



# SmartEnCity Academy for Zero Carbon Transition: Lesson 4

Session starts at 2 PM

TOWARDS SMART ZERO CO<sub>2</sub> CITIES ACROSS EUROPE

VITORIA-GASTEIZ + TARTU + SONDERBORG



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 691883



# SmartEnCity Academy for Zero Carbon Transition

## + SmartEnCity – Towards Smart Zero CO<sub>2</sub> Cities across Europe

- + 3 Lighthouse Cities
- + 2 Follower Cities
- + 37 partners
- + 02/2016 - 07/2021 (5.5 years)

## + SmartEnCity Academy

- + online training course for cities, municipalities and smart decision making
- + tailored step-by-step guidance
- + interactive discussions
- + recordings and presentations of all lessons at the SmartEnCity website







**More information, recordings and presentations at**  
**<https://smartencity.eu/outcomes/smartencity-academy/>**

**Questions to**  
**[info@smartencity.eu](mailto:info@smartencity.eu)**

**Please note that this lesson will be recorded and uploaded to**  
**<https://smartencity.eu>**







# Lesson 4: Agenda

## Envision and Planning: The SmartEnCity Planning Process

✦ **Moderation:** Koldo Urrutia Azcona, TECNALIA Research & Innovation

✦ **Agenda:**

✦ Introduction (Koldo Urrutia Azcona)

✦ Pitches:

✦ SmartEnCity Lighthouse City Tartu: **Merit Tatar**, Institute of Baltic Studies

✦ SmartEnCity Follower City Lecce: **Michele De Santis**, RINA Consulting S.p.A

✦ SmartEnCity Lighthouse City Vitoria-Gasteiz: **Alberto Ortiz De Elgea Olasolo**, VISESA

✦ Guest Speaker: **Judith Borsboom-van Beurden**, Locality Europe & EIP-SCC

✦ Panel Discussion & Questions from the audience







## Lesson 4: Speakers



Koldo Urrutia  
Azcona



Merit Tatar



Michele De Santis



Alberto Ortiz  
De Elgea Olasolo



Judith Borsboom  
-van Beurden





## **SmartEnCity Academy Lesson 4: The SmartEnCity Way towards Zero Carbon City: Envision and Planning: The SmartEnCity Planning Process**

Koldo Urrutia Azcona,  
TECNALIA Research & Innovation

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## Lesson 4:

### *Envision and Planning: The SmartEnCity Planning Process*

#### *Main objective:*

*Show how, share cities' experiences*

*It's doable; not easy, but not "rocket science" either*

#### *How??*

1. *A bit of theory > Strategy to incorporate cities into action – Cities4ZERO & Foresight mindset*
2. *A bit of SmartEnCity experiences > Tartu, Lecce and Vitoria-Gasteiz experiences*
3. *An external contrast: Judith and the Smart City Guidance Package*
4. *A bit of discussion?? – Roundtable discussion*







**Cities4ZERO:**

*The journey towards the*

**SMART ZERO CARBON CITY**

**Urban transformation process supporting  
the energy transition of European cities –  
THE PLANNING PROCESS**



**Koldo Urrutia Azcona - Researcher**

**Innovation in Smart Sustainable Cities & Urban Environment**

**Tecnalia Research & Innovation**

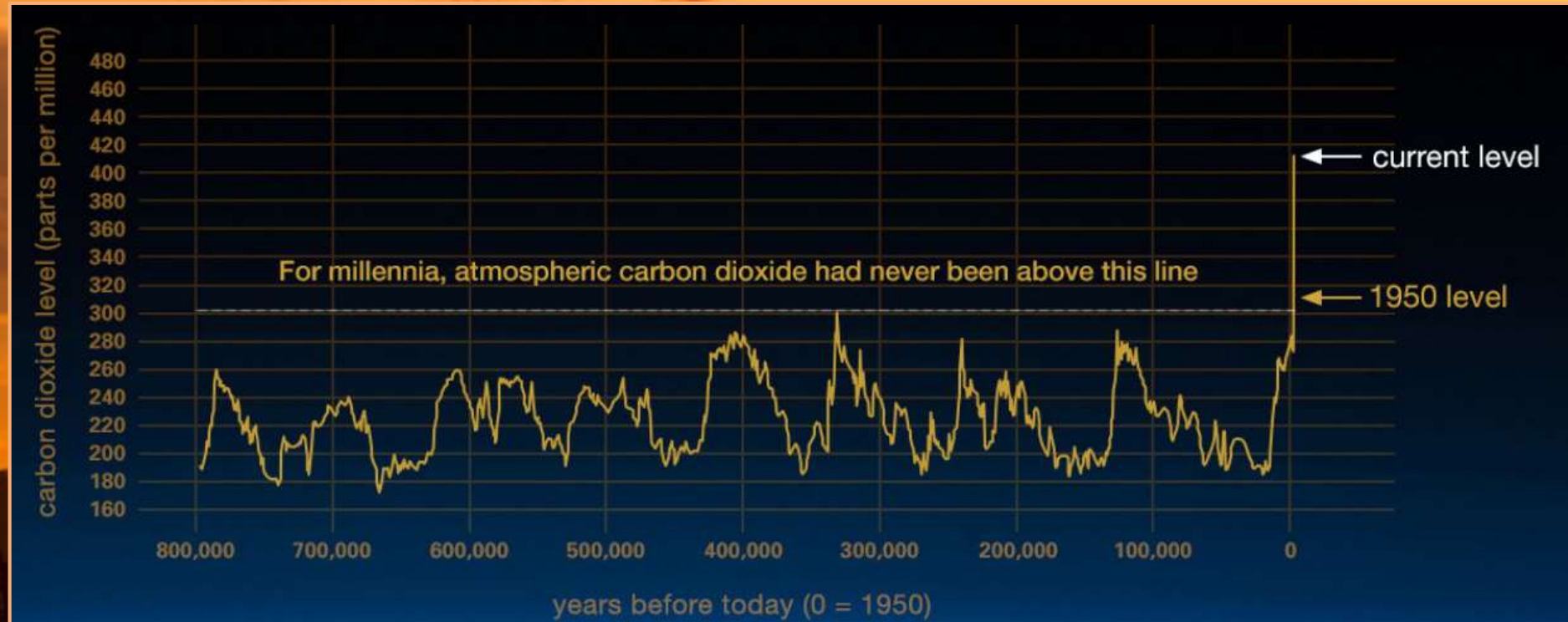
tecnalia Inspiring  
Business

Universidad  
del País Vasco

Euskal Herriko  
Unibertsitatea



















**CITIES NEED TO TAKE  
CLIMATE ACTION!!**

**SMARTCITY PROJECT  
IS TRYING GO AHEAD!**

**ADAPTING A  
METHDOLOGY TO  
DIVERSE LOCAL  
CONTEXTS**







## Cities4ZERO:

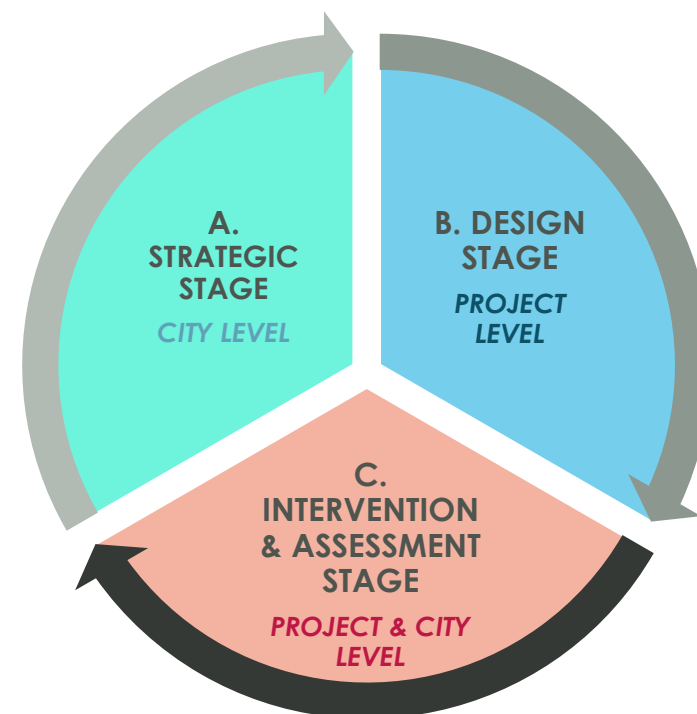
The journey towards the **SMART ZERO CARBON CITY**

Implementation methodology based on three stages:

A. Strategic stage

B. Design stage

C. Intervention & Assessment

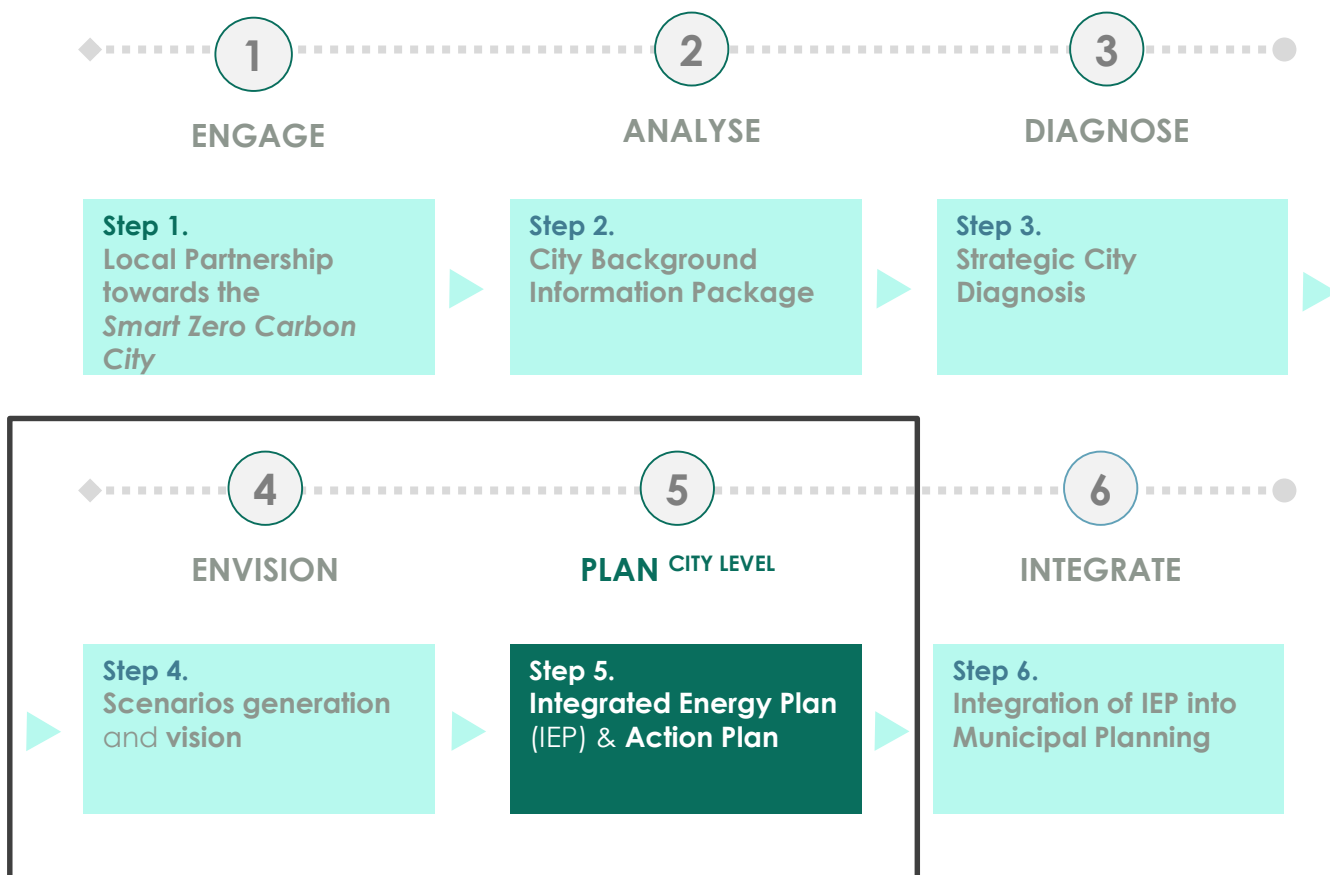






## Cities4ZERO:

## The journey towards the *SMART ZERO CARBON CITY*





1

Engage!

