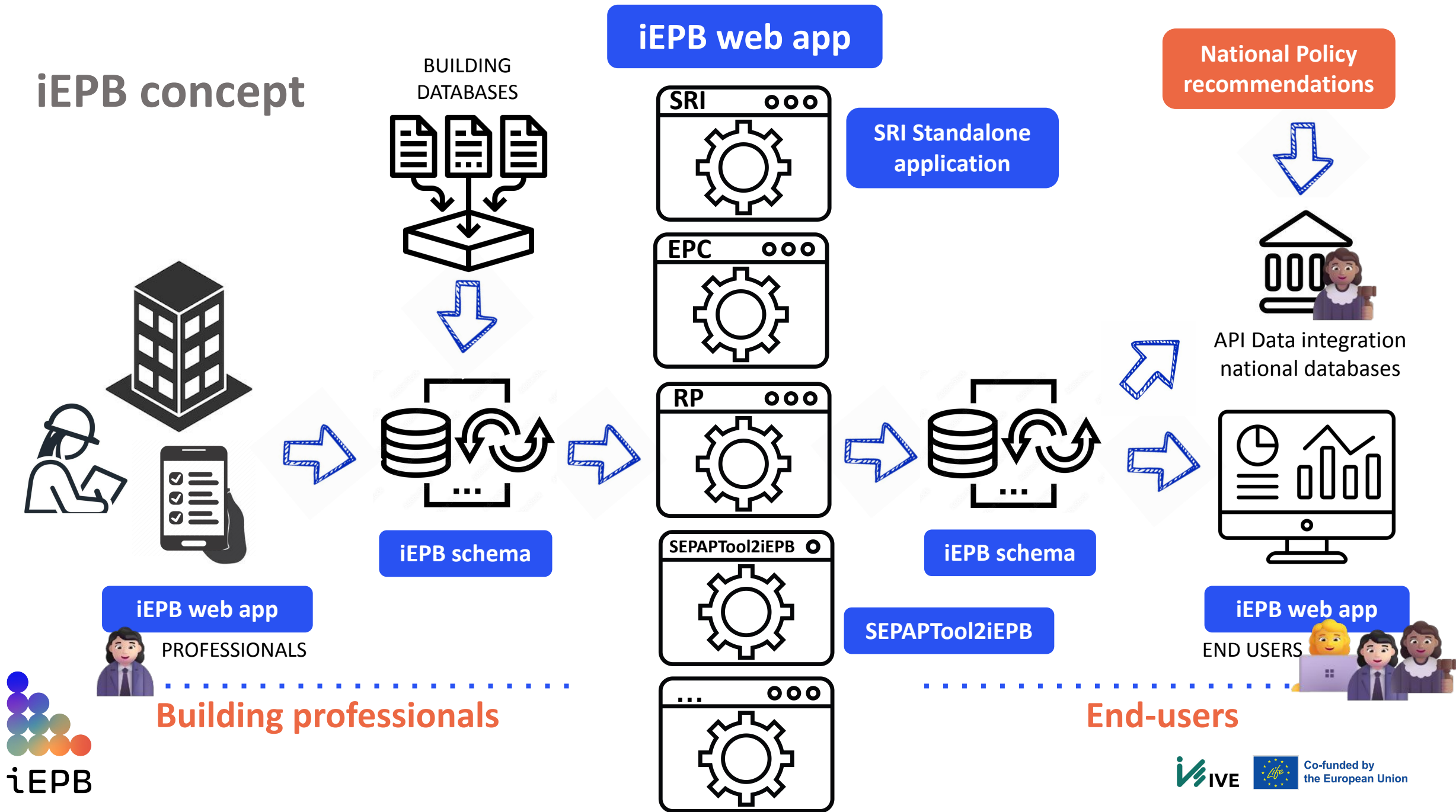
Space to include additional information on the indicator and building energy use

* the calculated rating assumes standard conditions. It only counts the energy user for heating, ventilation, cooling, hot water and lighting (and others if applicable)
** the measured rating is under actual conditions. It counts all energy use.



Co-funded by
the European Union

iEPB concept



How iEPB is facilitating practical EPBD IV implementation?

iEPB schema & iEPB web app

- **DLB – Digital Building Logbook** - *single file can centralise all building information in one location*
- **Art. 12 + Annex VIII – Renovation passports** - *integrates data collection required to generate Building Renovation Passports.*
- **Art. 16 - Data Exchange** - *enables interoperability of building performance data (EPCs, SRIs, BRPs, etc.) in a harmonised, digital format*
- **Art. 19 – Energy Performance Certificates** - *supports issuing EPCs in digital, machine-readable format*
- **Art. 22 - Databases for the energy performance of buildings** - *provides machine-readable, consistent data that Member States can use to populate national databases and the EU Building Stock Observatory*

SRI Standalone application

- **Art. 15 + Annex IV – Smart readiness of buildings** - *delivers the dedicated assessment of Smart Readiness Indicators, in line with the harmonised methodology.*

SEPAPTool2iEPB (+ Protocol for Dynamic re-scaling base on actual energy use)

- **Annex I – Metered energy use** - *encourages using actual building data to improve the quality and reliability of performance assessments.*



Thank you!



