

# SmartEnCity Academy for Zero Carbon Transition: Lesson 2

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 CO2 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
- + recording of Lesson 1 at the SmartEnCity website





**More information and updates about the lessons 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 2: Agenda

### Mastering Governance & Political Barriers: Engage and Integrate

- ✦ **Moderation:** Francisco Rodríguez Pérez-Curiel, TECNALIA Research & Innovation
- ✦ **Agenda:**
  - ✦ Introduction (Francisco Rodríguez Pérez-Curiel)
  - ✦ SmartEnCity Lighthouse Cities:
    - ✦ Governance & Political Barriers in Sonderborg (Peter Rathje, ProjectZero Sonderborg)
    - ✦ Governance & Political Barriers in Tartu (Raimond Tamm, Tartu City Government)
    - ✦ Governance & Political Barriers in Vitoria-Gasteiz (Juan Carlos Escudero, City of Vitoria-Gasteiz)
  - ✦ Guest Speaker from Remourban:
    - ✦ SMART CITIES: The Ambivalent Transition (Baha Kuban, Demir Enerji – Remourban)
  - ✦ Panel Discussion & Questions from the Audience





## Lesson 2: Speakers



Francisco Rodríguez  
Pérez-Curiel



Peter Rathje



Raimond Tamm



Juan Carlos  
Escudero



Baha Kuban





## SmartEnCity Academy Lesson 2: Mastering Governance & Political Barriers

Francisco Rodríguez Pérez-Curiel,  
TECNALIA Research & Innovation

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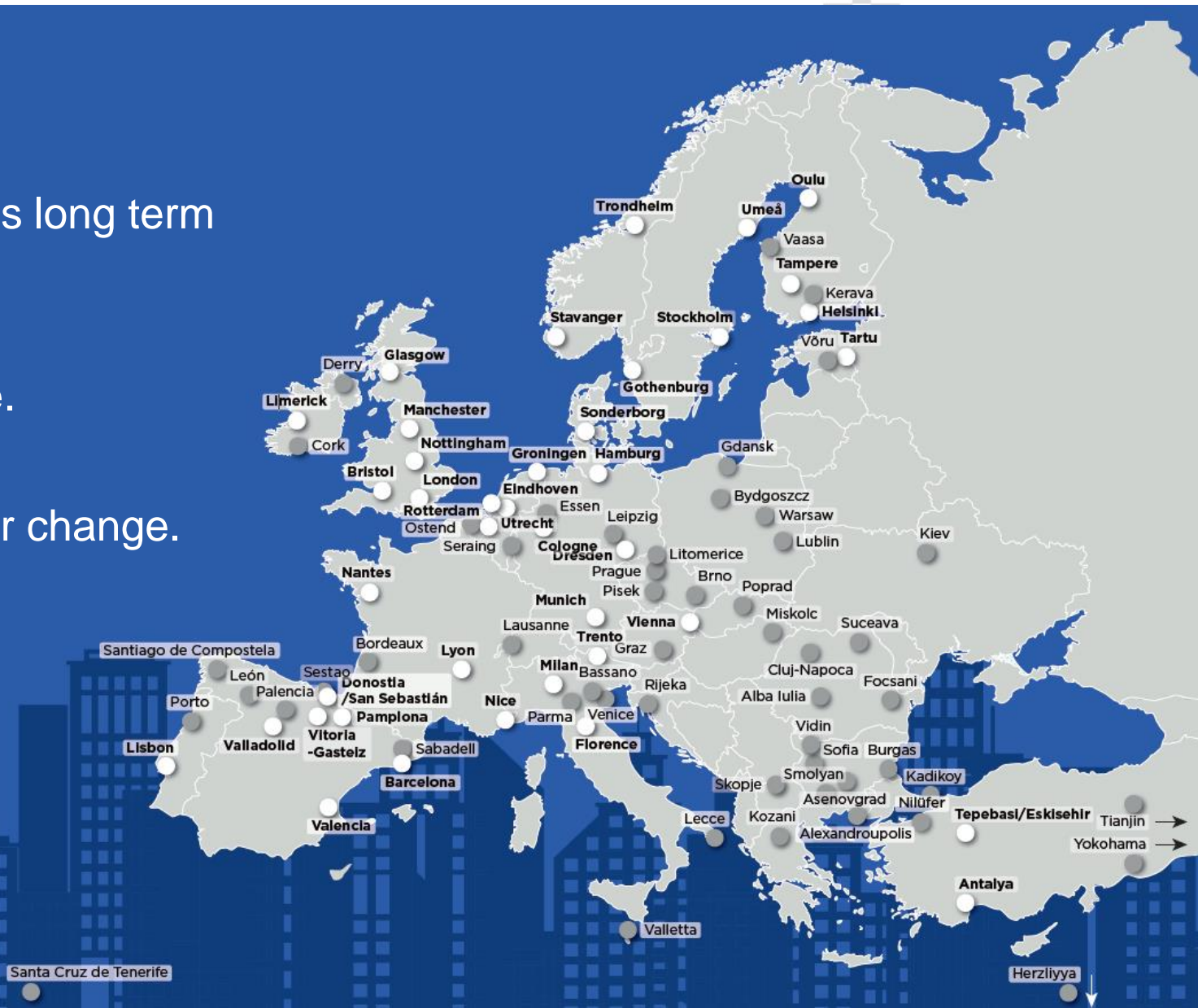


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# The LIGHTHOUSE projects: a strong pool of experience

## 17 projects sharing:

- ✦ Strong political commitment towards long term Transition Strategies.
- ✦ Focus on innovative technology use.
- ✦ Innovative governance structures for change.
- ✦ Co-ownership of vision and plans.
- ✦ Replication.





