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European Union

The background features abstract geometric shapes: a large dark blue circle with diagonal hatching, a light blue circle with diagonal hatching, a solid light blue circle, and a solid green circle. A dashed white line curves across the top and bottom of the page. At the bottom right, there is a white location pin icon on a dashed white line.

Mobility for more liveable urban spaces

Highlights report 2022

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Foreword

Dealing with the pandemic aftermath, the conflict in Ukraine, rising energy and electricity costs, inflation and record heatwaves – 2022 has been a year of crisis and uncertainty for Europe. Yet crises also provide opportunities for transformative and rapid change.

First and foremost, the climate emergency requires us to radically change the way we move and live in cities. Many innovative solutions to achieve sustainable urban mobility already exist, yet their widespread adoption has been too slow. To catalyse rapid uptake of these solutions and speed up the transition, a conducive environment to deploy and scale innovation is essential.

EIT Urban Mobility connects actors in the public, business, research and education sectors and provides them with access to markets, talent, finance, and knowledge, to innovate faster.

This report is a snapshot of our activities in 2022.

We align with EU priorities and help implement key EU strategies and initiatives such as the new European Green Deal and the EU's Urban Mobility Framework, the Cities Mission (100 climate-neutral and smart cities by 2030), and the New European Bauhaus. We're proud to work with other leading organisations to further common goals. This includes being a member of the new European Commission's Expert Group on Urban Mobility (EGUM) and a new partnership with the International Association of Public Transport (UITP).

With our strong network of partners across Europe, we are committed to fostering innovation to accelerate the transition to sustainable urban mobility and more liveable cities.

Dr. Maria Tsavachidis
Chief Executive Officer, EIT Urban Mobility



Accelerating change towards a sustainable model of urban mobility and liveable urban spaces

Europe is in the midst of a climate emergency. Following the European Commission's 2030 Climate Target Plan, 55% of greenhouse gas emissions have to be cut by 2030 and net zero emissions achieved by 2050.

EIT Urban Mobility is committed to helping the EU accomplish its ambitious CO2 reduction goals.

As the leading European network for innovating mobility in cities, our mission is to accelerate change towards a sustainable model of urban mobility and liveable urban spaces.

EIT Urban Mobility is an initiative of the European Institute of Technology (EIT), a body of the European Union. As such, we align with EU-level, national, and local government transport and mobility plans and strategies and are committed to making a positive impact on citizens' quality of life and the environment.

We do this by:



Match and connect

Connecting public and private partners to markets, talent, finance and knowledge



Talent to business

Educating next generation entrepreneurs



Innovations to market

Deploying market-ready solutions in cities



Start-ups to scale

Boosting growth for long-term impact

Focusing on innovations that support cities on their path to net zero

In 2022, our focus is on five challenge areas identified by consulting with cities:



Future mobility

New mobility services such as connected and autonomous transport



Public realm

Reallocation of urban space for people, including tactical urbanism and street experiments



Active mobility

Empowering people to shift from private fossil fuel vehicles to modes that encourage physical activity, such as walking and cycling



Sustainable city logistics

Optimisation of urban services and goods delivery



Mobility and energy

Uptake of zero emission and clean energy solutions to decarbonise transport

The leading European network for transport innovation in cities

As the leading European innovation community for urban mobility we bring together the key players across the whole value chain of mobility. Our community comprises more than 300 organisations in 33 countries across Europe.



Cities are at the heart of everything we do. We facilitate cities to deploy new solutions with the help of private sector and education partners to transition to a decarbonised and equitable mobility and transport system in Europe.

Part of the EIT Community

We belong to the broader EIT Community. With access to the largest European innovation network, we quickly respond to new challenges and launch initiatives to address them, such as the Covid Response Initiative or activities to support Ukraine.

We collaborate with the other EIT knowledge and innovation communities on common initiatives.

These include:

- **EIT Community New European Bauhaus (NEB)** – an initiative that supports the NEB mission. It places citizen's needs at the core of urban transformation and promotes innovative solutions at the intersection of art, culture, social inclusion, science and technology

- **Supernovas** – a programme that promotes female leadership in deep-tech start-ups and more women working and leading in innovation in general
- **Start for Future** – an incubator programme for students wanting to become entrepreneurs
- **Higher Education Initiative (HEI)** – a capacity building project, through which higher education institutes access the EIT innovation ecosystem and receive expertise and coaching support to boost innovation and entrepreneurship in their institutions
- **EIT Regional Innovation Scheme (RIS)** – a programme boosting competitiveness of regions and countries classified as emerging or moderate innovators by the European Union

EIT Urban Mobility Innovation Hubs

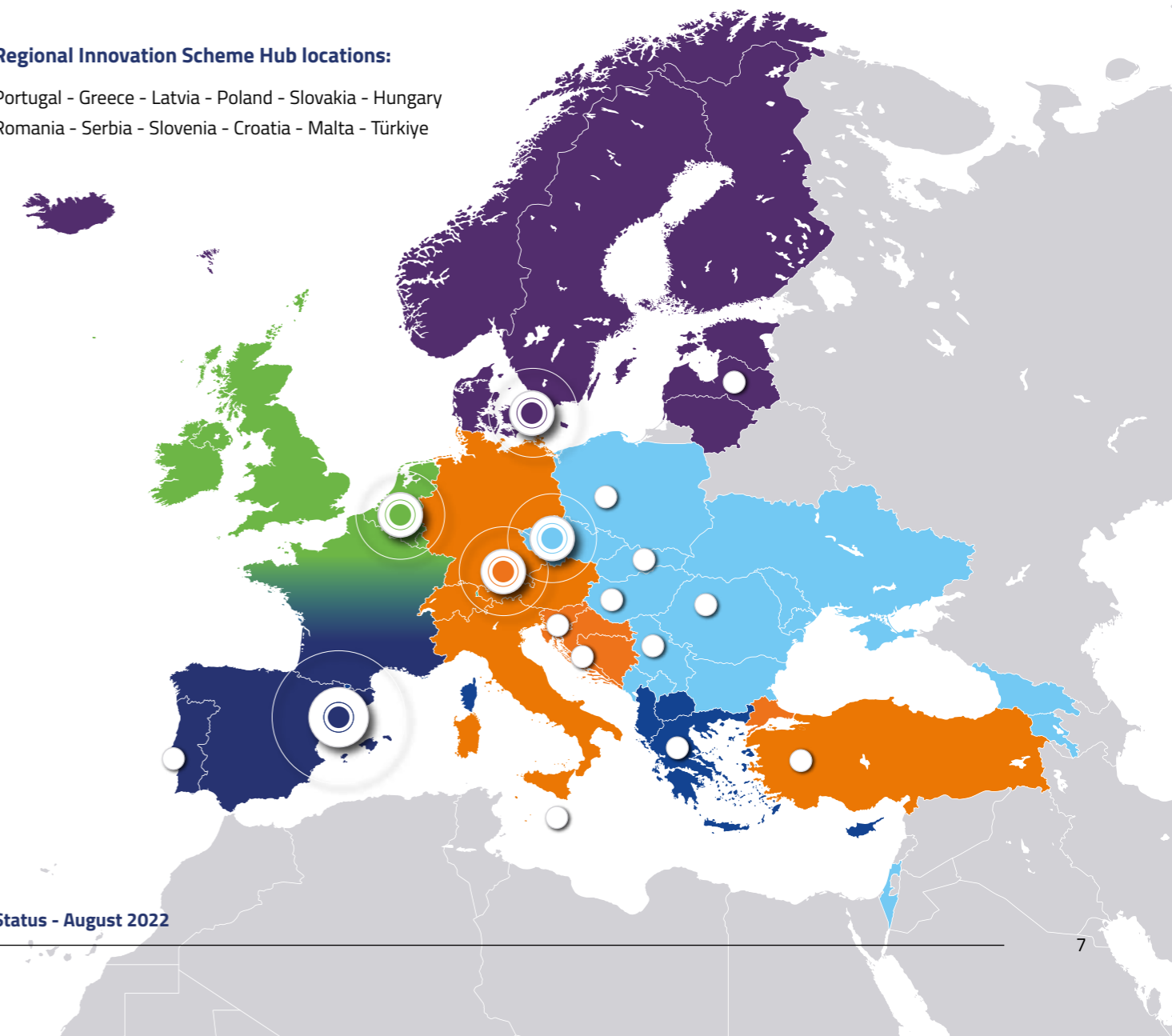
Five Innovation Hubs in Barcelona, Copenhagen, Helmond, Prague and Munich are the main points of contact for, and between, cities, innovators and educators across Europe.

