

FROM CONCERTO COMMUNITIES TO SMART CITIES: THE ROLE OF SMART CITIES INFORMATION SYSTEM

Branislav Iglár
20th REFORM-Group Meeting
Salzburg, September 2 2015





The CONCERTO Initiative (2005)

- 6th FP and 7th FP
- It aims to demonstrate the energy-optimisation of districts and communities as a whole is more cost-effective than optimising each building individually
- All relevant stakeholders work together and integrate different energy-technologies in a smart way

Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse projects (2014)

- 7th FP and H2020
- These solutions at the intersection of the three sectors will have a holistic approach and are still facing first mover risk.
- Projects will target primarily large scale demonstration of replicable SCC concepts in city context where existing technologies or very near to market technologies will be integrated in an innovative way.



EU-funded projects on buildings



- **Eco-building projects (90s-2000)**
- **CONCERTO (2005-2009)**
- **Follow-up in FP7 and H2020**
 - **PPP Energy Efficient Buildings (2009-ongoing)**
 - **Smart Cities and Communities (2012-ongoing)**
- **Cohesion policy – ERDF, ESF, CF (2014-ongoing)**



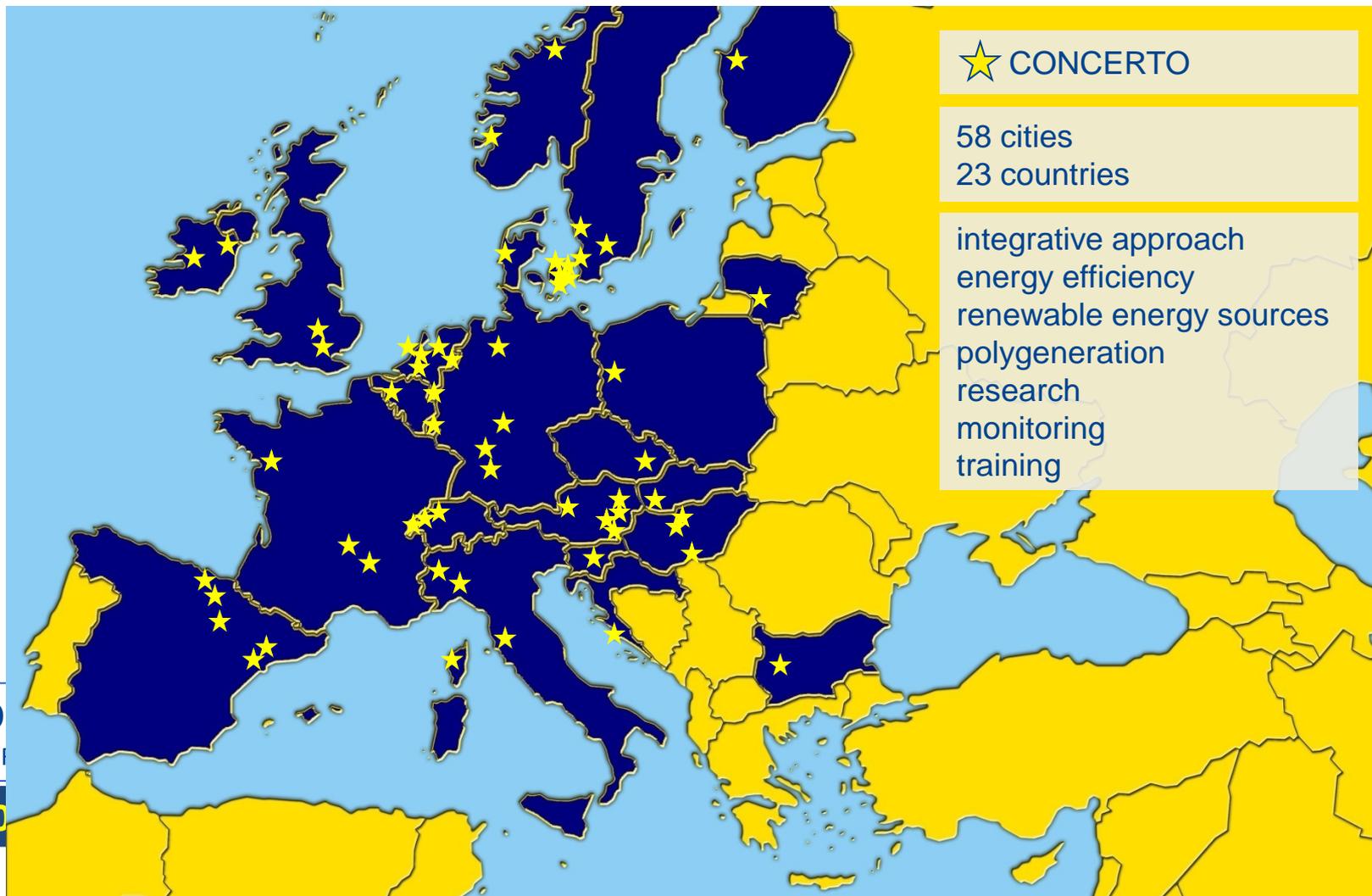
Upscaling...