2

Analyse

3

Diagnose

4

Envision

5

PLAN

6

Integrate

Step 1.  
Local Partnership  
towards the  
Smart Zero Carbon City

## Key stakeholders at city level

- **Quadruple helix principle:** government, industry, academia, citizenship
- **Group set-up & pre-planning tasks.**

## Governance model definition

- Open innovation
- **Decision-making** procedures
- **Committees**
- **Institutional analysis** and creation (if necessary)
- **Governance activities** (*spheres*)
  - Strategic, Tactical, Operational, Reflexive





1  
**Engage!**

2  
**Analyse!**

3  
**Diagnose**

4  
**Envision**

5  
**PLAN**

6  
**Integrate**

Step 2.  
City Background  
Information  
Package

## Pre-analysis – *Where are we?*

- **Literature review at city level**; existing documents & strategies
- **Interviews with experts**
- **Surveys**

## Analysis – City Characterisation

- Socio-economic
- Business & financial
- Urban environment & quality of life
- Policies and regulations
- **Sectors of the city** - Energy, building stock, mobility, ICTs, engagement, waste, water, etc.
- **CO2 EMISSIONS BASELINE**



1  
**Engage!**

2  
**Analyse!**

3  
**Diagnose!**

4  
**Envision**

5  
**PLAN**

6  
**Integrate**

Step 3.  
Strategic City  
Diagnosis

## Taskforce set-up for Diagnosis (Step 3) & Vision (Step 4)

- **Key stakeholders & groups**
- Probability and relevance of **critical topics**
- **Input for scenarios generation**

## Strategic City Diagnosis

- **SWOT analysis**
- *City-trends analysis*
- **Connection to national and international targets, policies & institutions**



1

Engage!

2

Analyse!

3

Diagnose!

4

Envision!

5

PLAN

6

Integrate

Step 4.  
**Scenarios  
generation** and  
preferred **vision**

## Workshop - *Visions of the future*

*Where do we want to go?*

- **Strategic question & Vision timeframe approach** > *How making our city carbon neutral by 2030?*
- Development within working groups
- **Scenarios' generation**
- Try to reach consensus
- **Develop a preferred vision**

Refine results towards **strategic planning**

- Develop and **refine preferred scenarios**
- **Share results with cities & experts**, including feedback





## Step 5. Integrated Energy Plan (IEP) & Action Plan

### Develop an **Integrated Energy Plan (IEP)**

- Bear in mind stakeholders, materials and decisions made in **Steps 1,2,3&4**
- **Vision & overall City Objective. Strategic City Goals**
- **Main IEP Axes & Strategic Lines**
- Main funding sources identification

### Develop an **Action Plan**

- **Actions & tangible targets**
- Contribution to *Strategic City Goals*
- Roadmap & timeframe (5-year max.)
- Potential **Key Projects identification**,
- **Indicator System** at city level



1

Engage!

2

Analyse!

3

Diagnose!

4

Envision!

5

PLAN!

6

Integrate!

Step 6.  
Integration of IEP  
into Municipal  
Planning

## Integrate IEP contents into Municipal land-use planning and strategies

- **Update/ modification of Land-use City Masterplan**
  - Ensure **legal viability and land-use provision**.
  - **Local legislation and municipal competences**.
- IEP & Action Plan **acknowledgement by all departments and strategies of the city**
- **Breaking sectorial silos**, fostering **cross-cutting collaboration** among municipal departments

Integration steered by LP towards SZCC (*step 1*), which entails key stakeholders from the municipality

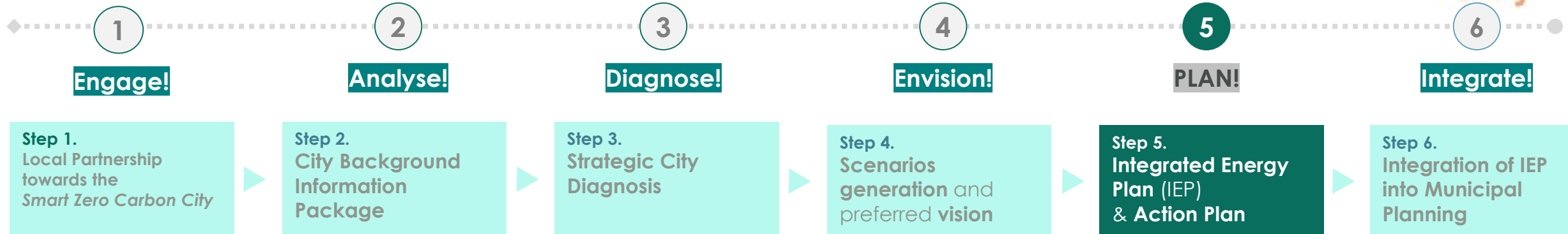
# Roadmap2025

50 steps towards a carbon neutral Sonderborg



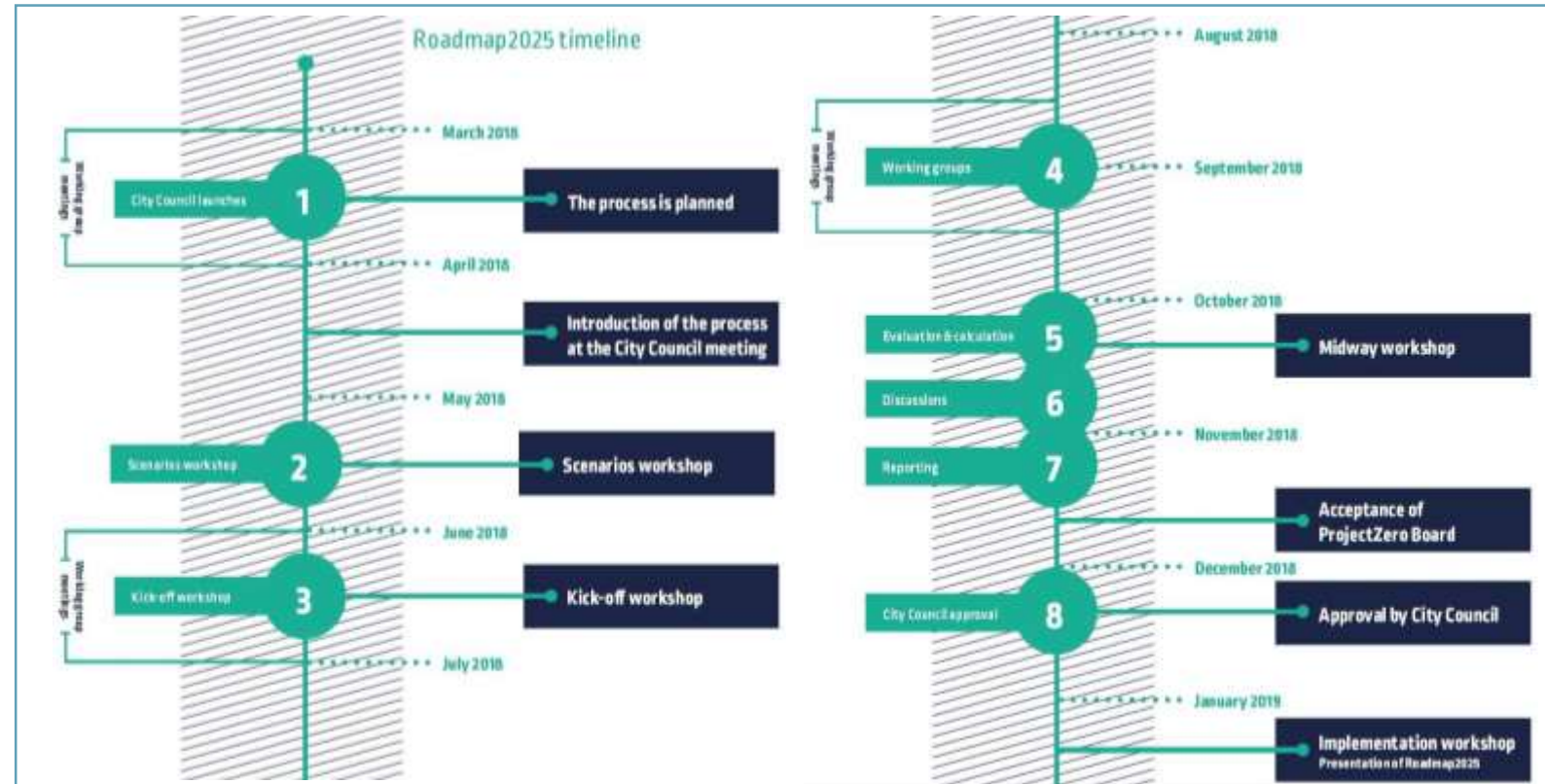


# Cities4ZERO strategy



*The journey:*  
towards the **SMART ZERO CARBON CITY**  
in your own way :)

- **Sonderborg way**
- **Tartu way**
- **Vitoria-Gasteiz way**
- **Lecce way**
- **Asenovgrad way**







## JOIN THE SMARTENCITY NETWORK!!

### Networking and resources:

- City solutions
- Webinars
- Tools
- YouTube channel
- Scientific papers
- Monthly news bulletin



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members  
entry of the  
smartencity  
network



Welcome to the SmartEnCity Network



Select a city from the map and click to learn more about the city and its initiatives. Or use the filter below, to refine specific initiatives across cities.

Let's act and learn while others just talk!

[Sign up for the Network Bulletin](#)

Climate change is one of the most important challenges that our society is facing. Europe has ambitious goals for energy efficiency and renewable energy supply. Cities can turn the climate challenge into an opportunity and create growth.

Many small and medium-sized cities across Europe have already





SONDERBORG

TARTU

ITERATIVE LEARNING PROCESS

CITIES' NETWORKING &  
EXPERINCES SHARING

3 LIGHTHOUSE CITIES

2 FOLLOWER CITIES

MORE THAN 50 EU NETWORK CITIES

LECCE

AND STILL GROWING...







## JOIN US AT

<http://smartcitynetwork.eu/>

*"You don't have to be a capital city  
to make a major difference"*

TARTU

SONDERBORG

ASENOVGRAD

VITORIA-GASTEIZ

LECCE

## How does YOUR JOURNEY look like?







**Koldo Urrutia Azcona – Researcher**  
**Innovation in Smart Sustainable Cities & Urban Environment**  
**Tecnalia Research & Innovation**

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**[www.tecnalia.com](http://www.tecnalia.com)**







## **SmartEnCity Academy Lesson 4: The SmartEnCity Way towards Zero Carbon City: Envision and Planning: The SmartEnCity Planning Process**

