

Smart Cities and Communities in EUROPE



Dr. Bernard GINDROZ

Chair ISO TC 268 « *Sustainable Development in Communities* »

Chair CEN/CENELEC/ETSI Sector Forum **SSCC** « *Smart & Sustainable Cities and Communities* »

EIP SCC Initiative Leader

Smart and Sustainable Cities developments

Complex Challenges but Great Opportunities



- Long term vision and commitment
- Holistic approach, priorities
- Integrated planning,
- Citizens' engagement
- Culture of results and communication

Standardization from best practices
and innovative models & partnership in support of:

- *Replication & Scaling up*
- *Adaptation to Climate Change*
- *Business models*
- *Dissemination*
- *Benchmarking (success stories & best practices)*



Smart and Sustainable Cities developments

Strong political engagement

- Vision
- Commitment/Decision
- Strategy with objectives
- Sectorial/area Roadmaps with targets
- **Implementation and culture of results**
 - *Measure progress and monitor*
 - *Evaluate against planned targets*
 - *Improve to meet the objectives*
 - *Communication & reporting*

Integrated and cross sectorial approach

With a culture of results and communication and citizens' engagement



International Standardization



International
Organization for
Standardization



ISO TC 268

Smart and Sustainable Cities developments

i.e. ISO 37100
ISO 37105
ISO 37106

- Terms and Definitions
- Description of cities
- Strategies for long term vision
- Maturity Models to help decision/commitment

i.e. ISO 37106
ISO 3712x

- Multi sectorial Strategies for cities
- Targets with Indicators to help setting roadmaps with targets

i.e. ISO 3715x
ISO 37106
ISO 3712x

- Identify infrastructures issues
- Identify multisectoriel issues
- Set Indicators for progress follow-up and reporting to help implementing actions plans

i.e. ISO 3712x

- Measure progress towards planned targets to evaluate results of the actions



Diagnostic of city's « readiness level » (maturity)
...for setting a long term vision

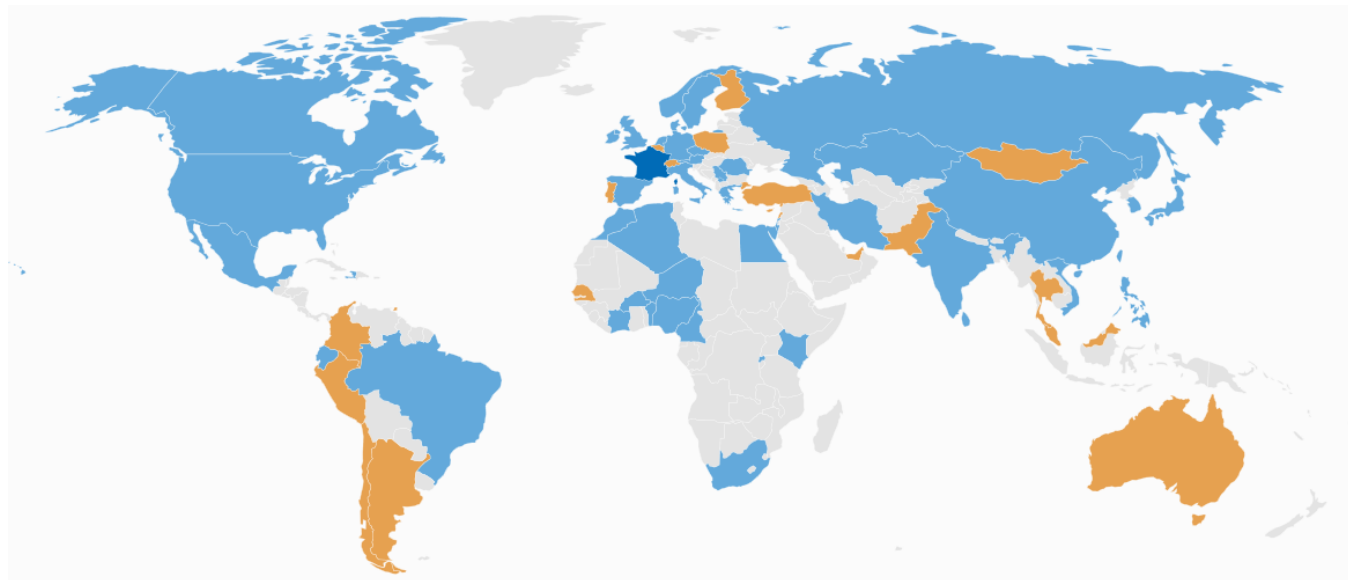
i.e. ISO 18091, ISO 37107

Management & Governance and guidelines
ISO 37101
ISO 37104

ISO TC 268

Smart and Sustainable Cities developments

The proposed series of International Standards will encourage the **development and implementation of holistic and integrated approaches** to sustainable development & sustainability.



