



EU Building Stock Observatory



3rd EDITION 2023-2026

... Better data for better buildings

INTRODUCING THE NEW BSO

Sylvain Robert | Andreas Hermelink | Roberto Lollini

30.11.2023



KEY QUESTIONS

1. **What is the BSO and why is it more relevant than ever?**
2. **What is new to future-proof the BSO?**
3. **What is coming up?**



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EU Building Stock Observatory

Quick overview

CINEA – Unit LIFE Climate & Energy
Sylvain Robert, Project adviser



Zero-Emission Buildings Academy #7

Online, 30 November 2023

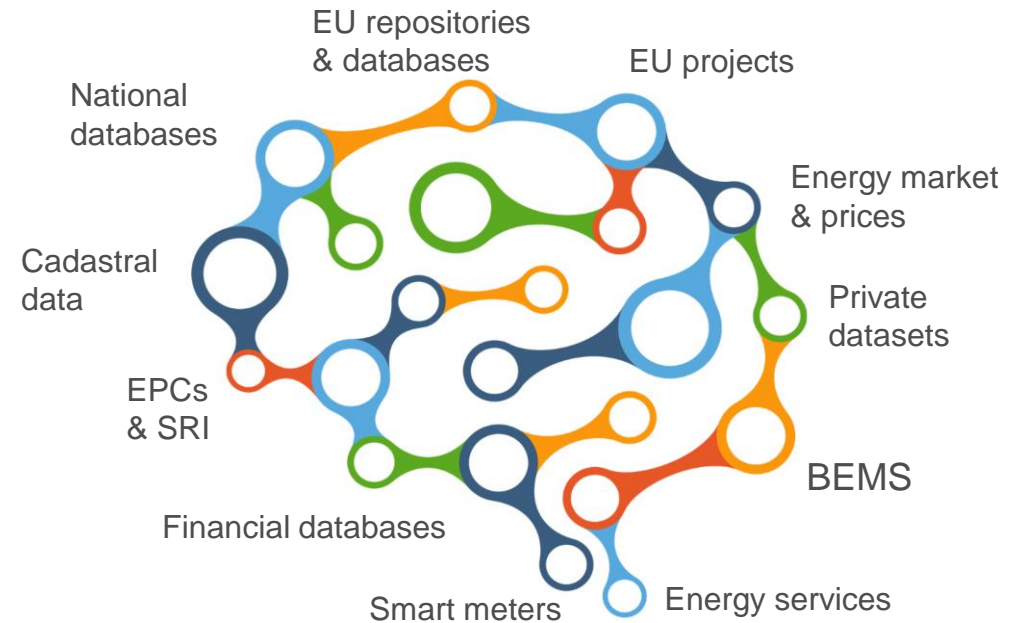
BSO - context



The BSO: a central repository for EU buildings data of policy interest



EU energy policy framework



Building data sources



BSO - EU Building Stock Observatory



Buildings data – a rich project landscape

- Fostering the implementation of EU policies
- Collecting data and enhancing data availability
- Innovation for a supportive EU buildings data infrastructure



LIFE Clean Energy Transition



- Key programme for EU clean energy policy implementation and fill the **gaps** between energy efficiency and renewables policy development and implementation
- Predecessor programmes: Intelligent Energy Europe and Horizon 2020 Energy Efficiency
- 2021-2027 budget of almost €1 bn, **about 100m EUR/annually for grants** through LIFE CET Call for Proposals



BSO - overview



BSO: main areas of interest

Building stock

- Type of buildings by destination
- Equipment (esp. H&C)
- Geospatial information

Activity

- Renovation
- New construction
- Demolition

Energy and GHG emission

- Energy performance and use, also by type of use and fuels
- Related GHG emissions
- Energy and emission savings

Socio-economics

- Investment
- Cost savings
- Energy poverty
- Jobs & GVA



BSO: version 1 of the tool (1)

				Indicator
Domain	Building Stock			
Category	Non-residential			
Sub-category	Education			
Sub-category	Health			
Sub-category	Hotels and restaurants			
Sub-category	Office			
Sub-category	Other			
Sub-category	Total commercial & public services sector			number of buildings
Sub-category	Wholesale and retail trade			floor area
Category	Residential			
Sub-category	Apartment blocks			
Sub-category	Single Family House			
Category	Whole building stock			
Sub-category	N/A			
Domain	Energy Consumption			
Category	Residential			
Sub-category	Residential final energy consumption (Mtoe)			final energy consumption
Category	Services			
Sub-category	Services final energy consumption (Mtoe)			
Domain	Renovation Rates			
Category	Non-residential			
Sub-category	N/A			
Sub-category	Non-residential			total renovation rate
Category	Residential			floor area renovated
Sub-category	N/A			number of buildings renovated
Sub-category	Residential			
Category	Whole building stock			
Sub-category	N/A			

