



Covenant of Mayors  
for Climate & Energy  
EUROPE

# GET INSPIRED BY COVENANT OF MAYORS CITIES' AND REGIONS' ACTIONS

Covenant of Mayors' twinnings final report



PART OF



GLOBAL COVENANT  
of MAYORS for  
CLIMATE & ENERGY



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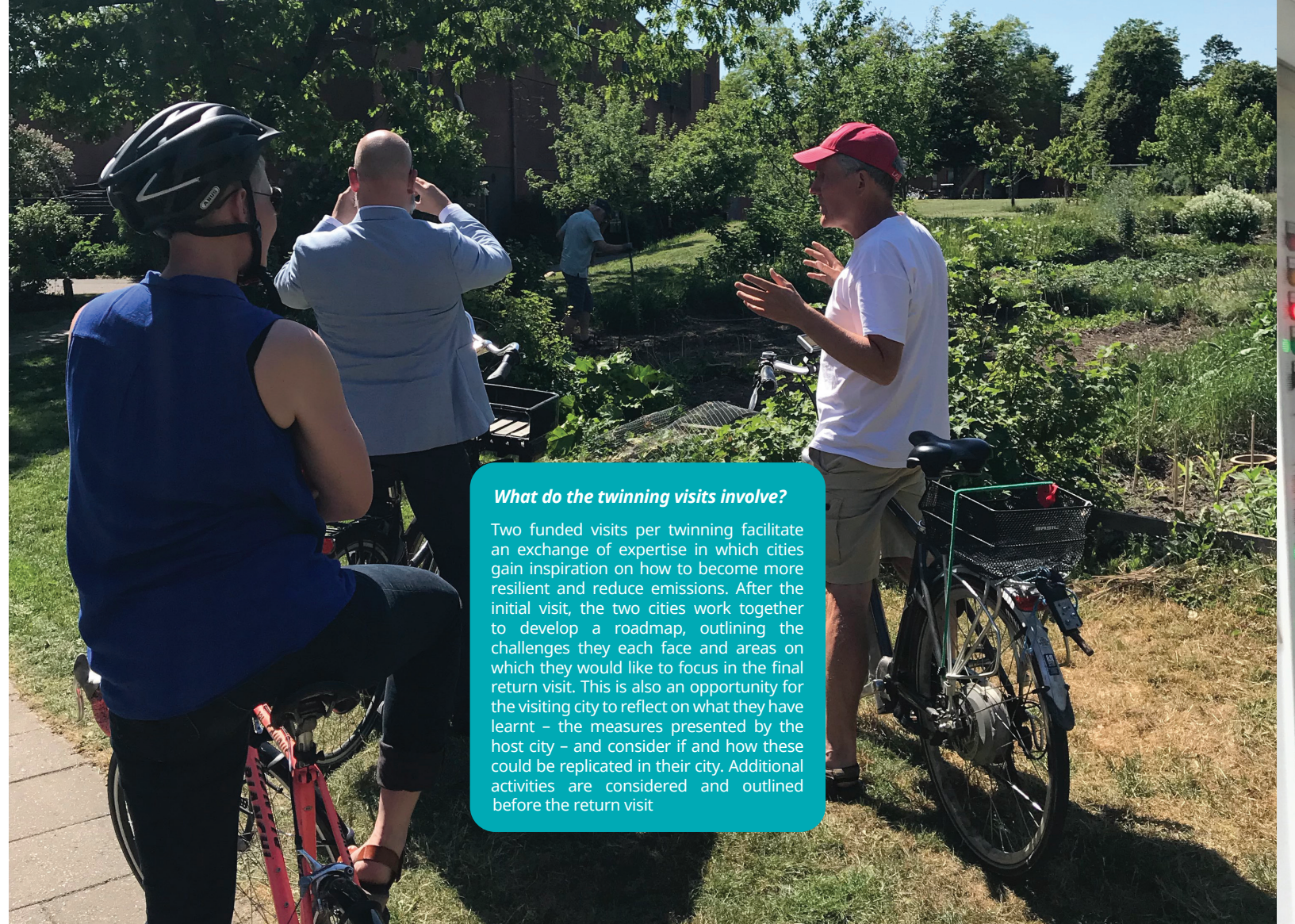


## INTRODUCTION

### *What is the twinning programme?*

Starting in 2017, the CoM developed this programme with the aim of increasing local authorities' capacity to mitigate and adapt to climate change while creating long-term partnerships between European, local and other subnational authorities. Two waves of twinings have since been launched – 2017-2018 and 2018-2019 – each consisting of 7 pairs of twinned entities. By the end of 2019, fourteen partnerships will have been developed leading to long-lasting cooperation.