TC 268 contributes to the **UN Sustainable Development Goals** through its standardization work.

Creation date: 2012
Secretariat: AFNOR, Mr. Etienne CAILLEAU
Chairman: Dr. Bernard GINDROZ

Participating countries: **46**
Observing countries: **23**

European Standardization



CEN/CENELEC/ETSI Sector Forum Smart & Sustainable Cities and Communities

→ Aligning strategic approach on ISO TC 268 principles



A platform of exchanges between all stakeholders and cities

- To collect needs expressed by cities
- To identify “tools” relevant in our contexts and “Identities” – no one size fits all -
- To consider Adoption of International standards when relevant for Europe, or adapt when possible
- To align decision making with investment
- To promote citizens’ engagement
-

Quality Management System

european
energy award



eea - European Energy Award



Quality management and certification system for municipalities, based on 4 principles:



- *Accelerator of national energy strategies*
- *Developed for municipalities by municipalities*
- *Continuous improvement (Plan-do-check-act – cycle)*
- *International benchmark*

eea - European Energy Award

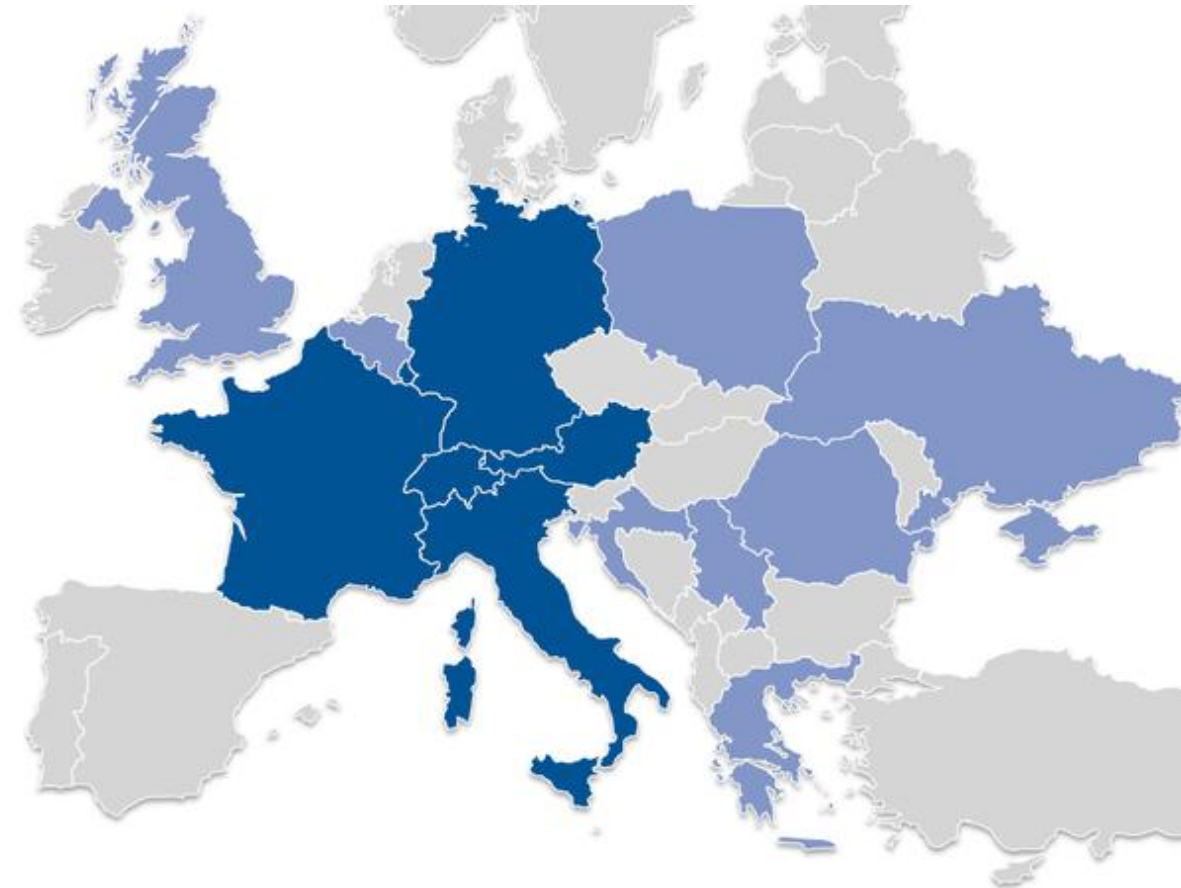
eea – Participating countries

The European Energy Award in figures

- ... more than 25 years of experience
- ... 1,504 municipalities participating
- ... total population of 48 million involved
- ... largest municipality participating:
Lyon Metropolis (FR, 1.34 m inhabitants)
- ... smallest municipality participating:
Senèdes (CH, 156 inhabitants)

