# No 3 August – September 2023

# Newsletter

### Smart City for Sustainable Development

Smart City in EU

The Smart Cities Marketplace provides you with vital knowledge to support you in moving your smart city ambitions forward. Here you will find use cases from more than 80 successful European projects, including 18 Lighthouse projects, sharing solutions implemented in both small and medium-sized towns and in metropolises such as London, Barcelona and Vienna. Many projects have reported their core data into our Self-Reporting Tool, to be picked up and developed into bankable solutions. (<a href="https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects">https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects</a>)

### **Smart City Marketplace**

GrowSmarter shares success stories at final conference

GrowSmarter aimed to stimulate city uptake of smart solutions by using the three Lighthouse cities Stockholm (Sweden), Cologne (Germany) and Barcelona (Spain) as a way to showcase 12 Smart City solutions: from advanced information and communication technology and better-connected urban mobility, to incorporating renewable energy sources directly into the city's supply network. This provided other cities with valuable insights on how they work in practice and opportunities for replication.

The 12 Smart City solutions were split into three areas of action:

- Low energy districts: Smart building shell refurbishment, Smart building logistics, Smart energy-saving tenants, Smart local electricity management;
- Integrated Infrastructures: Smart streets lighting, Waste heat recovery, Smart waste collection, Big data management;
- Sustainable Urban Mobility: Sustainable delivery, Smart traffic management, Alternative fuel driven vehicles, Smart mobility solutions.

#### **GrowSmarter Stockholm**



 $\label{lem:constraints} \textbf{GrowSmarter Stockholm (photo: $\underline{\text{https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-stockholm)}$ 

Sweden's capital city, Stockholm, has been working on climate change mitigation and adaptation since the 1990s. The city is a real frontrunner with well implemented climate

action plans and pioneering policies to ensure it meets its ambitious environmental targets. The carbon dioxide emissions have been cut by 25 % per citizen since 1990.

The demonstration site in Stockholm consists of three refurbished buildings with an overall gross floor area of  $36\ 307\ m^2$ .

The final energy demand of the site is reduced by 3333 MWh every year thanks to the refurbishment. According to SCIS calculations based on energy design data and the respective emission factors available, the primary energy savings go up to 4918 MWh/yr while the CO2 reduction amounts to 1187 tonnes every year.

**Source:** <a href="https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-stockholm">https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-stockholm</a>

### **GrowSmarter Cologne**



**GrowSmarter Cologne** (photo: <a href="https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-cologne">https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-cologne</a>)

The city is committed to the EU's goal of achieving a 20 % reduction in greenhouse gas emissions, a 20 % increase in the share of renewable energy and a 20 % increase in energy efficiency by 2020 based on 1990 levels. It aims to reduce CO2 even further, with a 50 % reduction by 2030.

In order to achieve these goals, Cologne is looking to work closely with local industry. Areas of focus include sustainable mobility, energy efficiency of buildings, low-emission heating facilities and ensuring an integrated infrastructure as the city expands.

In this context within the GrowSmarter project, Cologne demonstrates 12 smart solutions in the fields of low-energy districts, integrated infrastructure and sustainable urban mobility in Mülheim, a vibrant area in the north-east of Cologne, which is currently undergoing a process of regeneration.

The demonstration site in Cologne consists of two existing buildings with an overall gross floor area of  $33\ 290\ m^2$ . The final energy demand of the site has been reduced by 4 990 MWh every year thanks to the refurbishment.

According to SCIS calculations based on energy design data and the respective emission factors available (European factors – EN 15603), the primary energy savings go up to 6 203 MWh/yr while the CO2 emissions reduction amounts to 1844 tonnes every year.

**Source:** https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-cologne

#### **GrowSmarter Site Barcelona**



**GrowSmarter Site Barcelona** (photo: <a href="https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-barcelona">https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-barcelona</a>)

Barcelona's development towards a smart city began over 30 years ago when the city installed fibre optic cables to connect two municipal buildings. Currently, the City Council is using public-private partnerships to encourage innovation in areas such as transport, shopping, street lighting and environmental monitoring. Barcelona has been transformed into an urban laboratory, piloting projects and services that make the city more open, efficient and friendly.

The innovation zone, known as the 22nd District, has been chosen for Barcelona's implementation of the smart solutions within the GrowSmarter project. This multi-purpose area mixes residential, industrial and academic buildings in a lively, vibrant quarter bordering the Mediterranean Sea. Solutions being implemented in the 22nd District include introducing electric vehicles and installing charging infrastructure, refurbishing current buildings to create zero-energy blocks and installing district heating and cooling.