# Common ambition and goals: The City Journey

## City transition based in:

- ✦ Long-term political vision and commitment.
- ✦ Linked to other city and region goals (area revitalisation, competitiveness...).
- ✦ Leading to specific needs /solutions.
- ✦ Making use of interdisciplinary cooperation in a regional / local ecosystem.





# Common ambition and goals: Stakeholder integration

## Elements for successful co-ownership:

- ✦ Interdisciplinary cooperation in a regional / local ecosystem.
- ✦ Change of mindset in stakeholders.

## Social & cultural obstacles to overcome

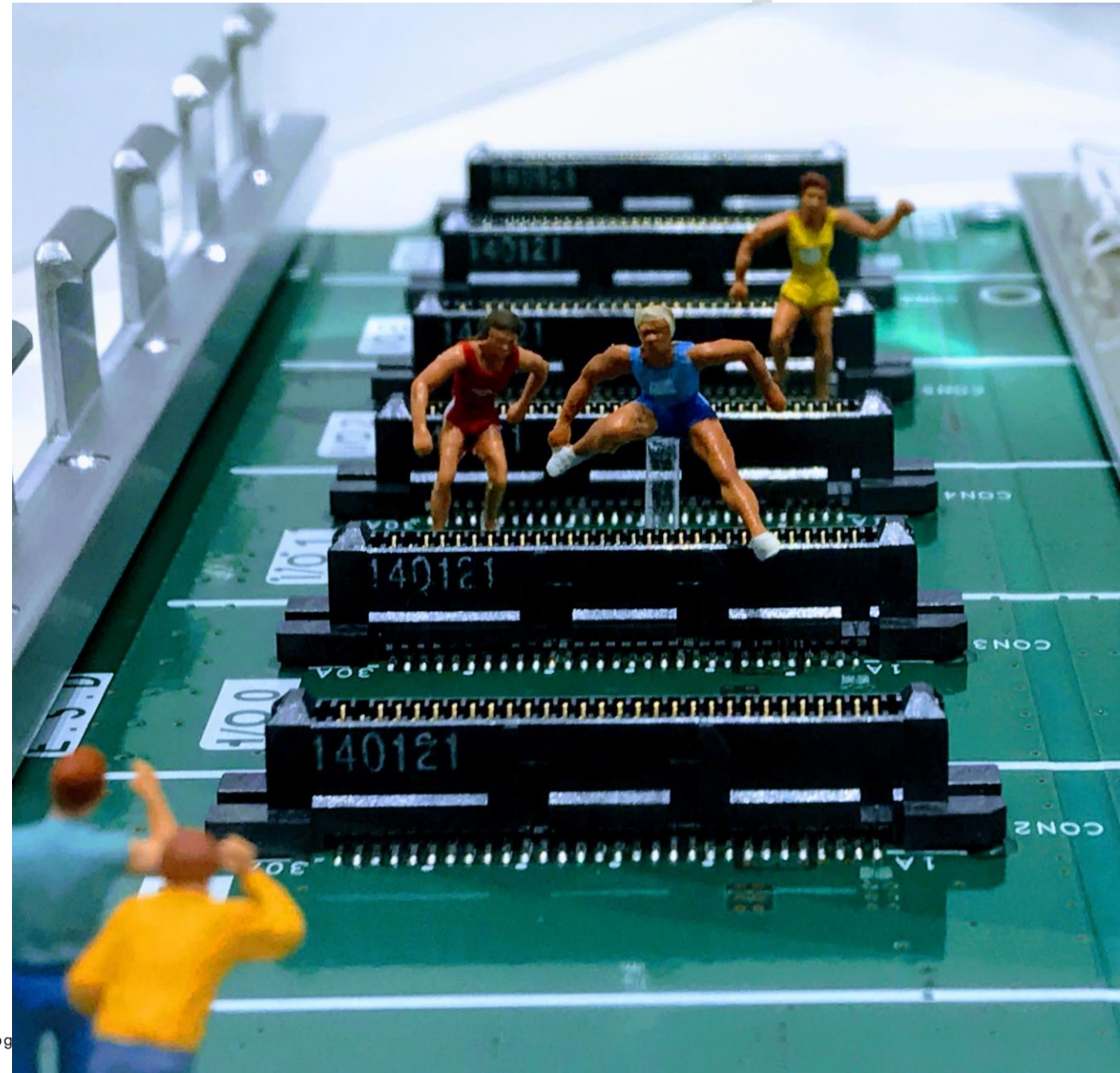
- ✦ More conscious and well-informed citizens about climate change and urban challenges.
- ✦ Establish a public dialogue with the citizenship in all stages.
- ✦ Place communication with citizens/target groups high in the smart sustainable city agenda.
- ✦ Key messages to the public focused on benefits (economic, social, environmental, quality of life for the individual).



# Innovation vs. Regulation (and behavior)

## Sustainable Urban Development to:

- ✦ Comply with EU / National legislation, local regulations. Move forward in:
  - ✦ Building codes and regulations, standardisation, incentive policies, taxation systems...
  - ✦ Flexible public procurement for Innovation.
  - ✦ Data governance.
  - ✦ Innovative financial schemes.
- ✦ Be accepted, understood, desired by population.
  - ✦ Awareness, education and citizen engagement.
  - ✦ Multi-stakeholder planning, implementation and evaluation.
  - ✦ Reinforce communication with citizens/target groups.





# Contact

## SmartEnCity

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





## SmartEnCity Academy Lesson 2: The SmartEnCity Way towards Zero Carbon City: **Governance and Political Barriers**

Peter Rathje, ProjectZero,  
Sonderborg, Denmark

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# Governance and political barriers

## Sonderborg, Denmark - introduction

### Sonderborg Municipality

- 76,000 citizens
- 500 km<sup>2</sup> territory – 2/3 on an island
- Main income from industry, farming/food-production and tourism

### Ambition since 2007: Transitioning into a ZEROcarbon energy-system by 2029

- 38.3% reduction achieved by 2018

### Use public-private partnership as the basis for our climate-transition

- Remove 700,000 tons of carbon emissions (baseline 2007) - based on a co-creation participatory platform !