-  Ordinary member countries with national eea programmes
-  Pilot countries

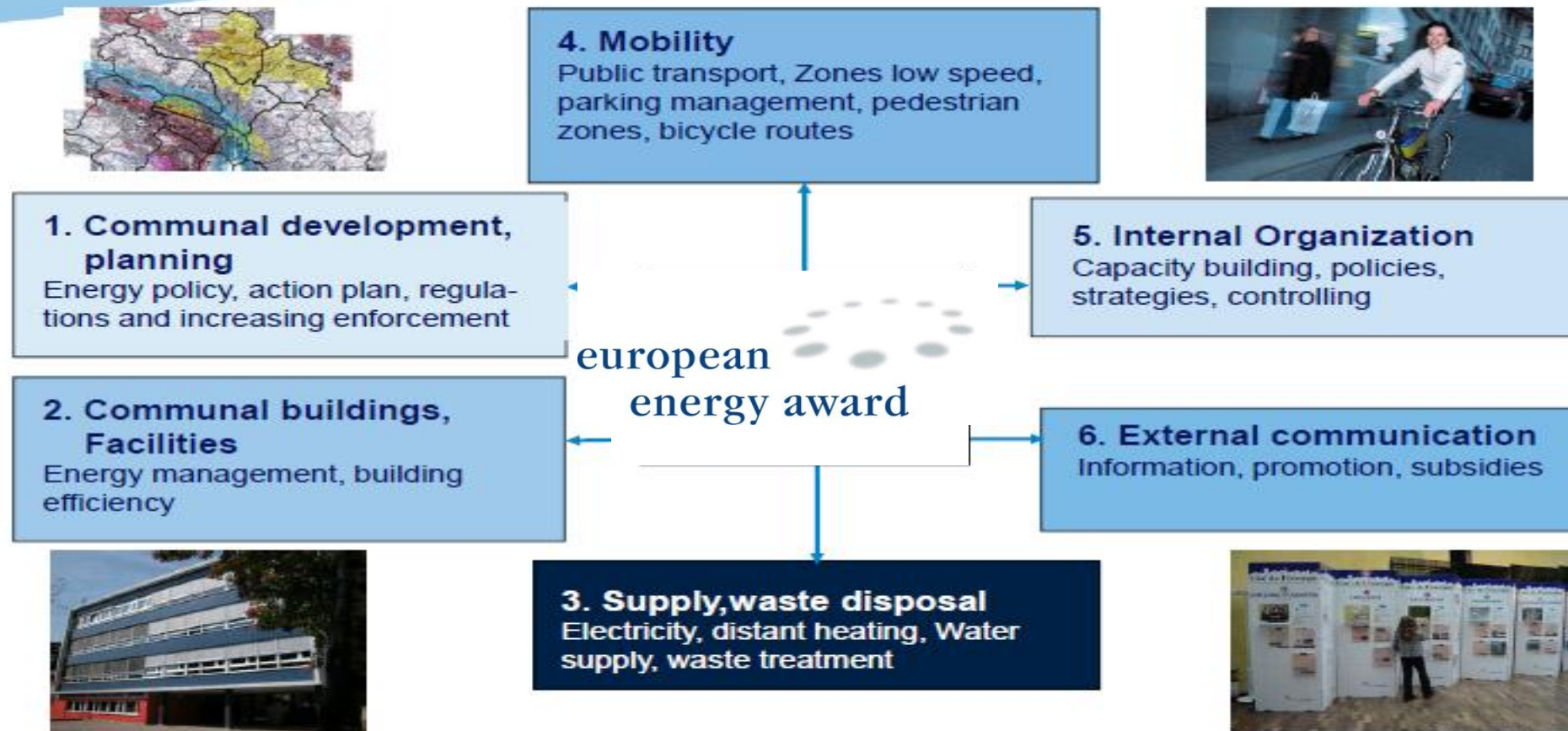
eea
european
energy award



eea - European Energy Award

Domains considered by the European energy award

7



eea - European Energy Award

A management system for cities and communities

**The recipe: Plan-Do-Check-Act
- and award!**

europa
european
energy award



eea and standardization development

- a management system for cities and communities
- Similar development for territories and regional authorities
- Fully compatible with ISO management systems family of standards
- Fully complementary with ISO 50001 (several practical joint implementations with common certification ->large benefits)
- Consistent/complementary with ISO 37101

eea supports cities and communities to :

- *integrated planning,*
- *cross sectorial management,*
- *citizens' engagement,*
- *Climate Change consideration, mitigation and adaptation*
- *a culture of improvement through PDCA process,*
- *evaluation & monitoring,*
- *benchmarking, ...*
- *implementing management systems, such as ISO 50001, ISO 37101*



European Innovative Partnership Smart Cities and Communities



**Smart City
Guidance Package**



European Innovative Partnership Smart Cities and Communities

The European Innovation Partnership on Smart Cities and Communities (EIP-SCC) is a **major market-changing undertaking** supported by the **European Commission** bringing together **cities, industries, SMEs, investors, researchers, standardization and other smart city actors.**

EIP SCC– Philosophy

- Tackle common challenges & bottlenecks
 - Develop innovative & replicable solutions
 - Bundle demand from cities and regions
 - Attract and involve business and banks
