

# NEW GREEN POSIBILITIES



This projects receives funding from the European Union's Horizon 2020



BUSINESS AS UNUSUAL

Project Manager Magdalena Rozanska  
Consultancy & Innovation Group  
ACCIONA Engineering

[magdalena.rozanska@acciona.com](mailto:magdalena.rozanska@acciona.com)





# First actions to the capacity building.

80% of our time is spent into buildings, while > 75% of EU citizen live in cities

**Green Building** meaning that at least the planning and construction processes and the energy efficiency will be improved in comparison to the existing situation and to other buildings.

**Demonstrating of the integration of sustainable, renewable energy technologies in the context of its neighbourhood**, contributing the transition to energy positive buildings (producing electricity, covering their heating, and cooling needs and contributing to the energy grid stability). Renewable energy sources will be used extensively on the building envelope (solar energy) or in the neighbourhood (geothermal energy).



## Energy efficient innovative retrofitting of social housing



Social Housing, **Mérida (Spain)**



[magdalena.rozanska@acciona.com](mailto:magdalena.rozanska@acciona.com)



# NEW GREEN POSSIBILITIES



This project receives funding from the European Union's Horizon 2020



## The role of Green Building Neighborhoods

**User-centric Cities**

Industrialisation with no homogenisation  
Flexible/modular indoor design/space

**Technologies**

Nature-based solutions  
Cities digital twins

**Mass customized Cities**

Inclusive cities  
Low Intrusive Urban quality of life

**Infrastructures for Ubiquitous mobility**

Invisible mobility  
Aerial mobility  
Underground mobility

**Space is For citizens**

Connected & interactive spaces



[magdalena.rozanska@acciona.com](mailto:magdalena.rozanska@acciona.com)



# NEW GREEN POSIBILITIES



This projects receives funding from the European Union's Horizon 2020

# URBAN GreenUP



[magdalena.rozanska@acciona.com](mailto:magdalena.rozanska@acciona.com)

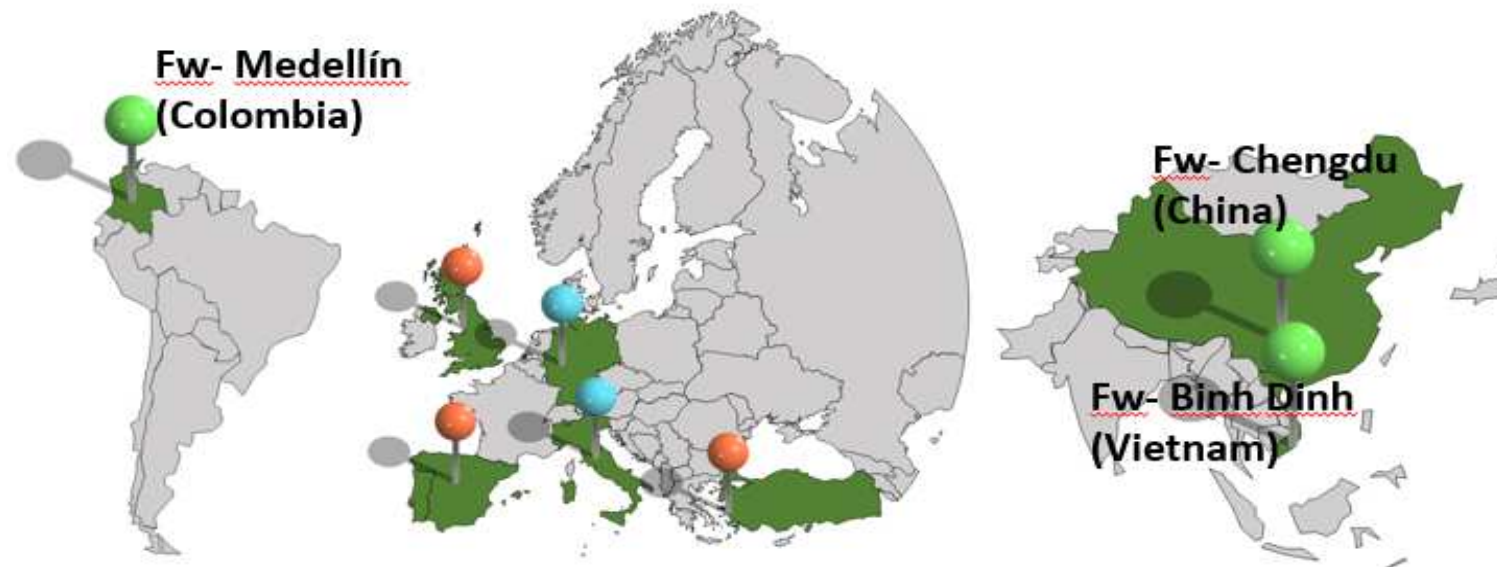




## URBAN GreenUP



URBAN GreenUP is the demonstration of an innovative methodology to re-naturing cities through NBS interventions, considering new technologies, towards the adaptation of the cities to fight against the climate change.



# NEW GREEN POSSIBILITIES



This project receives funding from the European Union's Horizon 2020



# Innovative methodology introducing RUP concept!

METHODOLOGY TO DEVELOP ACTIONS AND TO REACH THE URBAN GreenUP IMPACTS



magdalena.rozanska@acciona.com





# Re-naturing Methodology



- Identification of the **city challenges**.
- Involvement of the **key stakeholders** (industry partners, SMEs, Start-ups entrepreneurs and citizens – collaborative approach).
- Demonstration in **3 Demo-sites** (Valladolid, Liverpool and Izmir) and evaluation and replication across EU and World Followers.
- Application of interdisciplinary approach: different **methodologies** - EKLIPSE, ESA, MAES
- Involvement of Social Sciences and Humanities: Collaborative methodology (plan to involve the **Social Science and Humanities** and deployment of NBS) and new SSH KPIs.