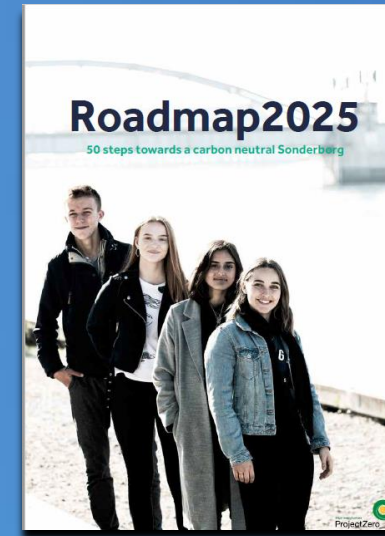
**Sonderborg's Vision**



2007:  
**700.000** ton CO<sub>2</sub>

2017:  
**444.000** ton CO<sub>2</sub>

-35%



2025:  
**175.000** tons CO<sub>2</sub>

-75%



2029

-100%

The ambition is to lower energy consumption by 44 % and transition all energy consumption into renewables - based on participatory and smart energy solutions. Roadmap2025 consists of 52 such (energy) transition projects.



**Envision**

**Plan**

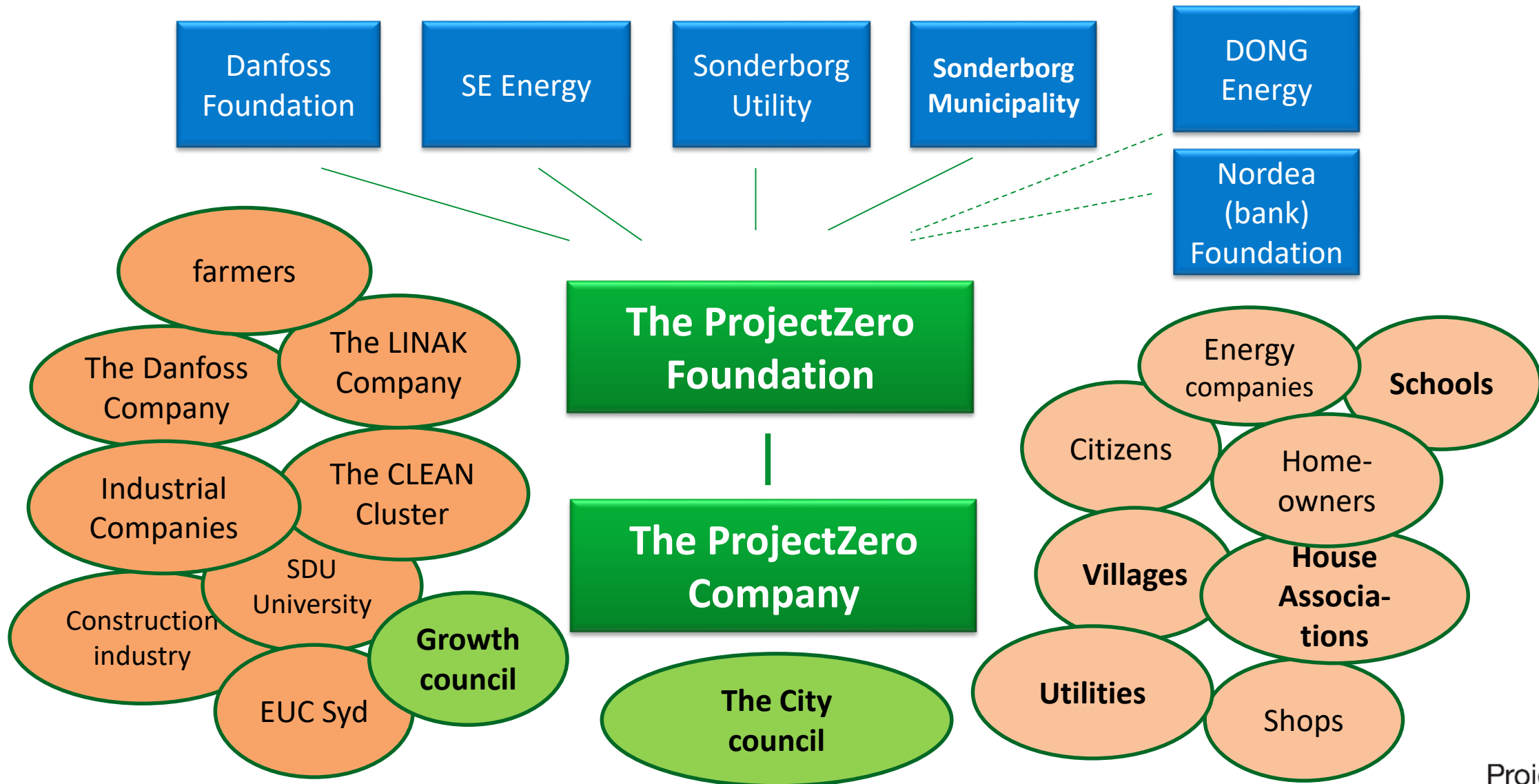
**Authority**

**Education**

BUT, why not aim  
for more .....