- ➔ **Create markets!**



European Innovative Partnership Smart Cities and Communities

6 Actions Clusters



Citizen Focus

1 Projects	51 Live Documents
202 Active Members	5 Discussions



Business Models, Finance and Procurement

1 Projects	36 Live Documents
116 Active Members	11 Discussions



Integrated Infrastructures and Processes

1 Projects	48 Live Documents
225 Active Members	0 Discussions



Integrated Planning, Policy and Regulations

1 Projects	43 Live Documents
180 Active Members	12 Discussions



Sustainable Districts and Built Environment

1 Projects	40 Live Documents
205 Active Members	1 Discussions



Sustainable Urban Mobility

3 Projects	86 Live Documents
205 Active Members	0 Discussions



Integrated planning and management

Enabling action: in day-to-day policy and decision-making, and implementation, by city administrations and urban stakeholders, **coordination-related issues** need to be addressed for successful implementation:

- to develop a **holistic perspective** on low energy neighbourhoods, integrated infrastructures, clean urban mobility and ICT
- to frame the impact of **short term** actions within a longer time horizon and **long term** goals and to measure progress
- to organise **cross-domain collaboration** during preparation and implementation of plans
- to enable governance of **co-design and co-creation** processes with a wide variety of urban stakeholders who are often interdependent upon each other for results
- to **mobilise capital** from different sources to finance projects at an early stage
- to **accelerate the impact** of smart city projects towards urban transition



EIP SCC – Achievement of Action Cluster

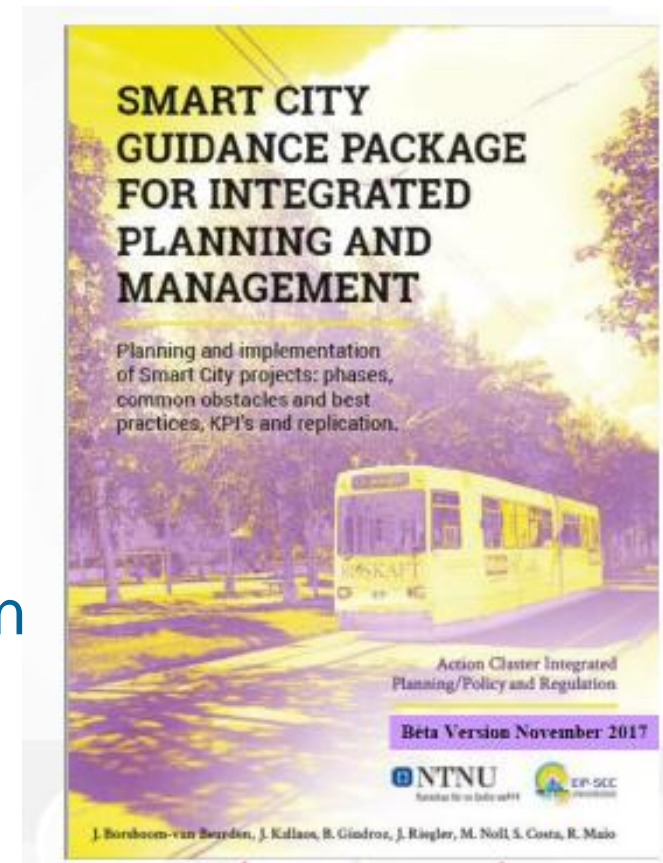
(Integrated Planning Policy and Regulation)