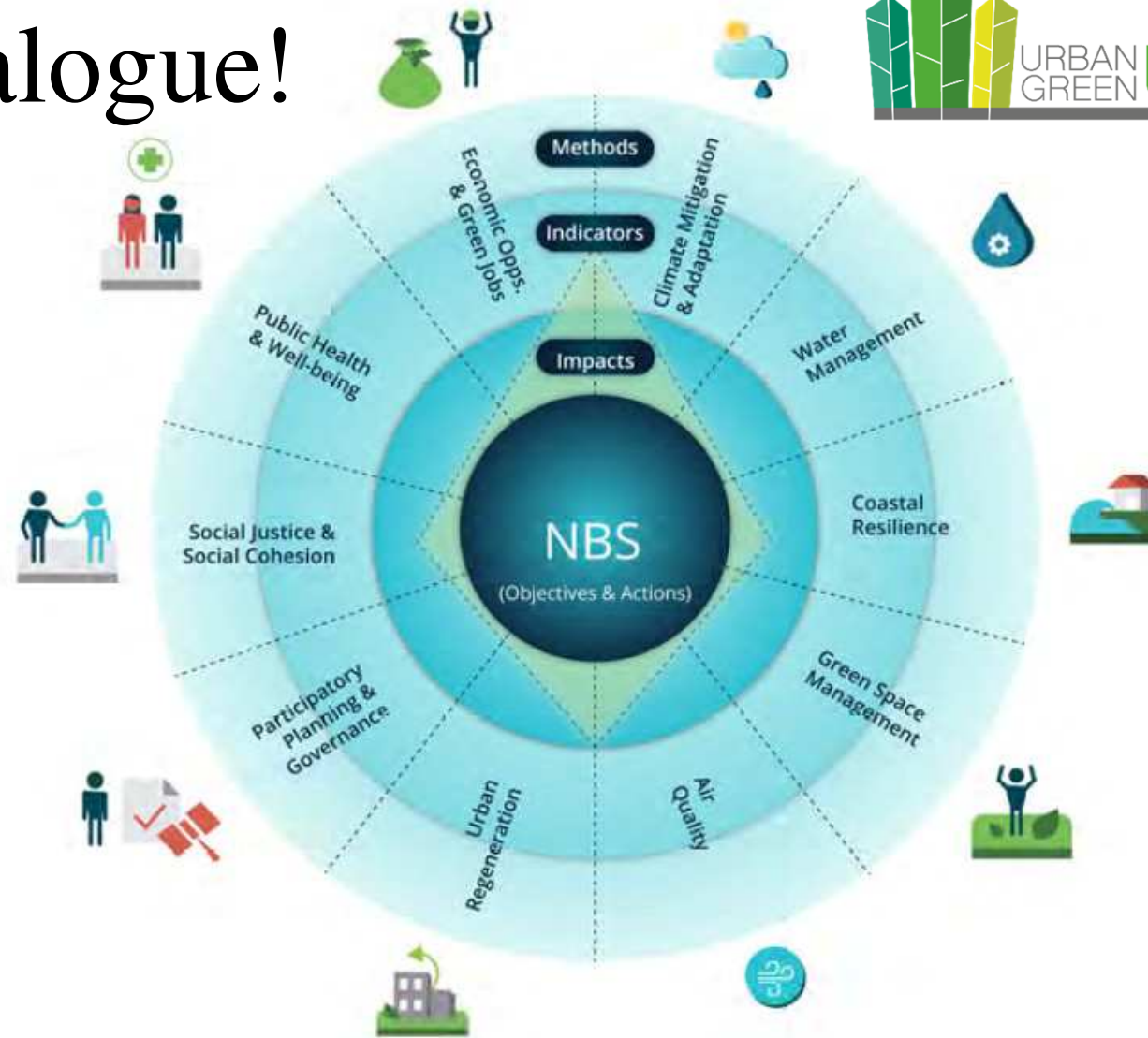




# NBS Catalogue!

VS  
Societal  
Challenge  
Catalogue

*\*follow up  
EKLIPSE Project*

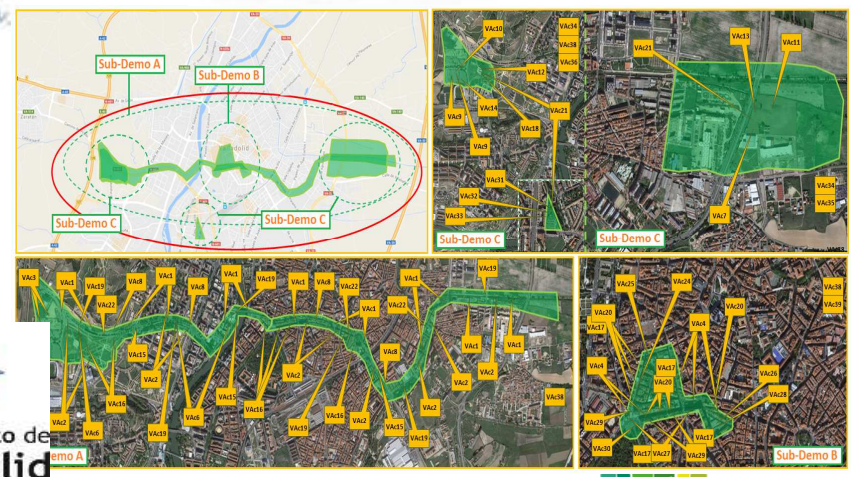
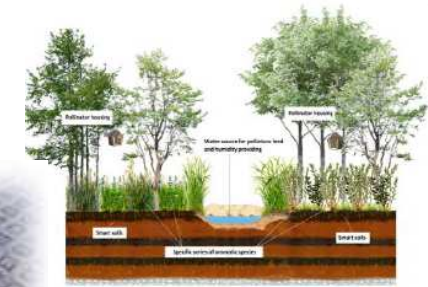
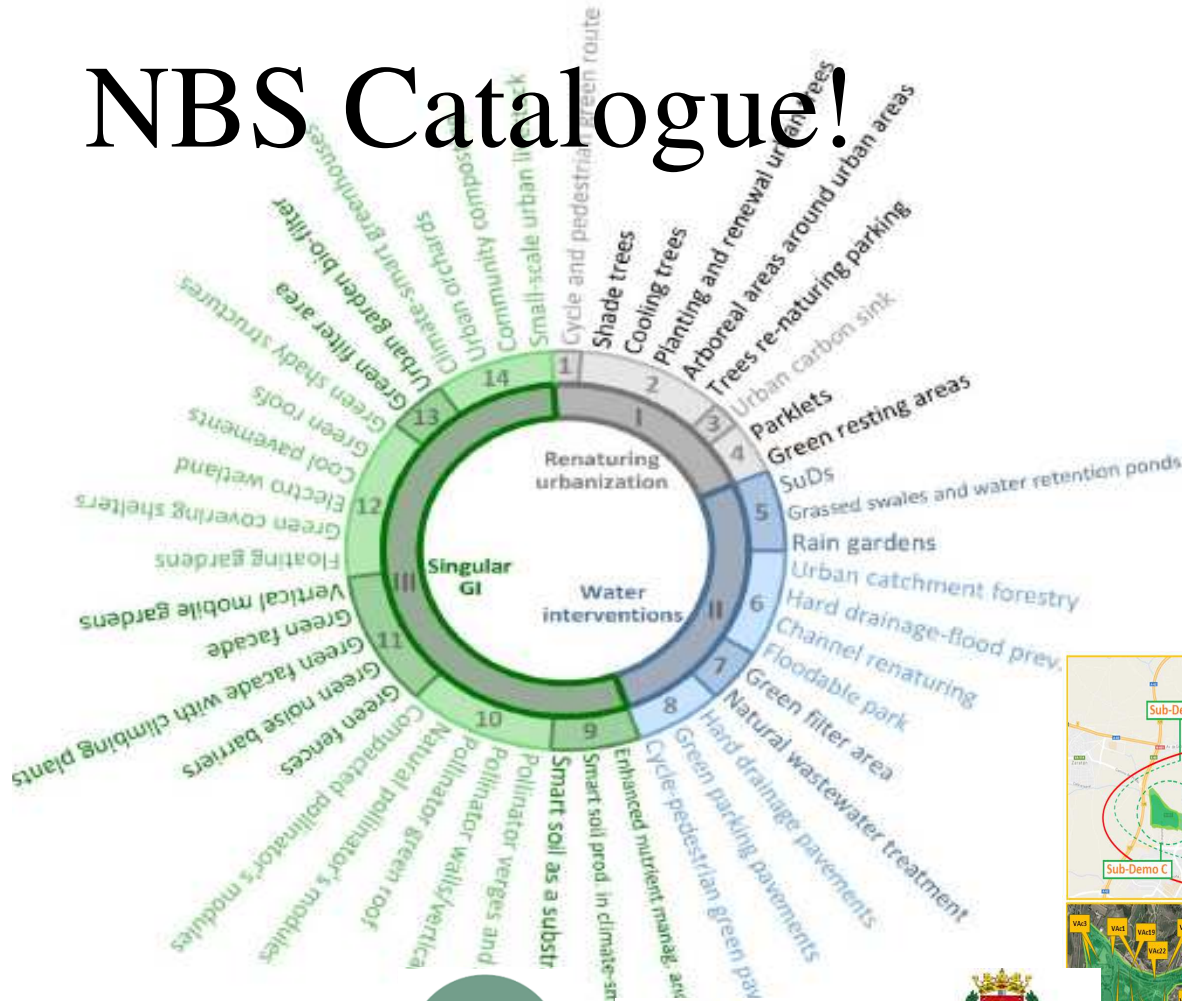