In addition, through the Regional Innovation Scheme (RIS) we support regions and cities that traditionally have faced challenges to compete either in the EU or global markets. Currently, we operate twelve RIS Hubs.

- SOUTH**
Barcelona
- NORTH**
Copenhagen
- WEST**
Helmond
- EAST**
Prague
- CENTRAL**
Munich

Regional Innovation Scheme Hub locations:

Portugal - Greece - Latvia - Poland - Slovakia - Hungary
Romania - Serbia - Slovenia - Croatia - Malta - Türkiye



Status - August 2022



Creating the largest community of innovators and connecting local, regional and European ecosystems

We match and connect players from industry, research, academia, and the public sector at local, national and European level, to develop and pilot innovative solutions throughout all our activities.

Knowledge exchange

Events such as Tomorrow.Mobility World Congress (TMWC) enable our partners to connect, share insights, and learn about the latest trends in the urban mobility sector. City members, and private sector and education partners can engage with relevant stakeholders at tailored formal and informal sessions and side events. Over 15,000 participants from 60 countries attended the inaugural 2021 TMWC event.

Future mobility studies

EIT Urban Mobility's future mobility studies combine the expertise of our community and cutting-edge transport research. Drawing on a range of different fields, the studies are data-based and provide recommendations on topical urban mobility issues. Findings are shared with the urban mobility community through dedicated events and turnkey consultancy services.

EIT Urban Mobility Marketplace

A comprehensive digital platform showcasing 150+ market-ready mobility solutions by innovative entities. At regional showroom events, the latest EIT Urban Mobility-supported innovations are presented in workshop format, for cities and innovators to meet and create new partnerships. EIT Urban Mobility also runs the EU's Smart City Marketplace for enhanced matchmaking, knowledge base building and dissemination, which will increase the opportunities of our marketplace users.

Access to non-EIT funding

We mobilise non-EIT funding from national and EU programmes and initiatives, and help partners navigate access to external funding and form consortia to bid on long-term, large-scale projects.

EIT Urban Mobility has been involved in five non-EIT funded projects to date (October 2022):

- **NetZeroCities** – the platform for climate neutral cities
- **URBANE** – green city logistics
- **PrepDSpace4Mobility** – preparatory action to set up a European mobility data space
- **UPPER** – public transport innovation
- **TRANS-SAFE** – promoting radical transformation towards road safety improvement in Africa



Educating the next generation of entrepreneurs

Attracting, fostering and retaining talent in the European urban mobility sector by upskilling and reskilling students, researchers, and professionals and promoting entrepreneurship and innovation in higher education institutes.

EIT Label Masters degrees

These pan-European two-year master programmes combine innovation and entrepreneurship training with technology and more technical knowledge, based on a learning-by-doing approach to education. The double-degree programmes run in partnership with six leading European universities and involve industry and cities. Students complete a two-week summer school in two different cities addressing critical city-based challenges (see example page 15).

Doctoral Training Network (DTN)

The DTN consists of a hands-on innovation and entrepreneurship programme to bridge the gap between PhD research and practical implementation. Through the network, PhD students can connect with their international peers in other leading European universities and with industry, city governments, and international mobility providers. Students can also do an international research guest placement of up to six months.

Start for Future incubators

A pan-European initiative for co-creation and start-up development supported by EIT Urban Mobility and EIT Manufacturing, initiated by Strascheg Centre for Entrepreneurship, utilising forces of entrepreneurial universities to connect young talents with start-ups through start-up incubators.

A community of more than 20 partners and 15 incubators spread across Europe, committed to driving entrepreneurship and innovation in a systemic and result-driven manner and providing the dynamic space for collaboration and exchange with like-minded innovators (see example page 17).

Competence Hub

The Competence Hub provides multi-disciplinary and cross-organisational learning experiences for urban mobility professionals, by using online, face-to-face, and blended formats. The Web TV channel, *Urban Mobility Explained*, offers short videos showcasing cutting-edge practices on key urban mobility themes. Viewers can deepen their knowledge by enrolling in the e-courses. The face-to-face and blended courses provide customised trainings for organisations and a set of courses for professionals in collaboration with renowned practitioners and academic partners.

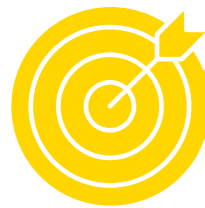
Education Capacity Building

Education activities to raise awareness of, and provide essential skills in, innovation and entrepreneurship to build education infrastructure and collaboration frameworks. One key capacity building project is the EIT's Higher Education Initiative (HEI) that helps higher education institutions build the capacity to teach innovation and entrepreneurship.

Urban Mobility Consultancy

Students and recent graduates join us as consultants, working within our company to advise external clients, our network of partners, and portfolio start-ups. Through this programme students and graduates gain firsthand exposure to industry and cities and train on-the-job.





New solutions to transform mobility in cities

We offer support to our partners to implement innovation projects that develop mobility products and services. Through these projects our partners accelerate the time to market by deploying innovations in real-life environments and commercialise solutions to scale impact in European cities.

Some of EIT Urban Mobility's most successful programmes bring together private mobility providers such as large enterprises and SMEs, including start-ups, and research institutes to implement agile pilots in European cities. To date, 51 pilots in 27 cities have been implemented since 2020.