Co-create a **Smart City Guidance Package (SCGP)**, which:

- is written in simple straight-forward language
- Bundles experiences of cities
- Helps other cities in avoiding common pitfalls, and in implementing their plans

Publication at event in May 2019

NTNU is leading this activity supported by the whole Action Cluster

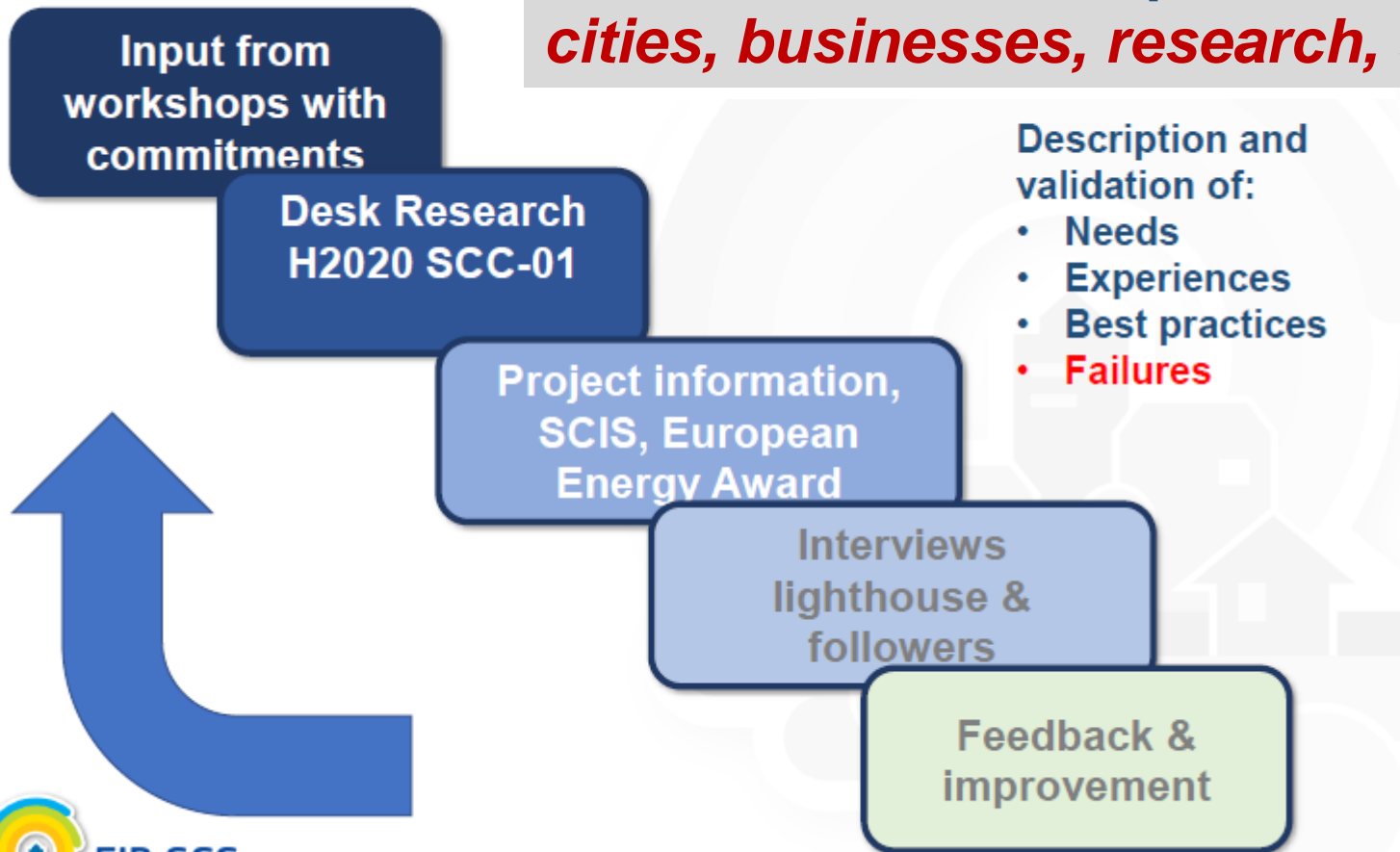


EIP SCC – Achievement of Action Cluster

(Integrated Planning Policy and Regulation)