<https://iepb-project.eu/>



iepb_coordinator@five.es



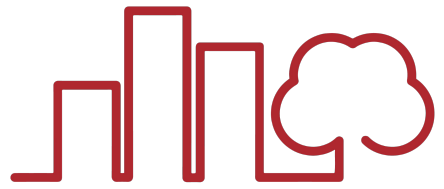
[@iEPB_eu](https://twitter.com/iEPB_eu)



[https://www.linkedin.com/
company/iepb-eu-project/](https://www.linkedin.com/company/iepb-eu-project/)



Co-funded by
the European Union



**SUSTAINABLE
PLACES 2025**

8-10 October 2025

Milano

Giulia De Aloysio

Barrio



www.sustainableplaces.eu

BARRIO's Toolkit for Neighbourhood-Scale Energy Renovation

The BARRIO Project

Eng. Giulia De Aloysio, PhD
CERTIMAC



Co-funded by
the European Union

Why are we here?

Context & EPBD



~75% of EU buildings inefficient → 40% of energy use, 35% of GHG emissions



Renovation rate $\approx$ 1%/year → far below EU targets



EPBD Recast 2024/1275:

- From single-building retrofits → **neighbourhood-scale strategies**
- **District-scale renovation** explicitly supported (Recital 24, Art. 17, 28)
- Data collection (Art. 3–4) → **robust building stock inventories**
- Building Renovation Passports (Annex II) → **staged roadmaps**

Our response: BARRIO

BARRIO anticipates the Directive:

- From fragmented data → **neighbourhood-scale Aggregated Renovation Plans** starting from **BRPs**
- Transforming **single-building BRPs** into **cluster-based staged roadmaps**
- Preparing **aggregated, automated renovation pathways** (APPs)
- Turning **policy ambition (EPBD / BRPs)** into **practical implementation at district level**