Merit Tatar  
Institute of Baltic Studies, Tartu, Estonia

TOWARDS SMART ZERO CO<sub>2</sub> CITIES ACROSS EUROPE

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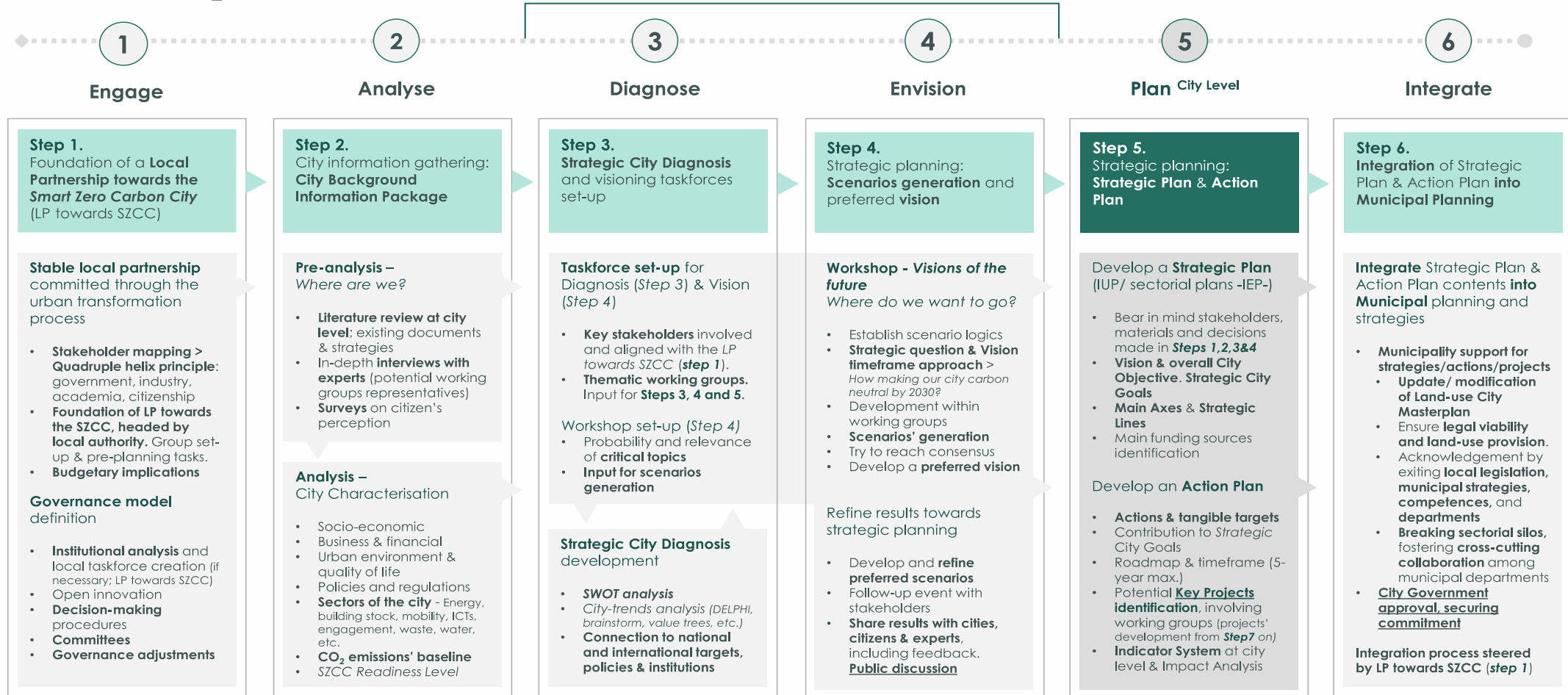
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 691883



# Cities4ZERO steps 3 and 4 – Diagnosis and Envision

## A. STRATEGIC STAGE\_CITY LEVEL

## Cities4ZERO Foresight





# Introduction to planning and vision development through **participative foresight** and **vision building**



- ✦ Process of transformation to low-carbon economy and society is complex and touches on a range of stakeholders within all sectors in a municipality
- ✦ Shift to low-carbon economy calls for a well-coordinated multi-level governance system
- ✦ Public sector leadership is needed
- ✦ But there is still lack of such capacities and insufficient interaction between stakeholders
- ✦ Plans fail as commitment from the whole community is not strong enough

## ENGAGE:

- ✓ Municipality technicians
- ✓ Politicians
- ✓ Industry leaders
- ✓ Research experts (university, research centres, innovative industry)
- ✓ Land owners & other promoters
- ✓ Citizens' associations
- ✓ Consultants
- ✓ Product developers
- ✓ Suppliers

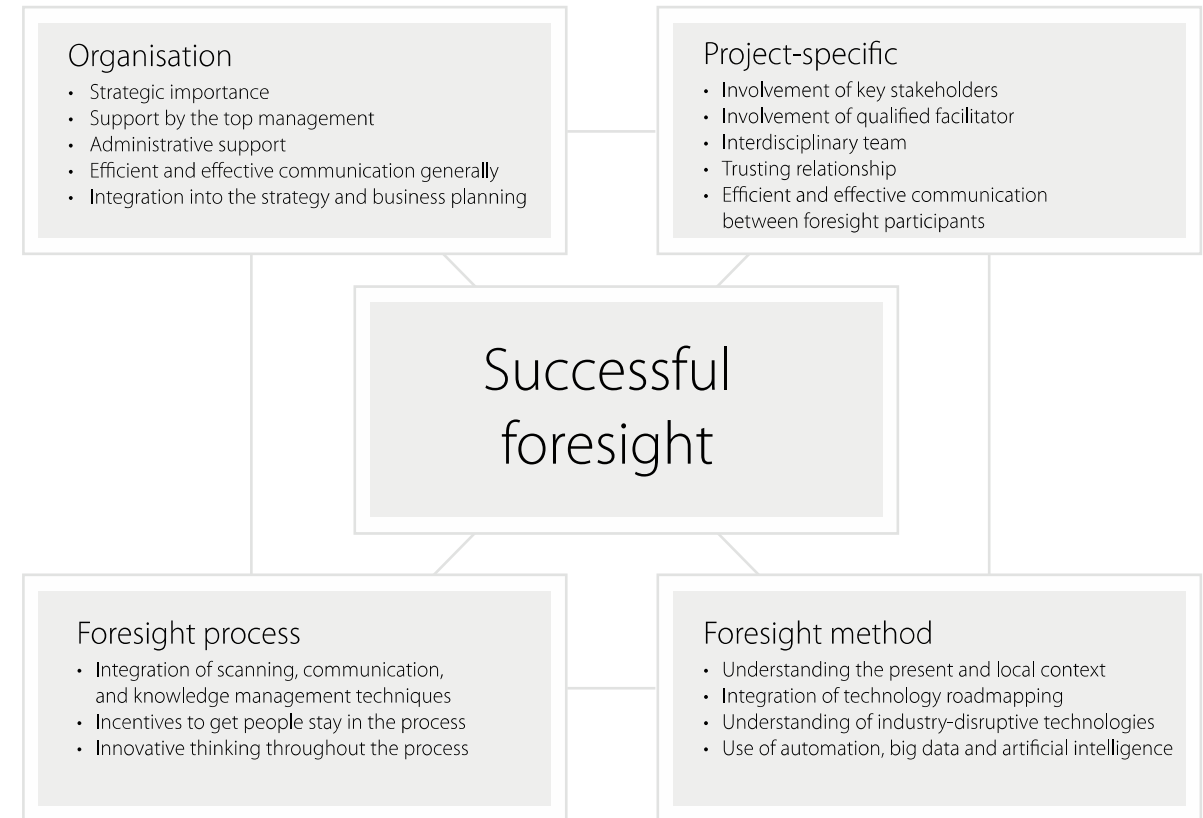
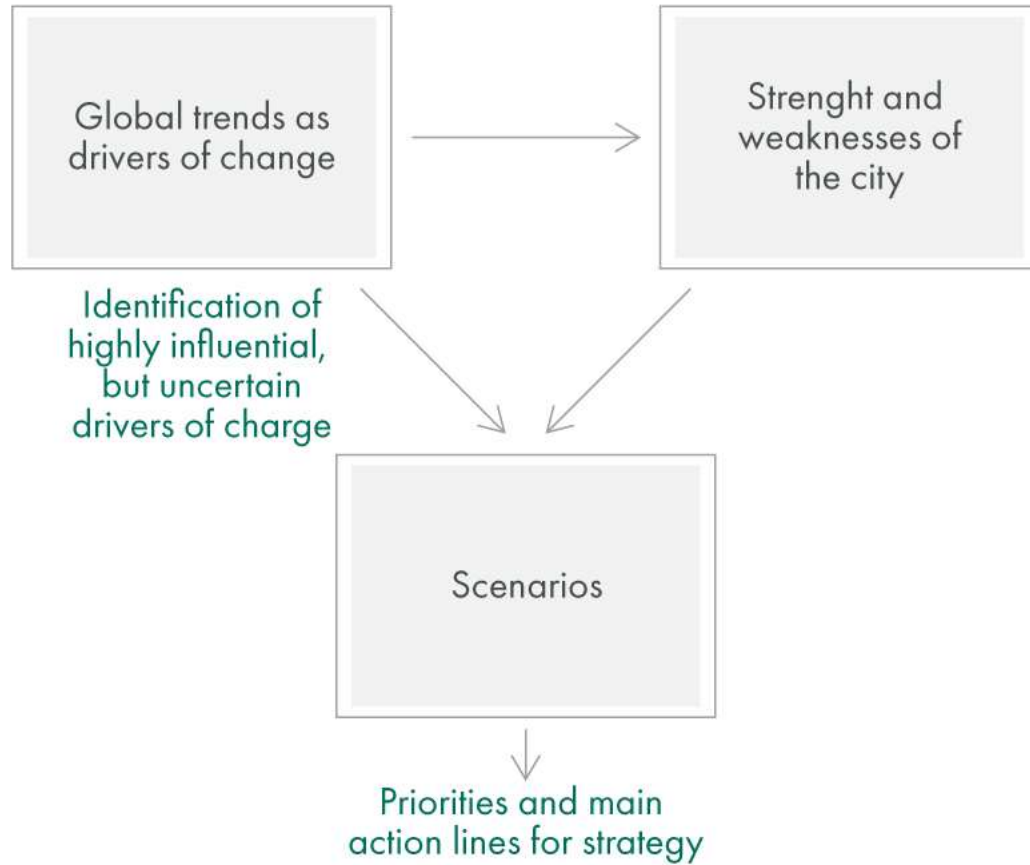
## ✦ Cities4ZERO foresight

- ✦ is about gathering future insights and building **common visions** for making present-day decisions and mobilizing joint actions
- ✦ is not planning, but foresight results provide information about the future and, as such, is one step in the planning and preparation of decisions
- ✦ can be used in working out urban development strategies as it brings together **various stakeholders** and **guides their individual choices towards consensus**

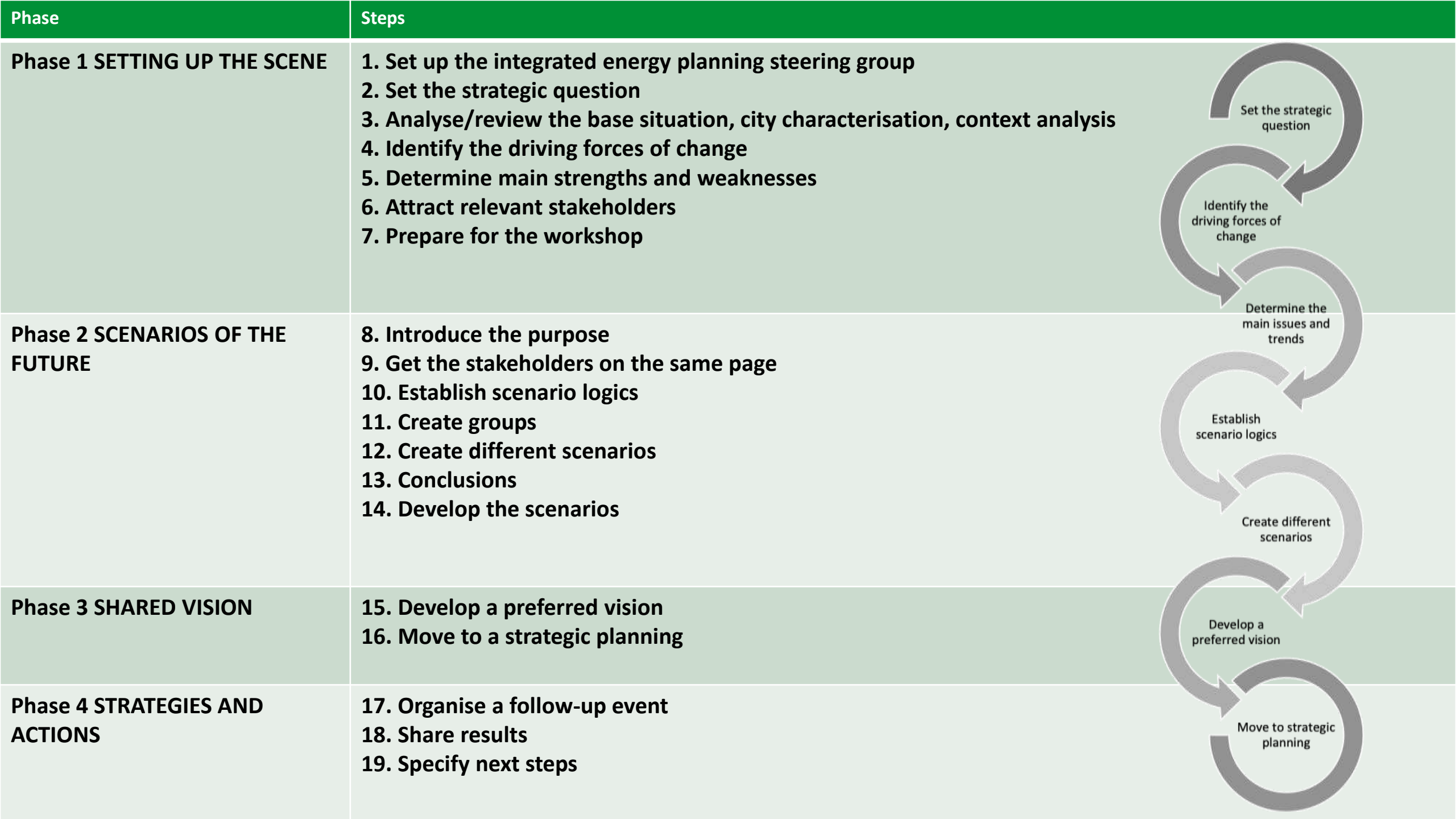


# Cities4ZERO Foresight is designed to contribute to the preparation of cities' strategic action plans i.e Step 5 from Cities4ZERO Stage 1.