A range of different innovations are offered to cities to test and tailor. Emerging ideas, prototypes, and fully commercialised market-ready solutions are tested in real life, engaging citizens to harness their insights and feedback. The data gathered helps improve functionality and form recommendations to adapt relevant mobility regulations and policies that promote behavioural change.

The results of these pilots have led to longer-term partnerships, growth for the private sector partners, and viable solutions for cities that can be integrated

into their mobility strategies and scaled. EIT Urban Mobility-supported solutions are also showcased on our EIT Urban Mobility Marketplace.

Living labs approach

EIT Urban Mobility facilitates testing and evaluation of new mobility solutions in living labs.

Living labs are sites where citizens are engaged in the design, testing, co-creation and adoption of new solutions. The process fosters a multidisciplinary approach that draws on expertise and experience from several sectors and ensures that private, public and research stakeholders collaborate and invest time and human resources in the project.



Market-ready solutions for cities

#ChallengeMyCity works with cities to identify their urban mobility issues. Three shortlisted challenges aligned with each city's future procurement plans are addressed by innovative solution providers and piloted for six months. Citizens participate in testing the solutions to make them more user-friendly, and their impact is assessed to improve procurement rollout. This year's cohort has run nine pilots in Madrid, Toulouse and Milano (see example page 27).

City pilots

Rapid Applications for Transport (RAPTOR) is a competition for SMEs, including start-ups, to create and test solutions addressing critical urban mobility challenges. Awarded SMEs receive a cash prize, customised mentoring sessions, and work closely with the city for live in-situ testing of the solution from four to six months. In the latest round, 15 pilots were implemented in eight cities including Riga, Tallinn, Prague, and Istanbul (see example page 26).



Boosting growth for long-term impact

Investing in gender-balanced start-ups and providing them with a full range of services to grow quickly. We run accelerator programmes, and offer access to funding, coaching and concrete opportunities.

Accelerators and scale-up programmes

Through accelerator and scale-up programmes, we foster entrepreneurs to create new solutions and scale them quickly.

Impact investment

We invest in start-ups that demonstrate potential to have significant positive impact socially and environmentally, as well as strong return on investment financially. We assist with getting access to funding, coaching and concrete opportunities through participation at events. Equity start-ups can also be matched with city members to facilitate partnerships.

Investing in gender-balanced, diverse start-ups

Encouraging more gender-balanced start-ups is a key priority. Apart from ensuring more women are included in our programmes and portfolio, we support women to be investors, and match aspiring female founders with mentors through the EIT programme Supernovas.



Measuring net impact

Our portfolio of companies (see page 33) creates significant positive value in three important ways. First, creating jobs and thereby building and maintaining mobility services and products that contribute economically and reduce unemployment. Second, these companies directly and indirectly - their suppliers and consumers of the products and services - pay taxes to the government. Third, contributing to the provision of public services, such as transport, accessible to all citizens.

Our companies are making good progress towards positive environmental impact, especially in the reduction of greenhouse gas emissions and waste production.



OUR IMPACT

Match and connect



15,000+

visitors to Tomorrow.Mobility World Congress, our flagship event in 2021

114

solutions showcased on our market place

Talent to business



15,000

professionals trained by Competence Hub

950,000+

views on EIT Urban Mobility learning channel (Web TV)

Innovations to market



70+

innovation projects supported

23

solutions launched to the market

Start-ups to scale



197

start-ups supported

77M+

of investment raised by our venture investment start-ups portfolio

Status - October 2022

Our selection of projects

A selection of projects we supported in 2022

Increasing impact and relevance through strong collaboration

This year, EIT Urban Mobility consolidated several high-level partnerships to further common goals on key policies, regulations, initiatives and strategies relating to a greener, safer mobility system in Europe:

- we are a member of the new Expert Group on Urban Mobility of the European Commission to promote dialogue on the EU Urban Mobility Framework (UMF) adopted in December 2021
- we signed a memorandum of understanding with the International Association for Public Transport (UITP) to collaborate on ways to improve public transport
- we joined more than 40 other companies and organisations who have committed to accelerate the logistics industry's green transition, by signing the Helsingborg Declaration
- we are part of the board of directors of the Gaia-X Association for Data and Cloud (AISBL), an EU initiative. Members create new data spaces between different mobility actors, ensuring that they are harmonised, secure, ethical and privacy-focused
- we signed a strategic partnership with Fira de Barcelona to co-organise the global event on urban mobility, Tomorrow.Mobility World Congress



New trends in urban mobility



Developing skills on urban mobility trends

Activity objective:

NewUM will provide to professionals the skills to help their institutions in leading the transition to a more inclusive, sustainable, diversified, connected, and intermodal mobility.

Activity output:

A course of five modules comprising lectures, tutorials by academics and industry professionals, content from MOOCs, and industry and tech webinars taught by experienced academics and professionals.

Activity challenge addressed:

Accelerating innovation and European competitiveness by increasing the capacity of public and private institutions to adapt and evolve.

The New Trends in Urban Mobility (NewUM) project is developing a course for professionals working in the mobility sector who want to promote innovation in their institutions, and start-ups keen to provide solutions to pressing urban mobility issues.

Participants learn about how the mobility sector has evolved, new technological innovations in urban mobility, and key trends such as mobility-as-a-service (MaaS), public-private partnerships in the mobility sector, and mobility infrastructure and logistics.

The programme consists of five modules that combine in-person sessions and an online component. Face-to-face sessions in Barcelona will include lectures with practical coursework delivered by academics and industry experts, while online work will include content from massive open online courses (MOOCs) and a mentored project. Streaming is available allowing registration from anywhere in the world.

Remaking the street



A summer school programme to design and implement street experiments

Activity objective:

Students learn the benefits of street experiments at a summer school and have an opportunity to create their own street experiment.

Activity output:

A summer school programme where students to gain both academic and practical training to implement street experiments in their home city.

Activity challenge addressed:

Discovering new ways to design streetscapes that benefit local businesses and the transportation network.

Remaking the Street is a hands-on summer school programme where students learn how street experiments can make small changes to public spaces that lead to big impacts on a citizen's quality of life.

Street experiments can improve the liveability of public spaces by reducing pollution and noise, improving safety, and giving communities a sense of ownership.

In this first edition students completed a two-week online course followed by a two-week in-person study tour visiting current street experiments in Amsterdam and Munich in August 2022 to learn

about the rapidly changing streetscapes. The final project challenged students to pitch an original street experiment to an expert jury.

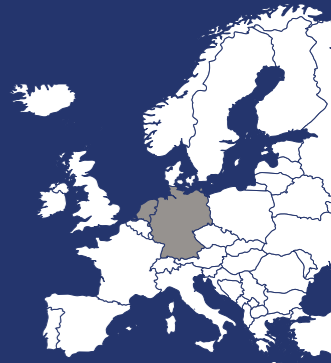
Modules consisted of online coursework taught by experts from EIT Urban Mobility projects. The curriculum also used content from selected massive open online courses (MOOCs) and the Street Visualisation Tools short course, and new content produced is being added to existing MOOCs.