# NEW GREEN POSSIBILITIES



This projects receives funding from the European Union's Horizon 2020

# NBS Catalogue!







magdalena.rozanska@acciona.com



# NBS Catalogue!

Catalogo NBS [www.urbangreenup.eu](http://www.urbangreenup.eu)

- Includes environmental, technical, economic and social characteristics to facilitate selection and integration

RE-NATURING URBANIZATION 	WATER INTERVENTIONS 	SINGULAR GI 	NON TECHNICAL INTERVENTIONS 
Green route	SUDS	Smart soils	Educational activity
Arboreal Interventions	Flood actions	Pollinators	Engagement
Carbon capture	Green Pavements	Vertical GI	City coaching
Resting areas	Water treatment	Horizontal GI	Support activity
		Pollutants filter	
		Bike-pedestrian infrastructures	
		Urban farming	

# NEW GREEN POSIBILITIES











This projects receives funding from the European Union's Horizon 2020



# Demo Actions!

Catalogue NBS <https://www.urbangreenup.eu/solutions/>

Re-naturing urbanization

<h3>Planting and renewal urban trees</h3>  <p>Icons: Izmir, Vitoria-Gasteiz</p> <p>Arboreal interventions</p>	<h3>Cooling trees (species to maximize cooling effect)</h3>  <p>Icons: Izmir, Liverpool, Vitoria-Gasteiz</p> <p>Arboreal interventions</p>	<h3>Shade trees (species to spread canopies)</h3>  <p>Icons: Izmir, Liverpool, Vitoria-Gasteiz</p> <p>Arboreal interventions</p>	<h3>Arboreal Areas around urban areas</h3>  <p>Arboreal interventions</p>
<h3>Trees Re-naturing parking</h3>  <p>Icon: Vitoria-Gasteiz</p>	<h3>Parklets</h3>  <p>Icon: Izmir</p>	<h3>Urban Carbon Sink</h3>  <p>Icon: Izmir</p>	<h3>Green resting areas</h3>  <p>Icon: Vitoria-Gasteiz</p>



# NEW GREEN POSIBILITIES



This projects receives funding from the European Union's Horizon 2020

El Corte Inglés department store

Public-private collaboration.

Completely finished on June 2020.

Construction affected by the COVID crisis.

Designed by SingularGreen architects.

Agreed between Valladolid City Council and El Corte Inglés



Vac25- Green façade.

Green façade  
Green area 551,05 m<sup>2</sup>



magdalena.rozanska@acciona.com



# NEW GREEN POSSIBILITIES



This projects receives funding from the European Union's Horizon 2020



Covering shelter & Mobile gardens

Vac27- Green Covering Shelter.

Green area 488 m<sup>2</sup>



[magdalena.rozanska@acciona.com](mailto:magdalena.rozanska@acciona.com)



# NEW GREEN POSSIBILITIES



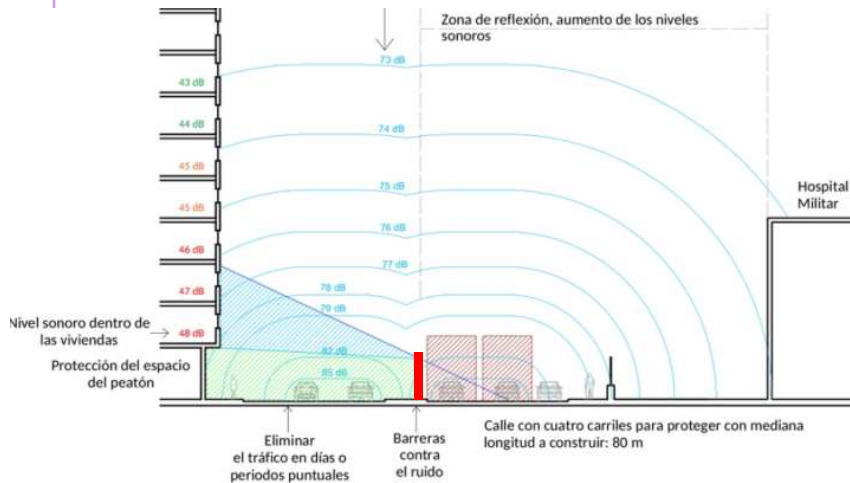
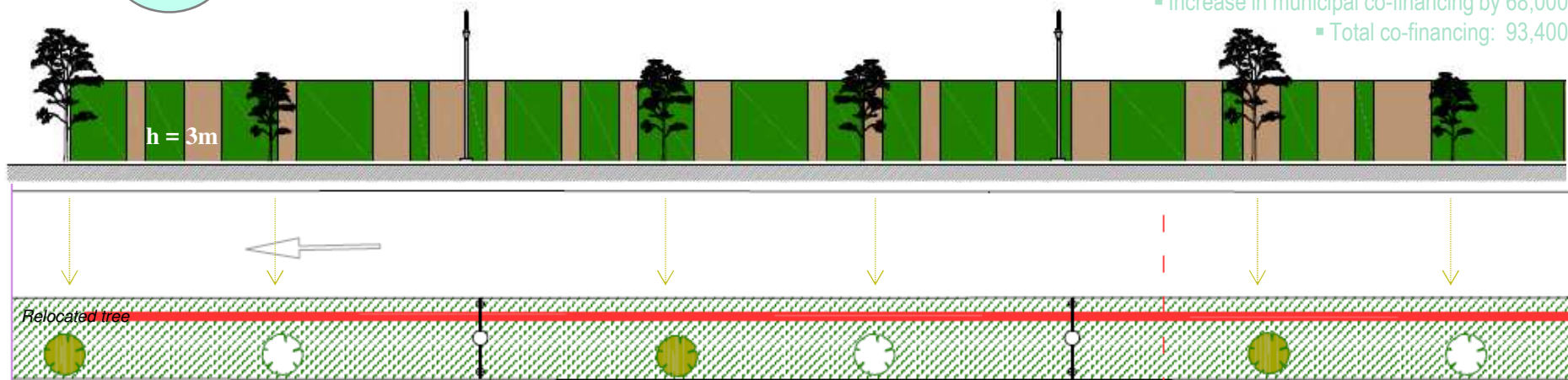
This projects receives funding from the European Union's Horizon 2020