Highly participation seeking!

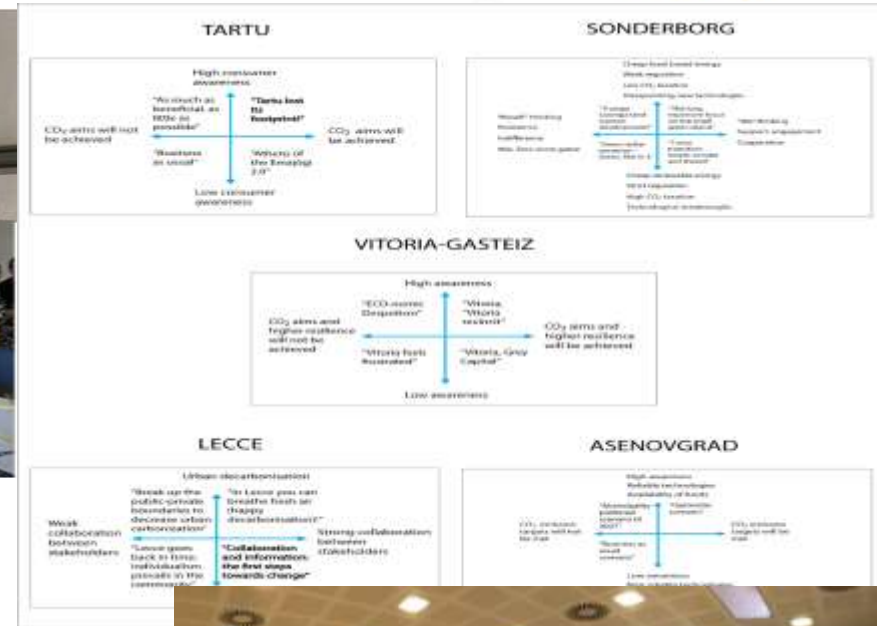
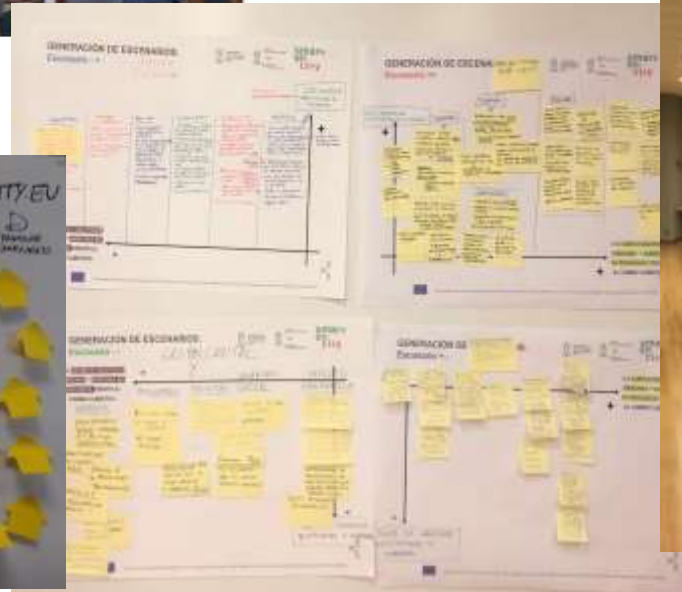
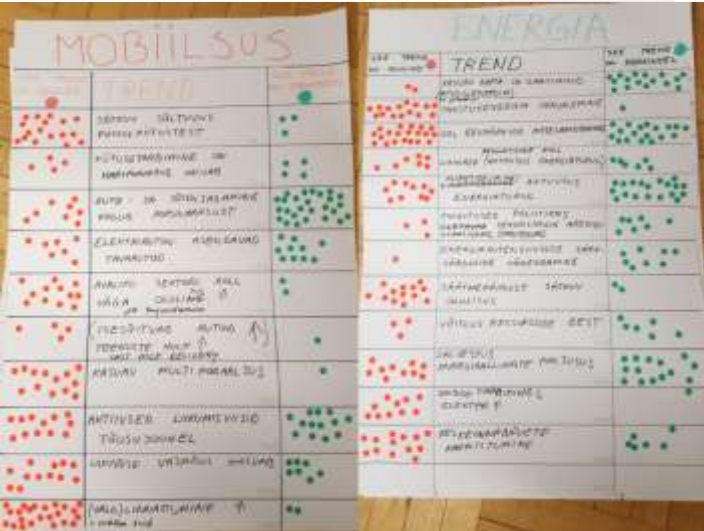








## Diagnose and Envision supported by foresight in 5 cities within SmartEnCity





# Case of Tartu - How can we reduce the CO<sub>2</sub> emission by 40% by 2030?

Baseline and Diagnosis

Scenario building

Vision development

Defining of topics

Set up of working groups

Objectives and Strategic goals

Further data collection, analysis

Strategy generation

Action plan generation in working groups

Approval in the City Council

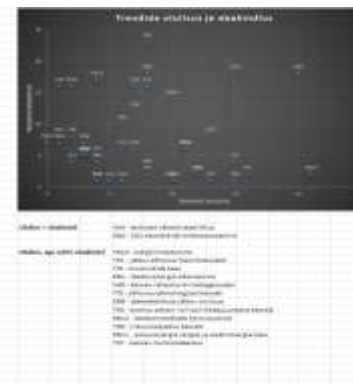
Agreement with stakeholders

Tartu Energy 2030+

**Vision:** Tartu is smartly developing community with good energy and a green pioneer.



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# Lessons learned and recommendations

- ✦ Global trend analysis is helpful and could be done jointly
- ✦ First – internal engagement – steering group/task force creation!
- ✦ Initial stakeholder mapping is the key
  - ✦ Business sector!
  - ✦ Politicians!
- ✦ Do not underestimate thorough preparation of each step, provide continuous feedback, be open, visible and accessible
- ✦ Consider using external moderator
- ✦ Strategic energy plan itself should focus strongly on engagement activities (they should not be secondary)
- ✦ These steps seem to be a lot of work, „painful“ – if done properly, it paves a way to further success
- ✦ Do not forget to engage further and keep the inclusive Governance model!



Töörühmad koostasid SmartEaCity projektipartnerid Tartu linn, Eesti Ühine Energiainstituut ja Tartu Regionaalne Energiaagentuur.

- ✦ Eelsoodused ja viisioonid
- ✦ Loodud strateegia ja viisiooni tabel
- ✦ Põhikokkuvõtte esimest töökoost
- ✦ Teise viisiooni töökoost
- ✦ Tartu 2030+ viisiooni sõnastus

## TÖÖRÜHMAD

Kui ühine viisioon oli sõnastatud, jätis 155 160 gruppidel, kuhu kogunesid vabatahtlikud eksperdid ja organisatsioonide esindajad, kes soovivad parandada energiaplaneeringut.

Töörühmad tegutsesid koos teemavaldkonnas ja neid juhivad Tartu Regionaalne Energiaagentuuri eksperdid:

Töörühm	Teemad	Töörühma juht
Kliimakoostamine	Kliimariiskid, nende hindamine ja neidega koostamine	Antti Roose <a href="mailto:antti.roose@trea.ee">antti.roose@trea.ee</a>
Energiaarendus	Kohalike energiaallikate kasutamine ja selle mõju; resursilainutus; kaugkütte- ja kaugjahutusvõrk ja selle mõju; elektrivõrk ja selle mõju; gaas; veesvarustus ja kanalisatsioon	Olo Kask <a href="mailto:olo.kask@trea.ee">olo.kask@trea.ee</a>
Hooned	Hoonete energiatarve, ehituskvaliteet ja sisekliima tagamine; hoonete mõju; Tartu linnavalituse omandi/valituse olemasolevate energiatarbijate toetus ja tarbimise mõju	Kalle Virkus <a href="mailto:kalle.virkus@trea.ee">kalle.virkus@trea.ee</a>
Andmekogumine	energiatarbijate andmete monitorimine, andmete kogumine ja kaugkütte	Marten Saarela <a href="mailto:marten.saarela@trea.ee">marten.saarela@trea.ee</a>





# Useful references

## SmartEnCity Outcomes:

<https://smartencity.eu/outcomes/>

## SmartEnCity Network

<http://smartencitynetwork.eu>



<https://www.mdpi.com/2071-1050/12/9/3590>



<https://www.mdpi.com/1996-1073/13/14/3533>



# Contact



**SmartEnCity**

MERIT TATAR

merit@ibs.ee

**www.ibs.ee**







## **SmartEnCity Academy Lesson 4: The SmartEnCity Way towards Zero Carbon City: Envision and Planning: The SmartEnCity Planning Process**

Michele De Santis,  
RINA Consulting S.p.A., Lecce, Italy

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# The Lecce Municipality

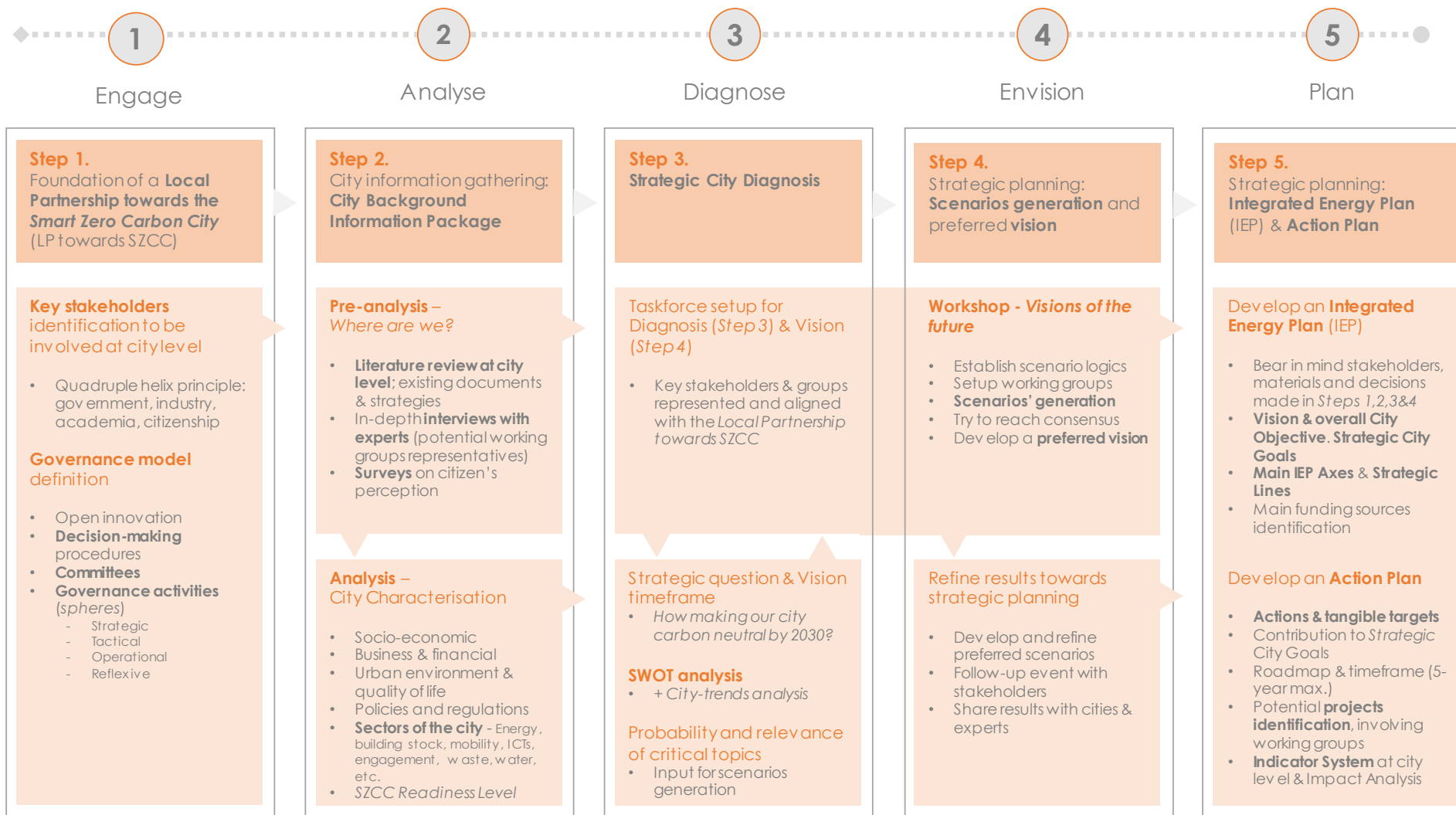
- ✦ Lecce is a medium sized city of **95,200 inhabitants**, a city of art with a very old history
- ✦ Lecce is located in the southern part of the Apulia region and covers an area of approximately **238 sqkm**
- ✦ Lecce's historic centre is an **important tourist destination**; it is also a university city and agricultural centre, chiefly for its olive oil and wine production
- ✦ Lecce Municipality joined **the Covenant of Mayors** and delivered the **Sustainable Energy Action Plans** (SEAP) in 2014. Lecce was Italian Capital of Culture in 2015