Countries:
Spain, Sweden

Lead partner:
UPC

Partners involved:
CARNET, KTH Royal Institute, UPC School, Tecnalia



Countries:
Germany, Netherlands

Lead partner:
Humankind

Partners involved:
Technical University of Munich



Urban Mobility Digital Talent



Attracting new talent and reskilling urban mobility professionals

Activity objective:

To attract talent, students and professionals, with the appropriate technical background, to the mobility sector in Europe.

Activity output:

A blended-learning course to reskill students and professionals and develop their careers in the mobility sector.

Activity challenge addressed:

For Europe to continue being innovative in the urban mobility sector, more talent needs to be attracted to the industry, and existing professionals upskilled or reskilled.

Through a blended-learning course, professionals and students will learn more about urban mobility and how it will develop in the future.

Participants will have the opportunity to engage with and learn from professionals in the sector, which could contribute to job creation in this area.

All partners, including Mobile World Capital, will demonstrate the potential of the mobility sector. They will share knowledge from a range of perspectives including future mobility challenges, latest technological trends, new business models, the role of the women, and future jobs in this industry, among others.

Education Framework for Urban Resilience Innovation Activities - EUFORIA



Building regional innovation valleys to foster entrepreneurial ecosystems

Activity objective:

Build regional innovation valleys to foster co-creation initiatives to develop and validate solutions that create long-term impact, enhancing urban quality of life.

Activity output:

Activation and engagement of entrepreneurial ecosystems based on engagement events and workshops with the quadruple helix stakeholders including a framework for developing Regional Innovation Valleys.

Activity challenge addressed:

Foster close and continuous cooperation between different stakeholders to close the knowledge gap and accelerate market opportunities.

The Education Framework for Urban Resilience Innovation Activities (EUFORIA) programme is creating and developing Regional Innovation Valleys comprised of universities and international cooperations.

Four have already been established in Athens, Varna, Osijek, and Aveiro and three more are currently in the process, scheduled to be launched by end of 2022. Based on the established framework in each city, representatives of the quadruple helix are actively engaged to define

and solve specific challenges related to mobility, focusing on regional societal challenges following smart specialisation strategies for sustainable and inclusive growth (S4+). EUFORIA is a part of the larger international initiative Start for Future.

Countries:
Spain, Portugal

Lead partner:
Fundación Mobile World Capital Barcelona (FMWC)

Partners involved:
CARNET, CTAG, University of Lisbon

Countries:
Greece, Bulgaria, Portugal, Italy, Macedonia, Croatia, Germany

Lead partner:
Athens University of Economics and Business (AUEB)

Partners involved:
Strascheg Center for Entrepreneurship (SCE), The Edge, J.J. Strossmayer University, University of Aveiro, University of Macedonia, University of Trento, German Center of Robotics (DKR)



INNOVATIONS TO MARKET

Mobility and Energy UMC



The first mobile charging service for electric vehicle users

Activity objective:

Create the first mobile charging service where the electrical vehicle charger comes to electric vehicle users.

Activity output:

Development of an autonomous charging platform, transportation platform and user app tested by each pilot city with a minimum of 100 charging sessions per city.

Activity challenge addressed:

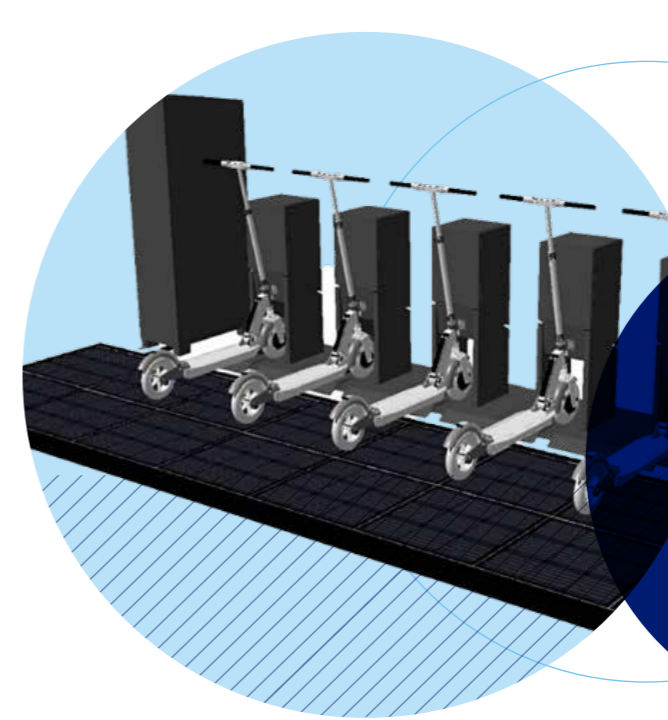
More charging places for electrical vehicles will increase clean energy use and reduce air pollution to help achieve the EU's climate change goals.

By 2030, 33 million electric vehicle owners in Europe will need efficient charging services.

UMC is creating an on-demand electric vehicle charging service via an autonomous battery-operated robot. The charging service is being piloted with delivery electric vehicles and human operators.

The project will help cities to better plan and streamline the deployment of mobile charging infrastructure, provide flexible demand-side services and optimise public space and infrastructure.

Mobility and Energy Cleanergy 4 Micromobility



Cableless and renewable energy docks for e-scooters

Activity objective:

The project will create e-scooter docks to address the current issues related to e-scooter expansion in urban areas.

Activity output:

Cableless, off-grid solar panel charging docks for e-scooters.

Activity challenge addressed:

Improving public space while reducing operating costs caused by charging and vandalism issues, and providing a reliable source of clean energy.

The rise of shared e-scooters in cities reduces car usage and helps achieve sustainable mobility goals.

However, it has also created some challenges related to shared public space, operating costs and clean energy sources. CLEANERGY has developed a dock for e-scooters that includes solar panel strips with an off-grid battery storage system to provide renewable energy for the docking stations, as well as cableless locks and helmet storage.