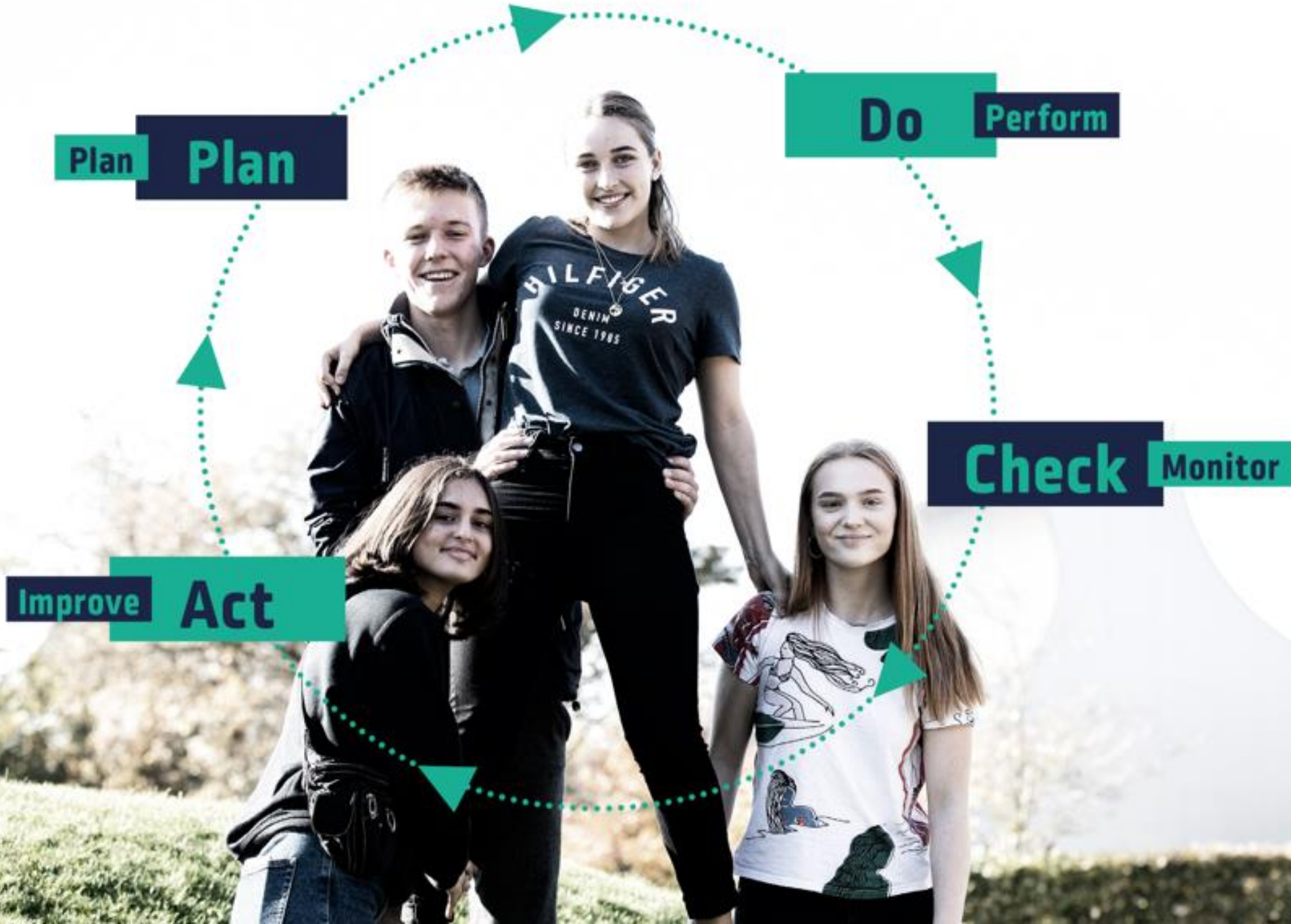


# ProjectZero - a true Public Private Partnership





ProjectZero  
SØNDERBORG



# Joint planning became core for creating a shared vibrant transition platform in Sonderborg

## Key is motivation and engaging “people”

- City council ownership – endorsement and approval
- 100+ people involved – local experts and stakeholders
- On a joint journey into the unknown future
- Creating relations, partnerships & plans
- Created a strong local story-telling
- Creating a strong foundation for the implementation

## Predefined Process & Organization

- A structured process – predefined and safe!
  - 8 step model based on the IEP-process
- Segmentation into 8 working groups
- Timeline: April => December 2018

## Implementing and executing Roadmap2025

- Same stakeholders are now busy supporting the execution of the Roadmap and their 52 projects







**Time to act – based on a co-created climate transition platform  
with shared responsibilities**



# Contact



## SmartEnCity

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**[www.projectzero.dk](http://www.projectzero.dk)**





## Learnings from Tartu – Governance and Handling of Barriers

Raimond Tamm,  
Deputy Mayor, Tartu City Government

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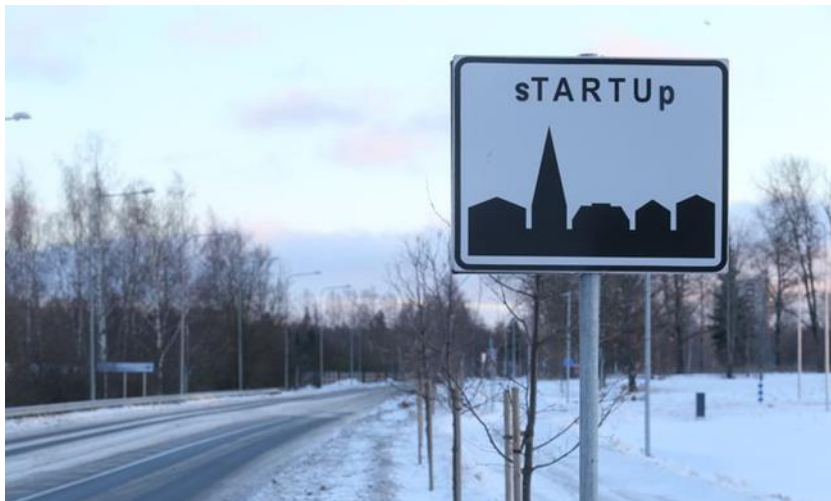