# City Level Main Process

## 0. STRATEGIC STAGE\_CITY LEVEL





# Engage - LECCE

1

Engage

## Step 1.

Foundation of a **Local Partnership towards the Smart Zero Carbon City** (LP towards SZCC)

**Key stakeholders** identification to be involved at city level

- Quadruple helix principle: government, industry, academia, citizenship

**Governance model** definition

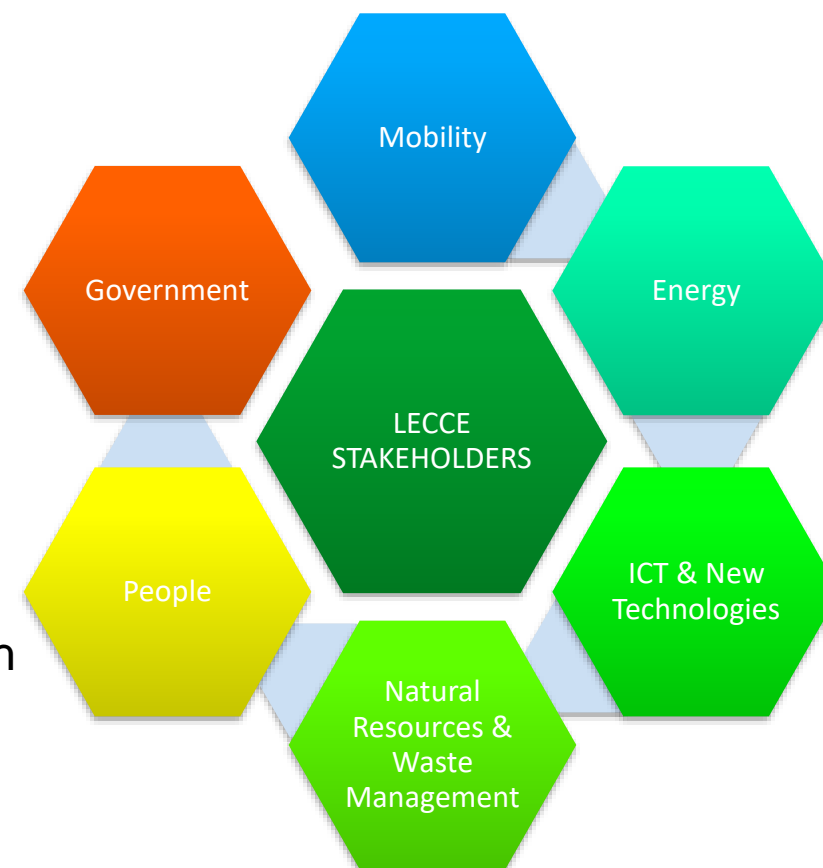
- Open innovation
- **Decision-making** procedures
- **Committees**
- **Governance activities (spheres)**
  - Strategic
  - Tactical
  - Operational
  - Reflexive

✦ *Timeline: November 2018 – February 2019*

✦ The foundation of a local group of work:

✦ In November 2018 the group of work was created and formed by **Lecce Municipality** as head of the group supported by **RINA**

✦ Together the two entities started with the **identification of key stakeholders**, through a mixed approach based on already known stakeholders and expression of interest





# Analyse - LECCE

2

## Analyse

### Step 2.

City information gathering:  
**City Background  
Information Package**

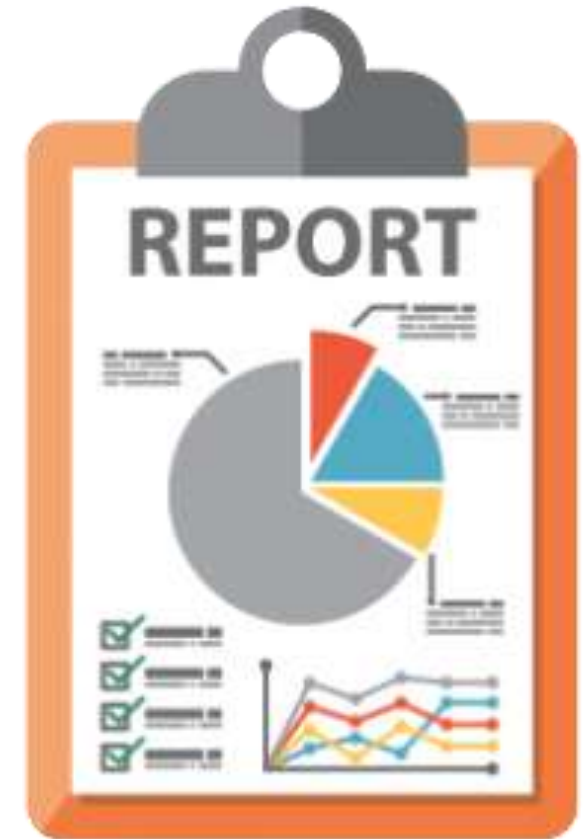
### Pre-analysis – Where are we?

- **Literature review at city level**; existing documents & strategies
- In-depth **interviews with experts** (potential working groups representatives)
- **Surveys** on citizen's perception

### Analysis – City Characterisation

- Socio-economic
- Business & financial
- Urban environment & quality of life
- Policies and regulations
- **Sectors of the city** - Energy, building stock, mobility, ICTs, engagement, waste, water, etc.
- *SZCC Readiness Level*

- + *Timeline: November 2018 – February 2019*
- + The city characterization has been based on **six domains**, covering the most relevant systems of the city
  - + Local conditions
  - + Energy supply and consuming patterns
  - + Building stock and retrofitting needs
  - + Urban mobility
  - + ICT infrastructures and services
  - + Citizen and stakeholders' engagement





# Diagnose - LECCE

3

Diagnose

## Step 3. Strategic City Diagnosis

Taskforce setup for  
Diagnosis (Step 3) & Vision  
(Step 4)

- Key stakeholders & groups represented and aligned with the Local Partnership towards SZCC

Strategic question & Vision  
timeframe

- How making our city carbon neutral by 2030?

**SWOT analysis**

- + City-trends analysis

Probability and relevance  
of critical topics

- Input for scenarios generation

✦ *Timeline: March 2019 – June 2019*

✦ **Strategic question and goal**

✦ How can we reduce the CO<sub>2</sub> emission by 40% within 2030?

Lecce would like to reduce its carbon footprint through the development of actions in different areas as energy efficiency, renewables, mobility, ICT and citizen involvement

✦ **SWOT Analysis**

✦ Identification of the smart city trends

✦ The starting point has been the global **smart city trends** survey conducted among Project Partners in the first project stages

✦ The **interests and objectives of Lecce Municipality** according to the local situation addressed the selection



# Envision - LECCE

4

Envision

**Step 4.**  
Strategic planning:  
**Scenarios generation** and  
preferred **vision**

**Workshop - Visions of the future**

- Establish scenario logics
- Setup working groups
- **Scenarios' generation**
- Try to reach consensus
- Develop a **preferred vision**

**Refine results towards strategic planning**

- Develop and refine preferred scenarios
- Follow-up event with stakeholders
- Share results with cities & experts

✦ *Timeline: June 2019 – September 2019*

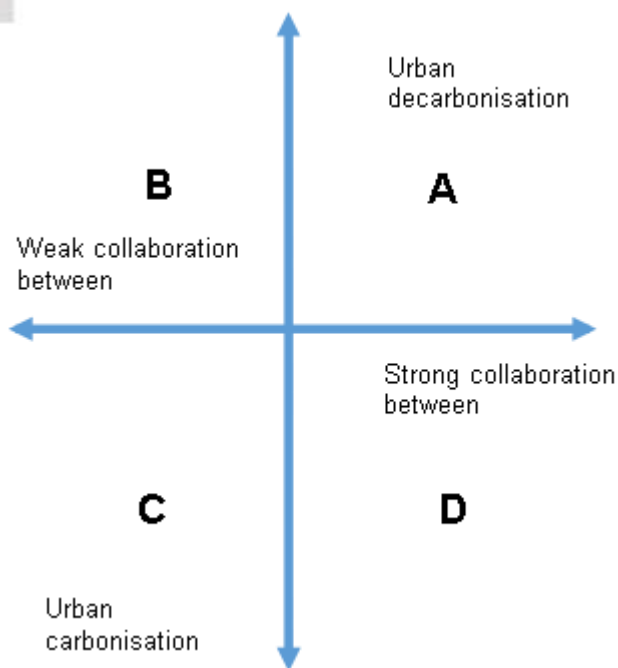
✦ **Foresight Workshop on Future Energy Strategies of the Municipality**

- ✦ The workshop was held in Lecce in July 2019 and involved more than 40 stakeholders coming from Public Institutions, University, Public and Private Companies and Associations.
- ✦ During the event the **four scenarios, were detailed in the working groups** and presented to the participants; after a round-table discussion it was asked them to vote the **most desirable scenario for Lecce in 2030**





# Envision - LECCE



+ **Scenario D: Collaboration and information: the first steps towards change**

+ Highlights:

- + City carbonisation
- + Strong collaboration and coordination among stakeholders
- + Citizens information and awareness considered as a valuable resource
- + Strict legislation and too much bureaucracy: barriers still to be overcome





## 5

### Step 5.

## Develop an Integrated Energy Plan (IEP)

- Bear in mind stakeholders, materials and decisions made in Steps 1,2,3&4
- **Vision & overall City Objective. Strategic City Goals**
- **Main IEP Axes & Strategic Lines**
- Main funding sources identification

## Develop an **Action Plan**

- **Actions & tangible targets**
- Contribution to *Strategic City Goals*
- Roadmap & timeframe (5-year max.)
- Potential **projects identification**, involving working groups
- **Indicator System** at city level & Impact Analysis