Countries:

France,
Italy,
Czech Republic,
Netherlands,
Germany,
Slovakia

Lead partner:

Nimble Energy

Partners involved:

Altran Technologies,
Altran Italia,
CVUT,
Helmond,
Brainport Smart District,
TASS,
TU Braunschweig NFF,
Braunschweig Zukunft,
University of Zilina,
City of Zilina



Countries:

Spain,
Turkey,
Greece

Lead partner:

Factual

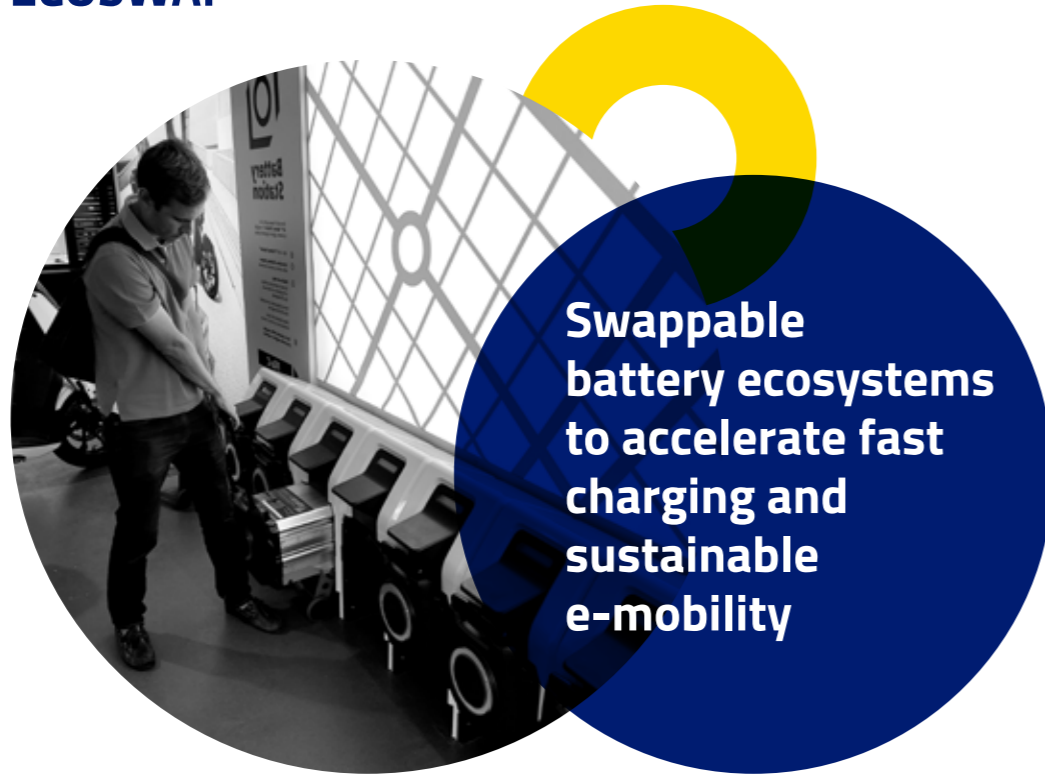
Partners involved:

City of Barcelona,
CARNET - CIT UPC,
Istanbul,
CERTH,
Solum,
Bile Communication SI,
Omnitec Systems,
Major Development Agency
Thessaloniki,
Rise Scooters,
Smartopt



INNOVATIONS TO MARKET

Mobility and Energy **ECOSWAP**



Swappable battery ecosystems to accelerate fast charging and sustainable e-mobility

Activity objective:

Foster the adoption of electric motorbikes through a battery swapping ecosystem.

Activity output:

A digital platform allowing electric motorbikes to use the same battery-swapping stations and an associated business model implemented and validated by users.

Activity challenge addressed:

Reduce greenhouse gas emissions, noise and air pollution and increase the quality of life in cities.

To help reduce greenhouse gas emissions, as well as air and noise pollution, the ECOSWAP project is promoting the uptake of e-motorbikes by offering a battery-swapping system to existing and new motorbike riders.

For customers, participating in the battery-share scheme reduces the overall vehicle price tag, thus incentivising sales.

ECOSWAP is testing the user-friendliness and accessibility of battery-swapping stations, specifically their durability, the optimal number of battery slots, locations, different business models and scaling capabilities in cities in Spain and Italy.

Mobility and Energy **SEVES**



Secondary use of EV batteries as an energy storage solution

Activity objective:

Development of an energy storage solution via secondary use of BEV batteries to speed up the transition to electrification of all modes of urban transport.

Activity output:

Energy storage using second-life EV batteries to support the high-power charging of electric vehicles.

Activity challenge addressed:

Long charging times of electrified transport, the cost of energy storage, high consumption of raw materials, and energy-intensive recycling of batteries.

The development of transport electrification means the unsustainable production of expensive batteries including the high consumption of raw materials and, at the end of the life of battery electric vehicles (BEV), their energy-intensive recycling.

Sustainable electrified urban transport requires the provision of peak charging performance for shorter charging times. Extending battery life is offered as a possible solution. Used BEV batteries still have a capacity of about 70% and are suitable for energy storage. SEVES is testing energy storage using second-life batteries to support high-power charging in Prague.



Countries:

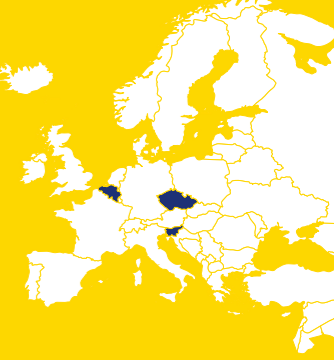
Spain,
Greece,
Italy,
Poland

Lead partner:

SEAT MO

Partners involved:

Barcelona Regional,
Barcelona Serveis Municipals,
CARNET - CIT UPC,
SEAT,
Metropolis Lab,
AMB,
CERTH,
City of Sant Boi de Llobregat,
Scutum Logistic,
Idneo Technologies,
Ficomirrors Italia,
Celsa Huta Ostrowiec,
Dafni,
Municipality of Astypalaia,
City of Verona



Countries:

Czech Republic,
Belgium,
Slovenia

Lead partner:

SKODA AUTO

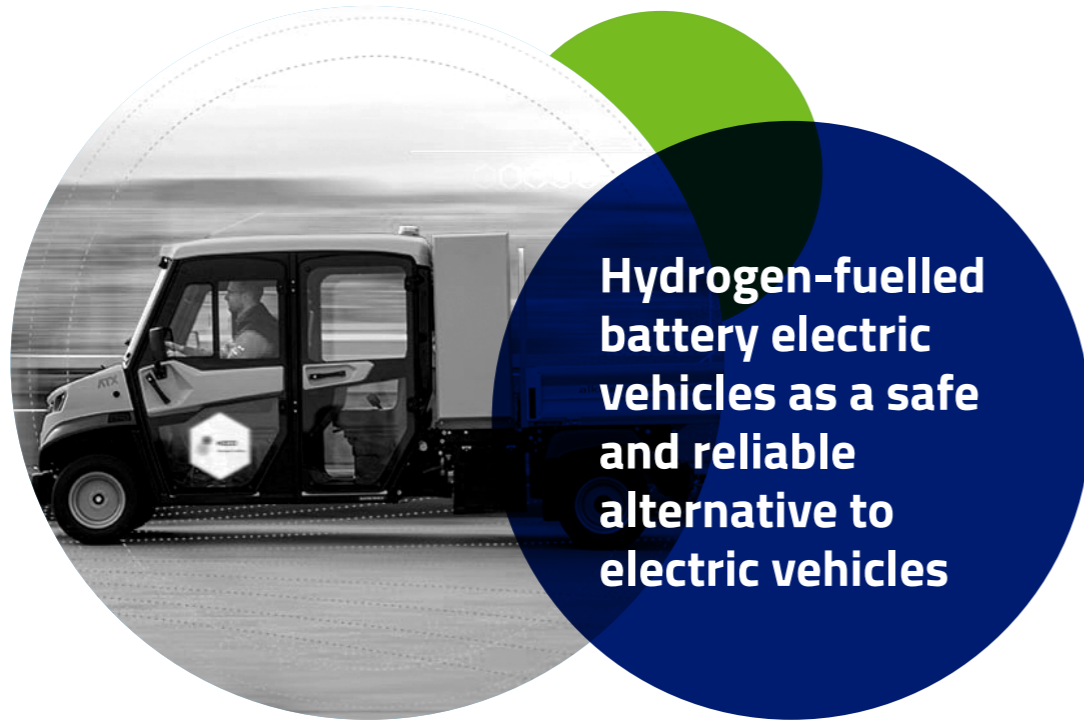
Partners involved:

Brno University of Technology,
Leef Technologies S.R.O.,
VUB-MOBI,
Pražská Energetika, A.S.,
Av Living Lab



INNOVATIONS TO MARKET

Mobility and Energy H2GO



Hydrogen-fuelled battery electric vehicles as a safe and reliable alternative to electric vehicles

Activity objective:

To demonstrate the advantages of hydrogen-fuelled battery electric vehicles to improve energy efficiency and extend their range.

Activity output:

A prototype for an urban light-duty electric vehicle that is both hydrogen and electric-powered.

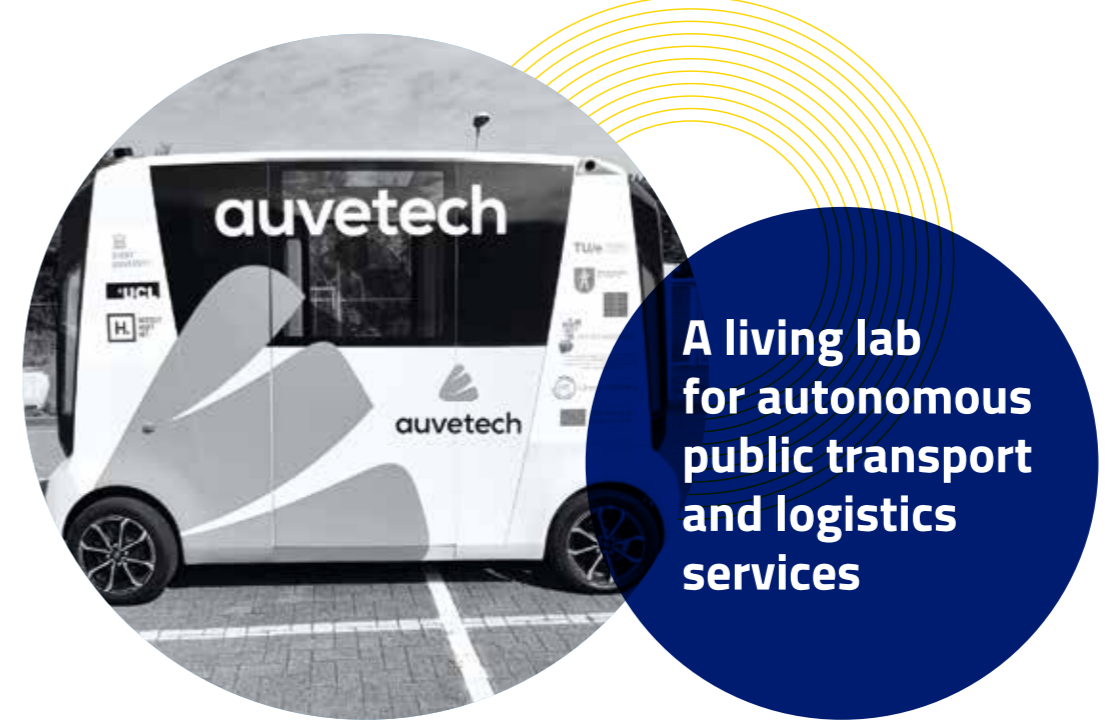
Activity challenge addressed:

Limited battery capacity determines the mileage of electric vehicles. Hydrogen-fuelled batteries provide a safe and reliable energy alternative to standard electric batteries.

While electric battery vehicles are becoming a popular alternative to motorised vehicles, they still face some challenges in terms of range, cost and limited charging infrastructure in some cities. Hydrogen fuel-cell batteries could help tackle these challenges.

As part of the H2GO project, the consortium has retrofitted a battery-run electric vehicle with fuel-cell hydrogen stack components, successfully converting them into hydrogen-battery electric vehicles. H2GO is piloting these hydrogen fuel-cell batteries in urban light-duty electric vehicles in Venice.

Future Mobility LivingLAPT



A living lab for autonomous public transport and logistics services

Activity objective:

LivingLAPT delivers sustainable autonomous shuttle and logistics services in European cities by replacing on-board safety operators with remote operators that oversee several services simultaneously.

Activity output:

Multi-city autonomous shuttle trials following a stepwise process to overcome the hurdles in citizen and operator acceptance and trust in autonomous shuttles.

Activity challenge addressed:

Behavioural changes to increase the acceptance of autonomous vehicles that will contribute to sustainable urban growth, transportation network decongestion, environmental goals and safer urban transport.

Cities need help to reduce emissions, ensure the safety and mobility of cyclists and pedestrians, and improve the quality of life for citizens.

Autonomous bus shuttles and logistic services can be a game changer for cities to address many of these challenges. However, current solutions lack a coordinated regulatory safety framework among European cities. Low public trust and acceptance of new technology along with significant investment, organising insurance and maintaining driver safety, are still notable barriers for cities.

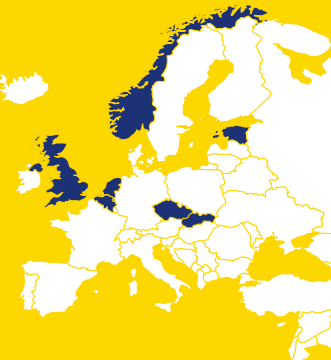
In 2022, LivingLAPT piloted autonomous shuttles for passengers and logistics services in the cities of Ricany, Hasselt, Kongsberg and Helmond, phasing out the need for drivers in shuttles and moving towards remote operators. Citizens who participated as passengers gave feedback which will be analysed to support future implementation decisions.



Countries:
Greece,
Italy

Lead partner:
Modena Energy
and Sustainable
Development Agency

Partners involved:
CERTH,
Bosch VHIT,
City of Venice,
Arco Fc,
Alke



Countries:
Netherlands,
Czech Republic,
United Kingdom,
Belgium,
Norway,
Estonia,
Slovakia

Lead partner:
UCL

Partners involved:
City of Helmond,
City of Prague,
Tue,
PowerHUB,
UGent,
Future Mobility Network,
Municipality of Ricany,
Staf Cars,
Applied Autonomy,
Kongsberg Kommune,
Auve Tech,
Artin Solutions S.R.O
City of Hasselt



INNOVATIONS TO MARKET

Sustainable City Logistics **FlexCurb**



Implementation of dynamic curbside management solutions to improve sustainable city logistics

Activity objective:

FlexCurb helps cities and logistics operators to manage curb space flexibly. It provides up-to-date digitised parking regulations and improves street safety and land use.