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# Tartu – City of Good Thoughts

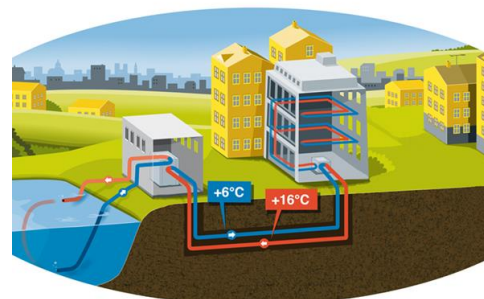
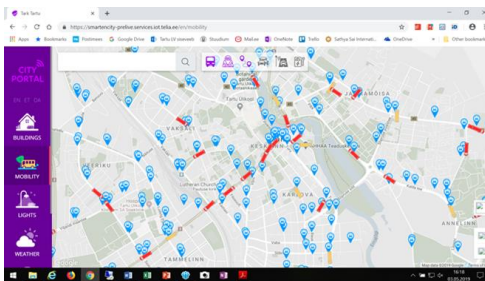
- ✦ Second-largest city in Estonia (ca 100 000 inhabitants)
- ✦ Research and education centre, University of Tartu was founded in 1632
- ✦ 90% uses internet, 98% holds ID-card
- ✦ Paperless city government since 2003 – documents, legal acts etc
- ✦ Startup mindset – be innovative and agile, failures are OK





# Project partners from public and private sector

- Choose your partners carefully and be aware of related risks
- In small and medium sized municipalities there are limited human resources and competences, success depends on ability to involve external partners





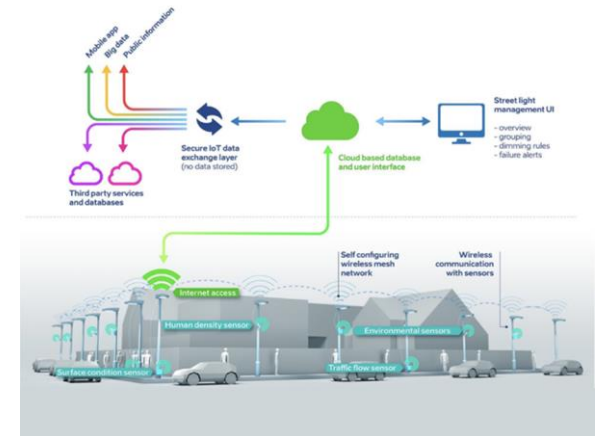
# How to overcome bureaucracy and legal barriers

## BUREAUCRACY

- ✦ Hard to overcome bureaucracy. Try to spend on it as little time as possible, focus on main activities that create value.
- ✦ Do not create extra bureaucracy whenever possible – automatic gathering of data
- ✦ Involve needed positions and institutions from the very beginning

## LEGAL

- ✦ Procurments are highly regulated. Smart choice of private sector project partners
- ✦ Public sector initiative to retrofit privately owned buildings. Complicated decision-making
- ✦ Have a lawyer in the team
- ✦ Legislation is not carved in the stone



# How to overcome economic barriers and ensure funding

- ✦ Undertake only activities that you would go for despite of receiving external support. Only those activities that you are actually ready to pay for yourself!
- ✦ Choose for activities which have political support and are matching the existing policy
- ✦ Involve private sector – new business models etc





# How to gain time and political support

## How to gain time?

- ✦ Involve all needed partners from the very beginning, have them always informed
- ✦ Involve all key positions and key partners to management group
- ✦ Regular (weekly) meetings to immediately address all issues that are popping up

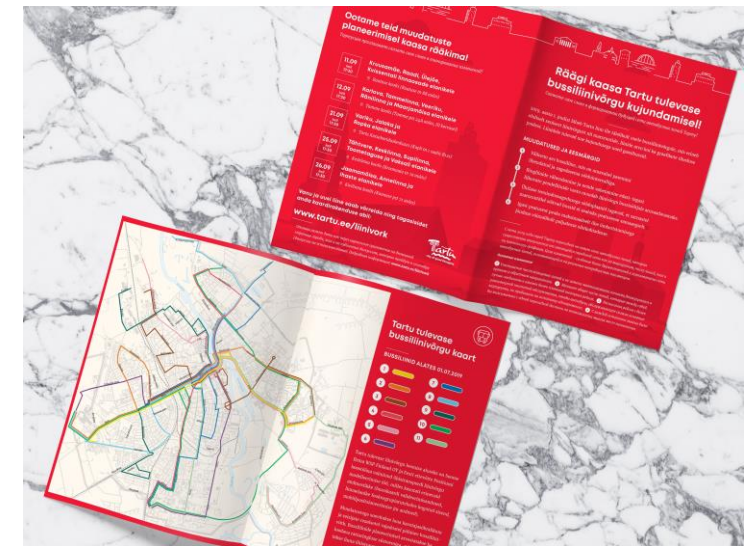
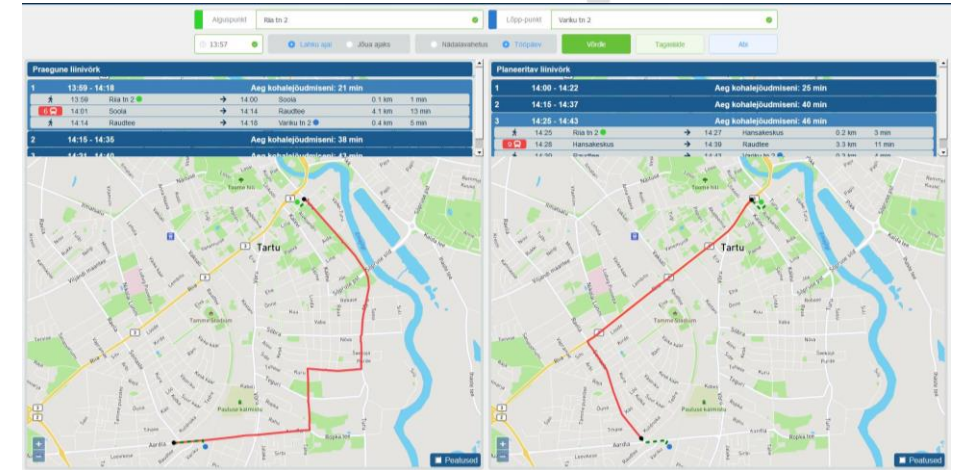
## How to gain political support?