Noise barriers

Vac22-23- Green noise barriers

MUNICIPAL COMMITMENT

- Increase in municipal co-financing by 68,000 €
- Total co-financing: 93,400 €



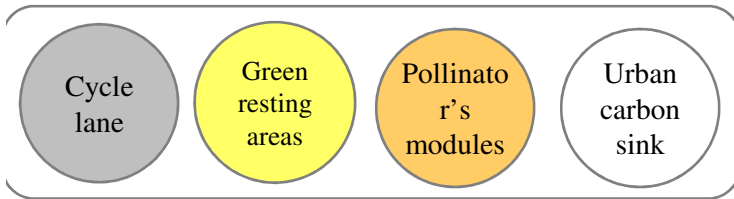
magdalena.rozanska@acciona.com



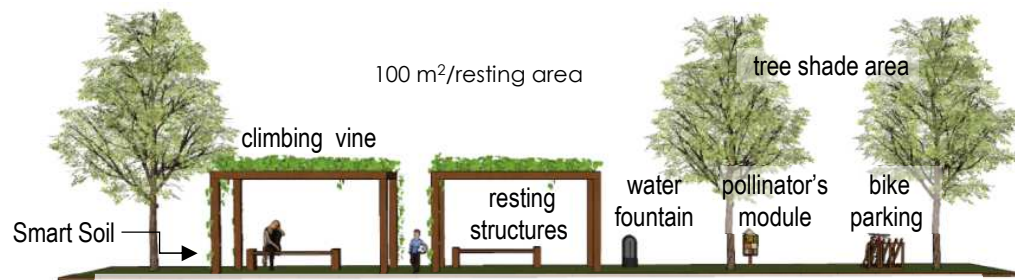
# NEW GREEN POSIBILITIES



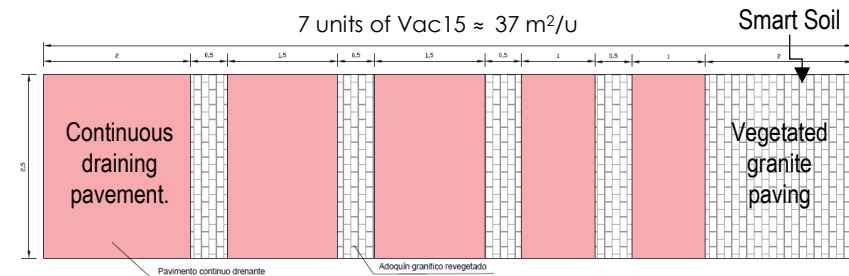
This projects receives funding from the European Union's Horizon 2020



## Green Corridor project



**(R)** VAc6 Three Green resting areas



VAc15 Cycle-pedestrian green paths

- **Green cycle lane:** New green cycle lane has been implemented in Valladolid by the City Council from 2017-2020.
- **URBAN GreenUP budget:** Intervention in the West and East of the Green corridor.



VAc1 New greencycle lane and renaturing existing bike lanes

magdalena.rozanska@acciona.com





# NEW GREEN POSSIBILITIES



This projects receives funding from the European Union's Horizon 2020

## All solutions monitored!

España Square AQ sensors



Vac27- Green covering shelter



Santa María St AQ sensors

Vac29- Green shady structures



Stations of the Municipal Air Quality Network (RCAAVA)



Zorrilla Square AQ sensors



Vac24- Vertical mobile garden



Vac25- Green façade

Constitución St AQ sensors



Ingeniería

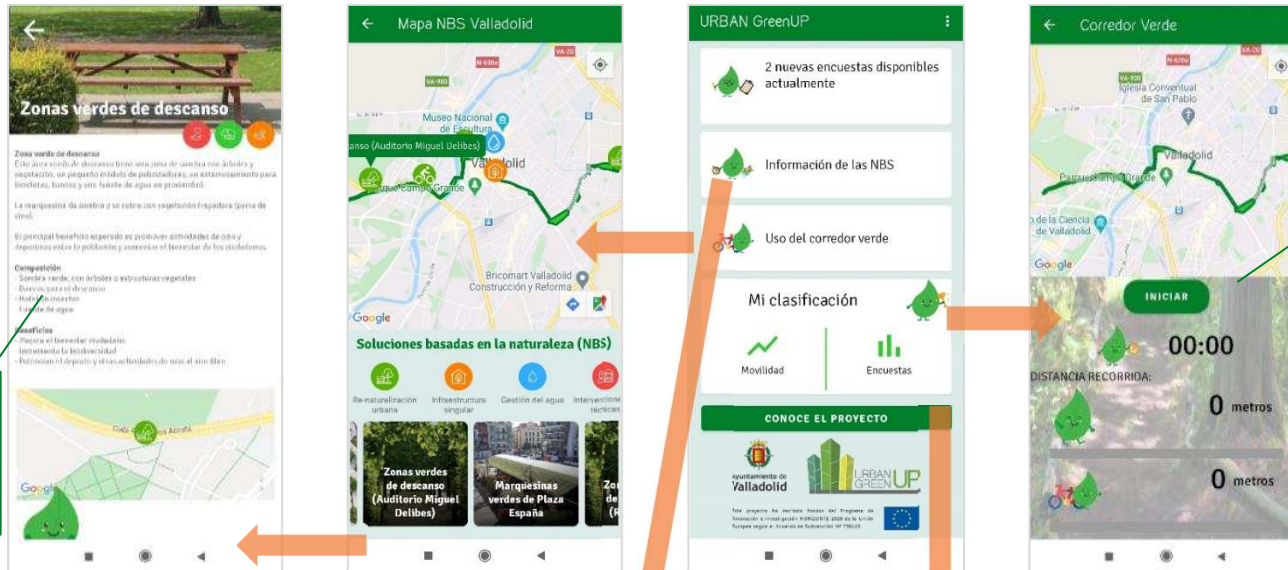


# NEW GREEN POSSIBILITIES



This projects receives funding from the European Union's Horizon 2020

# Citizens cooperation !



Provide information about the NBSs

Launch simple surveys

- Satisfaction
- Perception

Get automatically statistic data of presence in the NBS (location mobile API)

- Time and distance
- On foot, by bike

Earn game points per using the App. Bonus. (Serious game)



## SmartEnCity Project!

SmartEnCity

Vitoria-Gasteiz - Tartu - Sønderborg



- H2020 Smart Cities Project, [www.smartencity.eu](http://www.smartencity.eu)
- Integrated Demonstration Action: retrofitting & integration infrastructure
- Historical District “Coronation District of Vitoria”
- Following the main objective, **to towards urban transformation into sustainable, smart and resource-efficient urban environments in Europe**, the District Heating Design & Implementation in “Coronation District” has been performed by ACCIONA in collaboration with local partners (Visesa dep. of Environment & Planning, Municipality of Vitoria-Gasteiz, EVE, Giroa)