- First set of indicator
- 3 domains: building stock, energy consumption, renovation rates
- Limited time-related coverage (but will improve)



EU BSO: version 1 of the tool (2)



Database

View and extract available indicators data items



Datamapper

View the different data sets in a colour coded map



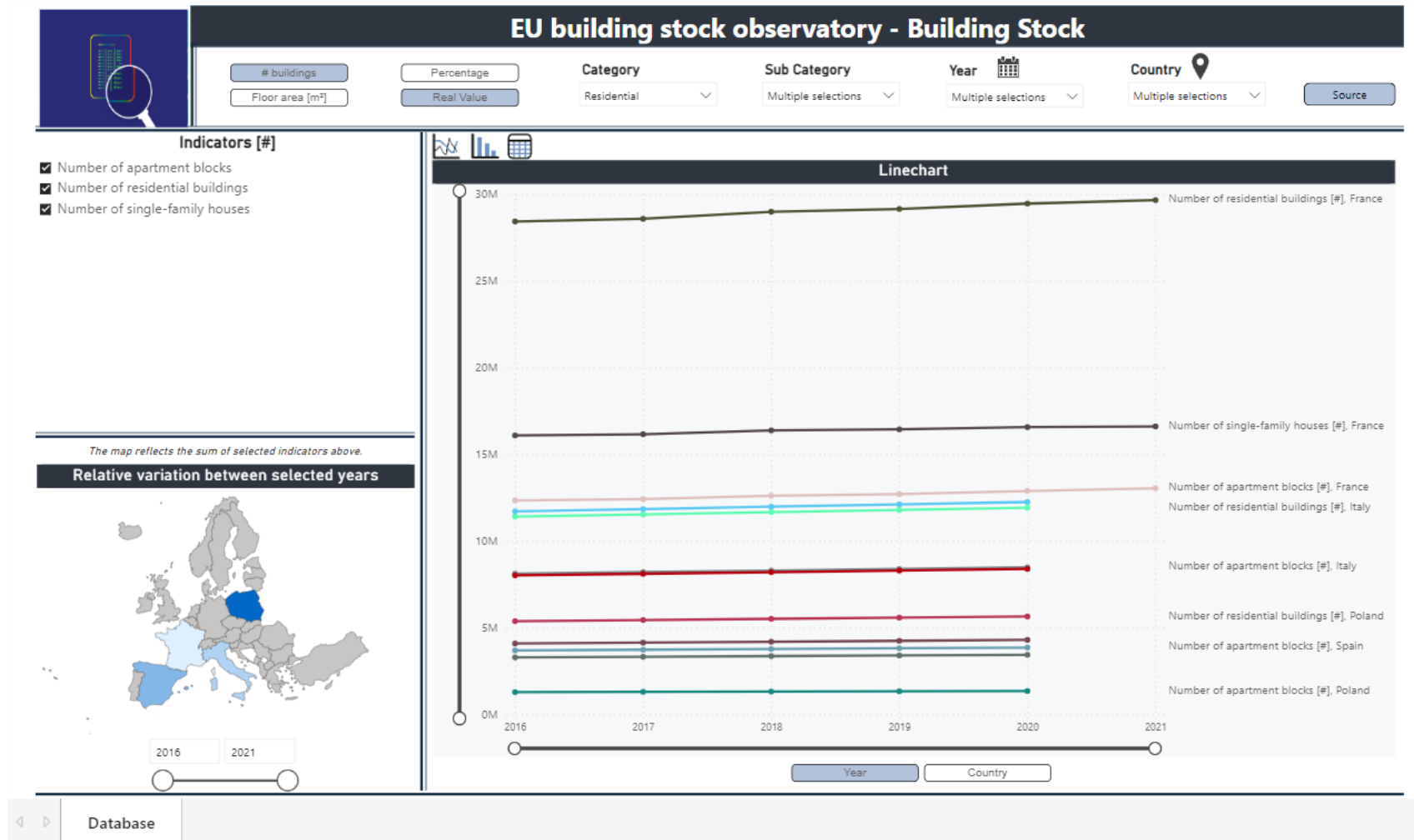
Factsheets

View and download main facts, figures and graphs

- The **database** allow to select, and visualise, the evolution over time of available indicators for Member States and whole EU.
- The **datamapper** allows to display information on an EU map.
- **Factsheets** provide a synthesis of most relevant data for the different MS.



