

European Union Location Framework

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Urban Energy Workshop, Lisbon
25 May 2015



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Stimulating innovation
Supporting legislation*

Content

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the European Union Location Framework
- EULF deliverables
- Feasibility study on location data and energy efficiency

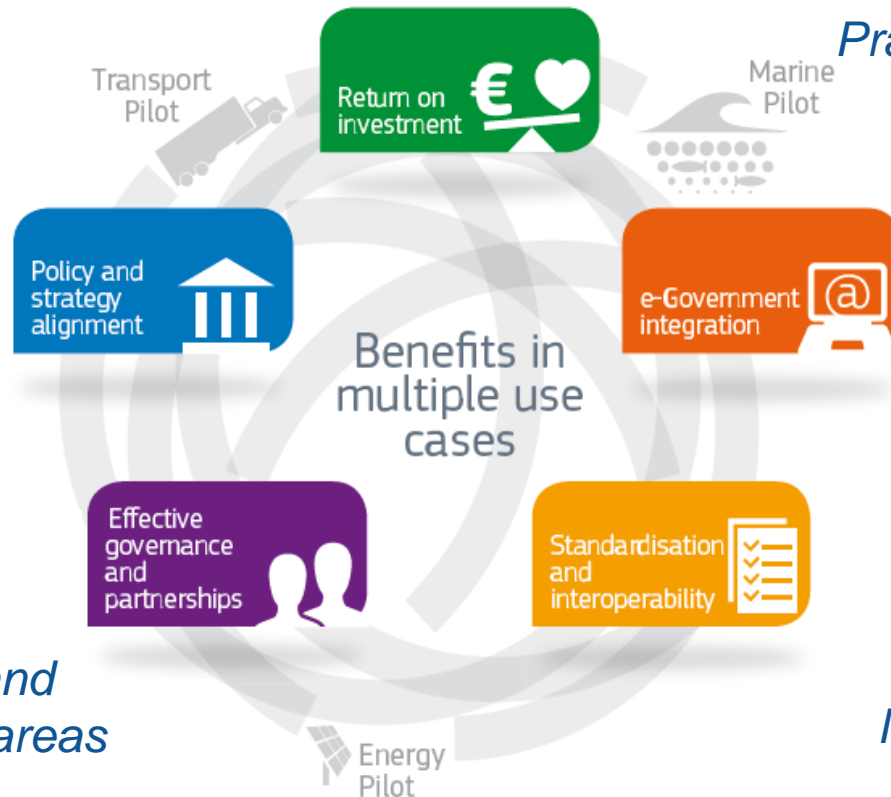
INSPIRE and beyond: the EULF

- The European Union Location Framework (EULF) project promotes effective location-enabled e-government across Europe, as part of the Interoperability Solutions for Public Administrations (ISA) programme
- It does this through a series of recommendations, guidance and actions targeting priority needs of citizens and businesses across all government sectors, and addressing cross-border applications and the goals of the Digital Single Market
- INSPIRE is a key element in the EULF toolkit
- The actions include guidance, recommendations, use case and pilots in different sectors

European Union Location Framework

Strategic framework based on EU survey

Practical problems solved through pilot studies



Recommendations and guidance in 5 focus areas

Working together with MS to address priorities

Delivering savings, growth and better services through “location-enabled government”

EULF deliverables

Strategic vision

Shared vision and rationale for the EULF, defines its scope and highlights the governance and implementation approach.

Survey and
Assessment

Assessment of the state of play in the five focus areas of the EULF.

Blueprint

Recommendations, guidelines, methodologies and best practices in the EULF focus areas.

References

Inventories, links and supplementary information related to the EULF.

Roadmap

A high level implementation plan for the EULF.

Pilots

A series of pilot studies in various policy areas (transport, marine and energy), to both validate and contribute to the EULF.

http://ec.europa.eu/isa/actions/02-interoperability-architecture/2-13action_en.htm

EULF pilots



**INSPIRE
Directive**

**Environmental
Sector**



EULF: provides the strategic framework, turning its recommendations into action and learning from the results