from buildings **to districts** **to cities**



CONCERTO programme



Evolution from CONCERTO to Energy Efficiency in Buildings



Demo Energy Efficiency – New buildings

Demo-Energy Efficiency– retrofiting

CONCERTO: INTEGRATION OF RENEWABLE ENERGY SUPPLY AND
ENERGY EFFICIENCY

2010

2011

2015

2020



Evolution from CONCERTO to Energy Efficiency in Buildings, to Districts



Demonstration of nearly Zero Energy
Building Renovation for districts

Demonstration of Systems for urban
area heating and cooling

Demo Energy Efficiency – New buildings

Demo-Energy Efficiency– retrofiting

CONCERTO: INTEGRATION OF RENEWABLE ENERGY SUPPLY AND
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2010

2011

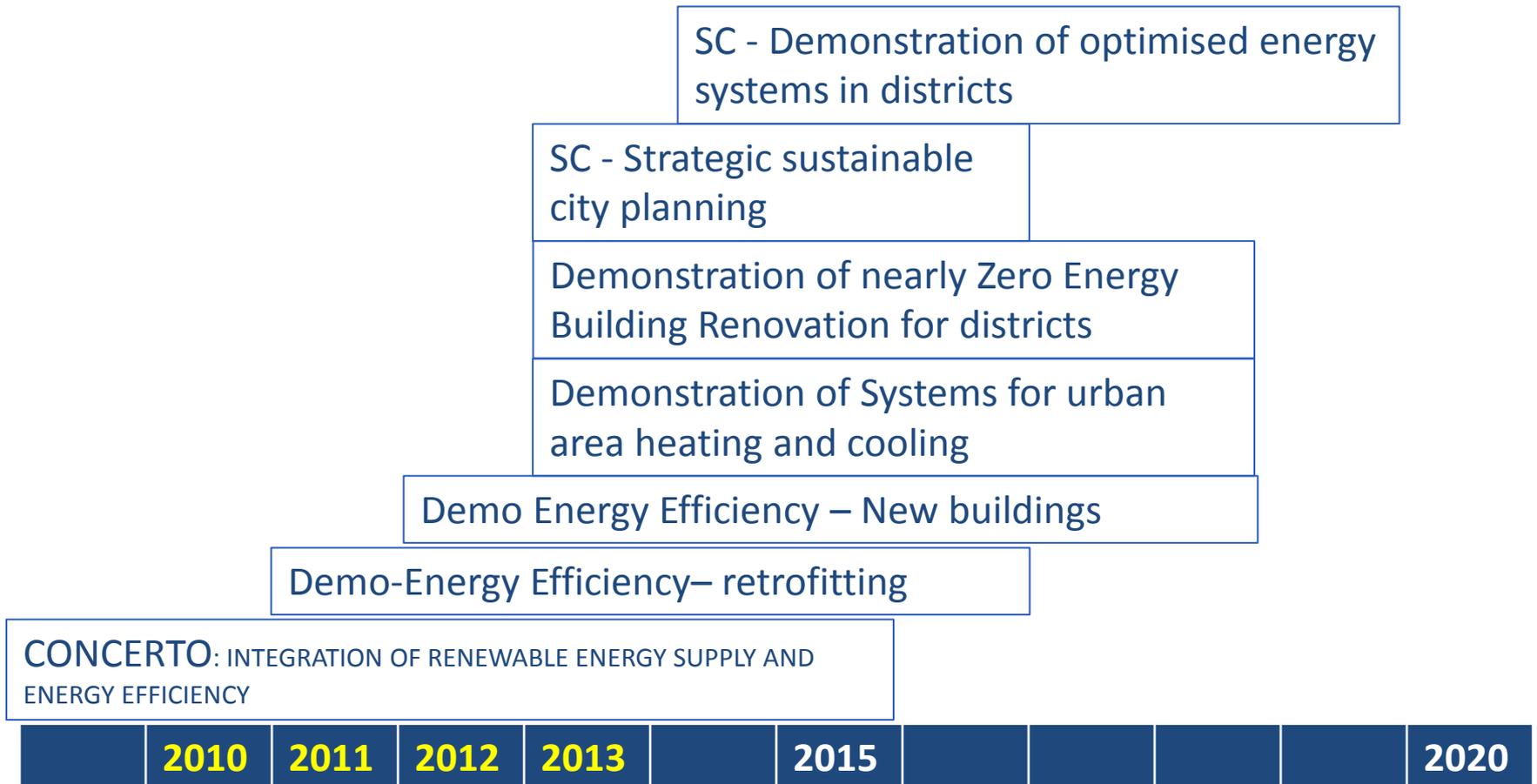
2012

2015

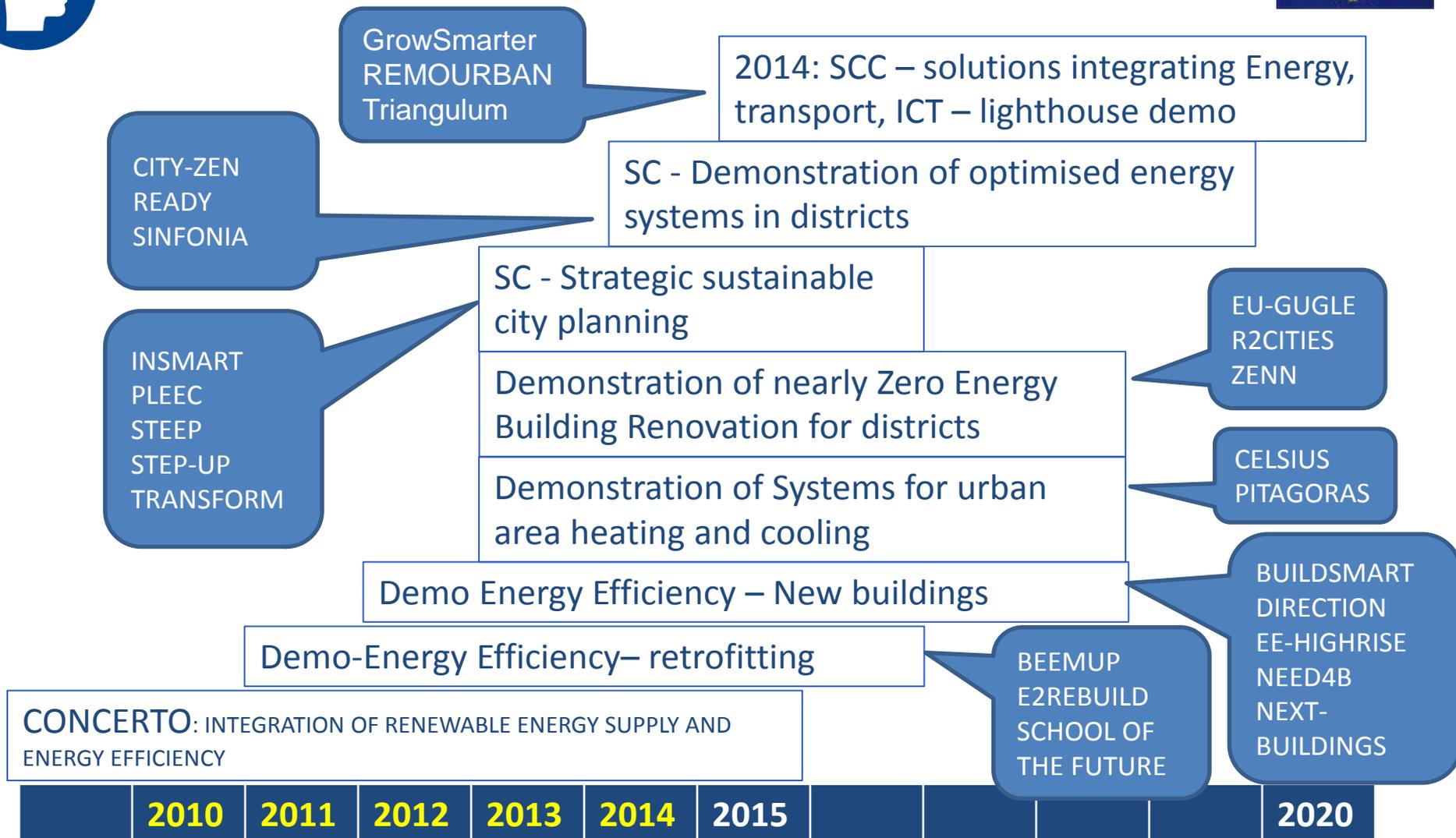
2020



Evolution from CONCERTO to Energy Efficiency in Buildings, to Smart Cities



... to integration of mobility and ICT infrastructure



Like CONCERTO many are the composed of several projects



A Headache?

We have the answer...