BSO: version 1 of the tool (3)



BSO: perspectives

- Version 2 (early 2024)
 - New user interface
 - Additional indicators (e.g. GHG emissions)
- Additional sources of data – e.g. Eurostat, EEA.
- Regular updates of indicators / dataset
- Follow BSO development: [BSO newsletter](#)





30 years of bringing green ideas to LIFE

Thank you for your attention!



https://cinea.ec.europa.eu/life_en



[LIFE Programme](#)



[@LIFEprogramme](#)



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[LIFE Newsletter](#)



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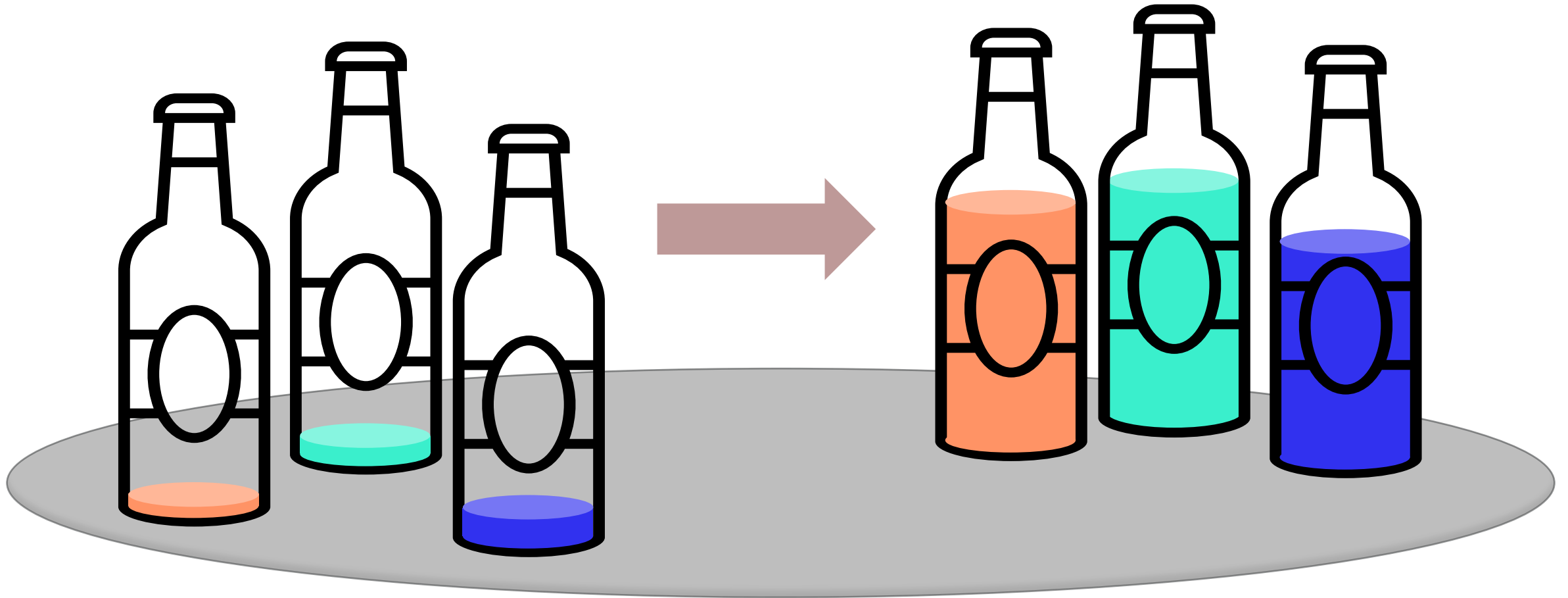
NEW PHILOSOPHY