**Transport
Sector**

ITS Directive



**Marine
Sector**

**MSFD Directive
Knowledge
2020**

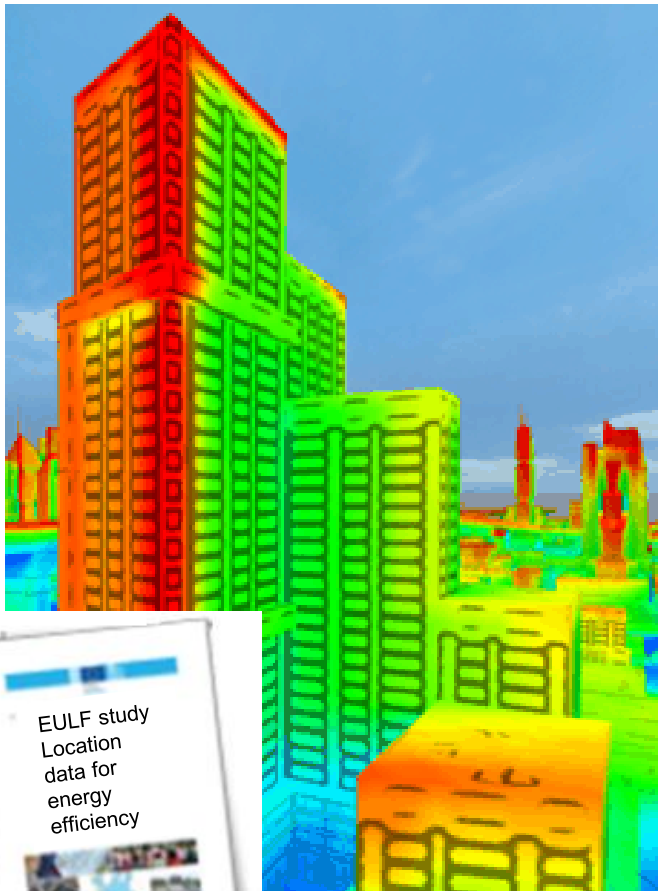


**Energy
Sector**

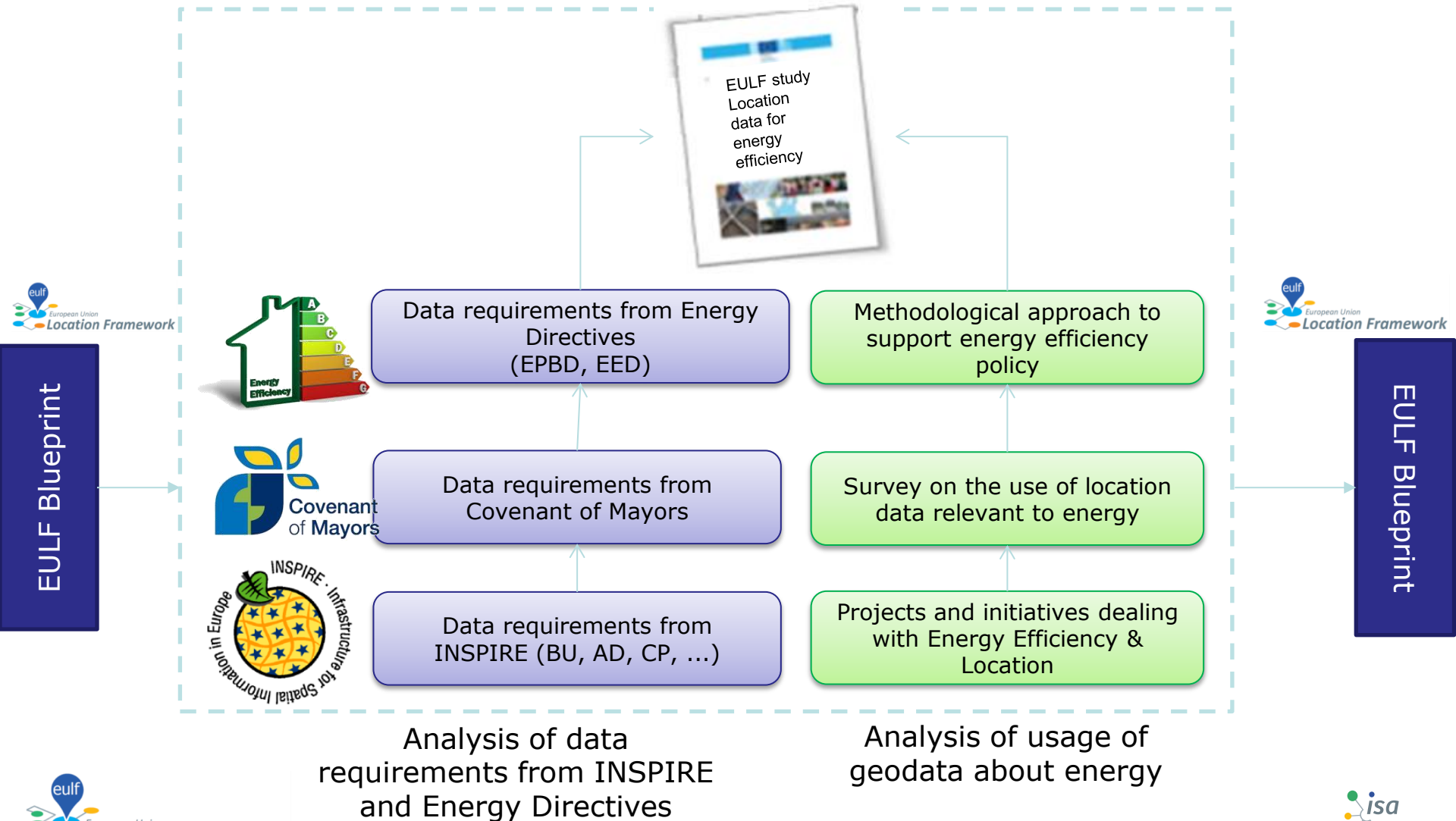
**COM SEAPs,
EPBD and EED
Directives**

Location Data for Energy Efficiency Policies Feasibility study

- Focus on Energy Efficiency
- Collaboration among JRC Units dealing with different topics:
 - IET (F07) - *Covenant of Mayors, Energy Efficiency in Smart Cities, Energy Performance of Buildings Directive*
 - IES (H06) – *EULF, INSPIRE*
- The goal of this study is to verify how location data can support energy efficiency policies



Energy feasibility study report



Outcomes of the feasibility study

- Public authorities can rely only on basic reporting tools and aggregated data to perform their monitoring obligations related to energy efficiency
- Need for a more harmonised approach to
 - ease the burden for public authorities
 - support the needs of policy makers
- Requirements from EPBD and EED are semantically richer than INSPIRE building requirements – need for extension
- Geospatial technologies can support energy efficiency policy, increasing
 - the efficiency of data collection, elaboration and sharing
 - the effectiveness of stakeholders' decision
- A pilot project will address these points