The demonstration site in Barcelona consists of 10 refurbished buildings with an overall gross floor area of  $33\,110$  m<sup>2</sup>. The final energy demand of the site has been reduced by 2767 MWh every year thanks to the refurbishment.

According to SCIS calculations based on energy design data and the respective emission factors available (European factors - EN  $\,15603$ ), the primary energy savings go up to 5729 MWh/yr while the carbon dioxide (CO2) emissions reduction amounts to 1610 tonnes every year.

**Source:** https://smart-cities-marketplace.ec.europa.eu/projects-and-sites/projects/growsmarter/growsmarter-site-barcelona

### Latest News about Smart City in EU

### Smart Cities Marketplace and Partners at Smart City Expo World Congress, Barcelona

The Smart Cities Marketplace team is happy to announce that we are again part of the Smart City Expo World Congress, the world's biggest and most influential event for cities and urban innovation, which will take place from 7-9 November 2023 in Barcelona, Spain.

The Smart Cities Marketplace on behalf of the European Commission is coordinating this year's joint EC representation of about 30 partners such as initiatives, projects, and DGs at the Smart Cities Expo World Congress.

The joint presence entails various activities as the Smart Cities Expo World Congress:

- Organisation of Congress & Agora sessions to impactful address relevant EC policies and cross-cutting topics focusing on scaling up solutions across cities.
- Stand representation including an engaging booth programme with sessions organized by attending projects & initiatives, which will supplement and reinforce the crosscutting topics presented in agora sessins and will focus on the work on the ground.
- Networking spaces for interaction with and promotion of the services of each partner project/initiative.

Source: <a href="https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/smart-cities-marketplace-and-partners-smart-city-expo-world-congress">https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/smart-cities-marketplace-and-partners-smart-city-expo-world-congress</a>

### From "global boiling" to another winter of energy crisis: sustaining the Cities Energy Saving Sprint

The growing hazards of climate change experienced this summer – from heat waves, and droughts to floods and wildfires – are exerting mounting pressure on local governments across Europe, while they continue to grapple with inflation and unstable energy prices.

The <u>Cities Energy Saving Sprint</u> launched to confront last winter's energy crisis, showed us the inseparable link between the energy and climate crises and the importance of combating them together with common solutions. Local governments, at the forefront of these challenges, have emerged as pioneers in adopting such solutions, aimed at saving energy and moving away from fossil fuels at the same time. Following a summer of climate disasters and anticipating another winter affected by the energy crisis, the Covenant of Mayors have relaunched the Cities Energy Saving Sprint, encouraging cities to uphold last winter's energy saving measures and making them long-term. Here is the <u>call to keep saving energy</u> and the <u>first featured success story</u> from the Sprint to inspire other cities.

**Source:** <a href="https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/global-boiling-another-winter-energy-crisis-sustaining-cities-energy">https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/global-boiling-another-winter-energy-crisis-sustaining-cities-energy</a>

#### NetZeroCities Call for Pilot Cities is now open!



Source: https://netzerocities.eu/2023/09/05/netzerocities-call-for-pilot-cities-is-now-open/

NetZeroCities has launched a second call to join its Pilot Cities Programme, a groundbreaking two-year programme testing innovative approaches to rapid decarbonisation in European cities. This second call, providing between 12 and 20 million Euros in grants and hands-on support to cities, is only open to Mission Cities which are not yet part of the Pilot Cities Programme.

Selected Pilot Cities will work across thematic areas, including mobility, energy systems, and the built environment, material and resource flows, health and well-being, natural areas, cultural/social/ financial/ institutional systems, and accessible public spaces to deploy and scale up locally tailored actions towards a climate transition. Cities will receive funding through three grant envelopes in the amounts of 0.5-0.6 million, 1 million, or 1.5 million and will also be supported through a range of services, knowledge, and expertise provided by NetZeroCities, including assistance from Climate Neutral City Advisors and other specialists.

The Call for Pilot Cities will be open from 5 September 2023 12.00 CEST until 6 November 2023 17.00 CET. More information is available on the Pilot Cities Programme page, on the NetZeroCities Portal (Pilot Cities Programme Group) and on the EU Funding and Tenders Portal.

Source: https://netzerocities.eu/2023/09/05/netzerocities-call-for-pilot-cities-is-now-open/

### EP Think Thank publishes Guide to EU Funding 2023 Edition

The European Union extends financial support to regional and local authorities, NGOs, businesses, professionals, and citizens through an extensive array of funds. The European Parliamentary Research Service has compiled a comprehensive 'Guide to EU funding,' offering

easily accessible information about the various EU funding sources, conveniently organized by their respective areas of action. To facilitate research, the main funding themes are further divided into subsections.