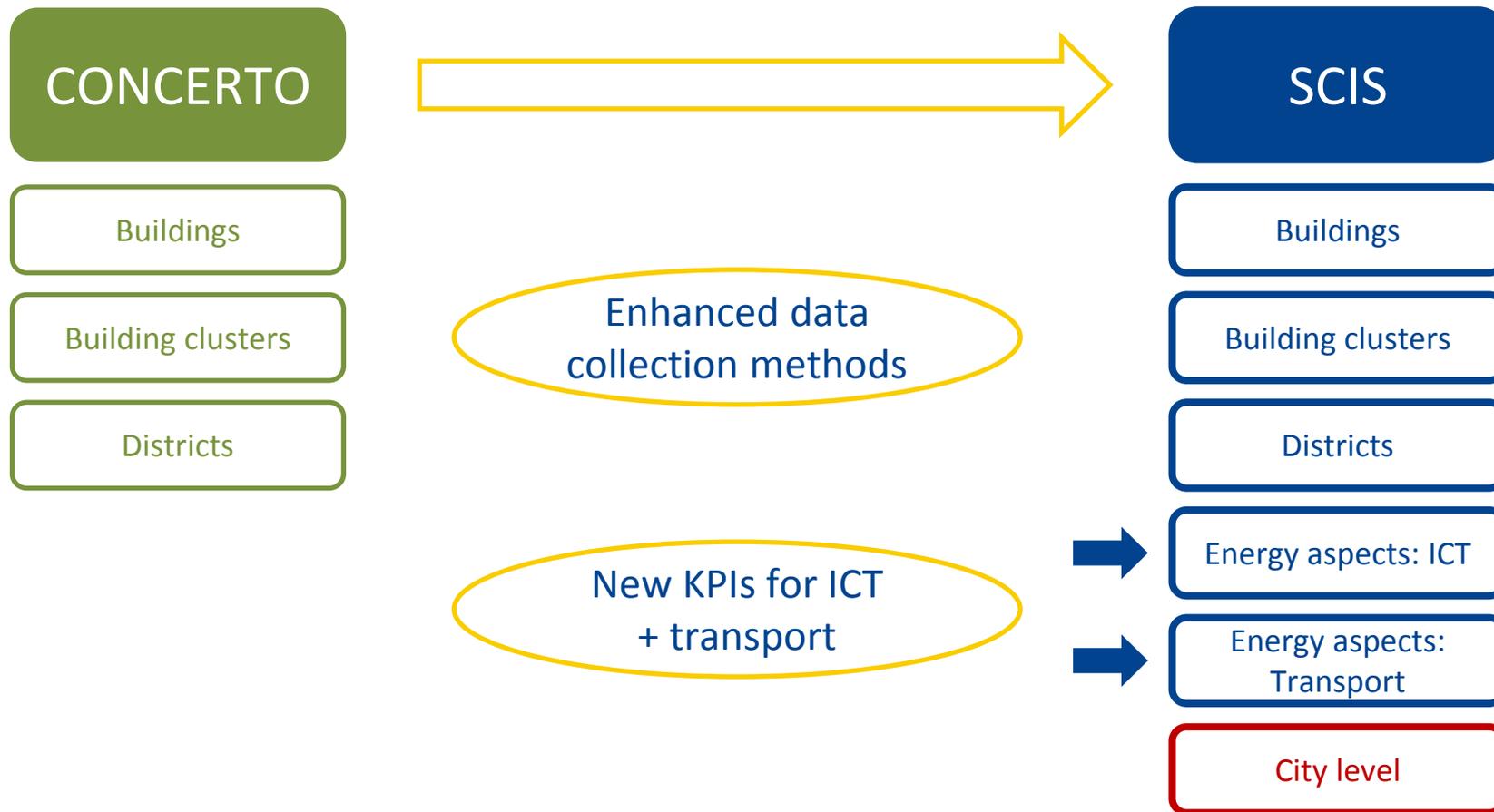




- **Supports the replication of smart cities innovation & technologies:**
 - **Gathers data** from CONCERTO, EE-buildings, SC FP7&H2020 projects → Technical Monitoring Database
 - Offers a **one-stop-shop** for replication:
 - Compares technologies,
 - Communicates best practices,
 - Offers information on support instruments
 - **Generates policy recommendations** from results
 - **Disseminates information**
 - exchange among projects, project coordinator's meeting
 - website, newsletter, social media