### *What do the twinning visits involve?*

Two funded visits per twinning facilitate an exchange of expertise in which cities gain inspiration on how to become more resilient and reduce emissions. After the initial visit, the two cities work together to develop a roadmap, outlining the challenges they each face and areas on which they would like to focus in the final return visit. This is also an opportunity for the visiting city to reflect on what they have learnt – the measures presented by the host city – and consider if and how these could be replicated in their city. Additional activities are considered and outlined before the return visit



A photograph of two men in a technical control room. The man on the left is wearing a bright pink polo shirt and black trousers, with a grey messenger bag slung over his shoulder. The man on the right is wearing a dark blue button-down shirt and white trousers. They are standing in front of a large piece of machinery with a control panel that has a 'CABLE' label. The room is filled with complex piping, including prominent yellow and silver pipes, and various mechanical components. The lighting is somewhat dim, with some light coming from a window on the right. A teal text box is overlaid on the left side of the image.

In this publication, you will find the 'reports' of a selection of visits from the 2017-2018 twinning programme. These visual reports summarise the twinning programme by outlining what each city feels is their strength, the challenges they each face, the learning objectives they each set for the programme and their 'results' – what actions they are taking forward as a result of the programme. Measures taken forward include the introduction of a digital map of the city for citizens to suggest new urban developments, the development of supra-municipal Sustainable Urban Mobility Plans (SUMPS), and the planning of a 'library' for the reuse of household appliances (eg. tools). These innovative ideas highlight just some of the many measures that cities are taking to tackle climate change. We hope they will inspire further action amongst cities across Europe.

# ALBERTSLUND twinned with LJUNGBY

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*The exchange with Albertslund has inspired me to think of new ways to develop both small details and large infrastructure investments in Ljungby. The most important thing, however, is that the exchange has contributed to a new mindset. We aim to continue to cooperate with Albertslund.*

- Magnus Gunnarson, Mayor of Ljungby

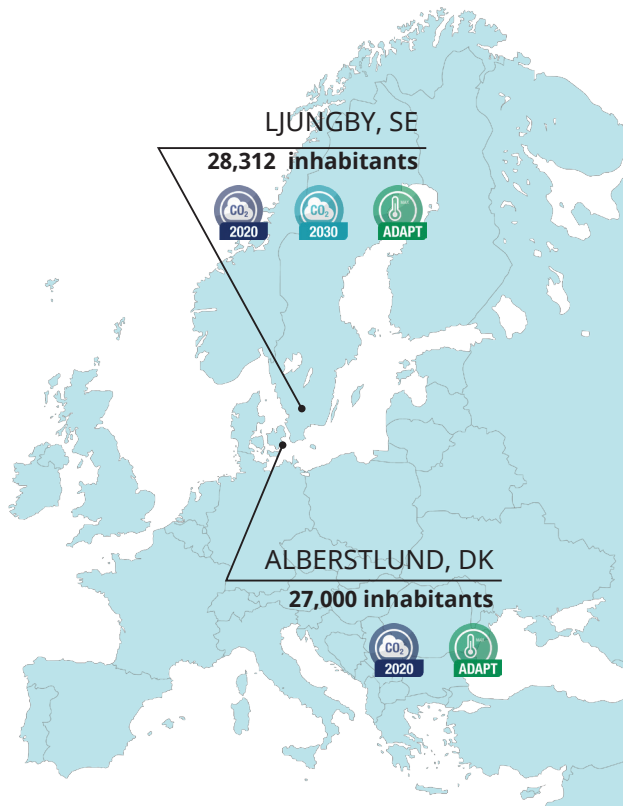
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*It was very inspiring to visit Ljungby and get an insight into how they work with climate-related issues regarding energy savings, food policy and urban development.*