GIROA VEOLIA

acciona  
Ingeniería

Netlux  
Ingeniería - Consultoría



Ayuntamiento  
de Vitoria-Gasteiz  
Vitoria-Gasteizko  
Udala

magdalena.rozanska@acciona.com

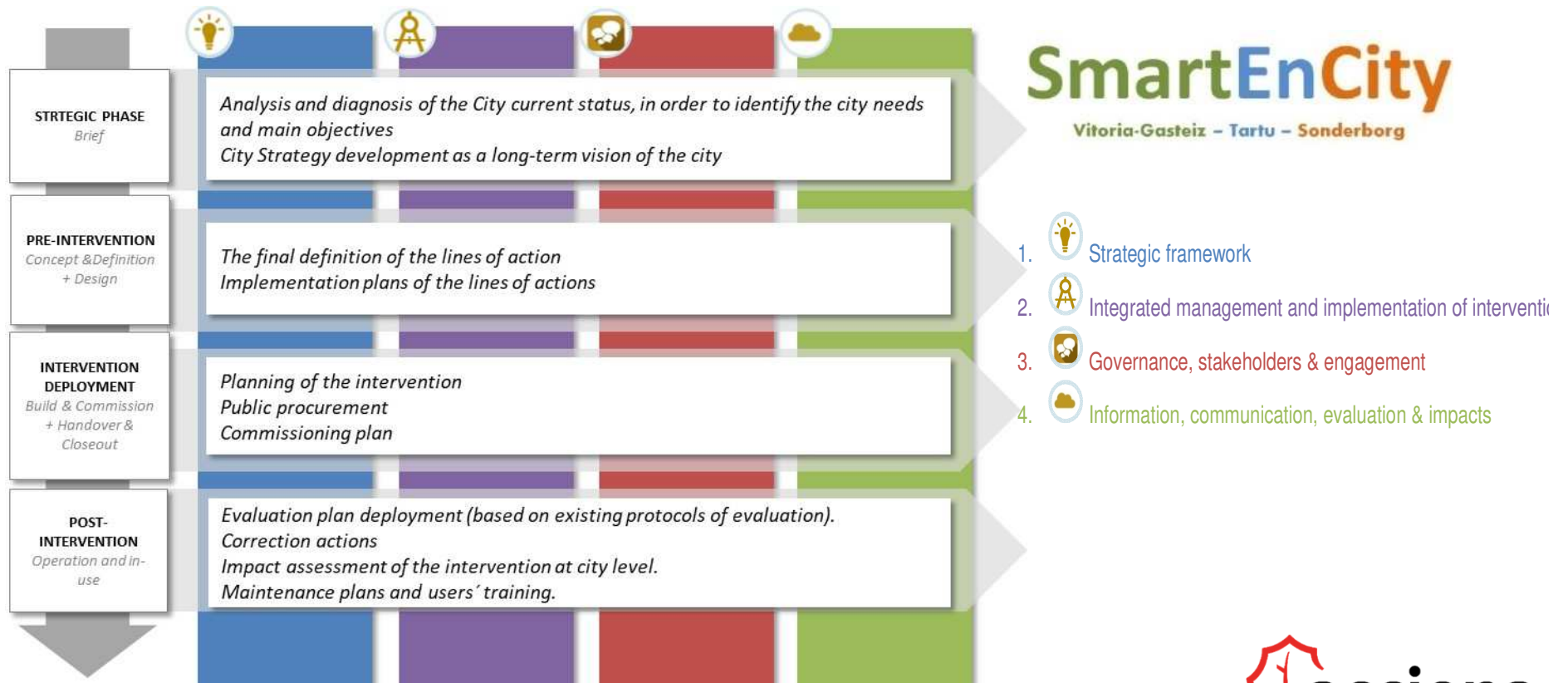
acciona  
Ingeniería

URBAN  
GREEN  
UP

SmartEnCity  
Vitoria-Gasteiz - Tartu - Sønderborg



# An integral Green/Smart urban planning



**SmartEnCity**  
Vitoria-Gasteiz - Tartu - Sonderborg

**Front Runner Cities: Vitoria-Gasteiz (Spain), Tartu (Estonia), Sonderborg (Denmark)**  
**Followers Cities: Lecce (Italy), Asenovgrad (Republic of Bulgaria)**