MADE BY THE USERS FOR THE USERS



BSO team facilitates these interactions and improvements

NO MORE EMPTY BOTTLES





NEW TEAM

CROSS-CUTTING COMPETENCIES



Project management
UI & Data structure



Indicator logic
Stakeholder engagement



Data collection
Data evaluation



Danish Energy
Agency

Member State involvement



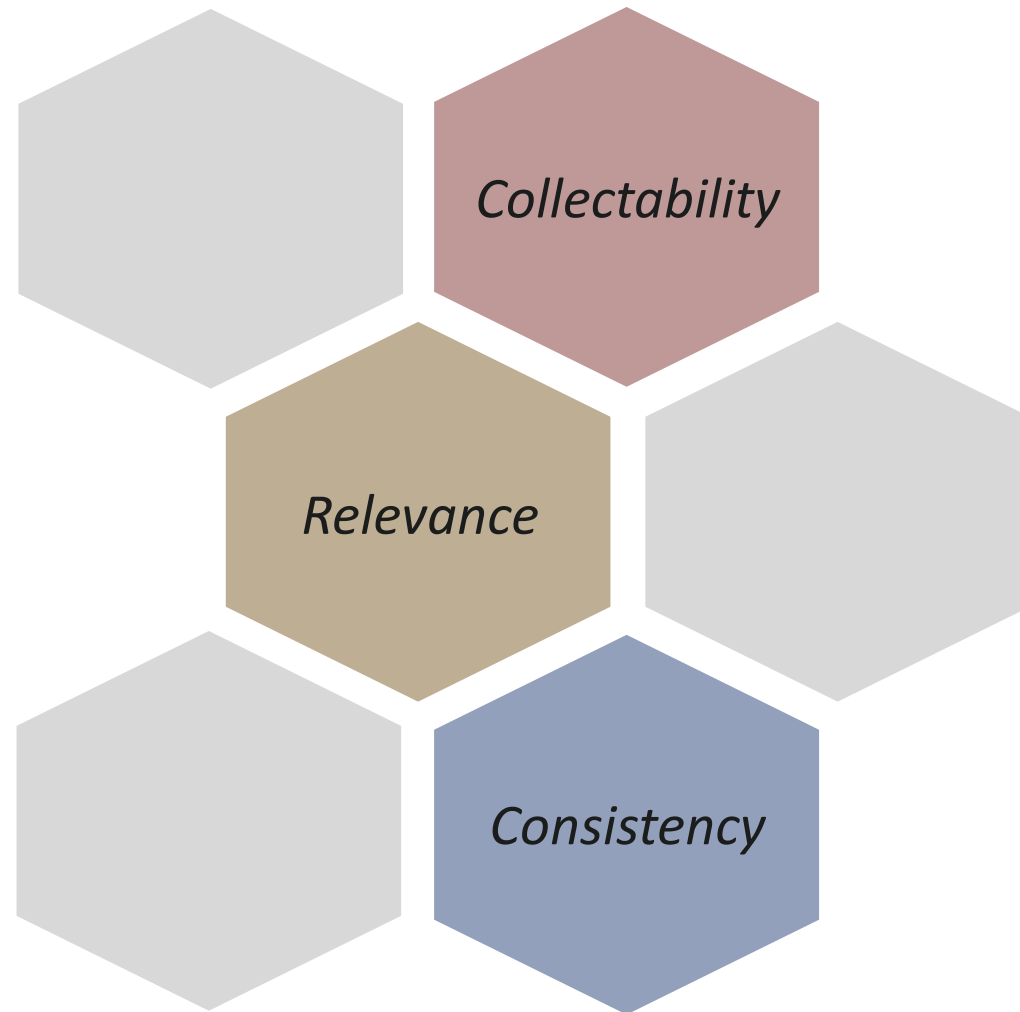
Quality review
Modelled data



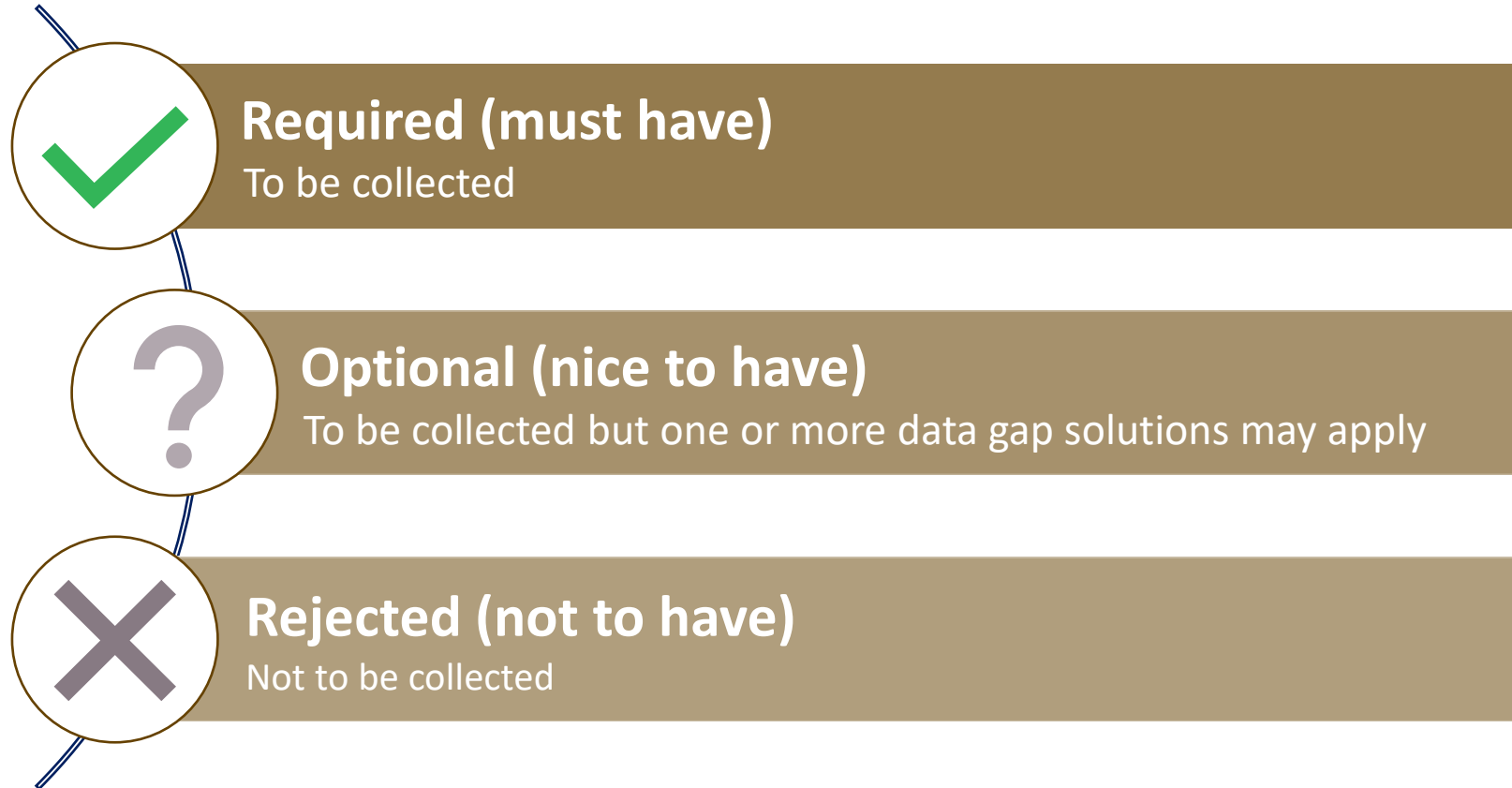


NEW LOGIC

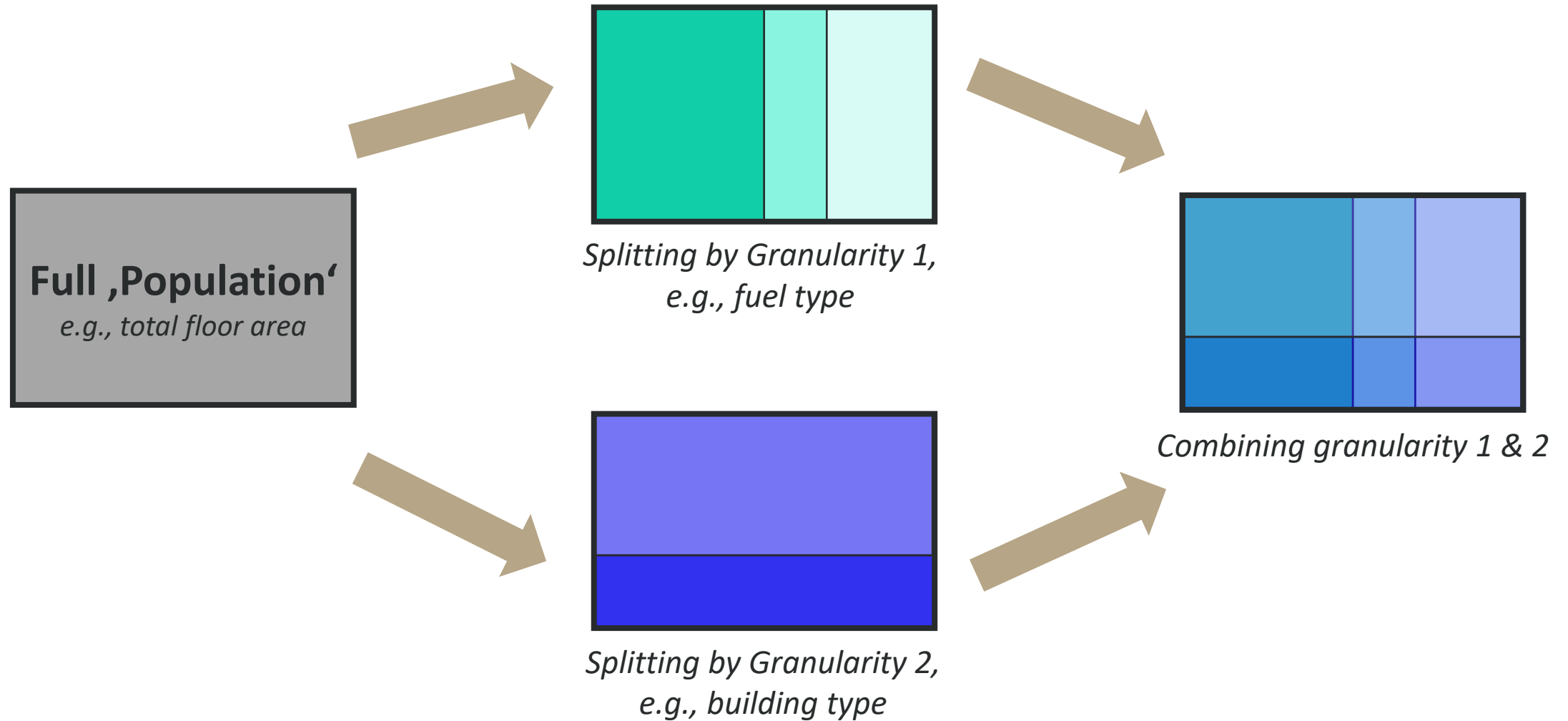
PRINCIPLES FOR INDICATOR SELECTION

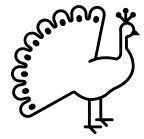


COLLECTION PRIORITY



MULTI-STAGE DATA GRANULARITY