- Maja Grønkvær, Energy and Development consultant for the city of Albertslund

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## CHALLENGES



**Energy retrofitting** of private housing as well as public buildings

Continuing **increase in private car** ownership



Moving towards the Covenant 2030 targets



Citizen involvement representing different age groups & ethnicities



A **large share** of transportation is done **by car** because of long distances & limited access to public transport



**Increase in energy use** both for transport & in households



Need to develop **new energy & climate plan**, as well as a SECAP



Date of twinning  
15 November 2017



24 May 2018  
Visit in Albertslund



5-6 February 2019  
Visit in Ljungby

## STRENGTHS



Strong **political emphasis** on environment & climate issues



**EMAS-certified** municipal organisation making environmental & climate issues relevant to all units



**Monitoring energy** consumption & CO2 emissions



88% **emissions reduction** target from electricity consumption by 2025



Long tradition of **involving citizens**



New method for **evaluating sustainable development strategies**, and land & water use based on the 2030 Agenda



Since 2005 **energy savings** in public buildings are a priority and energy use decreased by 15%

Working to reduce **food waste** and set **CO2 targets** for lunches served at municipal schools, daycare, retirement homes etc.



## LEARNING OBJECTIVES



New ideas for how to work with the planning of climate-friendly residential areas

Inputs on how to integrate the SDGs in the local sustainability & climate work



Actions to create energy savings both in private & municipal buildings

Inputs on integrating adaptation measures &/or mitigation efforts



## RESULTS FROM VISITS



Explore optimisation of the heat consumption of municipal buildings

Adopt Ljungby's method of localising SDGs & cooperating with strategic planners from different departments

Plan to work with suppliers to create more visibility around food use in pre-school



Consider the introduction of a digital map for citizens to suggest new urban developments



Inspiration for solutions & actions towards 2030, especially in transport

Using Albertslund's Klimastrategi 2017-2025 as inspiration for the new Municipal Energy Plan & SECAP

Planning for a new residential area in the city, including sustainable solutions for transport, energy, waste & social inclusion



Taking inspiration from Albertslund, Ljungby plans to separate transport infrastructure for bicycles and cars

# FORMIGINE twinned with XIRIVELLA

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The Twinning programme allowed us to share knowledge and experience with another European city about climate change, mobility, public lighting system, energy, circular economy and waste management. In particular, in Xirivella we have seen an interesting example of an integrated transport system (bike points, car parks, public transport network) which could be adopted in Formigine in order to improve the connections with neighbouring municipalities, which is one of the biggest challenges of the city. We aim to strengthen the positive relationship created with the city of Xirivella by participating together in other European projects.

- Maria Costi, Mayor of Formigine

- Giorgia Bartoli, Municipal Councilor to Environment and Agriculture, Transparency, Simplification and Innovation, Fund Research

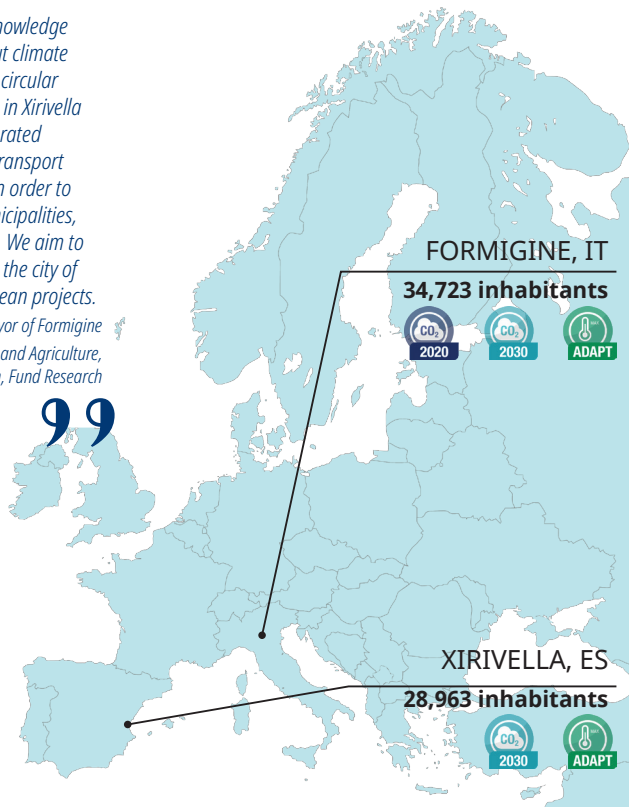
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It has been an enriching experience sharing knowledge, expertise and good practices. Ideas such as the 'library of objects' can be taken and implemented in our own context. It has also created a bond of friendship with Formigine to continue working on other projects together.