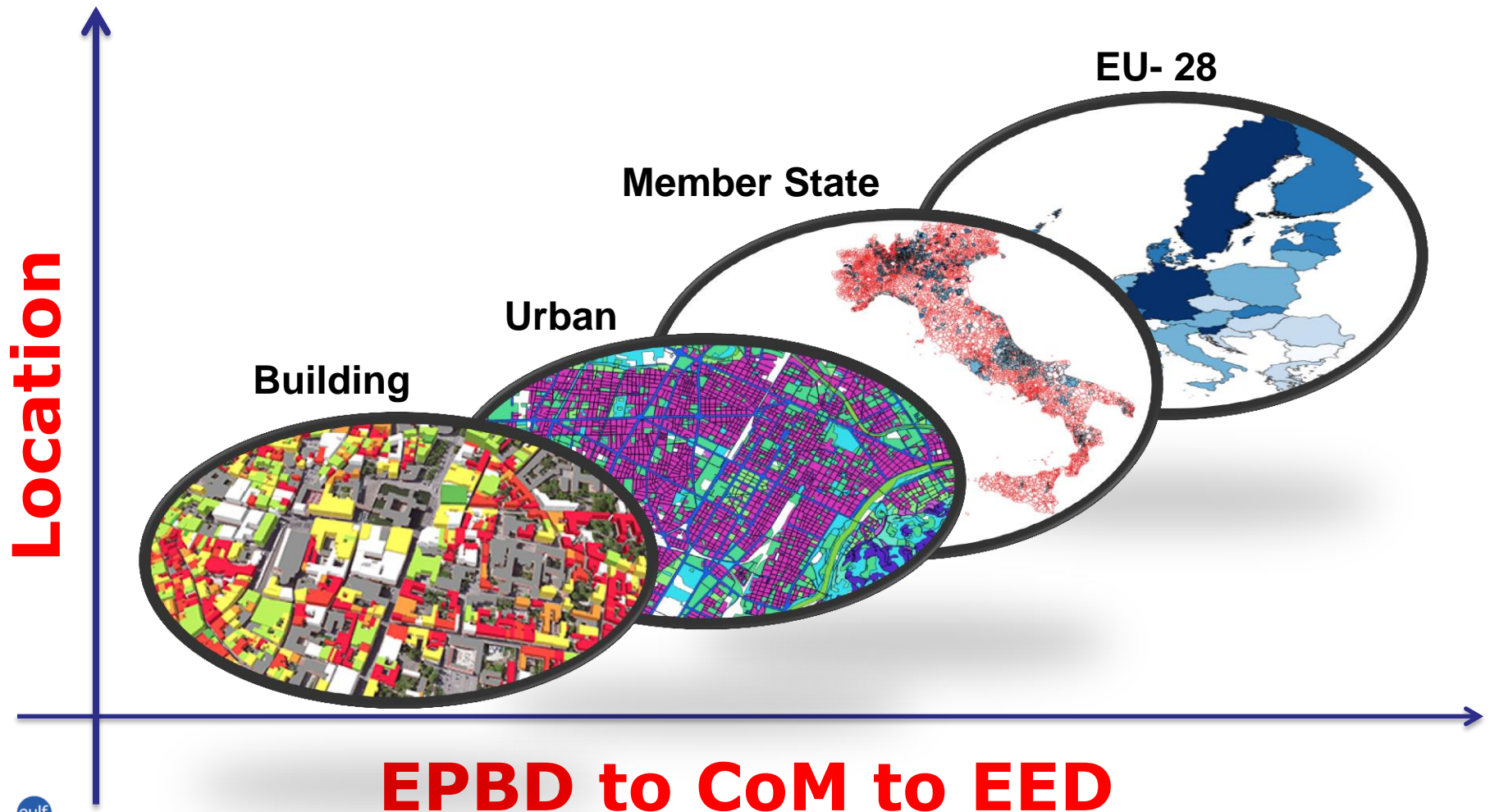
Goals of the EULF energy pilot

- Support local authorities to enhance the energy efficiency policy making process, improving the quality of the data
- Provide local authorities with methodology and tools to build and update a robust inventory of energy performance of buildings data
- Put in place harmonised data flows to support local energy related initiatives (e.g. the CoM)
- Align local initiatives with the national energy efficiency planning obligations (set by the Energy Efficiency Directives)

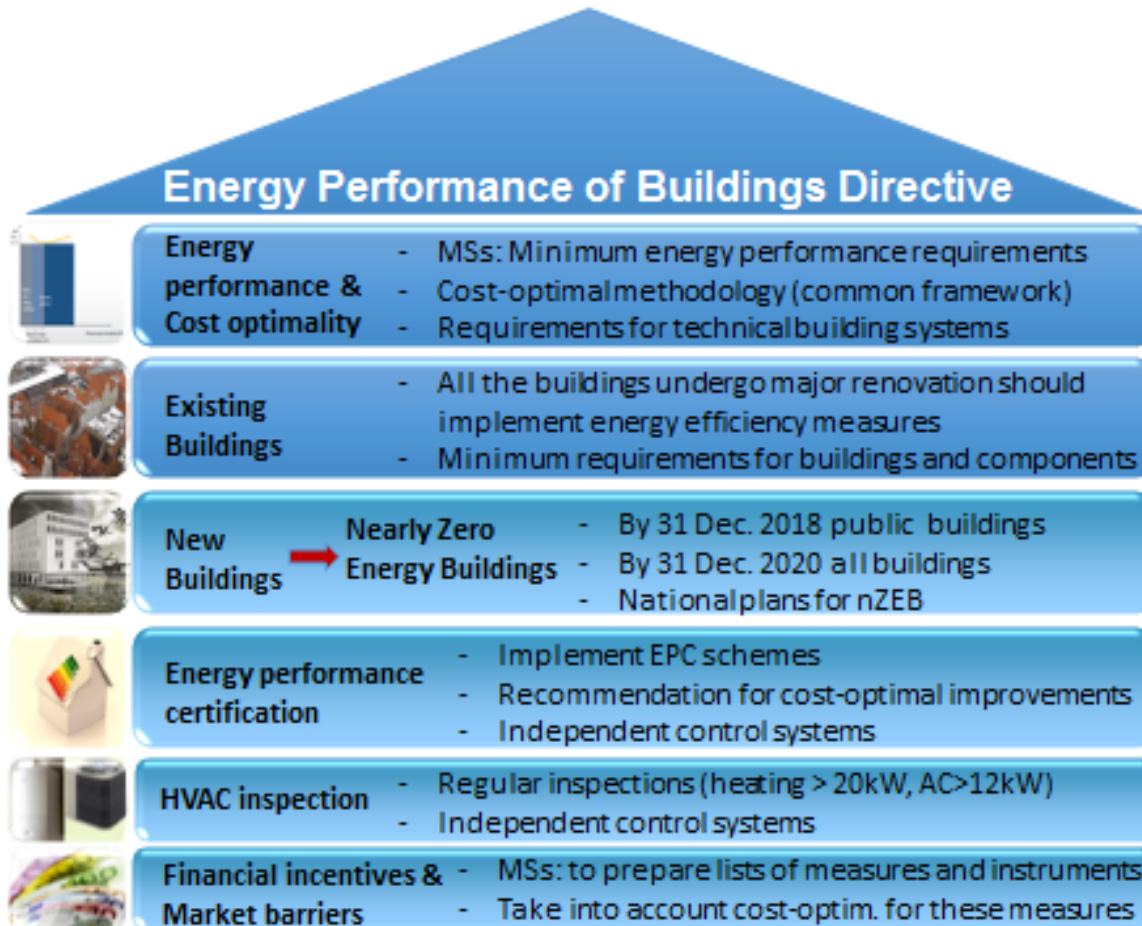
Energy pilot: relevance to Digital Single Market