- ✦ Make the decision to participate the project at highest possible level
- ✦ Involve political decision makers from the very beginning. You also need a spokesman!
- ✦ Involve politicians to the supervisory board or somehow connect them any other way – it will essentially speed up the decision-making
- ✦ Continuously share information about the project with decision makers





# Citizen engagement – be creative, but do not forget traditions





# Citizen engagement actions – Ambassador Program

Trainings for ambassadors:

- indoor climate,
- home expenses,
- sustainable renovation of the hruštsovka apartment
- waste and sustainable development
- smart home
- reconstruction and legal aspects (for apartment owners).



# Contact



## Raimond Tamm

### SmartEnCity

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# Energy-efficient Housing Retrofitting of Coronación Neighborhood: A Tale on Community Engagement

Juan Carlos Escudero  
Environmental Studies Centre  
Vitoria-Gasteiz City Council

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## *Vitoria-Gasteiz*

- *Capital City of the Basque Country*
- *255,042 inhabitants*
- *276.81 km.*
- *46 homes/ha.*
- *101.51 inhabitant/ha. (residential areas)*



# Focusing into the context: The aging neighborhoods





# Coronación Neighborhood Demo Area

## FIVE main measures:



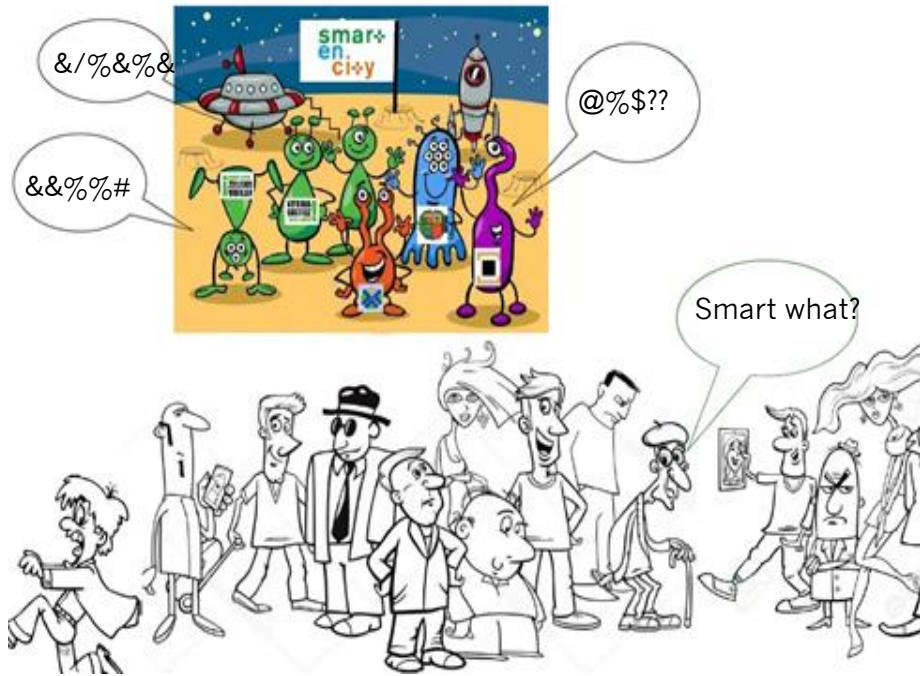
✦ A.- 750 dwellings retrofitting:	15,750,000 €
✦ B.- District Heating (Boilers + Network):	4,622,750 €
✦ C.- Public space improving works:	2,000,000 €
✦ D.- Sustainable Mobility actions:	1,968,000 €
✦ E.- ICT Platform:	380,000 €