# District Heating Intervention (Vitoria-Gasteiz)



**SmartEnCity**  
Vitoria-Gasteiz - Tartu - Sonderborg

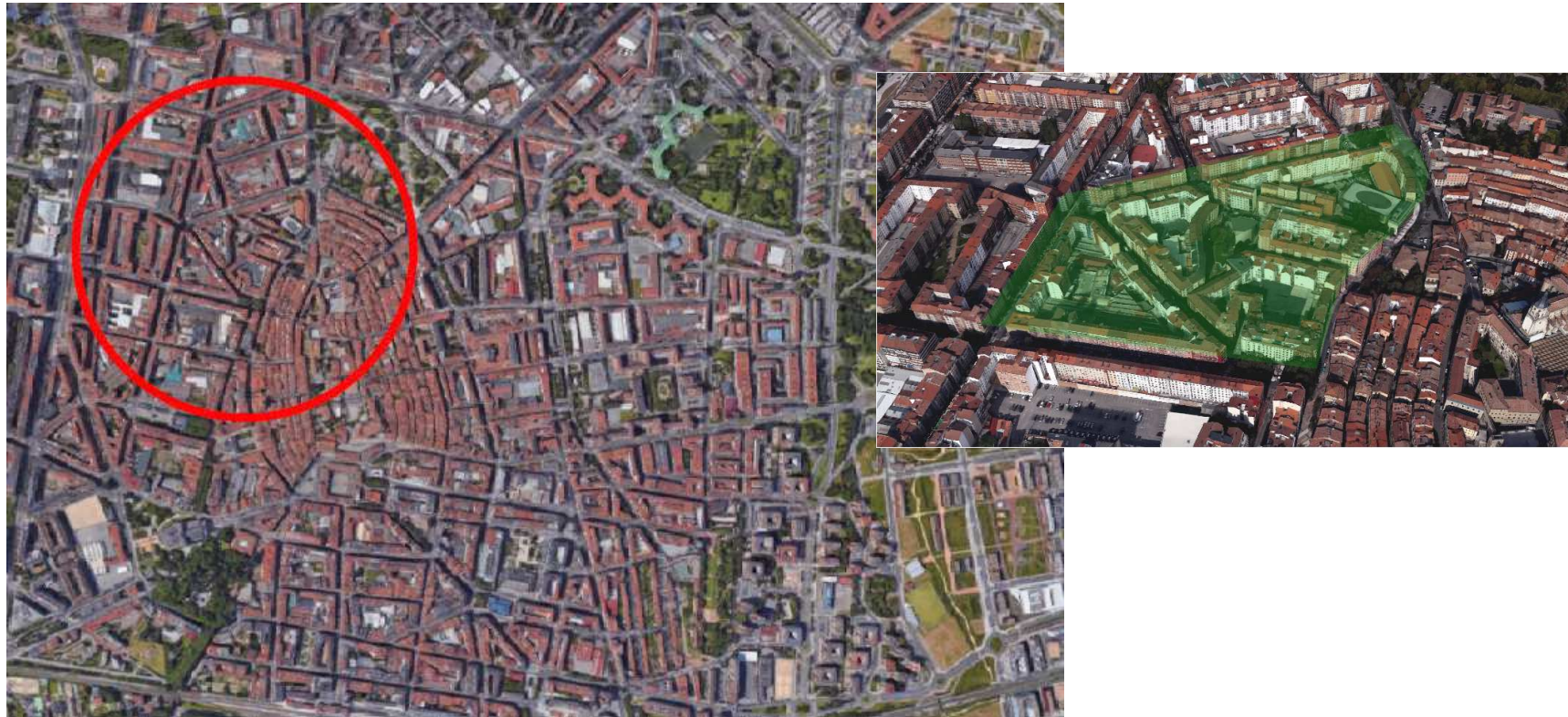


magdalena.rozanska@acciona.com





# District Heating Intervention (Vitoria-Gasteiz)

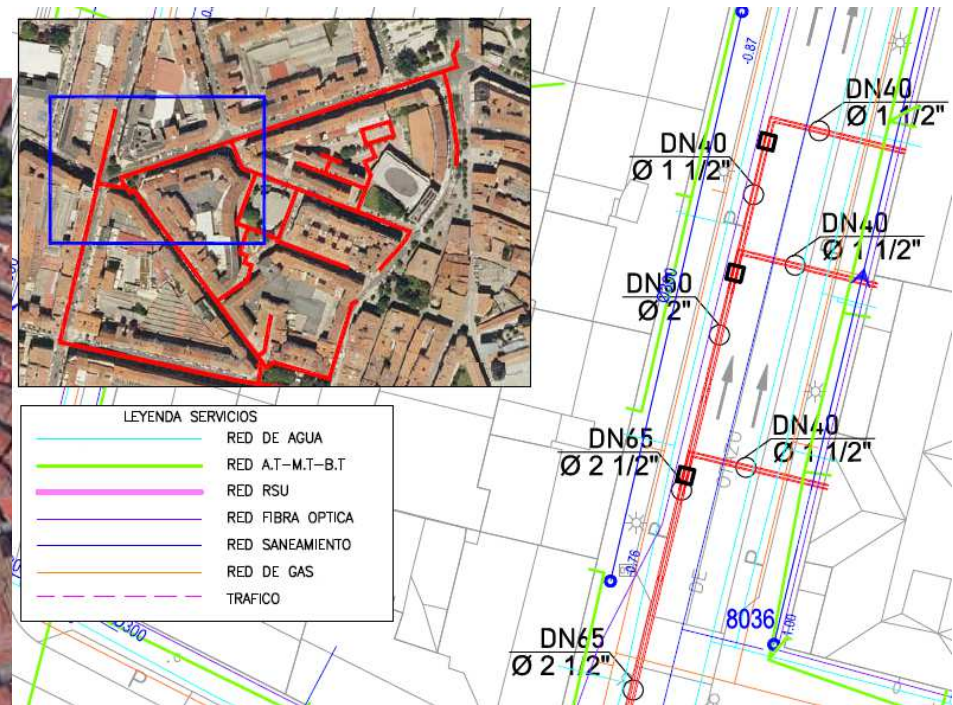


[magdalena.rozanska@acciona.com](mailto:magdalena.rozanska@acciona.com)



# District Heating Intervention (Vitoria-Gasteiz)

- Two steps implementation process to maximize cost effectiveness of the investment, 2 pipe system chosen





# District Heating Intervention (Vitoria-Gasteiz)

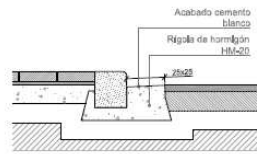
- Challenge in integration



Fot. 2.- c/ Eulogio Serdán vista entrada a parking



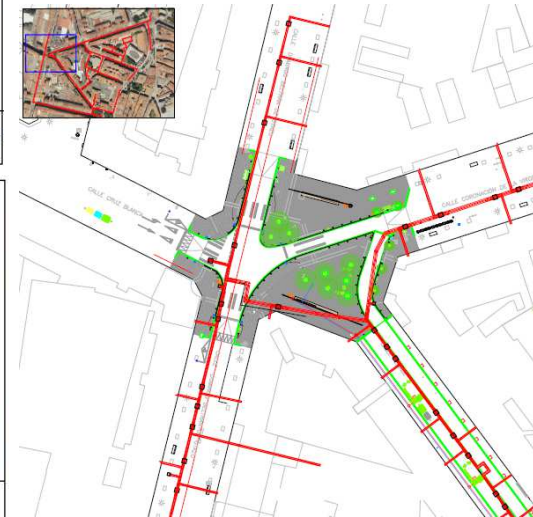
Fot. 4.- P Parking vista sentido Sur



Fot. 16.- c/ Fundadora sierva de Jesús vista sentido Noreste



Fot. 14.- c/ Eulogio Serdán vista sentido Suroeste





# NEW GREEN POSSIBILITIES



This projects receives funding from the European Union's Horizon 2020

# City Roadmaps performed!

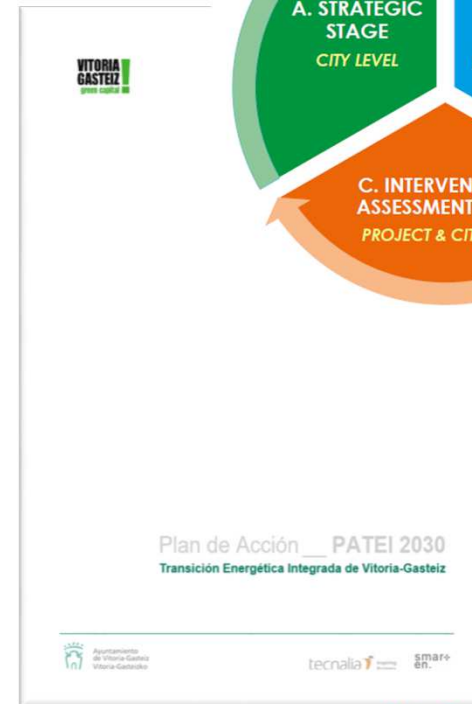
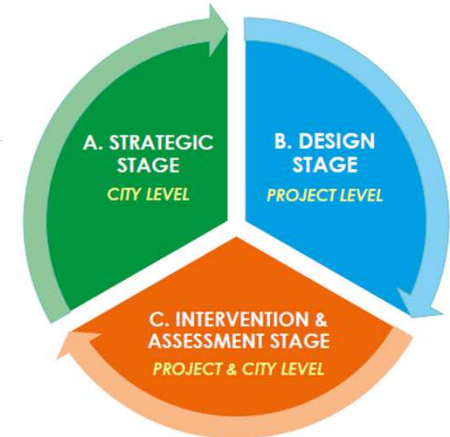
Vitoria-Gasteiz Frustrada



Vitoria-Gasteiz, "Haec est Victoria quae vincit"