- Ricard Barberà-Guillem, former Mayor of Xirivella

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## CHALLENGES

FORMIGINE



Address mobility issues as part of a larger framework with neighbouring municipalities

Increase circular economy measures



XIRIVELLA



Improve the accessibility for those with reduced mobility

Transform public spaces into sustainable and friendly environments



Promote alternative public transport

Boost sustainable metropolitan mobility based on accessibility and low-carbon economy, fostering infrastructure and services adapted to the citizens' needs



Date of twinning  
March 2018



17-18 September 2018  
Visit in Formigine



Date of twinning roadmap  
21 December 2018



14-15 March 2019  
Visit in Xirivella



## STRENGTHS

Modernised public lighting system through Energy Performance Contract (EPC) with a video surveillance system used for public safety



Exchange best and worst practice ideas in relation to smart street lighting



Waste management system



Strict guidelines for reducing CO<sub>2</sub> emissions for new buildings

'Library of objects' as a best practice of circular economy & social inclusion



Formigine's green heritage (67 parks and 25 m<sup>2</sup> of public green space per inhabitant)



Progressive policies for sustainable urban mobility: speed limit of 30km/h (and no traffic lights since 2002), and mobility solutions that involve several municipalities (such as a public network of bikes)



Encouraging citizen participation in mobility themes (e.g. Sustainable Urban Mobility Plan (SUMP))



Strong measures to address climate change: development of energy efficiency programmes for municipal buildings & facilities, and mobile facilities to collect toxic domestic waste

## LEARNING OBJECTIVES

Explore how Xirivella's public transport system connects the town to the wider province of Valencia



How to increase awareness & acceptance of bike sharing and increase sustainable mobility

Explore how Xirivella actively involves its citizens in issues related to sustainable mobility



Develop partnerships for the exchange of best practices in environmental policy, notably related to implementation of climate & energy projects



Explore common difficulties and solutions for energy efficiency, circular economy and waste management with twinned partner



## RESULTS FROM VISITS

Inspired by Xirivella's transport system, the neighbouring municipalities of Formigine jointly adopted a supra-municipal Sustainable Urban Mobility Plan (SUMP) in April 2019



Comparing urban and mobility plans with that of Xirivella to identify transferable aspects

Continue exchanging best practice ideas with Xirivella on climate and energy, in particular to help them draft their SEAP/SECAP



Inspired by Formigine, Xirivella will develop new ways to eliminate fibre cement - resulting from building renovations



By the end of 2019: planning a 'library' for the reuse of household appliances - inspired by Formigine - in collaboration with organisations working with people at risk



Exchanging ideas with Formigine focusing on energy or waste collection

# LEEDS twinned with BREDA

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*The visit to Breda provided us with many exciting and innovative ideas. We are disseminating these widely as part of our Climate Emergency planning for Zero Carbon and our general sustainability mission and vision. An invaluable experience.*