- Open access and better exploitation of energy performance of building data coming from municipalities
- Ensure interoperability through use of geospatial standards (INSPIRE) taking into account thematic requirements
- Business opportunities thanks to the availability of energy data, linking government (municipalities, regional and national authorities) and private sector involved on energy performance or construction (utilities, SMEs)

Location and Energy Efficiency Policies



Energy efficiency policies: EPBD



Energy Performance of Buildings Directive: promotes the improvement of the **energy performance of buildings** within the Union, taking into account *outdoor climatic* and *local conditions*, as well as *indoor climate requirements* and *cost-effectiveness*.

Energy efficiency policies - EED

- **The Energy Efficiency Directive (EED)** establishes a common framework of measures for the promotion of energy efficiency within the Union in order to ensure the achievement of the Union's 2020 targets.
- The **National Energy Efficiency Action Plans** shall cover significant energy efficiency improvement measures and expected and/ or achieved energy savings, including those in the supply, transmission and distribution of energy as well as energy end-use, in view of achieving the national energy efficiency targets

Covenant of Mayors - CoM

Voluntary initiative launched by DG ENERGY in 2008 to support local authorities in the sustainable energy development and the fight against climate change

Mayors voluntary commit to meet and exceed the EU energy and climate objectives

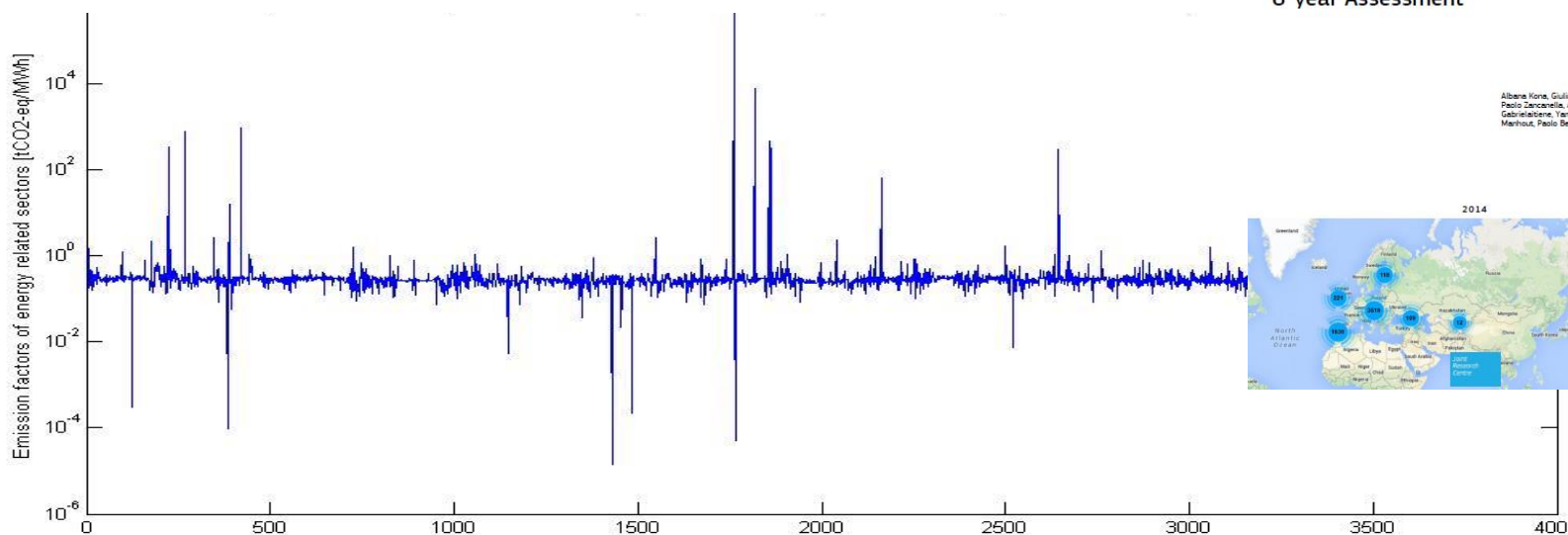
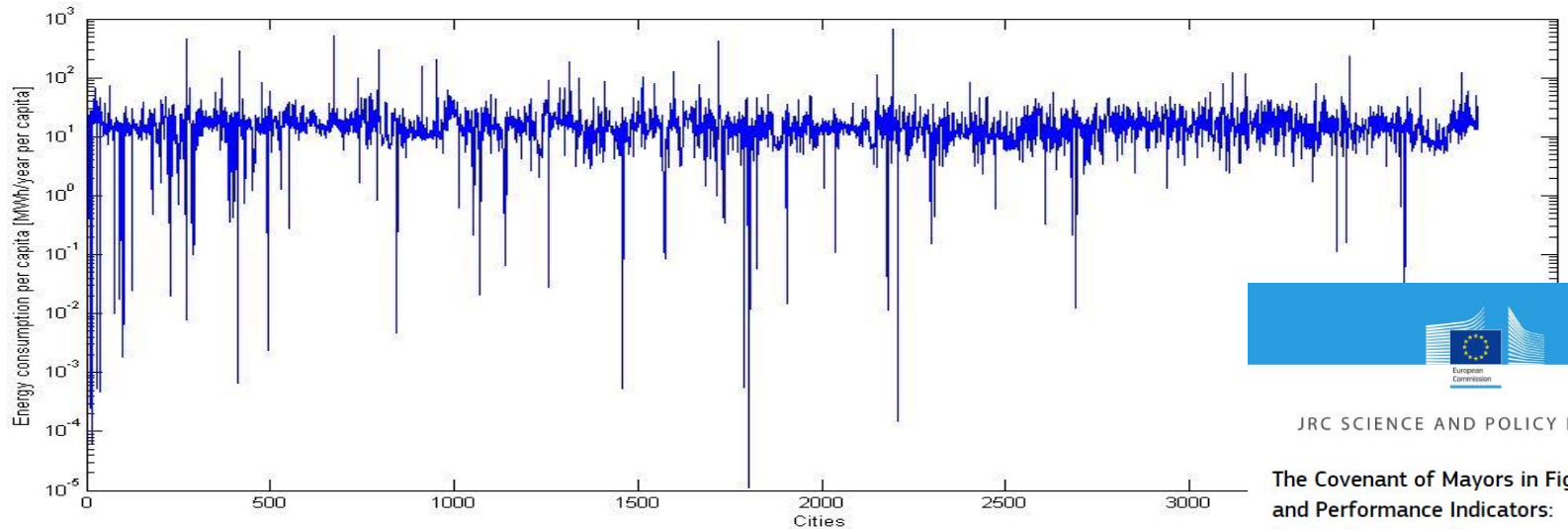
**at least 20% CO₂ reduction
in their respective territories by 2020**

- Define a Baseline Emission **Inventory** (BEI)
- Prepare a Sustainable Energy Action **Plan** (SEAP)
- Implement their Action Plan
- Report periodically on progress

6 330 signatories : 200 Million inh.



Overview of data in the CoM



JRC SCIENCE AND POLICY REPORTS

The Covenant of Mayors in Figures and Performance Indicators: 6-year Assessment

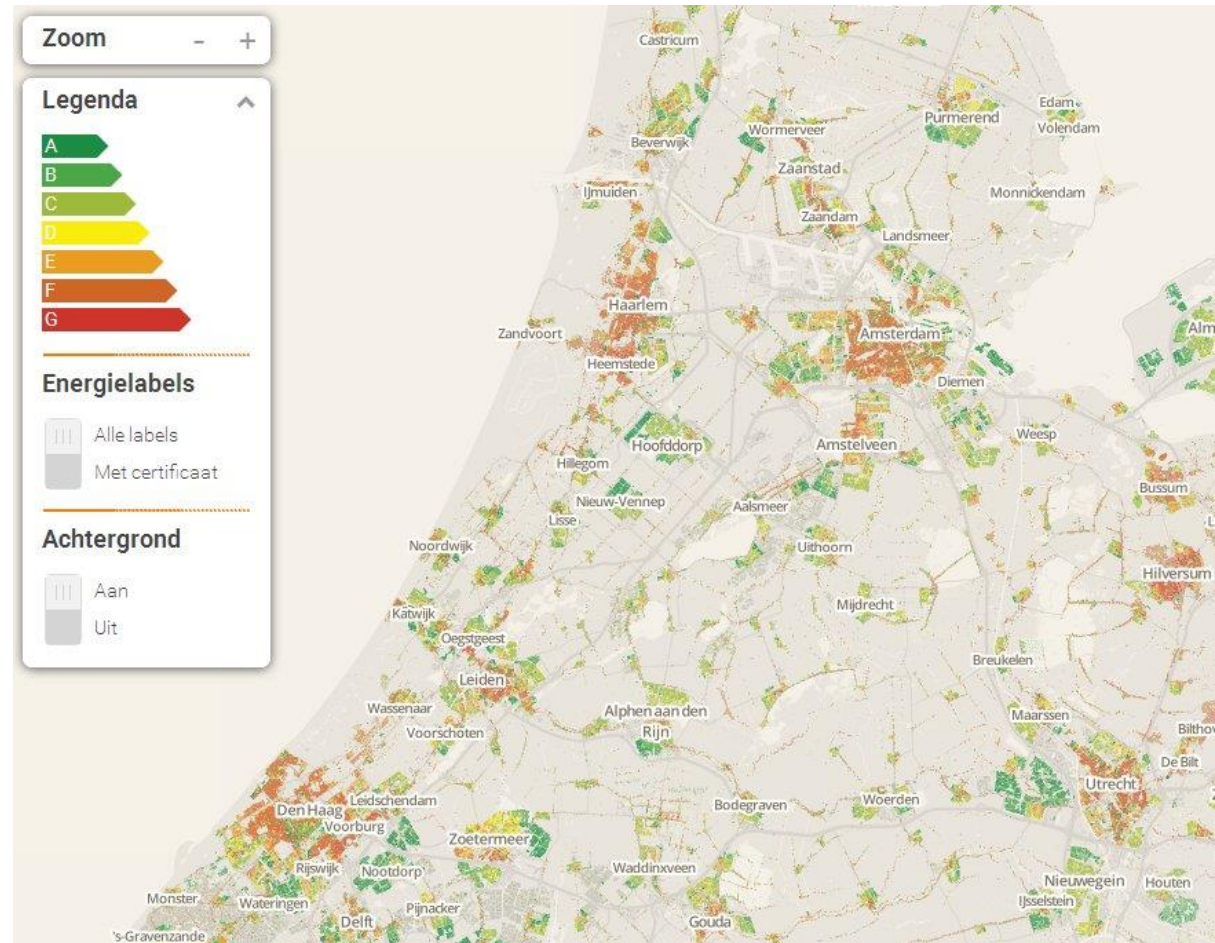
Albera Kone, Giulia Melice, Silvia Rivas Calvete, Paolo Zancanella, Andreia Iancu, Irene Gabrielabene, Yamina Sahab, Greet Janssens-Maenhout, Paolo Benold