**Total budget for the Coronación Neighborhood Intervention :**

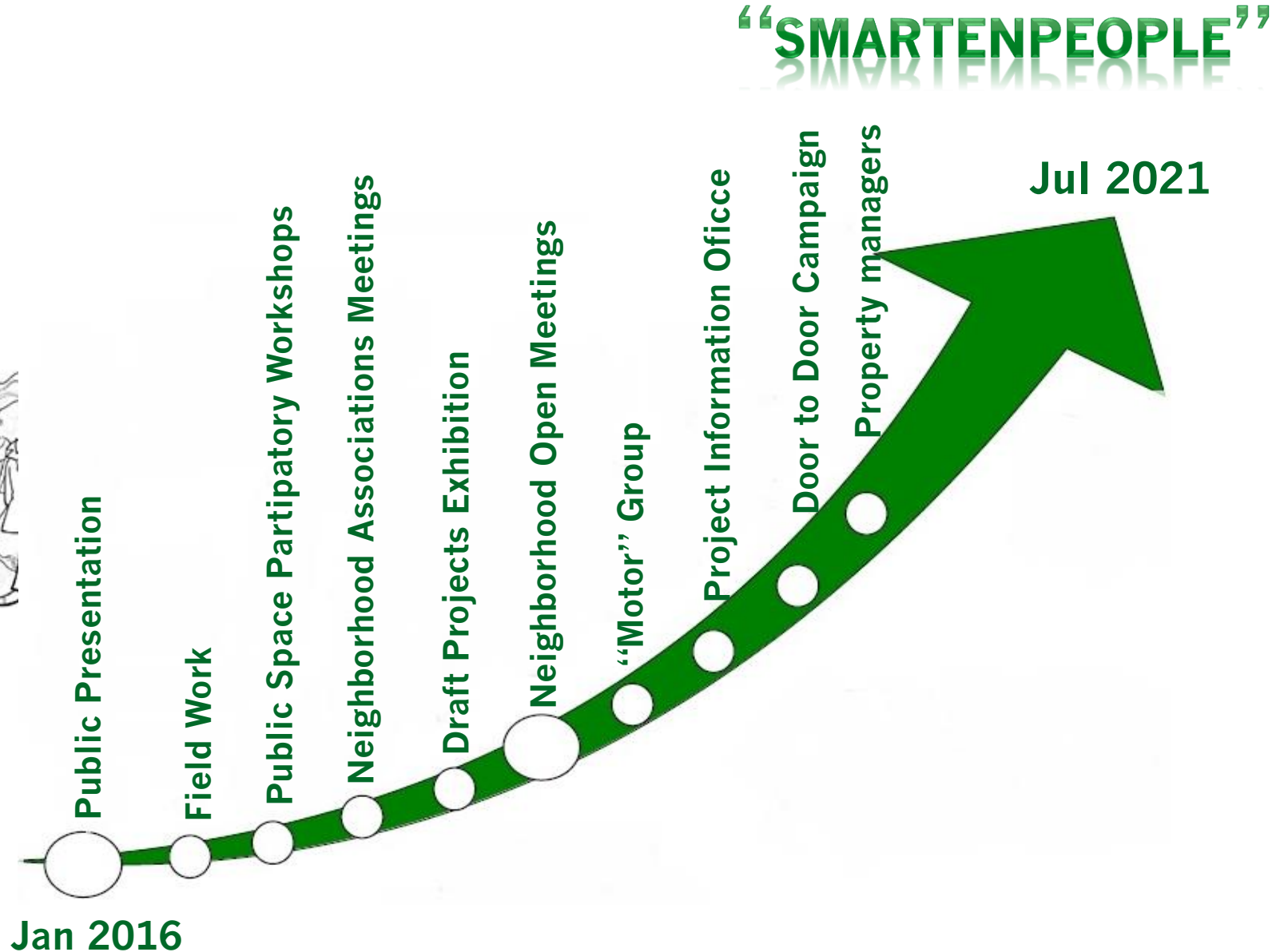
**24,720,750 € + VAT**



# A long way towards Community Engagement



SMART WHAT?



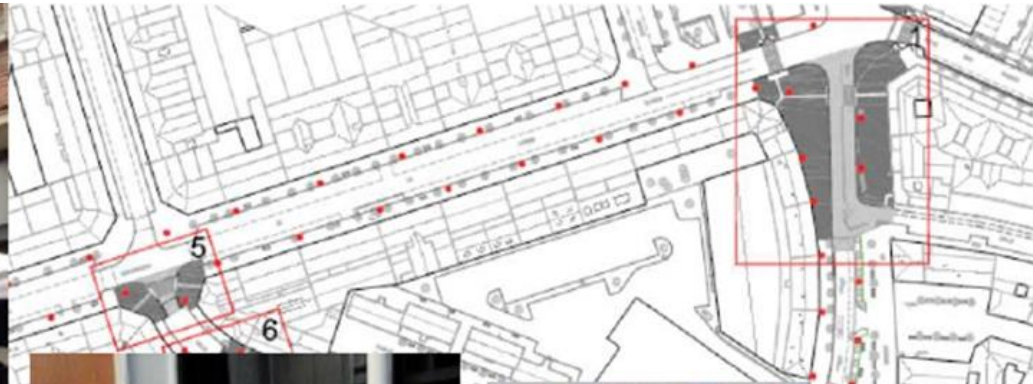


# A long way towards Community Engagement





# A long way towards Community Engagement



TAKING CARE OF YOUR  
HOME IS TAKING CARE OF  
YOUR NEIGHBOURHOOD!

TAKING CARE OF YOUR  
HOME IS TAKING CARE OF  
YOUR NEIGHBOURHOOD!



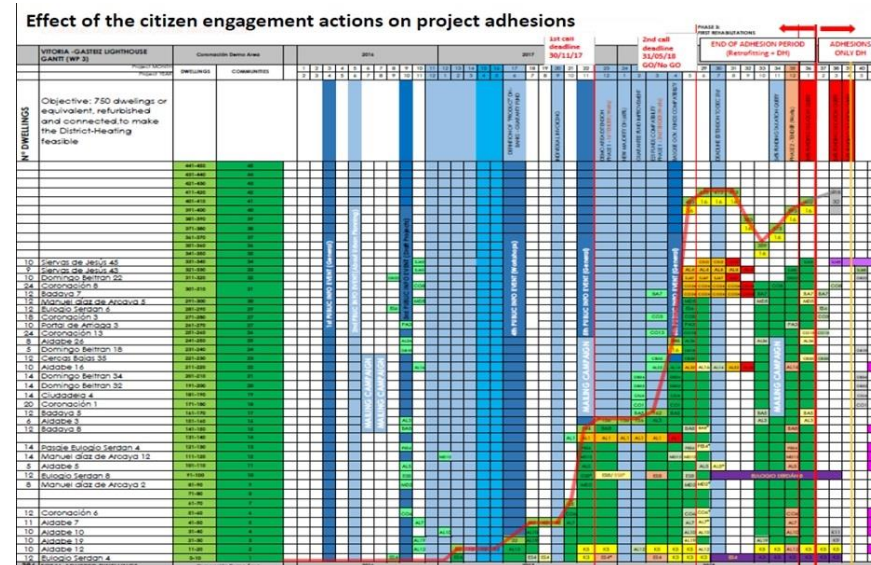
# A long way towards Community Engagement

The main challenge has been the “commercialization” of the retrofitting and connection to the district heating supply (home owners adhesions to the project). There is no tradition of this kind of collective energy infrastructures.