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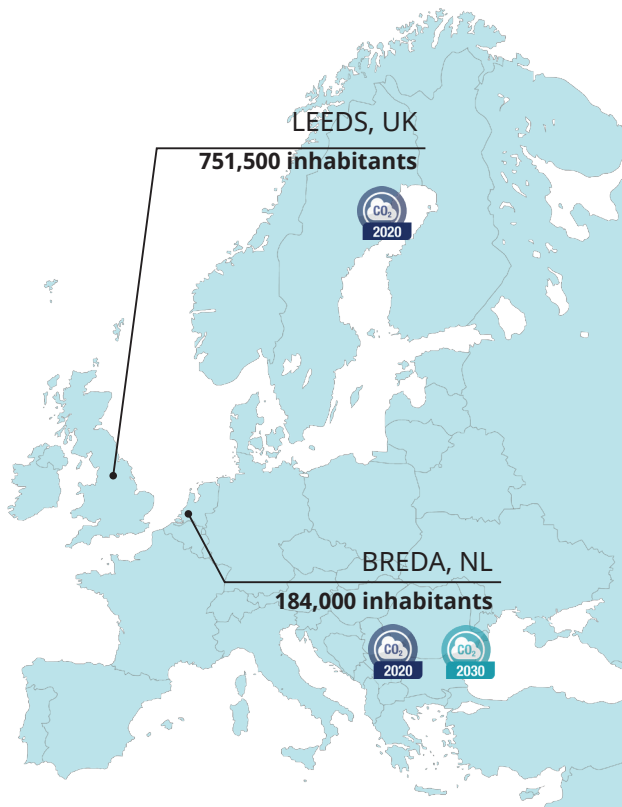
- Councillor Garthwait, Leeds City Council.

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*It is at local level that the challenging ambitions set by The European Commission in the European Green Deal need to become reality. I strongly believe in the added value of sharing knowledge and best practices between cities in Europe, especially when it comes to energy transition and fighting climate change. Past two years Breda learned a lot from our twinning with the city of Leeds.*

- Paul Depla, Mayor of Breda

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## CHALLENGES

LEEDS



Improve biodiversity

Build sustainability into events



Deliver wind energy

Innovate communication about climate change



BREDA



Organise and deliver district heating

Integrate energy in spatial planning and move towards a district approach



Develop partnership organisation and work

Improve domestic energy efficiency in relation to energy poverty



Develop hydrogen



Date of twinning  
November 2017



18-20 April 2018  
Visit in Leeds



Date of twinning roadmap  
September 2018



16-17 May 2019  
Visit in Breda

## STRENGTHS



Ambition for inclusive growth

Approach to air quality, e.g. the introduction of the Clean Air Zone



Supportive planning policy, linked to the delivery of a district heating network

Leeds Climate Commission gathering various city departments, the University and other stakeholders



Strong ambition. Breda aims to be the first European city in a green park by 2030

Integrated approaches to tackle multiple challenges – for example, Breda links climate adaptation to related challenges biodiversity, health and quality of life



Existing action plans for and by stakeholders

## LEARNING OBJECTIVES



Gain new ideas across a broad spectrum of areas

See how another city works with its communities to foster support



Implement a district approach on energy such as energy saving and sustainable energy action on existing houses

Better coordinate with other internal departments



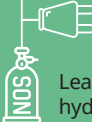
Organise a partnership approach with stakeholders at all levels



Use networks for heat resilience



Use evidence based strategic and operational decisions to make energy related choices



Learn from Leeds H21 hydrogen project

## RESULTS FROM VISITS



Insight into a sustainability framework for events

Details of how sustainability can be built into procurement



A new approach to engaging with children across the city

Interesting communication materials to adopt for Leeds climate conversation with citizens (summer 2019)



Integration of energy savings and sustainable energy measures as well as financing mechanisms for low-income households

Cooperation with stakeholders on energy transition: an energy transition coordination group with different stakeholders operates at neighbourhood-level and collaborates with the city administration





# UDINE twinned with ZADAR

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Two cities from different States and with different issues, but with in common the commitment to the city and citizens to take proactive actions to improve the quality of life of citizens and make their city more attractive and liveable.

- Agnese Presotto, Architect, Agency for Environmental Policies and Energy Management, city of Udine