Location data at building level - EPBD

Energy
Performance
Labelling atlas:

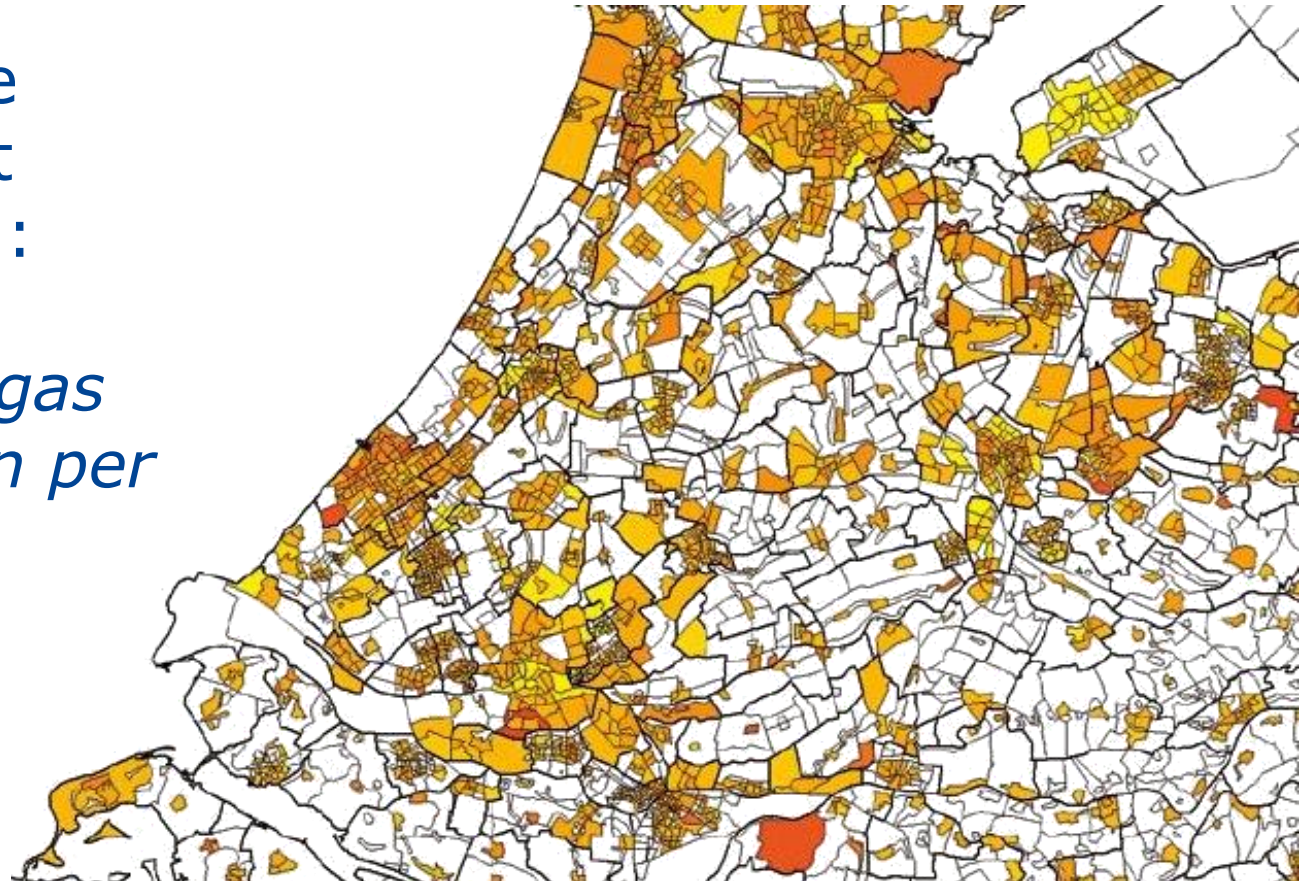
*Administrative
information on
building
stock..(age, type,
location,
construction,
usage), energy
systems...*