To enhance accessibility, the guide incorporates hyperlinks to the sources of funding information, making it more convenient for readers to explore the details. Additionally, each section of the guide concludes with a list of major potential beneficiaries, providing further assistance to the reader.

**Source:** <a href="https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/ep-think-thank-publishes-guide-eu-funding-2023-edition">https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/ep-think-thank-publishes-guide-eu-funding-2023-edition</a>

### **Empowering Youth for a Sustainable Future of European Cities**

The SPARCS project for sustainable development is funded by the European Union's Horizon 2020 research and innovation initiative. Collaborating with businesses, research institutions, and citizens, the project aims to discover innovative solutions for regional development. As a part of this initiative, upper comprehensive school students have gained a deeper understanding of urban and sustainable development through buddy class activities organised by the City of Espoo and Citycon Oyj.

This three-year project involved ongoing buddy class activities that spanned the entire upper comprehensive school period, involving students from Espoonlahti and Maininki schools. Throughout the project, these young individuals explored various topics related to energy efficiency, circular economy, and urban development. Mia Kaurila, the project coordinator from the City of Espoo, emphasised that the quarterly meetings played a crucial role in implementing the city's sustainable lifestyle.

## Smart Cities – Good Practices

### **Scalable Cities**

The Scalable Cities Action Grant financially supports cities and ad-hoc partnerships that wish to replicate measures that were successfully implemented through SCC projects to facilitate the transition towards climate neutrality.

Four cities are currently implementing ambitious replication projects inspired by the Scalable Cities lighthouse projects.

- The city of **Onda** in Spain is working on finding the best governance mechanisms and structures to support its decarbonisation ambition.
- The city of Gabrovo in Bulgaria is assessing internal needs in terms of staff, skills, and strategies for involving citizens and managing resources with the final goal to support energy transition.
- A consortium of four Ukrainian cities Slavutych, Myrhorod, Novovolynsk and Volodymyr is preparing a replicable model solution for a distantly organised Energy Management system (EMS) to increase organizational flexibility and resilience of waraffected municipalities, facing a lack of skilled staff and qualified advice in modernizing utility sector, planning investments and mitigating climate change.
- London Borough of Waltham Forest is preparing an investment case for replicating the Urban Sharing Platforms supporting the Connected Places Roadmap, an enabling strategy which sets out how tech and data can underpin and support the cities Climate Action Plan and 15 Minute Neighbourhood Strategy.

**Source:** <a href="https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/scalable-cities-action-grant-first-round-projects-are-under-way">https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/scalable-cities-action-grant-first-round-projects-are-under-way</a>

#### Madrid: Piloting a sustainable last-mile delivery system

The city of Madrid identified the need for a sustainable last-mile delivery system and enrolled in EIT Urban Mobility's #ChallengeMyCity program to find an innovative solution. Smart Point's smart locker logistics system was selected as the solution for Madrid's last-mile delivery challenge. The system aggregates deliveries at lockers and uses sustainable transport for delivery to pick-up points. The pilot program is being implemented in four semi-public locations in Madrid for six months. The program aims to assess the economic, social, and environmental impact of the solution for potential long-term integration and to address urban mobility challenges effectively.



**Source:** <a href="https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/madrid-piloting-sustainable-last-mile-delivery-system">https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2023/madrid-piloting-sustainable-last-mile-delivery-system</a>

### Ile-De-France: How Paris eradicates diesel-propelled buses from public transport

From 2015 to 2017, they embarked on a substantial endeavor aimed at **evaluating the performance of electric buses in real-world operational scenarios with passengers on board**. Their primary goal was to formulate robust proposals for substantial bus acquisitions by the latter part of 2017, paving the way for extensive deliveries to commence in 2019. During this timeframe, Île-de-France Mobilités and RATP achieved significant milestones in the realm of bus procurement. Particularly noteworthy is the 2019 initiation of the largest European call for electric buses, with the potential to encompass an order of approximately 800 vehicles. Collectively, the program's scope spans the acquisition or **procurement of 3,700 vehicles between the years 2015 and 2025**.



**Source:** <a href="https://marketplace.eiturbanmobility.eu/best-practices/ile-de-france-how-pariseradicates-diesel-propelled-buses-from-public-transport/">https://marketplace.eiturbanmobility.eu/best-practices/ile-de-france-how-pariseradicates-diesel-propelled-buses-from-public-transport/</a>