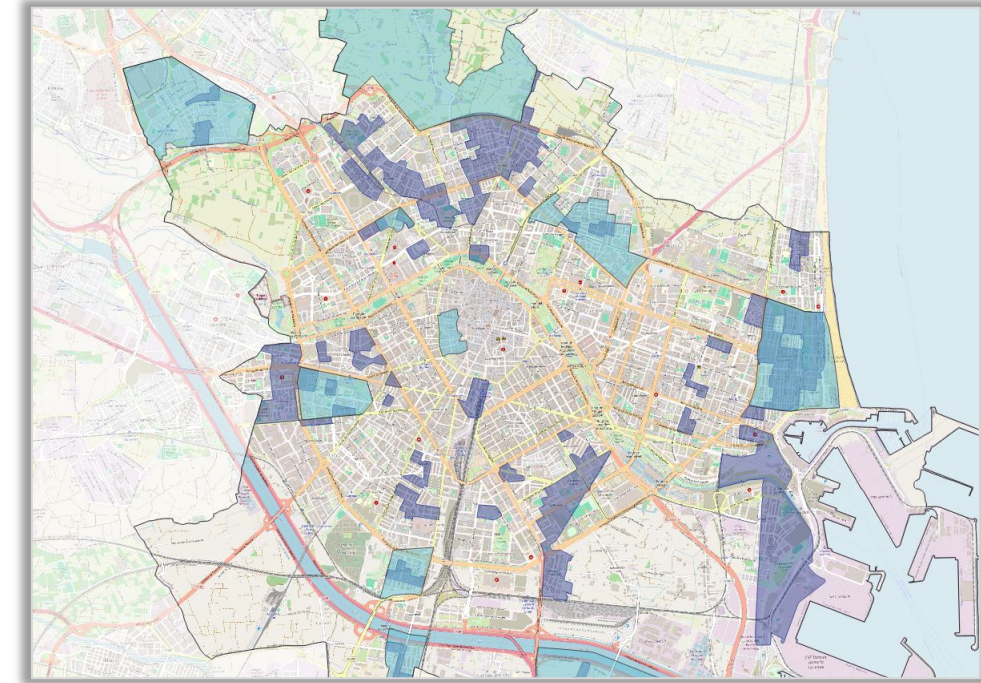


Data as the foundation

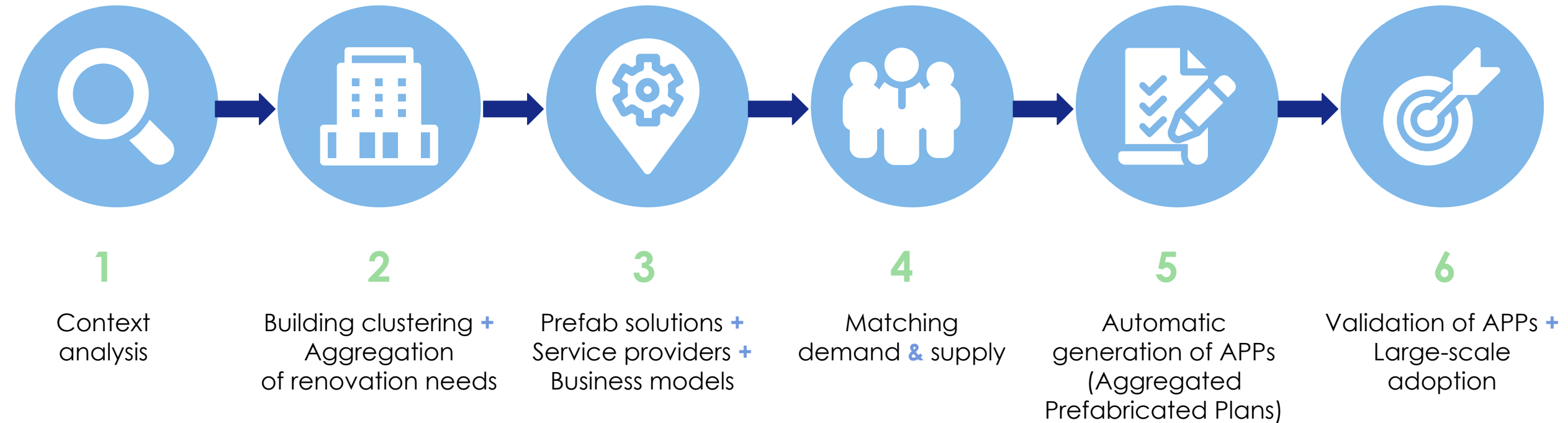
Why data matters?

- **Context Analysis & Clustering:** group buildings by type, age, ownership, condition → ready for joint renovation actions.
- **Renovation Needs Matrix:** aligns local priorities, urgent needs & market opportunities.
- **Integrated Data Layers:** EPCs, energy/comfort, socio-economic vulnerability, governance & finance readiness.

👉 Outcome: a **neighbourhood-level dataset** enabling aggregated investment pipelines & collective renovation plans.



How it flows: the BARRIO journey



The neighbourhood approach transforms
data & BRPs into collective, finance-ready renovation strategies.

Why it matters?

BARRIO is already EPBD in practice

 **4 pilots** → validating the neighbourhood approach in diverse EU contexts

 **Expected 5-year impacts:**

- +10% renovation rate
- 56 GWh/year saved
- ~2,500 tCO₂eq/year avoided

 **Upskilling:** Renovation Pack + DMT Pack → registry of certified professionals

 **Policy feedback loop:** APPs integrated into **SECAPs, NECPs, EPBD roadmaps**

BARRIO makes the neighbourhood approach **operational and scalable:**
DATA → BRPS → APPS → MARKET-READY RENOVATION PATHWAYS

Thank You



@BARRIO_EU



barrio@certimac.it

Barrio



**Co-funded by
the European Union**

Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

certimac | The logo for certimac, with the text "certimac" in a bold, sans-serif font. To its right are the logos for ENEA and CNR.

The logo for IVE, featuring a stylized "IVE" in a bold, sans-serif font. To its right is the text "Institut Valencià de l'Edificació" and "Instituto Valenciano de la Edificación".

The logo for B-Link, featuring a colorful, abstract geometric design. To its right is the text "B-Link", "BARCELONA", and "STRATEGIC PROJECTS".

The logo for IRI UL, featuring a stylized "IRI UL" in a bold, sans-serif font. To its right is the text "Institute for Innovation and Development" and "OF UNIVERSITY OF LJUBLJANA".

EnEffect The logo for EnEffect, with the text "EnEffect" in a bold, sans-serif font and a stylized red and white graphic to its right.

The logo for ECONOLER, featuring a stylized "E" in a bold, sans-serif font. To its right is the text "ECONOLER".

ubik
Geospatial Solutions

The logo for HOUSING EUROPE, featuring a stylized house icon in a bold, sans-serif font. To its right is the text "HOUSING EUROPE".



**SUSTAINABLE
PLACES 2025**

8-10 October 2025

Milano

Sara Dorregaray



BuildUPspeed



www.sustainableplaces.eu



Sara Dorregaray and María Ibáñez
ACR



The BuildUPspeed project has received funding from the LIFE programme of the European Union under Grant Agreement no. 101075843.

The challenge

Energy Performance Building Directive.



A couple of 1.000



projects
More than 200.000€
invested

Industrialised construction



Faster and more efficient on-site delivery



Reduced waste and emissions



Improved quality and traceability of processes



Better energy performance of buildings

Our mission



- Use of **industrialized solutions**
- Committed to **bridging technical gaps**
- **Support the building sector in achieving greater efficiency and sustainability**
- Unlock **the value of European research**
- Support architects, developers, contractors, manufacturers, public authorities and even **end-users in identifying the industrialised solutions** that best fit their specific needs and context

Ecosystems

Identified climatic zones:

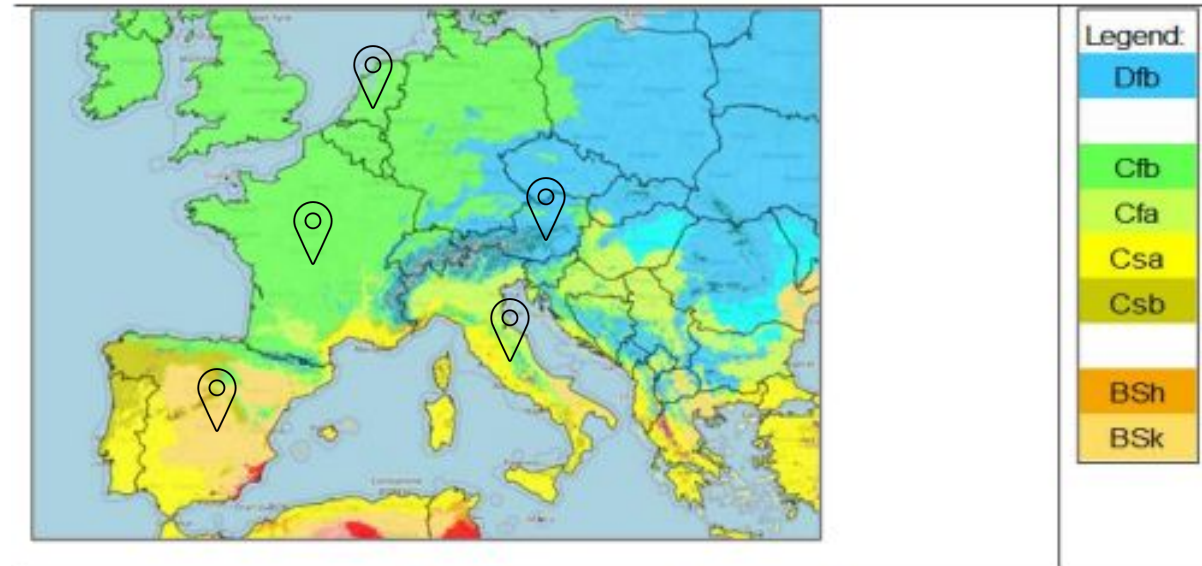
📌 Austrian

📌 French

📌 Italian

📌 Netherlands

📌 Spanish



Ecosystem Climate classification

Austria	Dfb	Cold	no dry season, warm summer
	Cfb	Temperate	no dry season, warm summer
France - Metropole of Bordeaux	Cfb	Temperate	no dry season, warm summer
The Netherlands	Cfb	Temperate	no dry season, warm summer
Italy - Milan area	Cfa	Temperate	no dry season, hot summer
Spain	Dfb	Cold	no dry season, warm summer
	Csa	Temperate	dry summer, hot summer
	Csb	Temperate	dry summer, warm summer
	Cfb	Temperate	no dry season, warm summer
	BSh	Arid	steppe, hot
	BSk	Arid	steppe, cold

Tools

Tools to bridge innovation and the market

To close the gap between technology and real-world needs, the BUPs team is developing two innovative tools:

Tool: MAP

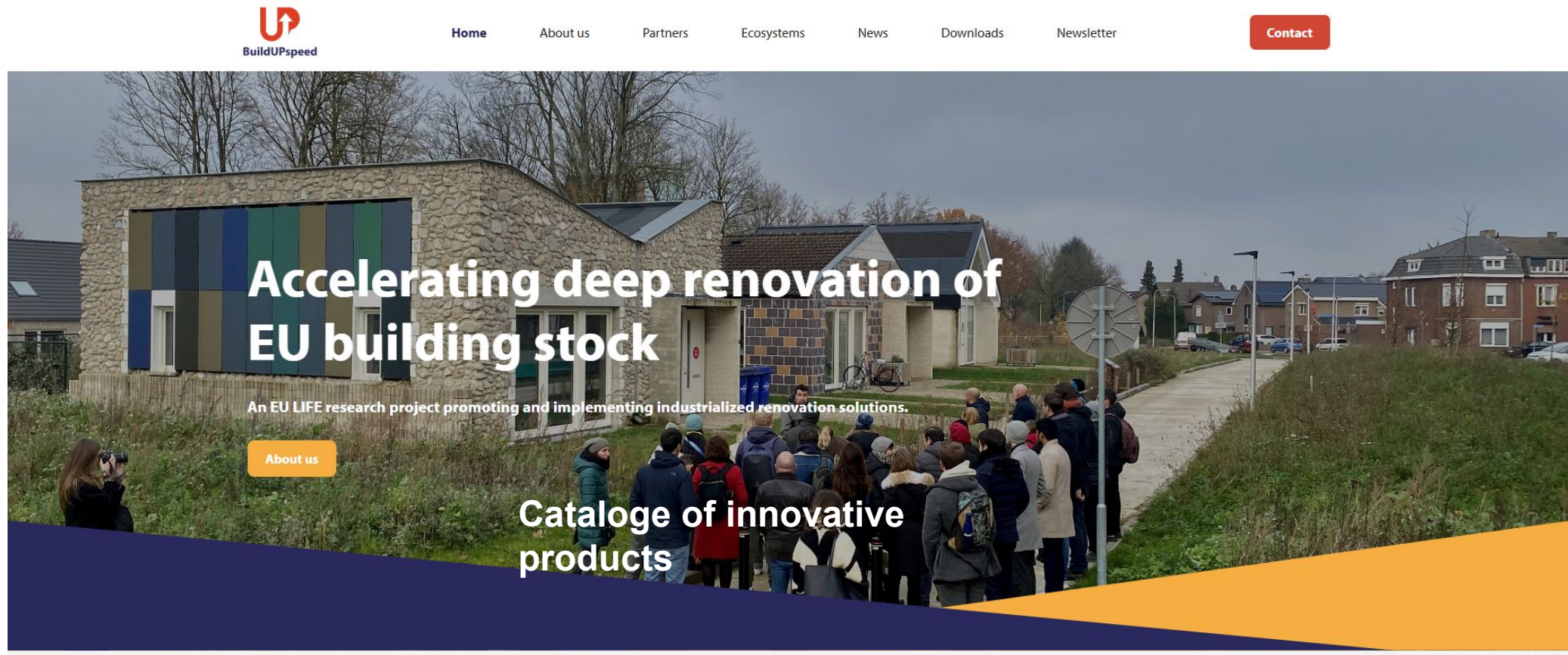
Tools to bridge innovation and the market