Activity output:

The project will result in two digital solutions:

- a planning platform for cities providing curb regulations and digitalisation
- a driver app for logistics operators providing current information on parking regulations and parking planning tool.

Activity challenge addressed:

Freight transport can cause congestion, emissions and noise pollution. FlexCurb addresses the challenge of efficient curbside management and is a step towards more sustainable city logistics.

Cities and logistics operators face challenges mitigating the issues freight transport causes in urban areas.

For cities, the lack of reliable data on the curb and logistics can result in inefficient planning and, for logistic operators, unreliable access to the curb.

FlexCurb digitally controls and balances the use of public space, enabling a transition towards flexible

use and management of curbs. In this way, the curb space can be shared and optimised to serve the needs of different users. Through pilots in Leuven, Funchal, Strasbourg and Toulouse, the project aims to demonstrate the administrative, environmental and commercial benefits of moving to a digitally managed and compliant curbside.

Active Mobility **BICIFICATION**



Supporting modal shift and bicycle use through gamification and rewards

Activity objective:

To support the modal shift towards green active mobility through a reward-based gamification scheme.

Activity output:

A patented hardware and software platform to reliably monitor bike trips and reward participants.

Activity challenge addressed:

More data will help cities understand why citizens aren't taking up cycling. Local authorities encourage cycling to reduce congestion and carbon emissions, and to contribute to preventative health.

Although bicycles are a common mode of transport for residents in some Northern European cities, other urban hubs in Europe have been less successful in attracting more people to cycle.

Through BICIFICATION, participants are encouraged to take up cycling in a reward-based gamification scheme.

The scheme is being piloted in Braga, Istanbul and Tallinn with approximately 1,500 registered users receiving monetary rewards from the local authorities to buy in their local shops.

BICIFICATION also provides cities with valuable data via a real-time open data platform including routes cycled, heat maps, case studies, reports about saved carbon dioxide emissions, kilometres travelled, and rewards granted.

Countries:

- Spain,
- Belgium,
- France,
- Italy,
- Portugal

Lead partner:

CTAG

Partners involved:

- CARNET-CIT UPC,
- UGent,
- Polis,
- Toulouse Metropole,
- Eurometropole of Strasbourg,
- Urban Radar,
- Fit Consulting,
- Stad Leuven,
- Municipality of Funchal

Countries:

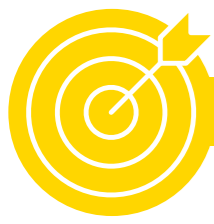
- Turkey,
- Sweden,
- Greece,
- Italy,
- Estonia,
- Portugal

Lead partner:

CERTH

Partners involved:

- City of Istanbul,
- KTH,
- Pin Bike,
- Nextome Srl,
- Tallinn City,
- Braga Municipality



City pilot - Resilient & sustainable urban plan
Bratislava - BitaGreen **RAPTOR** 

Blue-green mapping and monitoring SaaS platform for sustainable urban development

Challenge addressed:

To prepare a new zoning plan that creates liveable public spaces that encourages active mobility, the city of Bratislava needs to better understand the impacts of climate change. It will do this by collecting information about increased car use in specific locations, identify key areas for improvement, and plan appropriate public space interventions.

Solution implemented:

Bitagreen created a blue-green mapping and monitoring platform, combining innovative surface and sewer system modelling with environmental modelling to identify and visualise locations worth investing in green infrastructure. The platform integrates different benefit calculators on biodiversity, heat islands, noise reduction, air quality, cycling space, and provides a cost-benefit assessment at scale.



Market-ready solutions for cities
Milan, Toulouse, Madrid - SOLUM **#ChallengeMyCity**

Solar-powered micromobility docking stations to encourage intermodality

Challenge addressed:

E-scooter and e-bike riders often have trouble securely parking and charging their vehicles. Docking stations at mobility hubs foster use of public transport and micromobility modes by offering users a secure place to park and charge their vehicles in between public transport trips.

Solution implemented:

- Solum Helios autonomous docking station for e-scooters and e-bikes
 - solar-charging electric battery service
- The Solum Helios is an autonomous docking station that allows commuters to securely charge their e-scooters and e-bikes through its solar pavement. It can be installed at any location without disturbing the environment.



RAPTOR 

City pilot - R.O.A.D. winter system – ice and snow detection
promoting safer micromobility
City of Tallinn - Social Tech Projects

Micromobility in winter

Challenge addressed:

Tallinn has a goal to double e-scooter usage from 4-5% to 10% but snow and ice drastically affect micromobility usage in winter. There is no current solution or infrastructure to provide safe, clear streets throughout the year. Through data analysis, the city wishes to implement a flexible approach that provides customised snow and ice clearance.

Solution implemented:

Social Tech Projects has developed the R.O.A.D. winter system, a decision-support system to help cities improve and monitor conditions regarding micromobility infrastructure during the cold months. The network of hardware devices installed along the streets in critical urban areas detects black ice and snow in real-time and collects data.



Market-ready solutions for cities
Milan - Don Cicletto **#ChallengeMyCity**

Secure bicycle parking furthering the use of micromobility amongst commuters

Challenge addressed:

Bicycle users in urban centres face the threats of vandalism, theft, and inclement weather which can discourage them from cycling in the city. Secure parking for micromobility vehicles can alleviate concerns so cyclists feel safer and more comfortable.

Solution implemented:

- secure parking spaces for bicycles
- solar-powered charging service
- digital app for easy management



INNOVATIONS TO MARKET

Public realm **FURNISH-KIDS**



Engaging kids in the design, testing and implementation of DIY urban spaces

Activity objective:

FURNISH-KIDS will redesign public spaces focusing on children's needs which are often overlooked in urban planning.

Activity output:

Using a participatory design methodology, FURNISH-KIDS aims to include children in the urban planning process.

Activity challenge addressed:

To prove an urban living lab approach to co-design, co-fabricate, implement, and test, urban elements in a new pedestrian-friendly public space.

Cities are envisioning a change in the use of public space. Urban areas previously occupied or used by private cars are being transformed into public spaces, a welcome change for kids.

Yet children are generally excluded from the design and planning phases of these projects. Hence, the FURNISH-KIDS initiative aims to redesign urban spaces that will be tailored to children's needs. Using a collaborative process to gain insights from local communities in Milan and Barcelona,

FURNISH-KIDS will create prototypes in public spaces to be tested by children, as well as an urban living lab experience.

Image credit: Image by FURNISH/ELISAVA

Citizen engagement **Bicycle Heroes: Youth voices for active mobility**



Engaging with children for future sustainable mobility

Activity objective:

To involve children in the ideation, design and implementation of active mobility solutions in partnership with city representatives.