SCIS builds on CONCERTO



SCIS Evolution

2006

CONCERTO PLUS

2010

CONCERTO PREMIUM

2015

SCIS

CONCERTO I

CONCERTO II

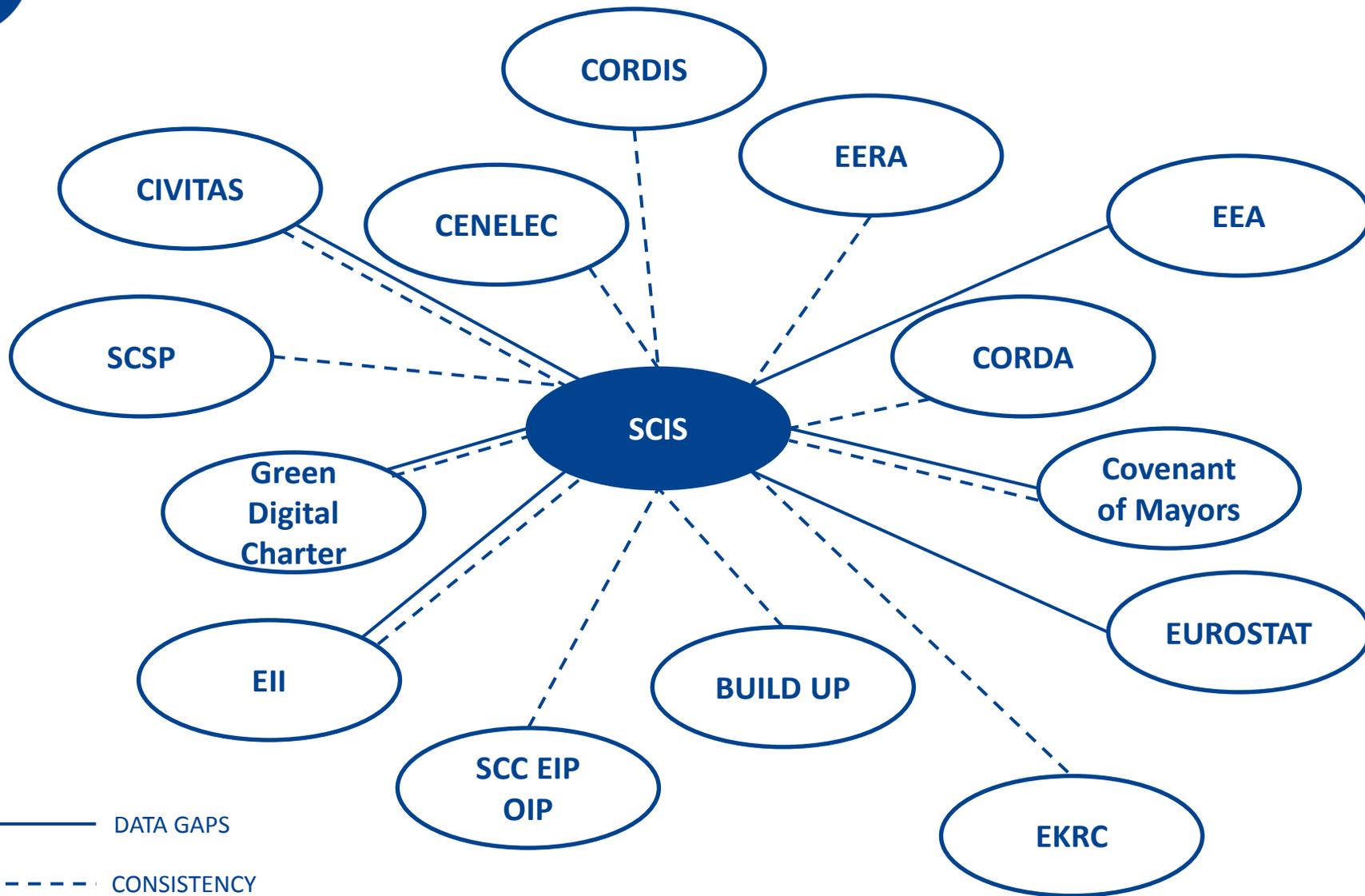
CONCERTO III

EeB / EE

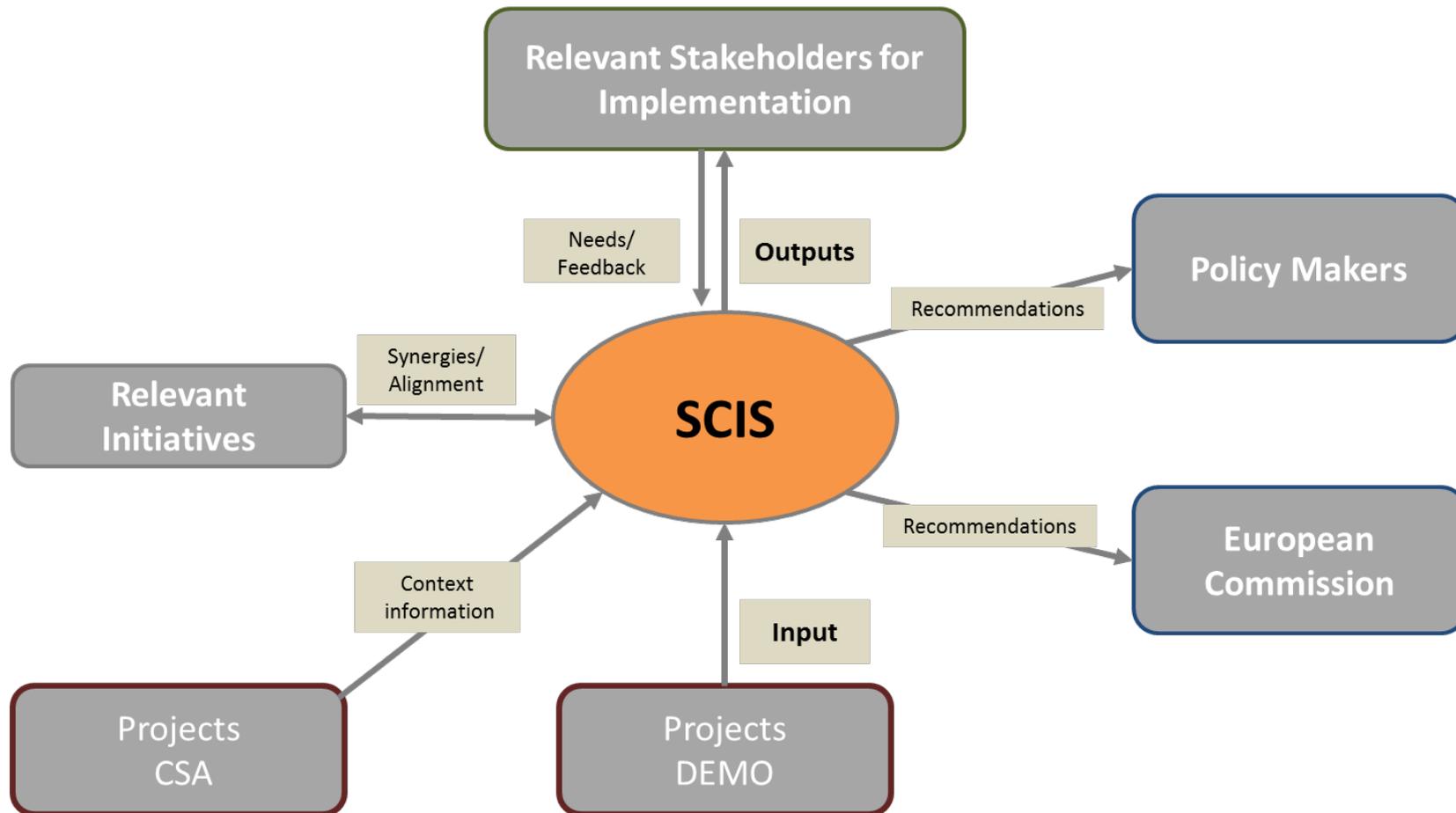
SC

SCC



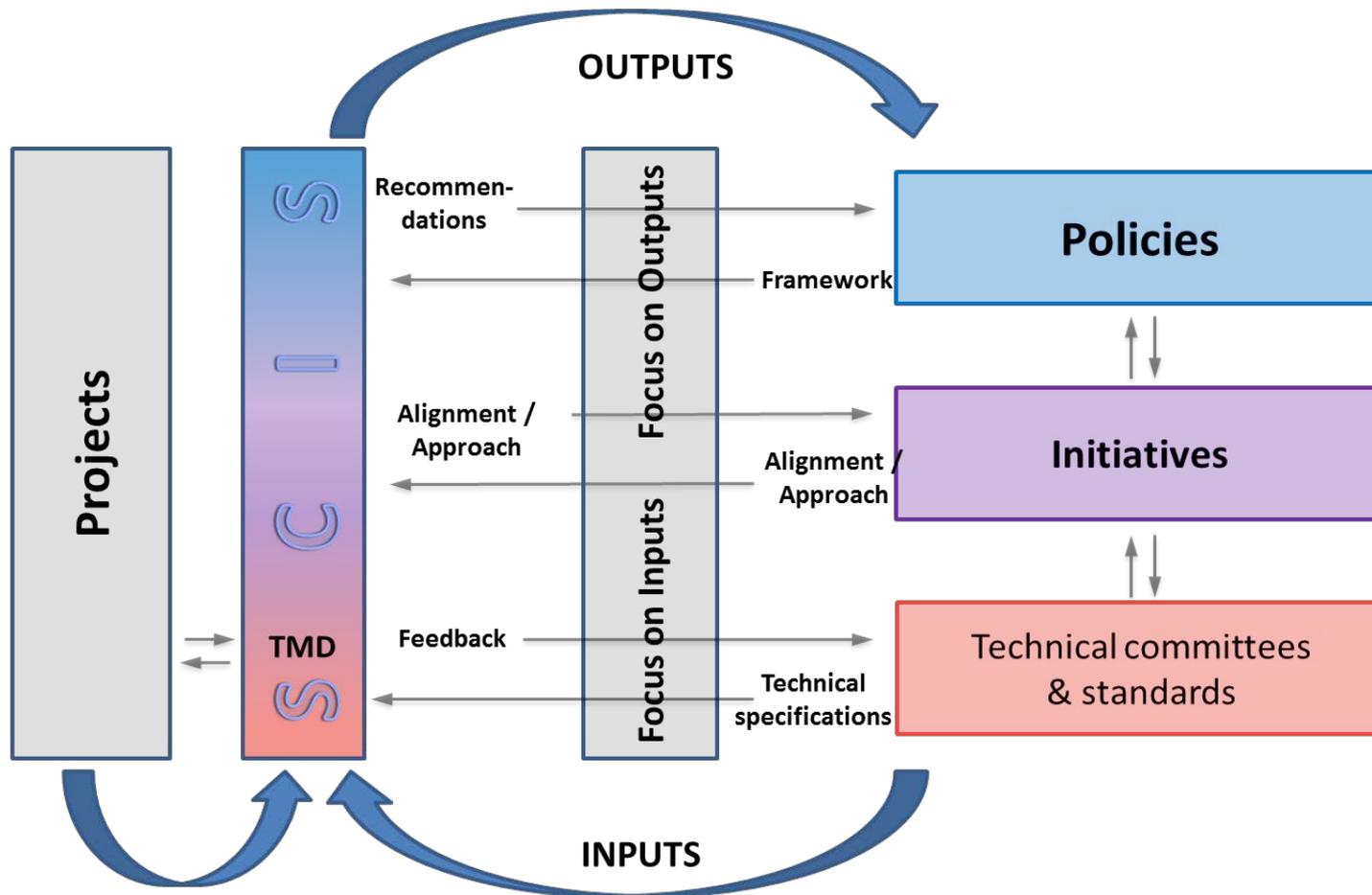