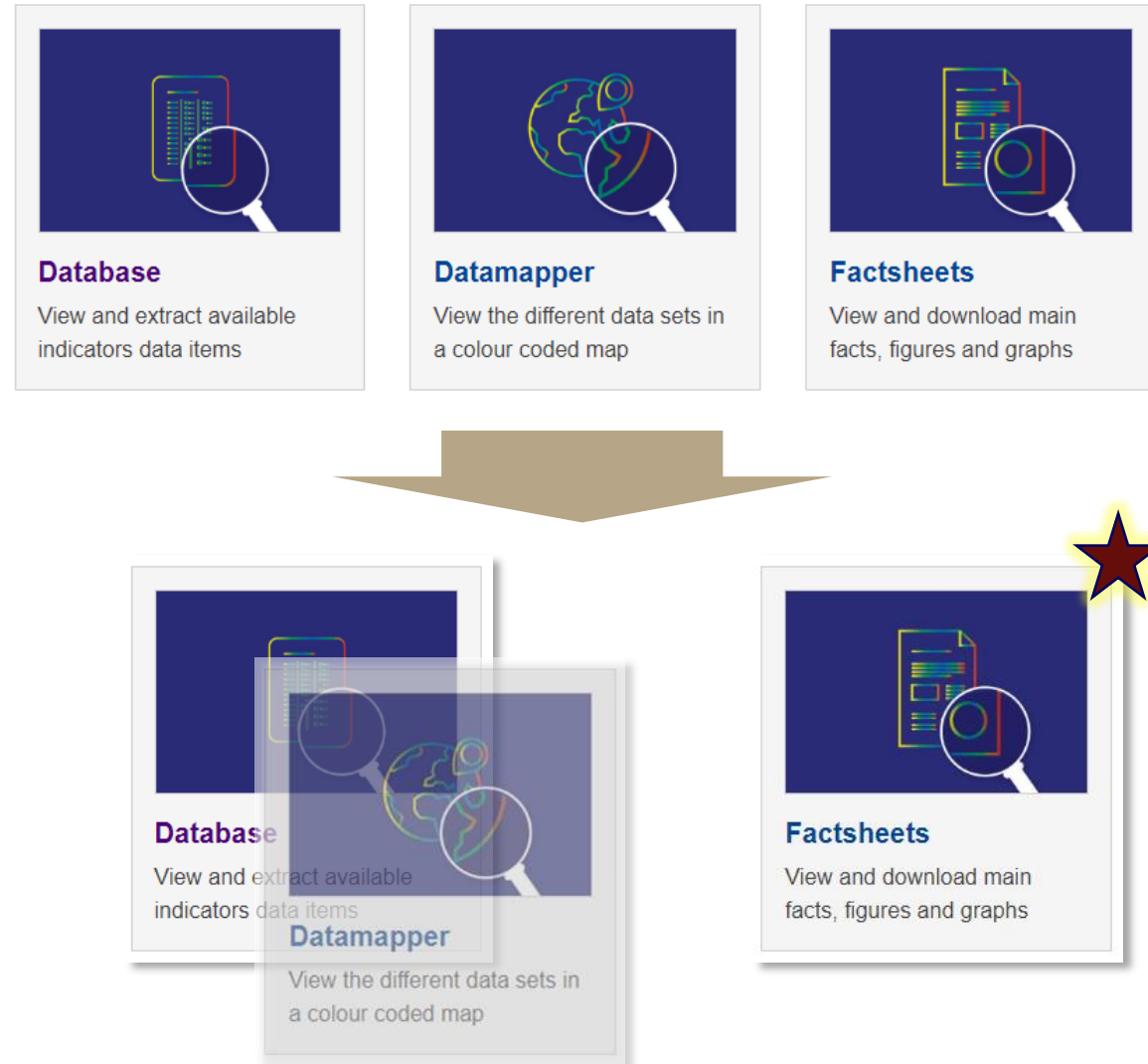


NEW LOOK & FEEL

A MORE INTUITIVE AND USER-FRIENDLY INTERFACE

We listened to user-feedback

- Merge of Database and Datamapper
=> single entry point
- Flexibility to adjust graphs
- Selection of different chart types
- Redesigned Country factsheets