- 



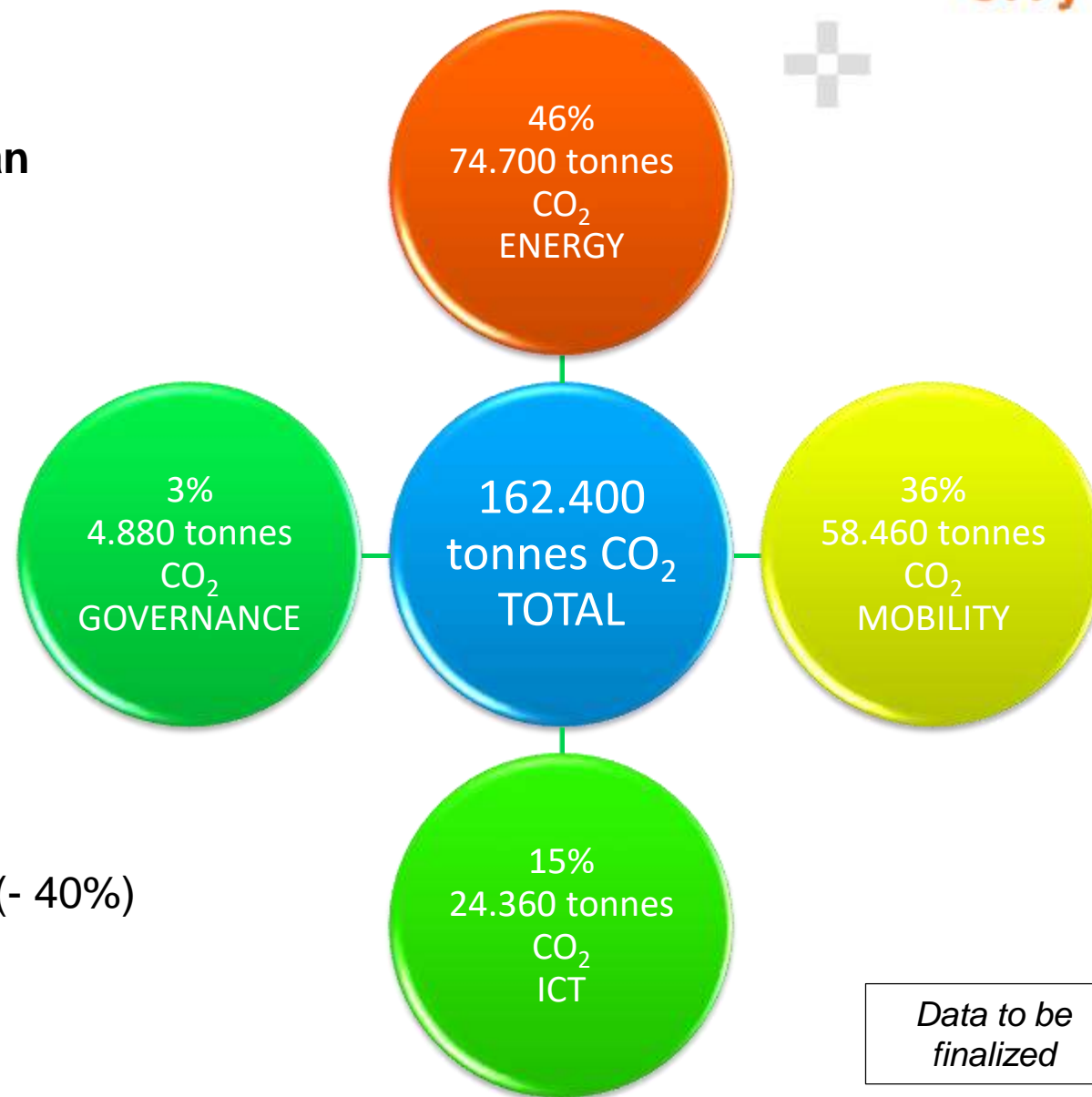


# Plan - LECCE

## + Strategic axis of the Integrated Energy Plan

- + ENERGY
- + MOBILITY
- + ICT
- + GOVERNANCE

- + **2007 Baseline:** 406.000 tonnes CO<sub>2</sub>
- + **2030 Target:** 243.600 tonnes CO<sub>2</sub>
- + **Expected Reduction:** 162.400 tonnes CO<sub>2</sub> (- 40%)



*Data to be finalized*



# Plan – LECCE

## + Next Steps

- + **Action Plans** – March 2020 – September 2020 – *on going*
- + **Replication Roadmaps** – October 2020 – December 2020
- + **Municipal Council Approval** – Beginning of 2021
- + ....
- + First interventions realised in LECCE





# Contact



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## **SmartEnCity Academy Lesson 4: The SmartEnCity Way towards Zero Carbon City: Vitoria-Gasteiz Demo Case**

Alberto Ortiz De Elgea Olasolo,  
VISESA

TOWARDS SMART ZERO CO<sub>2</sub> CITIES ACROSS EUROPE

VITORIA-GASTEIZ + TARTU + SONDERBORG



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 691883





# Vitoria-Gasteiz lighthouse



VITORIA-GASTEIZ

winner 2012



- ✚ Vitoria-Gasteiz: 249,200 inhabitants
- ✚ Demo area (Coronación district): 1,305 dwellings







**Demonstration pilot** project, as a **replication model** in other districts and cities, in the way towards Vitoria – Gasteiz' commitment to become a **carbon neutral** city by 2050

## Main interventions



- A.- Sustainable mobility
- B.- Building energy retrofitting
- C.- District Heating Network
- D.- City Information Open Platform

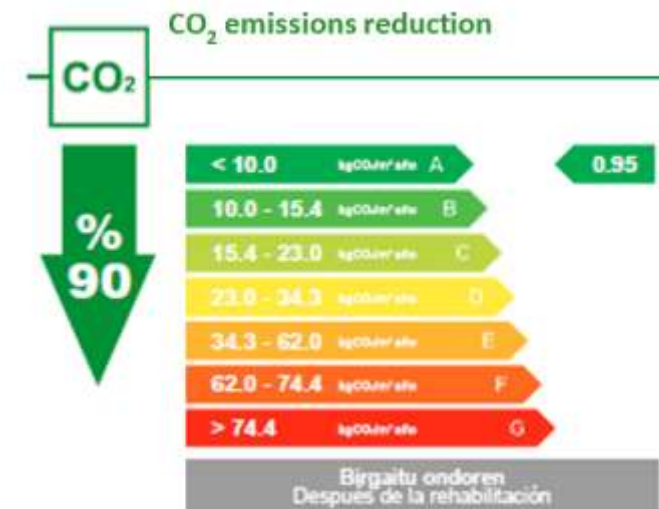
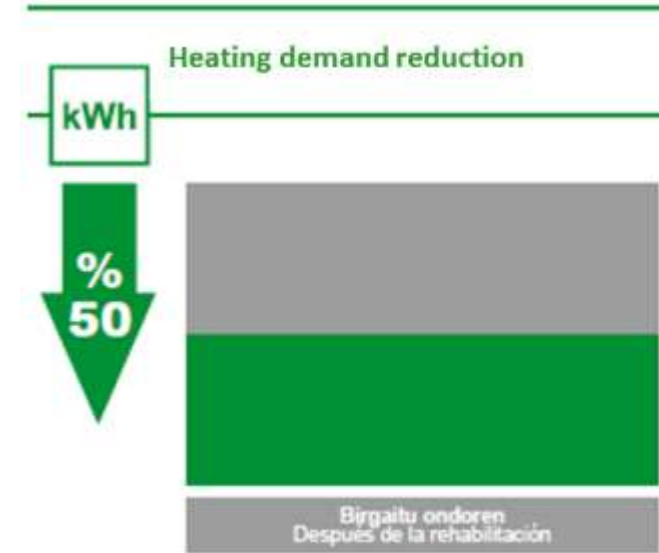
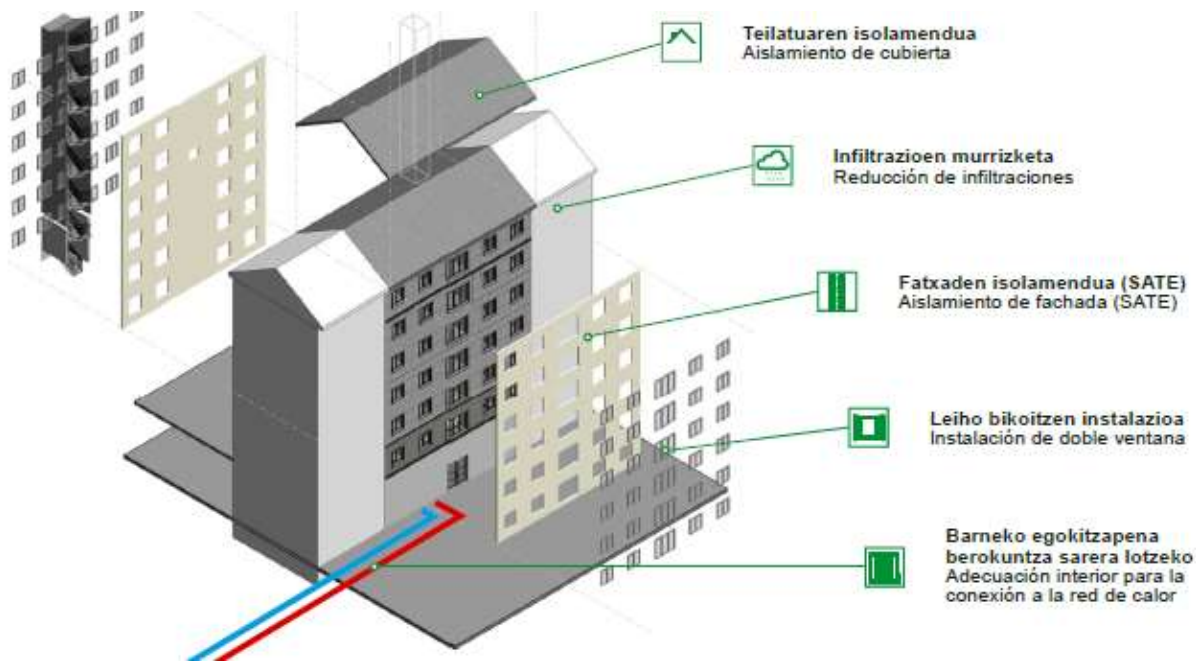




# Retrofitting proposal to home owners

## + **Technical approach:** improvement of the energy efficiency and indoor quality

- **Update of the building envelope**
  - Insulation of the façade and roof (12-14 cm) ETICS
  - Installation of a double window or replacement of the existing one
- **Improvement of heat distribution system** (inside the building) and **connection** to the district heating network







# Barriers for the implementation

## ❖ Coronacion (demo area): socio-economic degradation

- ✦ One of the highest aging index: 25% population over 64 years
- ✦ Very high index of foreign population: 21% (city 9%)
- ✦ Low economic level: family incomes 27% lower than city average
- ✦ High unemployment rate: 22% (city 14.5%)
- ✦ 27% of the inhabitants live in rented housing



- ❖ **Mandatory connection** of the buildings to the future **district heating**, in order to receive H2020 grants => No DH culture: generally, homes have NG individual boilers
- ❖ **There are no housing associations** => each building is a “battle” with multiple homeowners (decision of joining the project requires the agreement of at least a 60%)
- ❖ **Time**: urban regeneration projects consolidation time longer than H2020 SCC deadlines



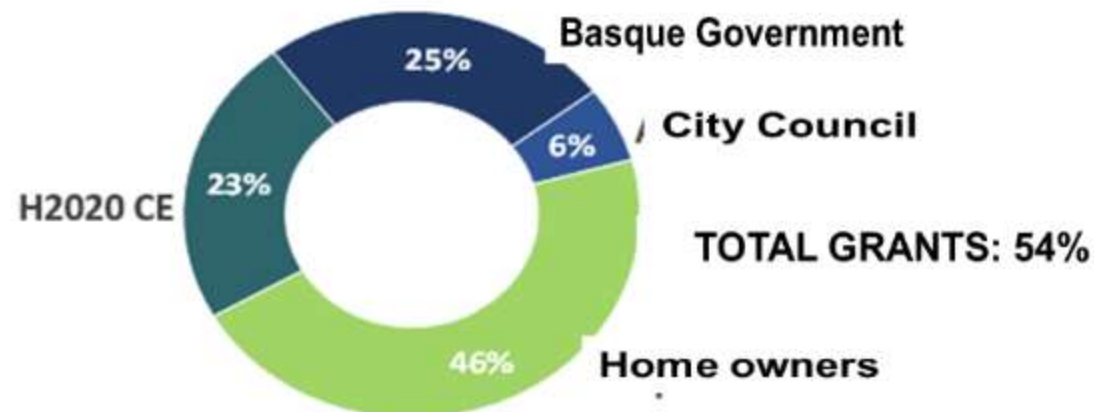


## Innovative business model for the renovation of buildings

**VISESA** (Basque public social housing agency) acts as **delegate promoter**, on behalf of the Communities of home owners.