Role in the environment

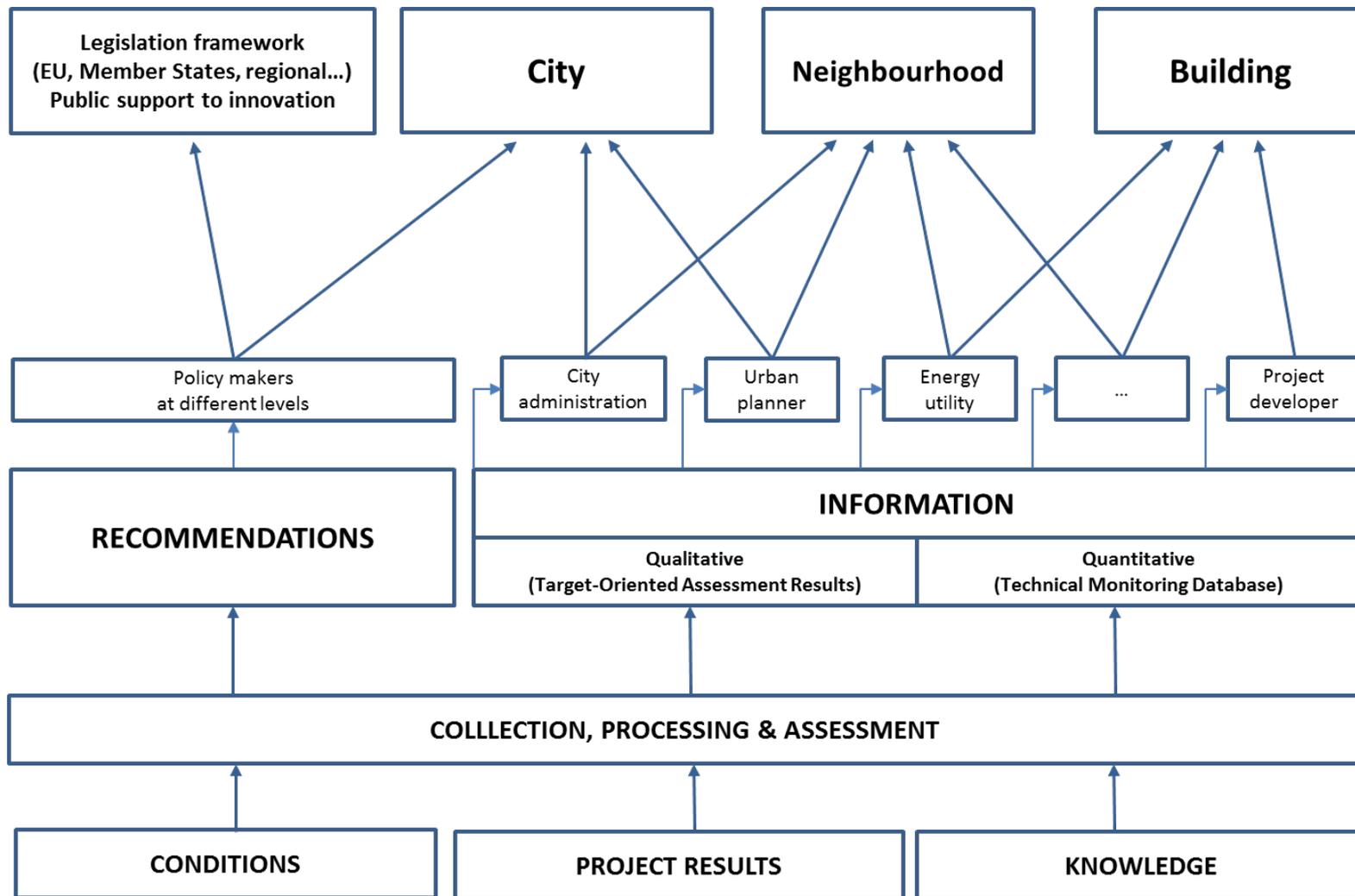


SCIS as an interface

complementarity + synergy + alignment