## ✦ Some figures of citizen engagement actions:

- Radio campaigns
- Public informative events
- Meetings with Communities of homeowners
- Phone calls to homeowners
- “Door to door” campaign visits
- Visits attended in the Project Information Office
- Advertising cards in mail campaign

2  
10  
320  
> 400  
650  
1600  
1650





## To conclude ...

**Closing of adhesion period:** **32 communities (386 dwellings)** will be finally retrofitted and connected to a district heating network thanks to SmartEnCity.

Additionally some tertiary buildings have signed agreements to be connected to the DH (equivalent to the heat consumption of 356 dwellings)

SmartEnCity “domino effect” (replication): at the moment, other 5 communities (64 flats) of the demo area are retrofitting (out of the SEC project) and some additional ones around



### **INNOVATION => Citizen engagement toolkit**

The conclusions and lessons learnt are being collected to help in replication (D3.9)

A large part of the neighborhoods of Spanish cities has a socio-economic situation similar to Coronación, so the experience gained can be very useful in the renovation processes promoted by different municipalities or other agencies

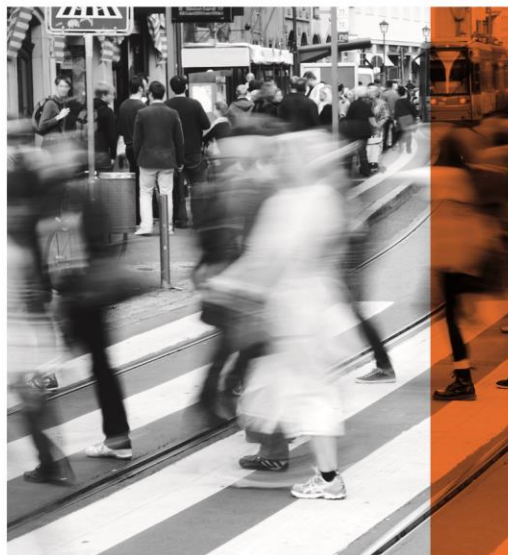
# Contact



## **Juan Carlos Escudero Achiaga**

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Vitoria-Gasteiz City Council  
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## SMART CITIES: The Ambivalent Transition

Dr. Baha Kuban,  
Demir Enerji - Remourban

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# SMART CITIES; The Ambivalent Transition

## Smart City Transitions at the Intersection of Power and Politics

Large Scale Socio-Technical Transformations; complex historical processes

- Tech-led
- Market-led
- State-led
- Citizen-led

combinations?

Insights from «Transitions» Literature

- ✓ Urgent need to link socio-technical narratives to socio-political agendas ;  
Historically informed analyses of the intersections of  
power, politics, economy, technology and social class
- ✓ Emphasis on «experimentation, transitional arrangements, contextuality»



- governance,
- health,
- urban planning,
- waste water,
- water & sanitation,
- finance,
- other issues

- economy,
- education,
- environment,
- recreation,
- safety,
- shelter,

- solid waste,
- innovation,
- disasters and emergency response,



## Novel Concepts

- Local Government driven smart city visions
- Coalition of Interests
- Fractions of «Capital»

## Transformative Alliances

# Contact

**Baha Kuban**



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# ROUNDTABLE DISCUSSION

Engage! Please submit your questions on our  
*chatbox*



# SmartEnCity Academy for Zero Carbon Transition

**An online training course for cities, municipalities and smart decision making:**

- ✦ **Four** lessons → two more to come!
- ✦ **External professionals** from the Smart City field as guest speakers





## + Lesson 3: Where Are We Now? City Analysis and Diagnosis

+ **Date:** 4 June 2020 at 2 PM

+ **Content:** What needs to be included in a city description? Focus on Lighthouse City Sonderborg and Follower City Asenovgrad.

+ **Moderator:** Michele de Santis from RINA Consulting S.p.A

+ **Speakers:**

+ Ivanka Pandelieva-Dimova, Sofia Energy Centre, Follower City Asenovgrad

+ Simon Stendorf Sørensen, PlanEnergi, Lighthouse City Sonderborg

+ Alis Daniela Torres, Climate Action and Smart Cities - Monitoring, Reporting and Verification Expert - Task Force 5. European Covenant of Mayors

## + Lesson 4: Envision and Planning: The SmartEnCity Planning Process

+ **Date:** September 2020 (exact date tbc)

+ **Content:** How has the planning process been used in practice? What obstacles needed to be solved? Focus on Lighthouse Cities Tartu and Vitoria-Gasteiz and Follower City Lecce.

# SmartEnCity Academy for Zero Carbon Transition

**An online training course for cities, municipalities and smart decision making:**

- ✦ **Four** lessons
- ✦ **External professionals** from the Smart City field as guest speakers
- ✦ **Interactive** discussions, **tailored** to your needs & answering your questions:
  - ✦ **Assessment** questionnaire prior to lessons
  - ✦ **Feedback** form after lessons

**Become your city's/organization's ambassador for a carbon free future!**

**Further support needed? Join the **SmartEnCity Network** at <http://smartencitynetwork.eu/>**



# Contact

## **SmartEnCity Coordination Team TECNALIA Research & Innovation**

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