Through agreements signed between both parties, **VISESA manages, contracts, supervises and finances the correct design and execution** of the works, **delivering the final product “turnkey” to its owners** and charging them the cost difference less subsidies (54%).

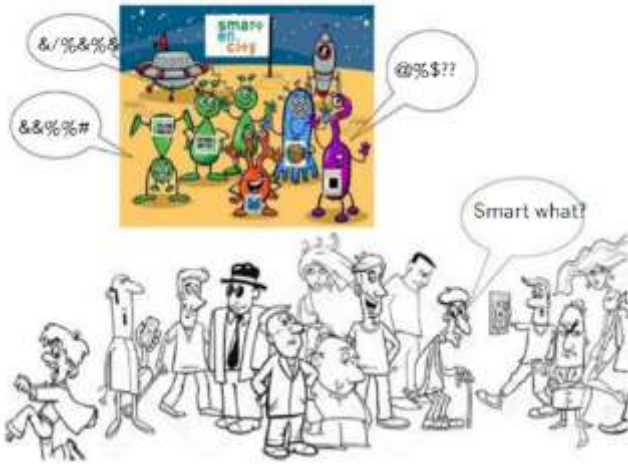
VISESA also manages the different subsidies administrative tasks (application, justification, etc.) as "**one stop shop agency**"



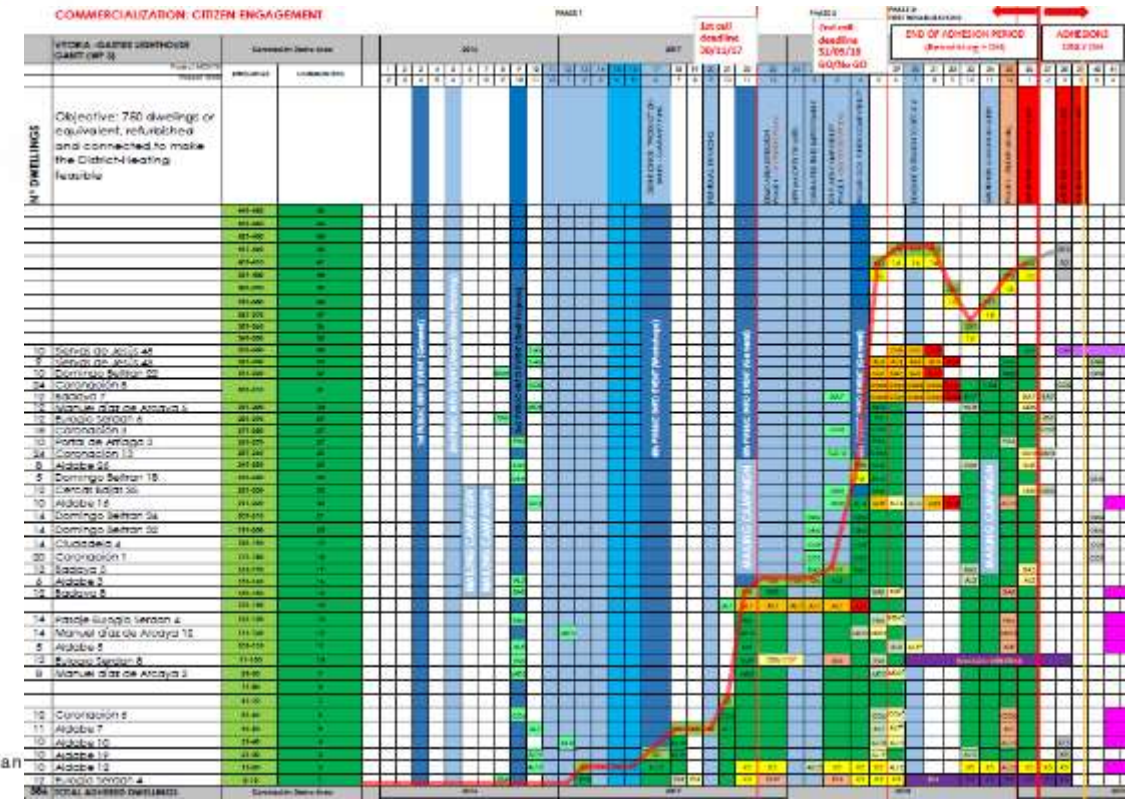
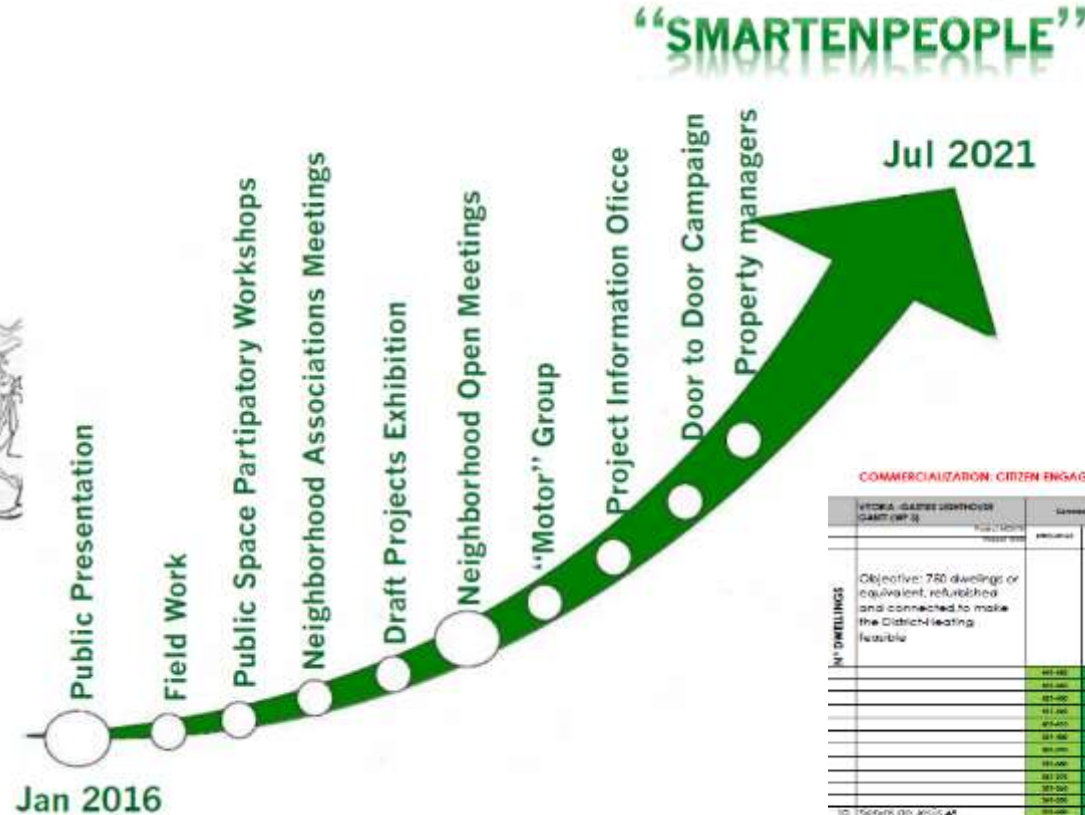
... BUT WITHOUT CITIZENS ENGAGEMENT THERE IS NO PROJECT



# A long way towards Community Engagement



SMART WHAT?







# Citizen engagement actions

## Informative events:



## Exhibitions:







## Recruitment of the engaged neighbours and co-creation process

- ✦ District relevant stakeholder's **identification** (leaders)
- ✦ Workshops with relevant stakeholders to establish a plan with **shared goals**
- ✦ **Process of co-creation**: informative material (deliverables, brochures, etc.) and contractual documents to be signed VIS for retrofitting and for heating supply

Lesson learned!

## Initial action (as kick-off for the domino effect)

- ✦ Dynamics to select and recruit an interested **“early adopter” community** => first intervention process: Eulogio Serdan 4 (12 flats)



Before



After





# Citizen engagement actions

## ✦ Webpage, radio and mailing campaigns:

[www.vitoria-gasteiz.org/coronación](http://www.vitoria-gasteiz.org/coronación)

## ✦ Informative brochures, with financial simulations case studies



## ✦ Videos with information about the project details and with real testimonies of neighbors

<https://youtu.be/vLI09ytfbU0>

<https://youtu.be/uUfF-t98TN4>





- ❖ Project information office: **more than 1,600 visits attended**

Lesson learned!



- ❖ “Door to door campaign”: **More than 650 homes were visited** to inform them about the project.

## El ‘plan Coronación’ llama a la puerta

La campaña de información vecino a vecino ha llegado ya a 70 comunidades aunque sólo cinco se han sumado al plan de rehabilitación

— MARÍA JOSÉ PÉREZ

VITORIA. El esfuerzo institucional por sacar adelante el proyecto Smart+en+ci+y para convertir Coronación en un ‘ecobarrio’, se visualiza desde hace un par de semanas en la iniciativa ‘puerta a puerta’ para informar de manera individualizada a los vecinos cuyas viviendas son susceptibles de acogerse al plan europeo de rehabilitación energética. Un cartel en los portales avisa de que alguno de los tres equipos que está realizando el contacto directo con los residentes se personará en

mación», plantea Maite Bravo, una de las encargadas de resolver las dudas de los vecinos.

Como en cualquier barrio, el espectro vecinal de Coronación es amplio, pero subyace una característica predominante: hay muchas personas mayores. «En algunos casos nos hemos puesto en contacto con los hijos», comenta Bravo, para lo que han necesitado concertar nuevas citas. También existen muchas viviendas en régimen de alquiler. Y entre los inquilinos encuentran desde quien les da el teléfono de los propietarios hasta quienes se desentienden. Igor Castillo es uno de esos dueños de un piso que tiene alquilado que al principio tenía dudas porque «era una reforma total, de portal, ventanas, tejado... y subiría mucho el presupuesto». Pero después de recibir todas las explicaciones me-



Maite Bravo, con una vecina. — MARÍA JOSÉ PÉREZ



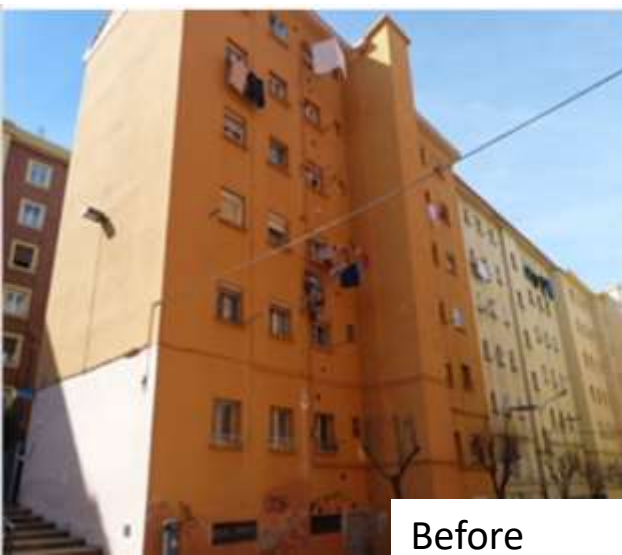


# Results

**RESULTS: 27 buildings (312 dwellings)** signed contracts for the retrofitting.

Actually 11 of them are finished and the rest will be in the next months

SmartEnCity “domino effect” (replication): other buildings of the demo area are retrofitting (out of the SEC project)



Before



After

innovation



Before



After



## Contact



# THANK YOU !

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# Smart City Guidance Package: how to connect the dots by integrated planning?