Vitoria-Gasteiz Grey Capital Despotismo ECO-nómico



magdalena.rozanska@acciona.com





## City Roadmaps performed!

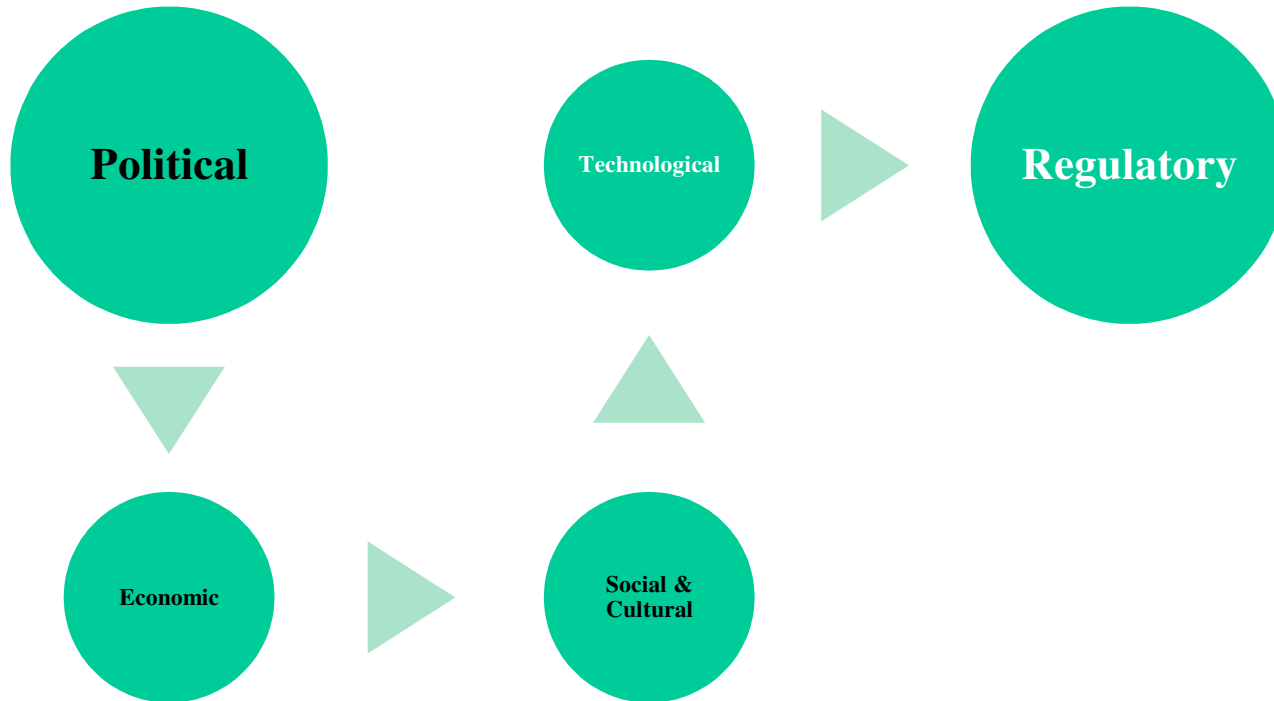
- Co-creation, co-development... (citizens participation)...
- Local support and founds strong collaboration with local public authorities
  - An estimated objective number of 70/80 buildings connected to the DH network during the project, opened for a new future connexions...