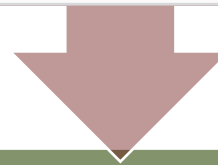


NEW DATA

SNEAK PREVIEW: TENTATIVE UPDATED DATASET

CURRENT INDICATORS

Number of buildings	Floor area	Total renovation rates	Floor area renovated	Number of buildings renovated	Final energy consumption in buildings
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ADDITIONAL INDICATORS

Total floor area building permits	Electricity prices	Gas prices	Construction producer costs index	Arrears on utility bills Share of energy bill
Inability to keep house warm Too dark Mould	GHG emission from energy use in buildings	Final energy consumption by sector / by use	Heating/Cooling Degree Days (HDD/CDD)	Climate corrected space heating in households



NEW RELATIONS

COLLABORATION WITH RELIABLE DATA SOURCES

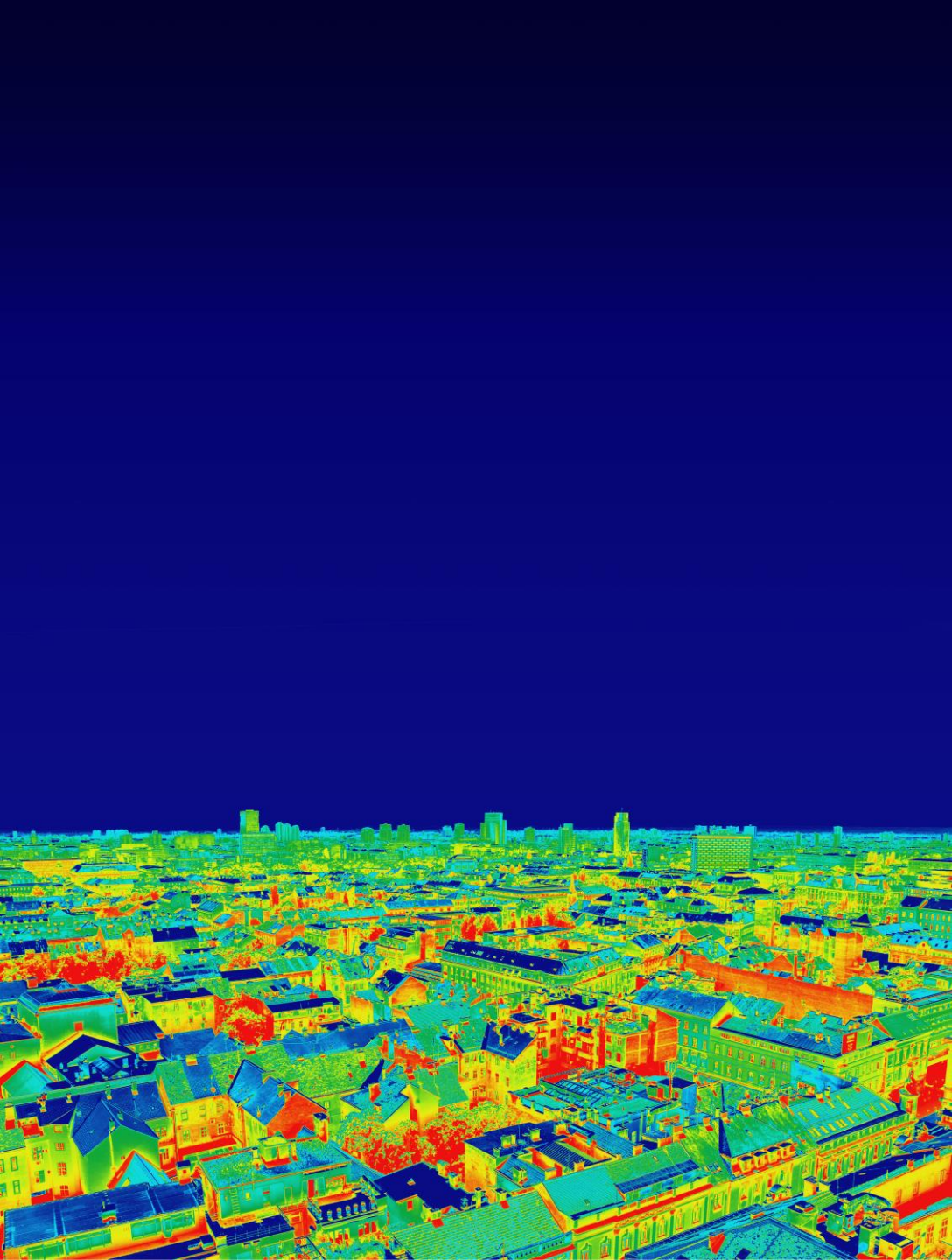
eurostat 

JRC



European
Environment
Agency

Your organisation?