Information processing & provision

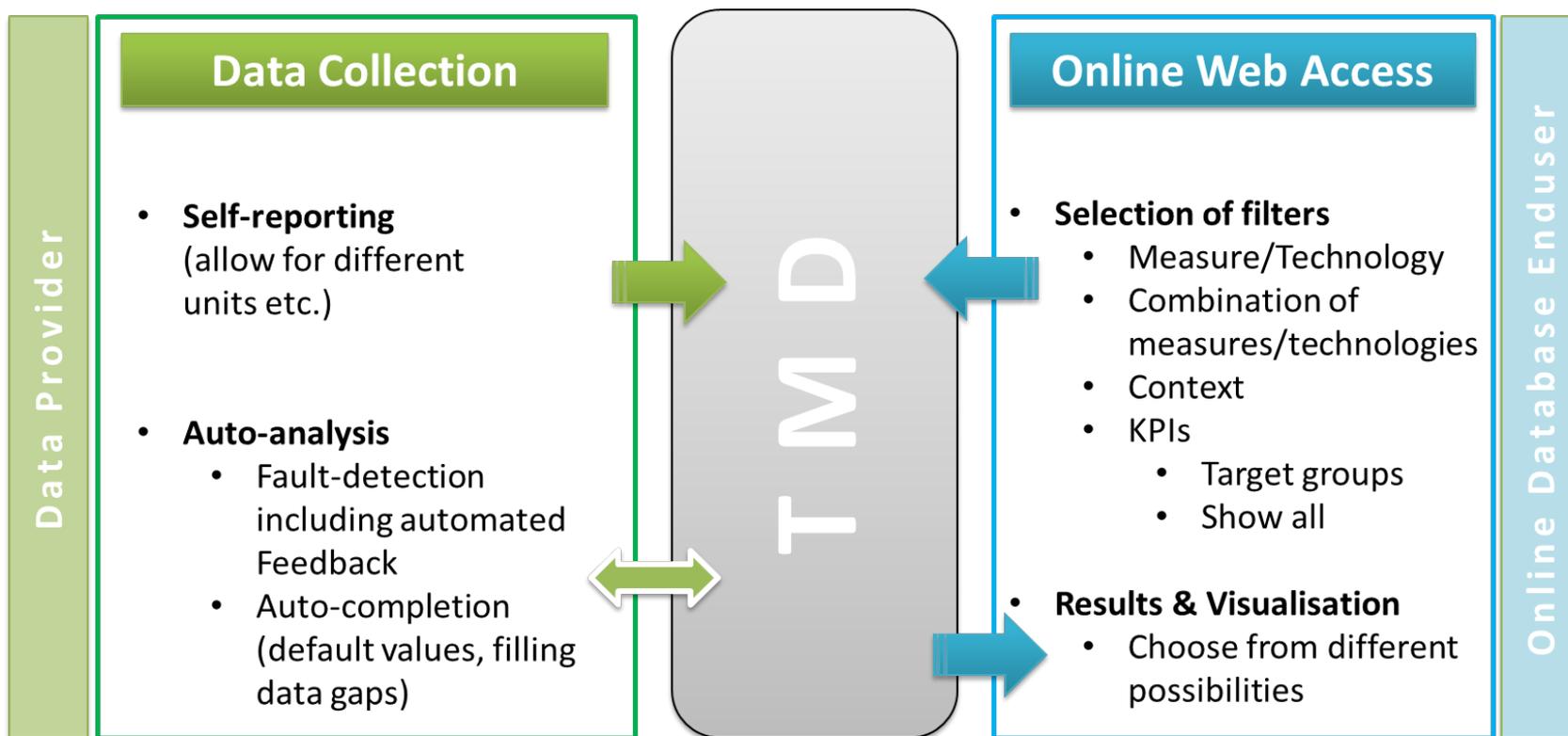


How will we provide clear information?