Location data in districts - EED

Performance indicators at district level:

ex. average gas consumption per unit area

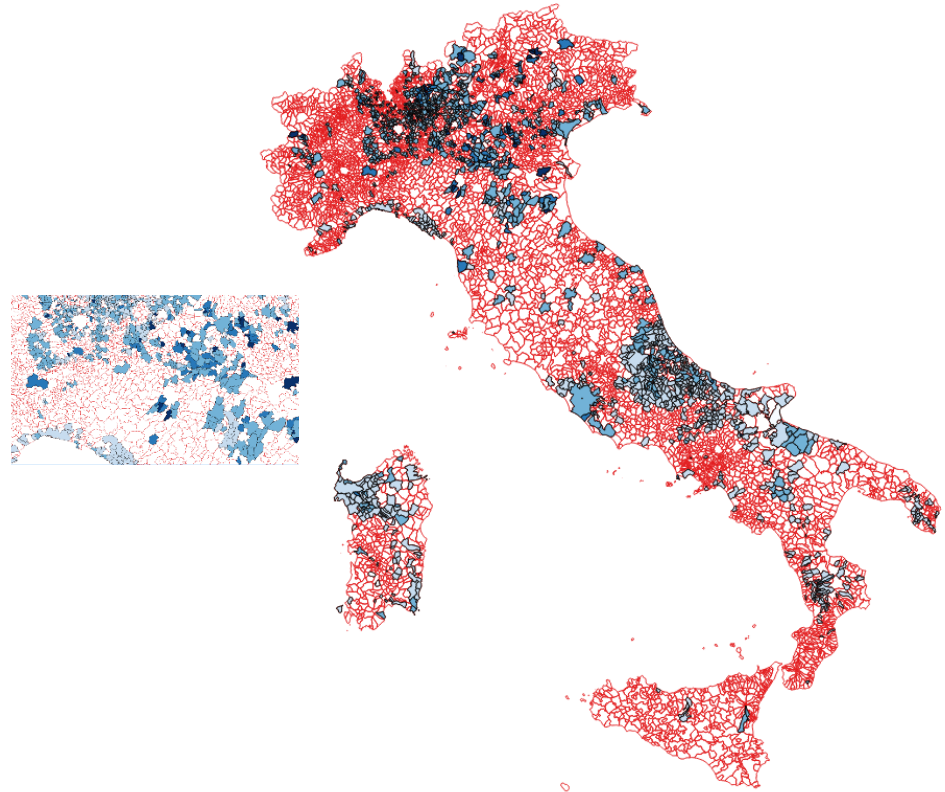


Source: Manual for statistics on energy consumption in households.
Eurostat 2013.

Location data in urban areas - CoM

Performance indicators
at city level:
e.g. Energy
consumption per
capita,
Geolocation of SEAP
measures.