To close the gap between technology and real-world needs, the BUPS team is developing two innovative tools:



Market Activation Platform (MAP)– A digital hub that consolidates industrialized solutions, technical data, and real-world case studies. This platform aids decision-makers in identifying the most effective solutions for their specific goals and contexts, while considering digital innovation methods and circularity criteria.

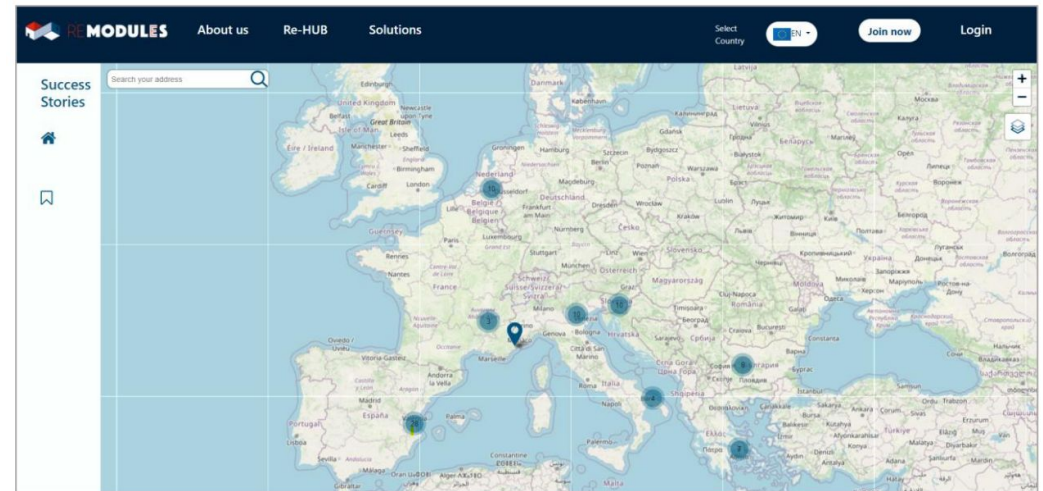
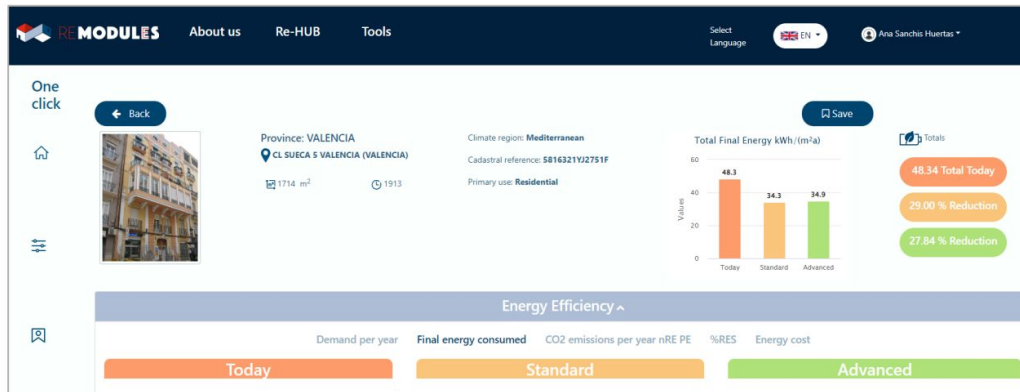
Tool: MAP



Tool: MAP

- Design through BIM
- VR visualizations
- Implementation
- Feedback

& Connect with Re-MODULEES platform:



Tool: PuF

Tools to bridge innovation and the market

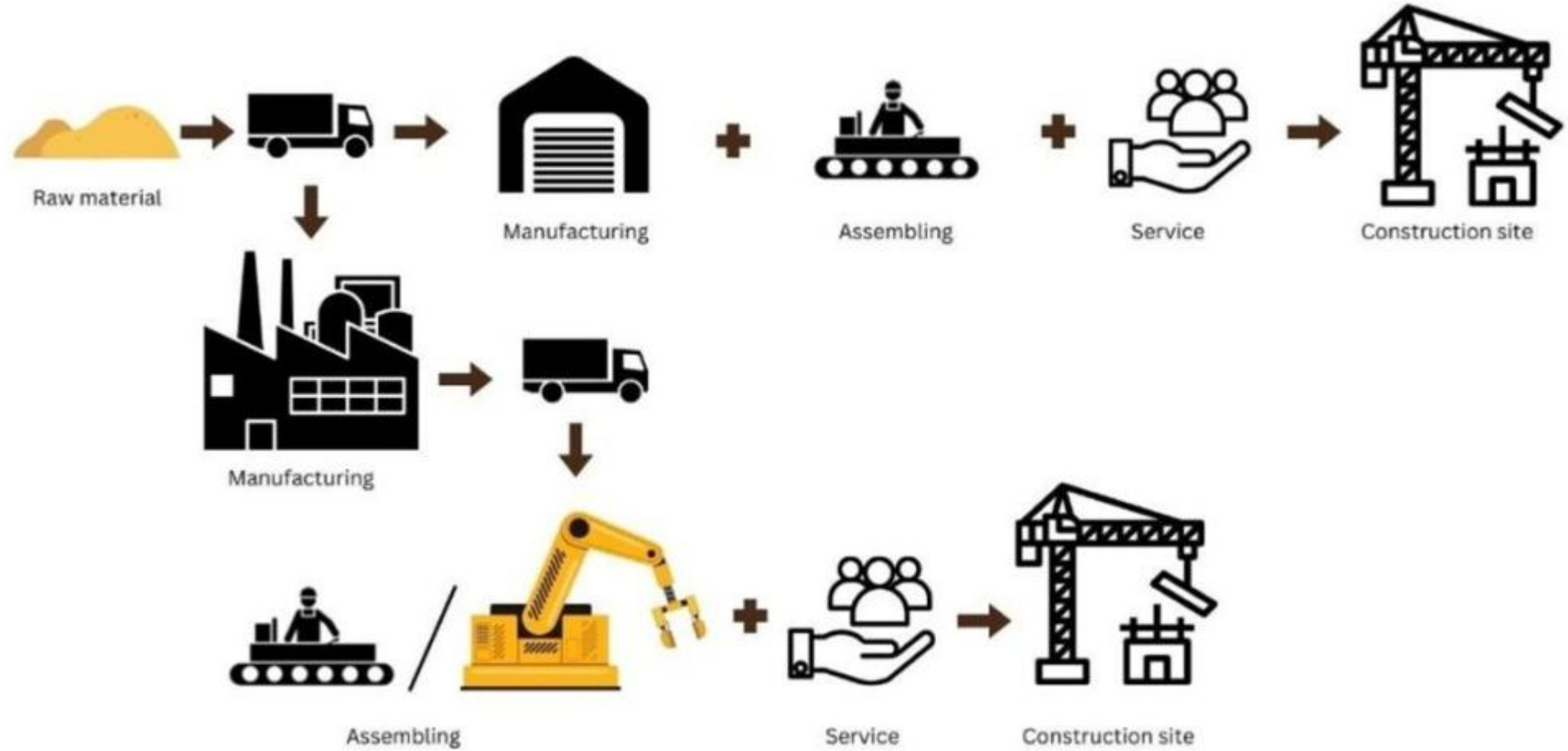
To close the gap between technology and real-world needs, the BUPS team is developing two innovative tools:



Market Activation Platform (MAP)— A digital hub that consolidates industrialized solutions, technical data, and real-world case studies. This platform aids decision-makers in identifying the most effective solutions for their specific goals and contexts, while considering digital innovation methods and circularity criteria.