- <https://vimeo.com/266466060/88d19bbd96>

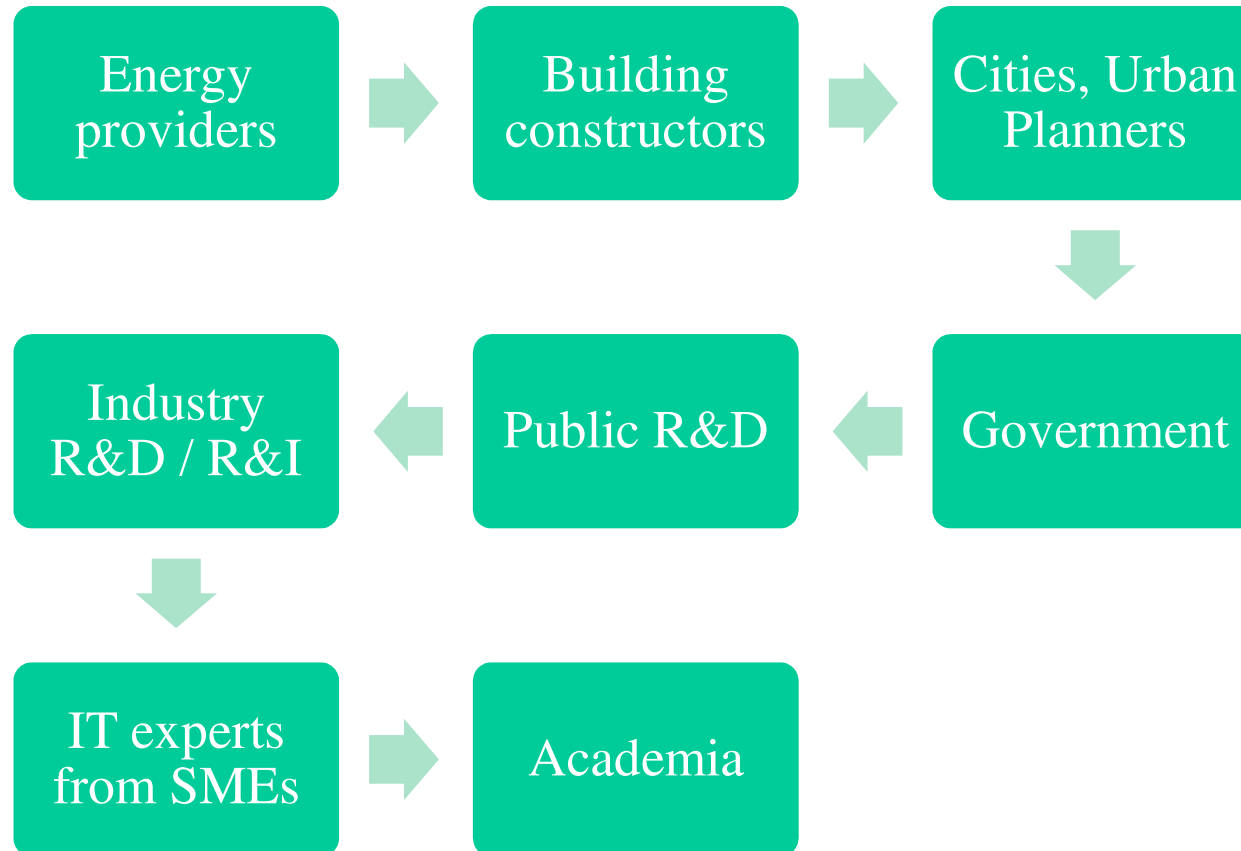


# Green Cities but How?



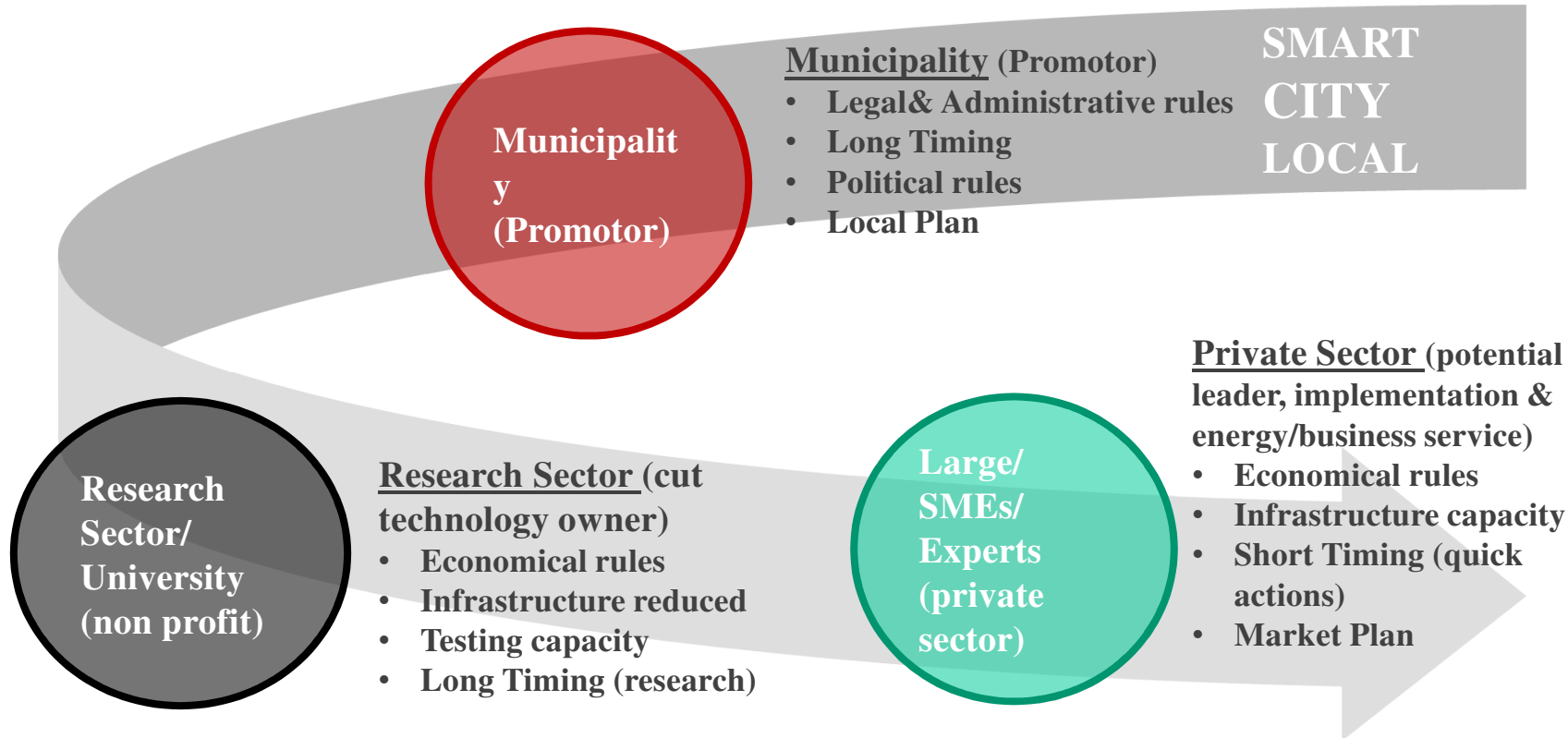


# Citizens on the top, and one goal, one idea on behind.





# Main barriers or rather main differences?





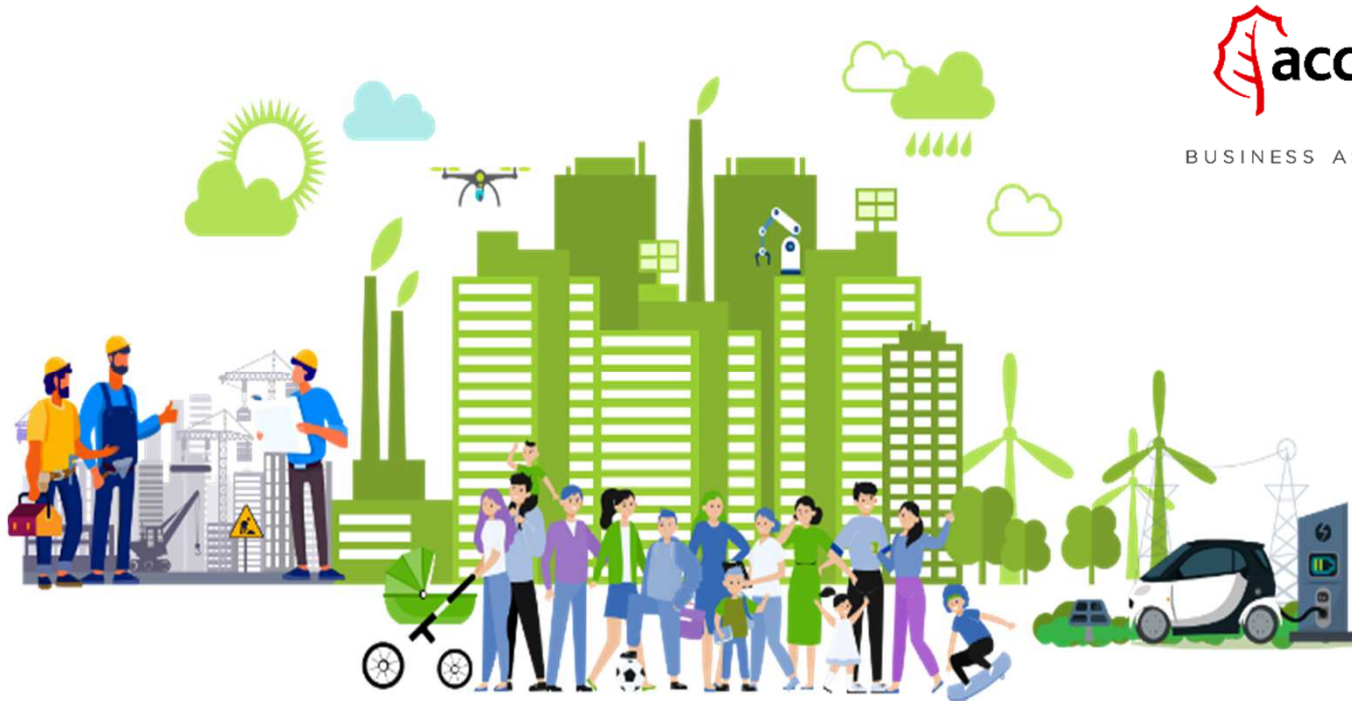
# Conclusions to get the goal on greening!

- **The whole value chain has to be covered to achieve the targeted smart city performance**
  - Well balanced expert teams with a local leader
- **Be technologically innovative is not enough: we have to find innovative business modes as well!**
- **New business models and financial mechanism have to be put in place to make energy transition process more affordable**
- **Communication between different sectors!**
- **Having a Citizens and Well being of All on the front page!**

# NEW GREEN POSIBILITIES



This projects receives funding from the European Union's Horizon 2020



BUSINESS AS UNUSUAL

*\*Very Soon to go back to you with a new green initiatives!*

*Follow us: [www.acciona.com](http://www.acciona.com)*

Project Manager Magdalena Rozanska  
Consultancy & Innovation Group  
ACCIONA Engineering

[magdalena.rozanska@acciona.com](mailto:magdalena.rozanska@acciona.com)