- Information to assist technology replication:
 - A **user-friendly** interface **to input** data
 - A **user friendly** interface **to analyse** data and find solutions to barriers
- Formatted and targeted for the needs of different users

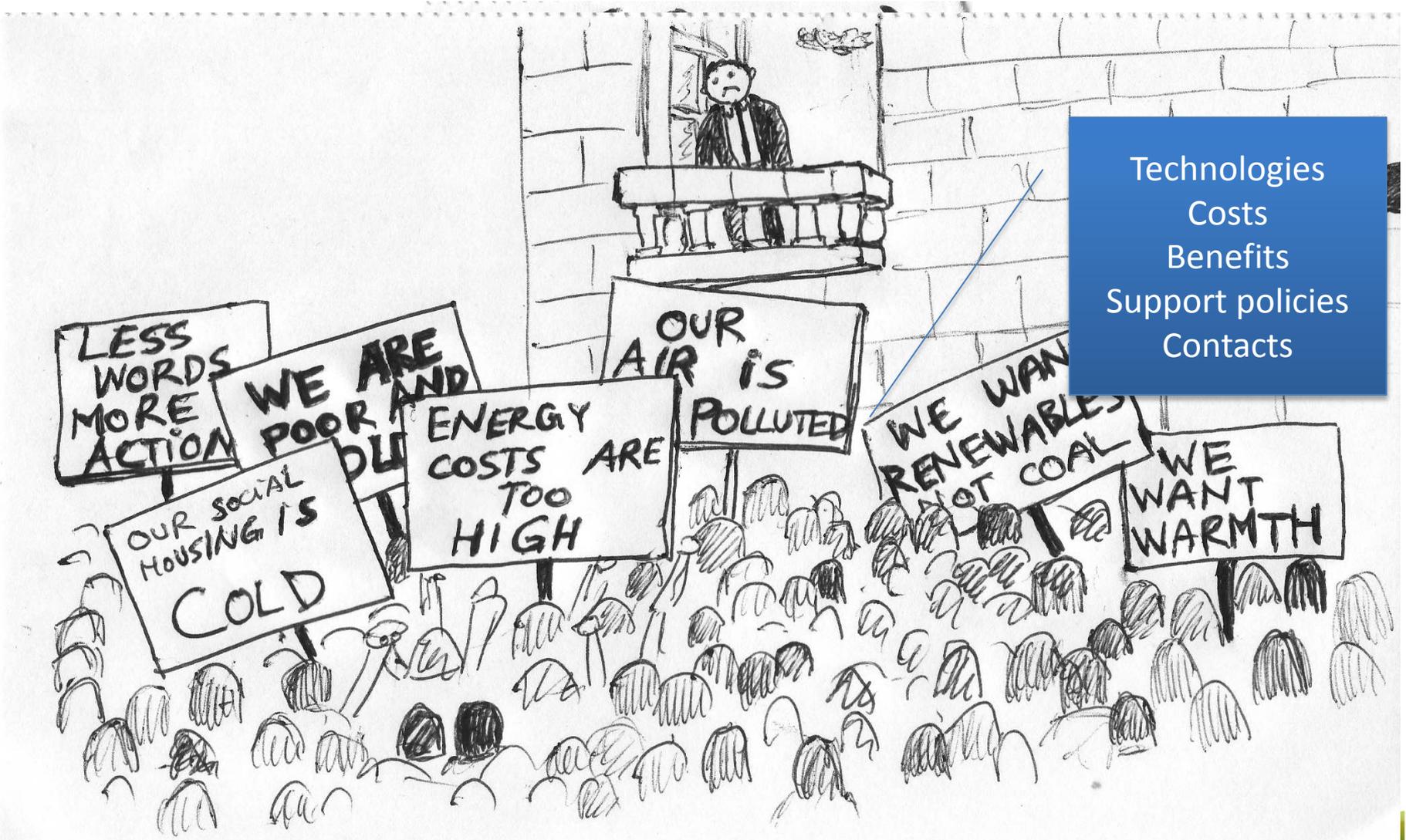


Technical Monitoring Database



For whom? What for...??

Example 1... town mayor



- Technologies
- Costs
- Benefits
- Support policies
- Contacts

Example 2

... architect / urban planner





- SCIS reacts to the **key needs of knowledge transfer for replication**
- It will provide **technical, policy and financial details** of projects
- It will **identify by *technology group* barriers and enablers**
- It will provide **visibility for the projects** through clear easily understandable and accessible information
- Also replication studies, financial assessments, policy recommendations



Timeline

- End of 2014 – launch of SCIS
- Summer 2015 – start of data collection
- October 2015 – alignment with projects
- November 2015 – web functionalities
- March 2016 – self-reporting feature
- Mid 2016 – launch of the new TMD incl. visualisation
- End 2017 – SCIS preparation fully finalised



THANK YOU

www.smartcities-infosystem.eu

Sign up, keep informed and interact