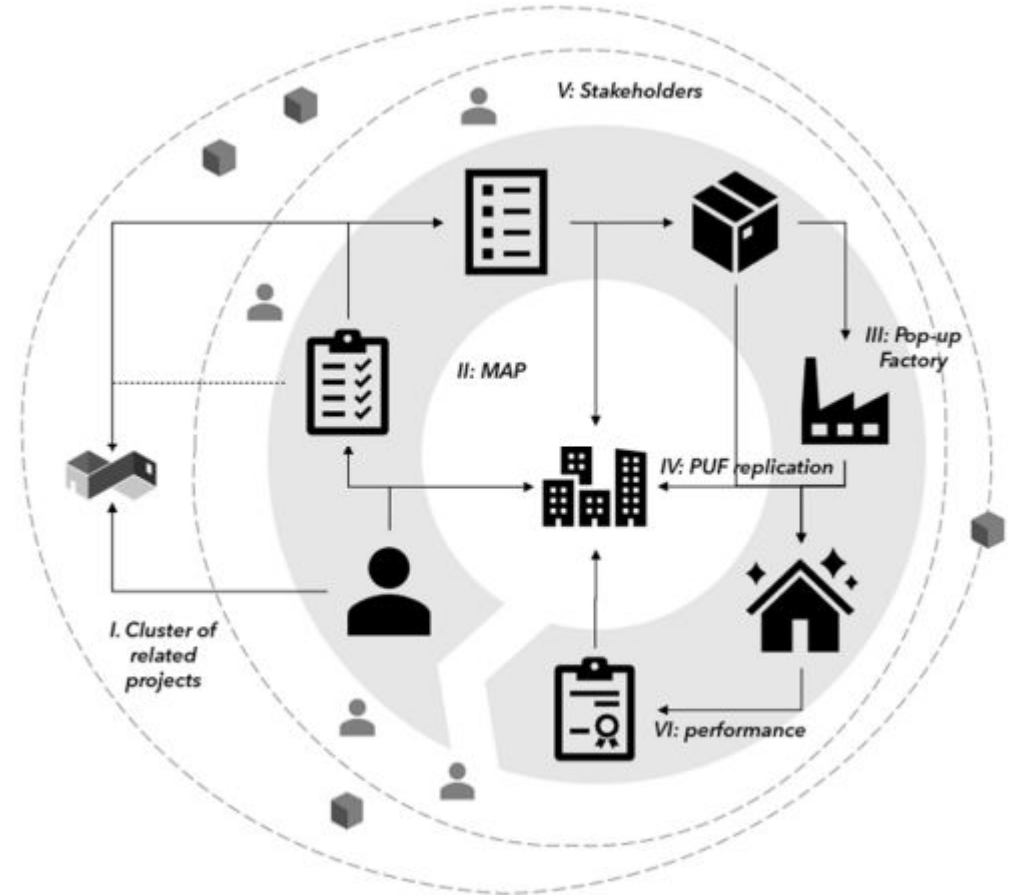
Pop-up Factories (PuF) – Modular, temporary or semi-permanent production units designed to operate near renovation sites. Their proximity enables real-time customisation, reduces transport needs, and enhances sustainability. Within BuildUPspeed, five distinct PuF scenarios are explored—ranging from mobile on-site units to regional district factories and service hubs—each offering a tailored approach to match local renovation demands, regulatory conditions, and market maturity. By aligning industrial capabilities with specific project contexts, PuFs offer a transformative solution to scale up deep renovations across Europe.

Tool: PuF



Why this matter

- The transformation of construction benefits everyone:
 - safer housing
 - better energy performance
 - lower environmental impact
 - faster responses to social and climate emergencies
- Promoting the use of industrialization, digital innovation, and circularity criteria.
- Conection between final user or determined need and technology.





BuildUPspeed

Thank you for your attention!

Colofon

This project has received funding from the European Union's LIFE framework programme under grant agreement no. 101075843

The information in this publication does not necessarily represent the view of the European Commission.

© BuildUPspeed

All rights reserved. Any duplication or use of objects such as diagrams in other electronic or printed publications is not permitted without the author's agreement.

Follow us:

BuildUPspeed.eu



BuildUPspeed



@BuildUPspeed_EU



The BuildUPspeed project has received funding from the LIFE programme of the European Union under Grant Agreement no. 101075843.



**SUSTAINABLE
PLACES 2025**

8-10 October 2025

Milano

Leticia Ortega

FACILITA



www.sustainableplaces.eu

FACILITA

**Facilitating Ambitious Energy Renovation of
Public Buildings through Integrated Services**

Leticia Ortega IVE – Valencia Institute of Building www.five.es



**Co-funded by
the European Union**

WHAT?

Trigger ambitious **renovations** in **public buildings** offering Spanish local and regional public bodies a comprehensive and **all-inclusive service** of technical, financial and legal advice, procurement and quality assurance of works.



HOW?

By creating **3 OSSs** providing **integral renovation solutions**, shifting from an atomised model characterised by fragmented demand and supply. FACILITA will explore **3 different OSS models**, regarding institutional force, governance, service portfolio and finance mechanisms.

FACILITA and the EPBD 2024: The Role of One-Stop-Shops

EPBD 2024 highlights **One-Stop-Shops (OSS)** as key instruments to simplify the renovation journey. FACILITA establishes 3 regional OSS for public buildings in Spain, addressing EPBD priorities:



- **Integrated support:** technical, legal, financial, and procurement assistance.



- **One-Click Information:** clear communication, legal/regulatory analysis, link with EU and local policies.



- **Financing solutions:** supporting the application of innovative mechanisms by engaging frontrunner public administrations.