There is a need for a
bottom up approach
from building to
district to urban area

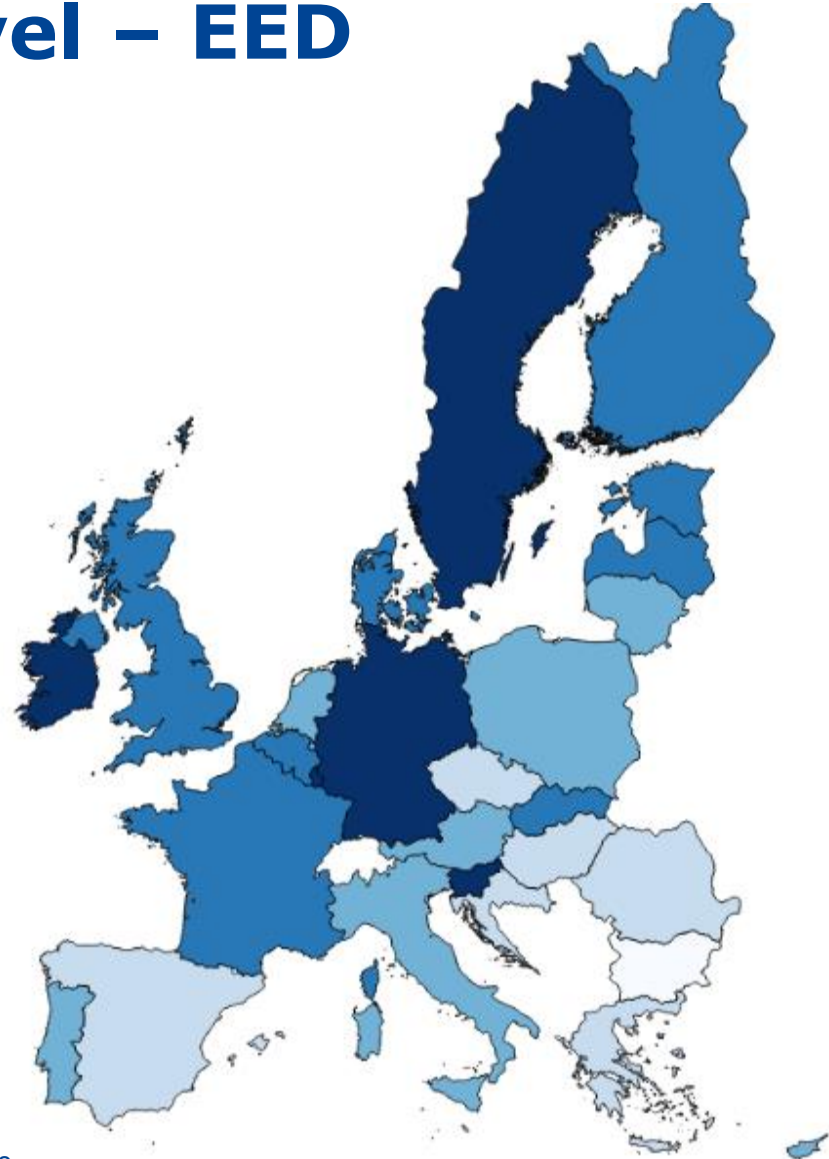


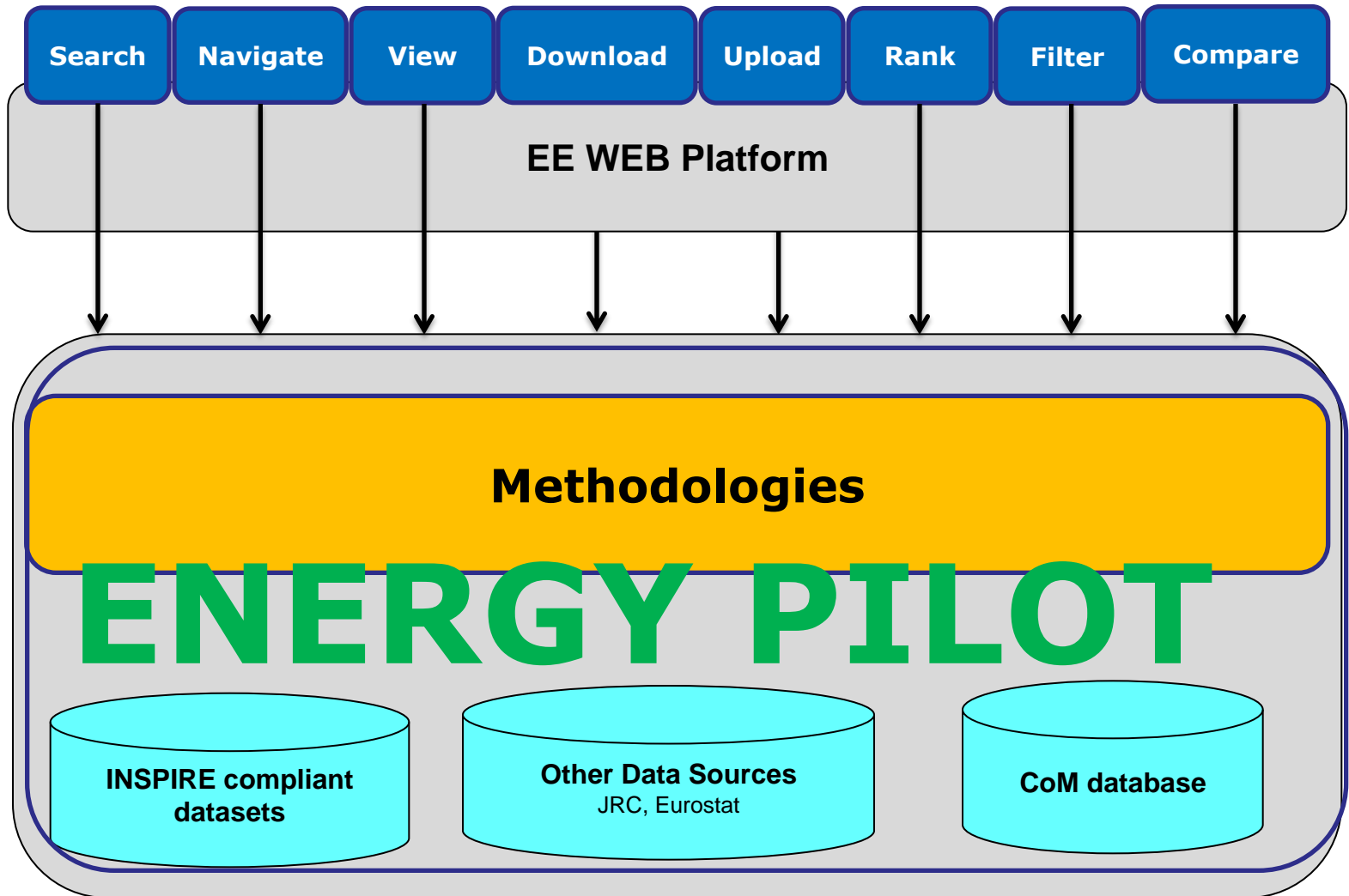
Source: Location Data for Energy Efficiency Policies. In progress JRC 2015

Location data at MS level – EED

Performance indicators at
country level:

- scaling up from urban to country level
- Mapping CoM measures contributing in the National Action Plans





App. Layer

Service Layer

Data Layer

Conclusions and next steps

- Implement an open data (spatial) platform where to collect geographic datasets about energy properties of real buildings (performance, consumption, systems, ...), with data coming from 3 to 4 pilot cities in Europe (possibly already signatories of Covenant of Mayors)
- Workshop with key stakeholders to review the assessment and proposed approach and determine interest in participation to the pilot

“Have your say!” at the EULF Workshop

- When?
 - Friday 29 May 13.30-15.00
- Where?
 - ???
- What?
 - Overview of EULF - towards a framework for location-enabled e-government
 - EULF and the Digital Single Market on-enabled government
 - Overview of each of the EULF Pilots and of their findings so far
 - Facilitated group discussions on the general framework and on the use cases

Contact and join us!



http://ec.europa.eu/isa/actions/02-interoperability-architecture/2-13action_en.htm



<https://joinup.ec.europa.eu/community/eulf/description>



<http://inspire-forum.jrc.ec.europa.eu/pg/groups/228519/european-union-location-framework-the-study/>



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<https://twitter.com/EULocation>
#EULF

Making it happen - INSPIRE

- **INSPIRE Directive** 2007/02/EC – to establish a **spatial data infrastructure** for environmental policy
- **34 data themes** including **reference** data (e.g. coordinate systems, transport networks) and **thematic** data (e.g. **buildings**, land use)
- Common **cross-domain data models** to facilitate **interoperability**
- Thematic extensions being developed
- **Decentralised publication** via network services and metadata (discovery, view, download, transform, invoke)
- Data and service sharing policy
- Comprehensive monitoring and reporting
- **Implementation 2009 to 2020**