Judith Borsboom-van Beurden  
Bernard Gindroz  
Simona Costa  
Johannes Riegler  
James Kallaos



## Lesson 4: the Smart City Guidance Package as a planning resource

22 September 2020

Judith.Borsboom@locality-eu.nl



# Why are integrated planning and implementation important for smart climate-neutral cities?

## Key elements needed

- Policies and actions usually within timeframe of **political cycle**
- Many government/business **sectors** involved but connections weak
- Many **interdependencies** among stakeholders
- Lack of awareness or **engagement** of citizens & local businesses
- **Business cases** often less attractive and coming in too late

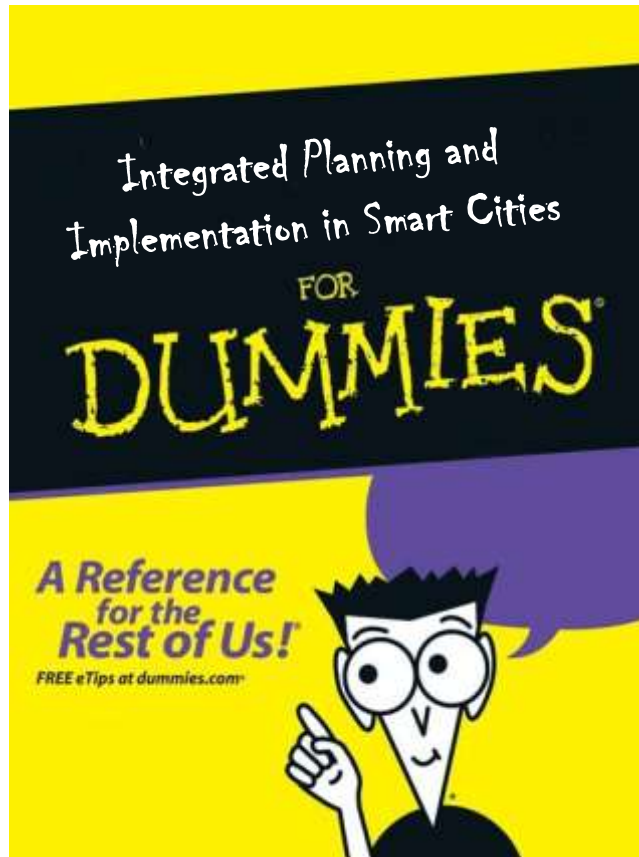


- Long-term perspective of **life-cycle of built environment** prerequisite to take right short term actions, meet obligations and make plans resilient
- **Holistic, multi-sectorial perspective** is key to agree on the best options and exploit cross-domain synergies
- Development of and buy-in on **common operational picture and responsibilities**
- **Quadruple helix collaboration**, citizen-centered co-design and co-creation
- Systematic scan of low-hanging fruit, exploitation of **new value chains** and business opportunities early in the process, including co-benefits





# Why the Smart City Guidance Package?



- High level of complexity in transformative actions towards smart, climate-neutral cities
- Time constraints of employees of municipalities
- Provide an easily assessable introduction for those who want to use a holistic approach
- Articulate better what we understand by integrated planning and implementation
- ISO Standards often perceived as too heavy
- Prevent „pilot sickness“ and reinventing of the wheel



# What is the Smart City Guidance Package?

an inspirational document and self-help guide for integrated  
planning and implementation of smart city projects

- produced by the EIP-SCC with the help of the wider smart city community
- scientific basis but written in simple straight-forward language
- bundles experiences of cities and helps other cities in avoiding common pitfalls, and in implementing their plans
- defines integrated planning and implementation
- does not discuss technologies but a **recommended process**
- free for non-commercial use

Download:

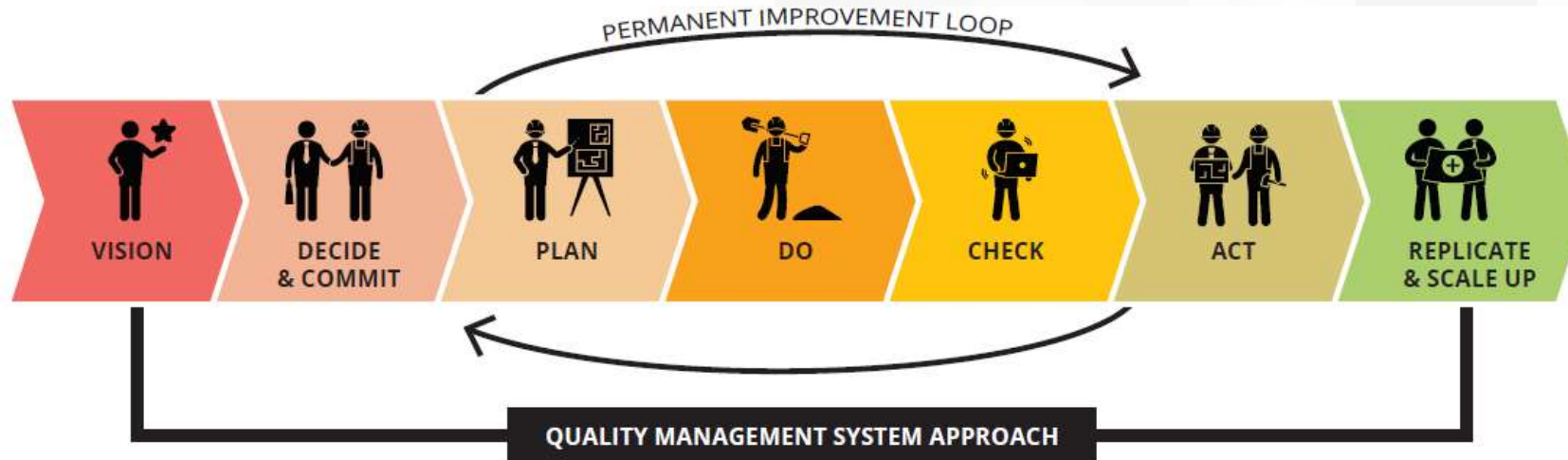
<https://eu-smartcities.eu/documents>





# How is it organised?

- A sequences of stages in the roadmap for integrated planning and implementation of smart city projects
- Compliant with ISO standards





### Question:

How do we see the city we are living in, in 20-30-50 years from now on?

## STAGE 1: VISION



### TO DO 1: DEFINE THE PROBLEM

by making more precise which problems we want to address or which existing urban vision or plan we want to realise with smart city project(s)

### TO DO 2: TAKE STOCK OF WHAT YOU ALREADY HAVE AND WHAT YOU WOULD NEED

by becoming aware of financial and organisational aspects and of stakeholders which should be engaged

### TO DO 3: START ORGANISING THE LOCAL ECOSYSTEM

by identifying, engaging and informally consulting key stakeholders and clarifying their roles and responsibilities

### TO DO 4: BRAINSTORM

by discussing different aspects of the problem(s) and issue(s) with key stakeholders

### TO DO 5: CREATE SHARED KNOWLEDGE BASE

by exploring possible solutions for the problem(s) and issue(s) at stake together with key stakeholders

### TO DO 6: EXPLORE LEGISLATION AND COMMITMENTS

by charting the preconditions and binding national and EU obligations following from these, which may influence the design of your solutions

## Tools & standards

### TOOLS:

- direct consultations
- SWOT-analysis
- peer review
- round tables
- focus groups
- broad public hearings
- World Café
- benchmarks
- scenario planning
- foresight studies
- mind-maps
- innovative brainstorming methods (i.e. tree of knowledge)
- Espresso Maturity analysis
- NESTA method

### STANDARDS:

- ISO 18901 Diagnostic of city's readiness level/ maturity level for setting a long term vision
- ISO 37101 Quality Management Systems approach
- national standards if applicable

### Output:

Priority in long-term objectives for smart sustainable development laid down in vision.



### TO DO 4: BRAINSTORM

by discussing different aspects of the problem(s) and issue(s) with key stakeholders

Following, different aspects of the targeted problems or issues must be explored with the stakeholders identified so far, to **hear their opinions and understand their interests**. Usually this implies organising a brainstorm on different aspects of the problem(s)/issue(s) with the stakeholders, or comparable methods for discussion and dialogue. Apart from direct consultations, many other different formats for informing and engaging stakeholders have been developed over the years, which can be used here, all with their specific pros and cons. To name but a few: world café, round tables, focus groups, public hearings, canvassing, workshops, drawing of mindmaps, citizens panels, serious games, meetings at "pop-up" temporary physical meeting spaces, or neighbourhood festivals.

In addition, **internal collaboration** within the city administration needs to be organised. Siloed municipal organisations are a problem that occurs often, discussed more in-depth in the next chapter.



### EXAMPLE: PLAY AN ENERGY BOARD GAME WITH POLITICIANS, CITY STAFF AND CITIZENS

The We-Energy Game is a Serious Game that initiates a discussion about the energy transition and creates awareness among the players about the task at hand for the energy transition. Originally the game was meant to make a presentation more enjoyable, but it was so well received by the participants that it was further developed by Hanzehogeschool Groningen (We-energy, 2015). Since then, the game has been played with dozens of cities, most of them in the Netherlands.

The players can represent the following roles: People, Planet, Profit, Balance, Legislation and Production. They place small cards representing certain quantities of renewable energy sources on a map of the relevant local village or city. Playing the renew-



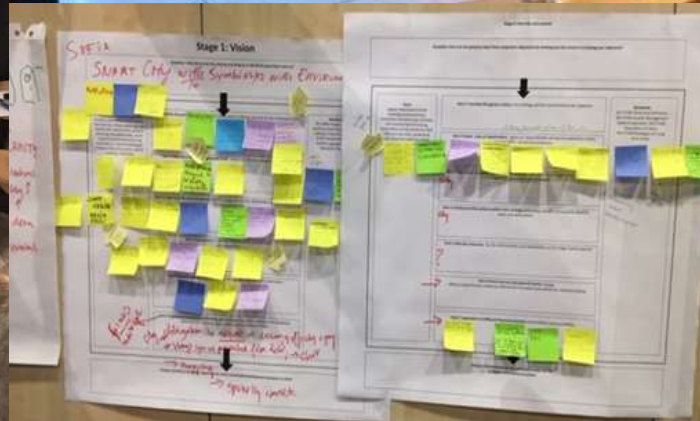
### WHY?

A well-organised local ecosystem promotes the successful preparation and realisation of plans for smart cities and low energy districts in four ways:

- Specific choices in behaviour and lifestyles of citizens can contribute to realising the objectives of smart city and low energy district plans, possibly supported by and nudged by advanced ICT;
- Citizens have a say as (end-)users of buildings, utilities, energy, transport and ICT networks. As tenants and owners of buildings, their rights are enshrined in laws and regulations, and their **approval is vital** in processes as refurbishment. As end-users, they expect the same or better service levels. Citizens need to be informed and participate from the early phases of plan preparation. Co-design of the content of plans with other stakeholders, and co-creation during the implementation stage, accommodate citizen's rights and preferences, enlarge support for the plan, and contribute to its realisation;
- Due to different **ownership structures and operational licenses** in cities, in particular in countries where many public services have been privatised, urban stakeholders are highly dependent upon each other for successful preparation and implementation of a smart city plan, often relying on innovative procurement and novel business cases;
- **Good ideas of citizens and local businesses**, united in bottom-up initiatives, can be very powerful, but often need some form of facilitation by the local government.







## Testbeds Smart City Guidance Package

23 November  
Santa Cruz  
de Tenerife

26 November  
Sofia

4 December  
Vaasa

30 January  
Brno

8 February  
Parma



# Where to find and what are the next steps?

- **Download:** <https://eu-smartcities.eu/documents>
- Develop an Open Access **web-based version**
- Teaming up where possible with **adjoining initiatives**, such as H2020 SCC-01 projects, Covenant of Mayors, eea, JPI Urban Europe PED, SET Plan 3.2 Action and CEN/CENELEC/ETSI
  - Summary for politicians in EU languages & additional info on finance
  - Work together with cities to develop local plans in an integrated way
  - Capacity building for interested cities: training, exchange, network
  - Collaboration with adjoining methods to provide a suite of complementary tools
  - Explore value of accreditation and certification
- Find **more testbeds** for wider application to refine the methodology



**Stay tuned!**

<https://eu-smartcities.eu/>  
[Judith.Borsboom@locality-eu.nl](mailto:Judith.Borsboom@locality-eu.nl)





# ROUNDTABLE DISCUSSION

Engage! Please submit your questions on our  
*chatbox*





# SmartEnCity Academy for Zero Carbon Transition

Thank you for joining us on this journey!

## SmartEnCity Certificate?

Those of you having successfully participated in **all four lessons** of the SmartEnCity Academy are eligible to receive the **SmartEnCity Academy Certificate**

→ Please send an email to [info@smartencity.eu](mailto:info@smartencity.eu) to request the certificate



# Contact



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