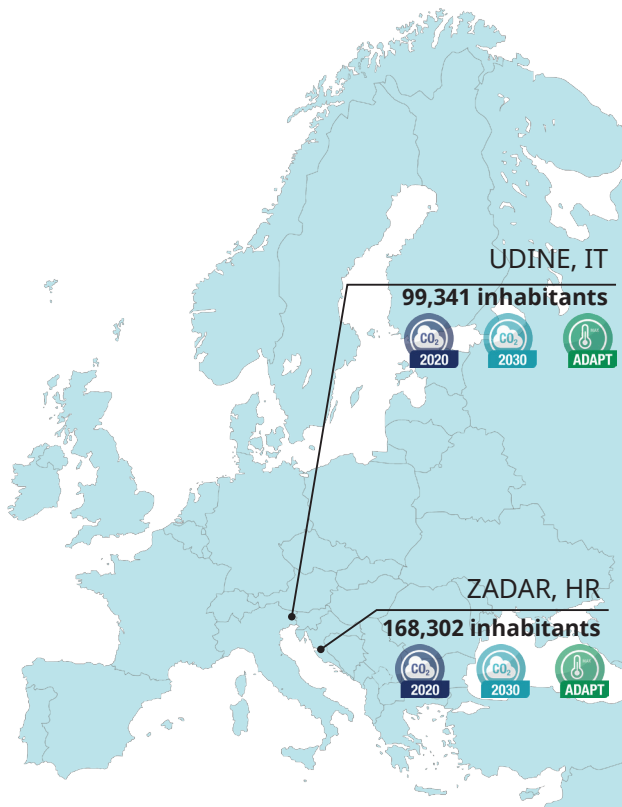
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During the visit in Udine delegation of the City of Zadar was introduced with very interesting projects and learned about more sustainable materials for the energy efficient construction that also don't have any harmful effect on health. Also visited a very impressive Udine district heating power station which provides energy to the city hospital, university, five schools, sport center and several residential buildings. It is also a trigeneration plant. Also twinning partners had a very fruitful and interesting discussion on the implemented projects and activities in both visits.

- Ana Baljo, Head of Section for Energy Efficiency, city of Zadar

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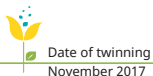
## CHALLENGES

UDINE

- Financing of climate mitigation and adaptation actions
- Energy efficient municipal buildings
- Sustainable mobility (especially during the touristic)
- Tourism pressure
- Climate adaptation challenges
- Water management and supply on islands
- Prevention of floods

ZADAR

- Financing
- Energy efficient municipal buildings
- Sustainable mobility
- Tourism pressure
- Water management and supply on islands
- Prevention of floods



## STRENGTHS



Have a sound experience in European collaboration projects

Having set up objective up to 2030



Have a monitoring and environmental management system in place for more than 10 years

Have strong collaborations with territorial actors (University, private companies, associations) on the model of quadruple helix



## LEARNING OBJECTIVES



Implement innovative financing schemes for energy and climate projects

Implementing a systematic energy management in public buildings



Define adaptation measures and projects

Promote awareness raising campaigns on energy efficiency and climate change resilience among citizens, students, families



Political commitment

EE & RES projects



Energy management



Financing (innovative financing schemes)

Water management and supply



Sustainable mobility

Waste management



To gain the good examples of practice that could be applied in Zadar

## RESULTS FROM VISITS



Replicating the energy monitoring system for electric energy and water consumptions. For every building, we can interrogate the system and have monthly consumption and money spent and summary information on a yearly basis.

Collaboration: through the Compete4SECAP (C4S) project aiming to transform existing SEAPs into Sustainable Energy and Climate Action Plans (SECAPs). Together with Zadar, we will explore the next EU programming period (especially within the Interreg ITA-HR Programme) for opportunities to collaborate



Inspired by the 'Via Baldasseria' eco-friendly school project, we are assessing the feasibility of replicating this with measures such as transparent facades, radiant floor panels, geothermal heating with an energy recovery system, thermal solar panels and rainwater recycle system.



We exchanged knowledge to find solutions to shared problems, for example on our experiences with ISO 50001 to improve energy efficiency.



We will continue to work through the C4S project and find further opportunities for collaboration



# VAASA twinned with GHENT

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*Based on our applications an idea of what could possibly be learnt from Ghent, but through the successful and very friendly and open discussions, so much more was learned and discussed and a fruitful knowledge transfer took place. A solid basis for continuing relations and knowledge exchange was created thanks to the twinning programme.*