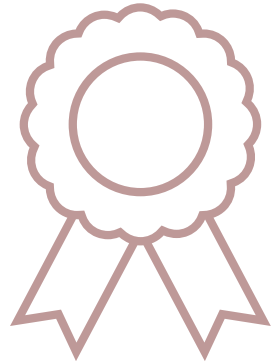


KEY QUESTIONS

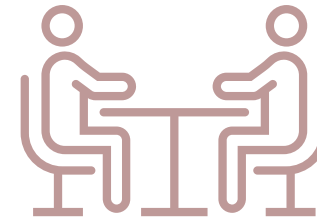
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THIS IS MEANT TO BE YOUR BSO!

Become a trusted data provider!



Get involved as a trusted and valued BSO data provider



Contact us for closed door discussions on the future development of the BSO and your potential contribution.



LAUNCH OF NEW VERSION!

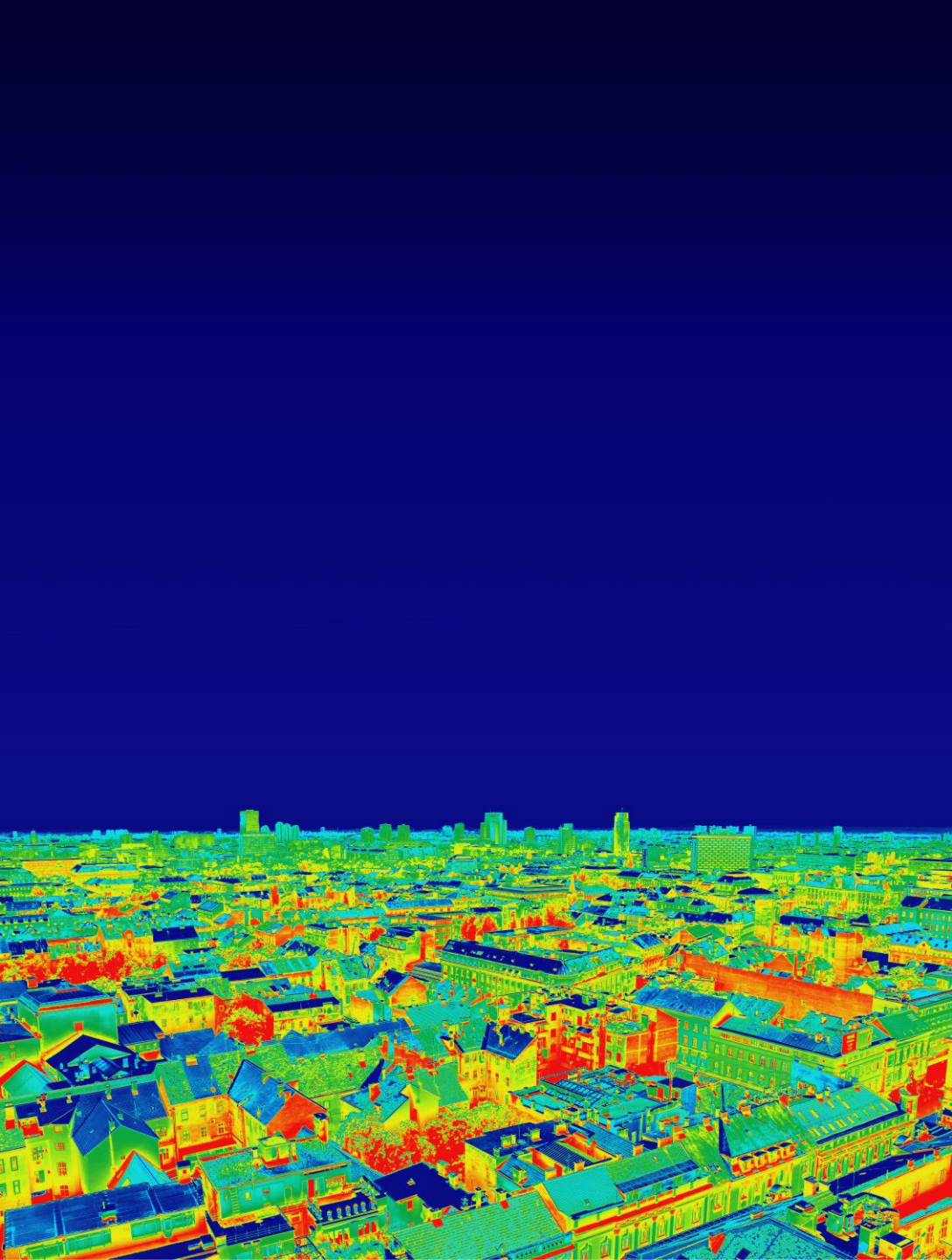
Launch window: Q1/2024

Stay tuned!



EU Building Stock Observatory





THANK YOU

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Dr Roberto Lollini

EURAC



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