Collaborative development:

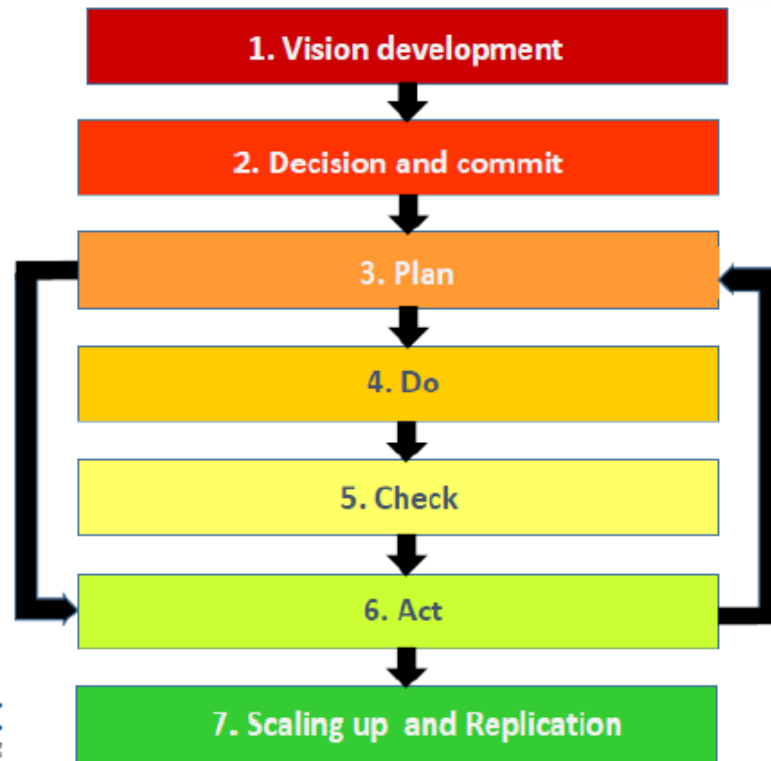
cities, businesses, research, standardization



EIP SCC – Achievement of Action Cluster

(Integrated Planning Policy and Regulation)

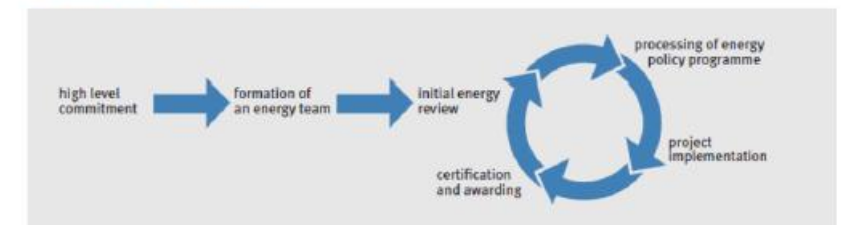
Stages in roadmap for integrated planning and management



Based on improved methodology



THE STEP-BY-STEP PROCESS



Smart Cities and Communities in EUROPE

Conclusions and perspectives

Smart & Sustainable development : a real challenge for cities but Great Opportunities

Strong consideration of standards as key support for cities by creating:

- *A long term vision with citizens' engagement*
- *A holistic approach & New governance models (including citizens' active participation)*
- *A culture of results with permanent improvement approach*
- *A strong consideration of Climate Change, both mitigation and adaptation*
- *A culture of communication and reporting to keep collective engagement*
- *A common framework for communities, suppliers and other smart cities stakeholders*

In Europe, quality management system approach paves the way to sustainable development of cities, communities and territories

In Europe, EIP SCC provides a Smart City Guidance Package (SCGP) , based on robust and improved methodology to help cities and communities to engage in smart and sustainable development



International
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EIP-SCC

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