- Maria Backman, Development Manager, Vaasa

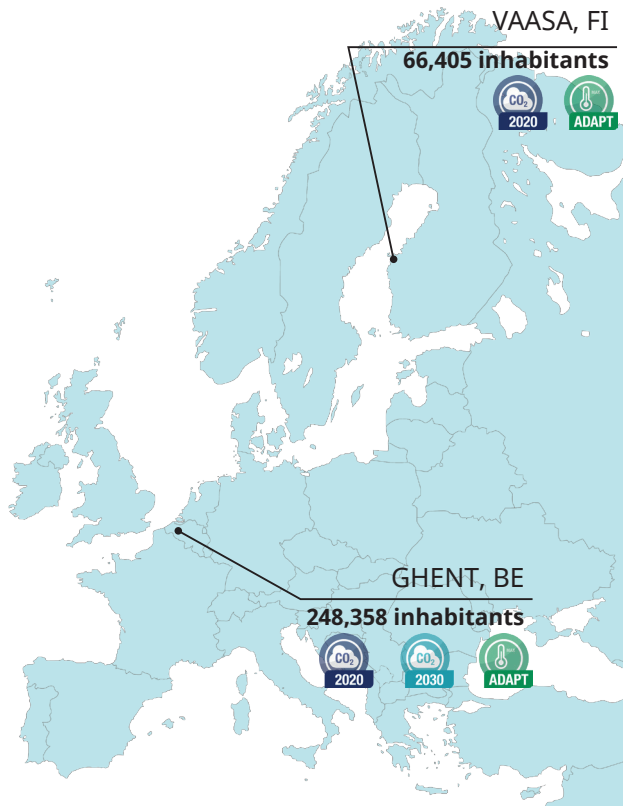
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*Via the twinning programme of CoM you get to know your twinning city more in depth. You not only learn about their successes, but also on their failures and the way the city handled with them. You really can build a long-lasting relationship.*

- Cathy De Bruyne, Director of the Ghent's Service for Environment and Climate

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## CHALLENGES

VAASA



Internal competition concerning resources

Need to strengthen leadership / management and commitment to energy and climate program



GHENT



Creating alliances with stakeholders active in the city

Tackling scope 3 emissions and avoiding the CoM scope as a potential lock in (e.g. use consumption to make production more sustainable, potential for CCU and circular economy and include waste/materials)



Financing the energy transition

Reducing emissions from industry and tertiary sector



Date of twinning  
November 2017



18-20 April 2018  
Visit in Vaasa



Date of twinning roadmap  
September 2018



12-14 June 2019  
Visit in Ghent



## STRENGTHS



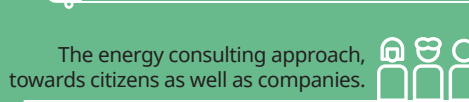
Vaasa is known for its unique way of cooperation. The city has a proactive role in facilitating cooperation with companies, universities, public and third sector and citizens

The Nordic Energy Hub, situated in Vaasa, houses expertise in energy technology research and competence, and contributes 30% of the energy technology export from Finland

## LEARNING OBJECTIVES



Further learning on strategic leadership, management and engagement concerning energy- and climate issues and sustainable development



The energy consulting approach, towards citizens as well as companies.



The way of communicating and engaging

## RESULTS FROM VISITS



The Ghent's approach to stakeholder engagement and management – replicable factors and lessons learnt – will be considered in the update of The Vaasa City Strategy in the next 2 years

Inspired by Ghent's energy coaching and energy grants, Vaasa has opened a survey aimed at SMEs to understand what help we could offer in relation to reducing their emissions.



We also learned to reflect on our own strengths and development possibilities



Encouraging bottom up projects with citizens

The services Ghent offers for households [to renovate their houses in an energy efficient way]: the energy central as a one stop shop for free advice, guidance, grants and loans.



The services Ghent offers for companies (energy coaching, monitoring, grants)

Leadership and management of the climate challenge on the city level



Cooperation between city/university/companies in building an energy hub

Production of biogas from organic waste: insight in the business case and research the transferability to the Gent situation



Skype meetings with experts of Vaasa on the energy production of the waste facility and the way government, universities and industry are working together within the "Energy hub" Vaasa is.

Learning from Vaasa's experience of working with knowledge institutions, the city of Ghent in partnership with Ghent University, North Sea Port, and other industry, are developing a business case for CCU.



Insights gained are now being used in drawing up a new climate plan for 2020-2030