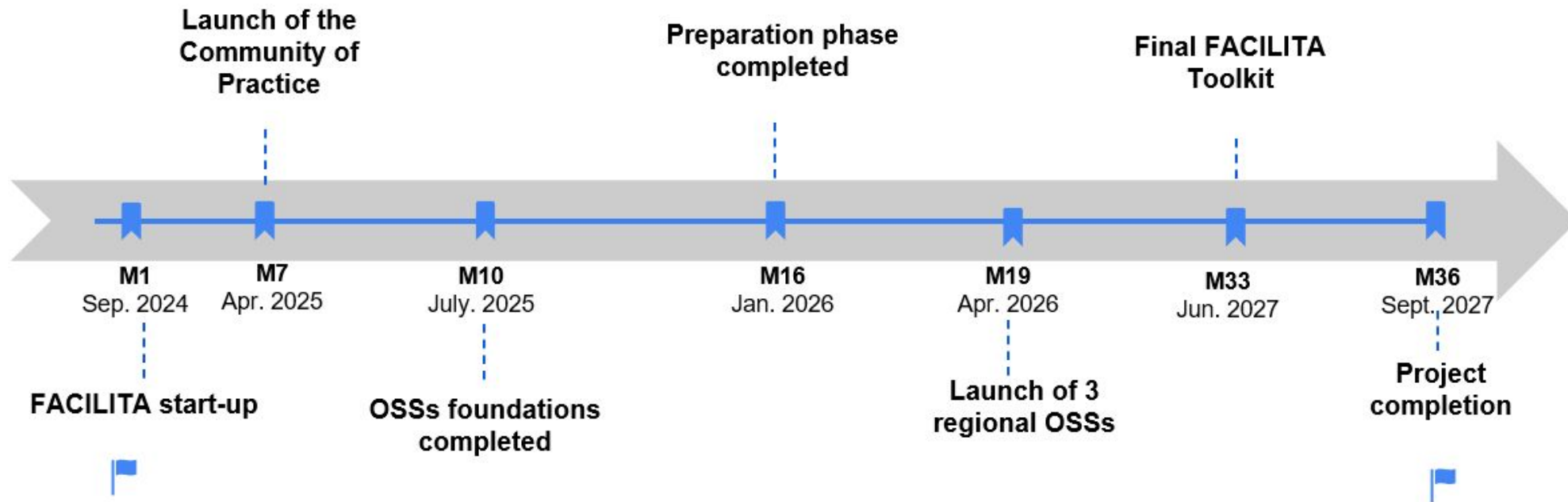


- **Building Renovation Passport (BRP) logic:** long-term planning and traceability of renovation steps.



- **Capacity building:** empowering facilitators, training OSS staff, ensuring long-term operational capacity.

WHEN?



RESULTS / IMPACTS?



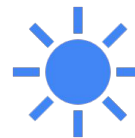
3 operational OSS



Investments mobilised
in the renovation of public
buildings



95.11 GWh/year final
energy savings



40.25 GWh/year
renewable energy
generation.



**Policies and
strategies** created or
adapted



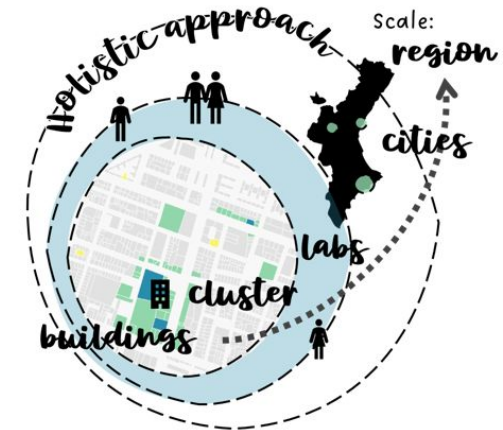
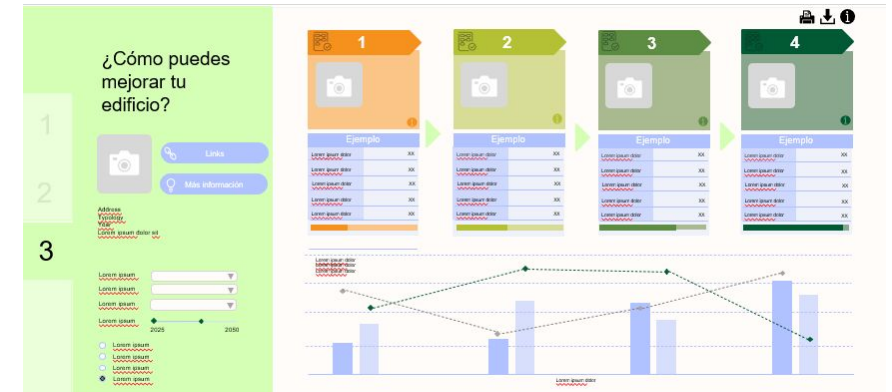
**Action Plan and
Toolkit** to ensure
replicability

CONNECTION WITH OTHER PROJECTS

FACILITA leverages and adapts existing innovations developed in other projects to public buildings:

- **From OneClickRENO (OCR):** digital tools and methodologies for Building Renovation Passports (BRPs) that simplify long-term planning.
- **From BARRIO:** approaches for aggregating demand and engaging local ecosystems at neighbourhood scale.

This creates synergies across projects and maximises the impact of EU-funded innovation.

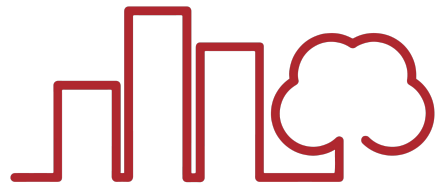


THANK YOU!

FACILITA



Co-funded by
the European Union



**SUSTAINABLE
PLACES 2025**

8-10 October 2025

Milano



PANEL DISCUSSION

Building Renovation in Practice
Challenges, Solutions and Collaboration



BuildUPspeed



www.sustainableplaces.eu



one click
reno

FACILITA



iEPB