Activity output:

Active mobility projects proposed by children are implemented in partnership with city and local stakeholders. The process is documented for replication in any city.

Activity challenge addressed:

To improve the child-friendliness of cities through the co-creation of active mobility solutions.

Children have a unique perspective on how to solve challenges.

Their needs, when met, also make cities safe for other vulnerable groups such as the elderly or people with disabilities. Furthermore, they are effective spokespeople for change because of the influence they have within their families.

Despite these and many other advantages of engaging with children, they are often overlooked in mobility planning and design. The Bicycle Heroes project addresses this gap by working with children in Dublin, Ireland; Lisbon, Portugal; and Rome, Italy

to identify their barriers to cycling using interactive formats such as walk-alongs. After developing children-first solutions to these barriers through several co-creation workshops, the ideas are exhibited as part of a public design competition and the children then implement a selected idea in partnership with local stakeholders.

This participatory model is being developed as a toolkit and will be made available to replicate in other cities.

Countries:
Spain,
Italy

Lead partner:
CARNET

Partners involved:
UPC, Elisava, IAAC,
Ajuntament de Barcelona,
Comune di Milano

Countries:
Portugal,
Italy,
Ireland

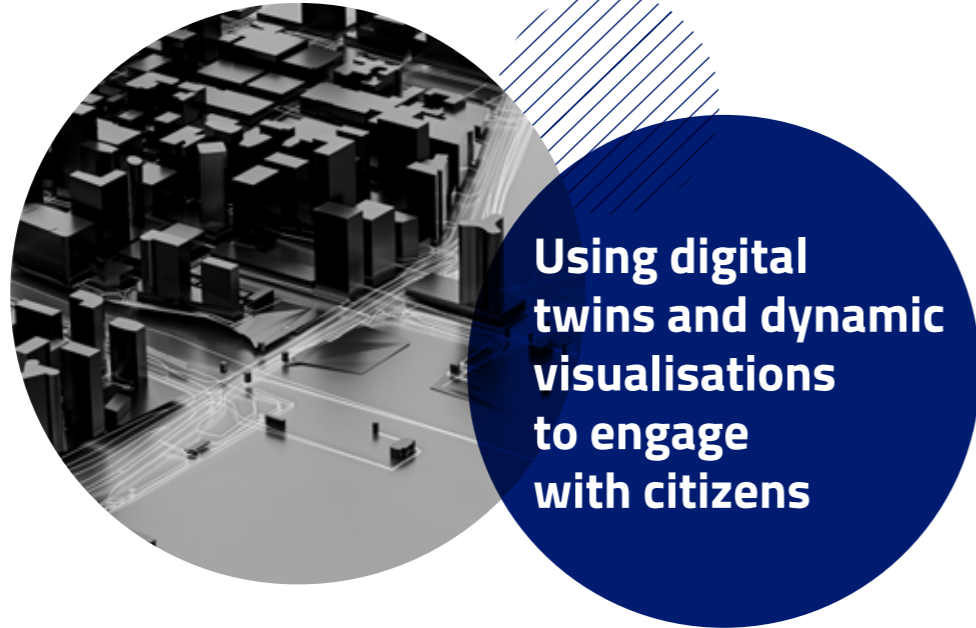
Lead partner:
BYCS

Partners involved:
Mobilita Roma,
Dublin City Council,
Trinity College Dublin,
APSI,
Bicultura



INNOVATIONS TO MARKET

Citizen engagement **Dynamic visualisations to enhance citizen engagement (DVECE)**



Using digital twins and dynamic visualisations to engage with citizens

Activity objective:

To work with different citizen groups to collect, visualise and validate local urban mobility needs within digital twin environments.

Activity output:

Best practices and useful insights on the potential of using digital twins to engage citizens with urban mobility topics.

Activity challenge addressed:

How to facilitate robust participatory methods for cities to engage with local residents on their sustainable mobility plans and strategies.

Many cities have been developing semantic 3D models as a digital representation of their city – models which are meant to be more dynamic and visual than traditional static illustrations and 2D maps.

The DVECE project explores the use of such 3D models, also known as digital twins, as a tool for effective and inclusive citizen engagement.

The project partners have organised ideation and co-creation workshops in three urban living labs, each focusing on a different population segment: people with disabilities, pedestrian advocacy groups

and people living in neighbourhoods with low economic opportunity. The urban mobility needs identified in these sessions are then translated into dynamic digital twins for review and validation by the workshop participants. Finally, the citizen insights are presented in this digital format to stimulate conversation with local policymakers on how to design effective hybrid participation processes that bring together people and technology in collaborative and meaningful ways.

Image credit: Image from xD Twin solution: <https://www.xd-twin.io/>

Citizen engagement **User engagement for urban mobility solutions**



Placing the citizen experience at the centre of urban mobility

Activity objective:

To incorporate citizen and end-user insights into city pilots with the objective of shaping, evaluating and improving urban mobility projects.

Activity output:

A methodology and framework to engage citizens and end users with urban mobility solutions that can be adapted to different contexts.

Activity challenge addressed:

Evaluating the citizen experience within demonstration projects helps create mobility solutions that are aligned with people's real needs and establish trust and support from citizens.

One of the core EIT Urban Mobility activities is to bring together cities, industry and research to advance sustainable urban mobility.

This often includes supporting pilots to test and demonstrate innovative urban mobility solutions within a real city environment, such as through the RAPTOR pilots.

This project incorporates the citizen experience into three such pilot projects through generating human insight, identifying citizens' key needs and gathering actionable feedback on the pilot. These

perspectives help the company localise and further develop their solution; enable the city to evaluate the pilot and understand different perspectives to solve local challenges; and, most importantly, ensure that a great citizen experience is placed at the centre of urban mobility.

A range of human-centred design methods such as observations, interviews, co-creation workshops, travel diaries and videos are used and documented for dissemination and future replication by other mobility companies and cities.

Countries:
Finland,
Greece,
The Netherlands

Lead partner:
CERTH

Partners involved:
Forum Virium,
Breda University of
Applied Sciences

Countries:
Latvia,
Czech Republic,
Romania

Lead partner:
Humankind



INNOVATIONS TO MARKET

Citizen engagement

STATION SOFIA – New Greenways for Old Railways



**From railways
to greenways:
reclaiming urban
space in Sofia**

Countries:
Bulgaria

Lead partner:
Urban Ideas & Design
Association [GRADOSCOPE]

Activity objective:

The project will guide the sustainable transformation of a wild landscape of 80ha and a cultural heritage building into an inclusive, innovative and multifunctional urban space.

Activity output:

Three workshops to define a common vision for the future use of this unused post-industrial heritage site will be held between neighbours, institutional stakeholders, and other relevant experts.

Activity challenge addressed:

Repurposing urban spaces and cultivating a sense of community and belonging.

This project proposes to convert 80 hectares of unused land in peri-urban Sofia.

Plans include construction of a bridge and three smaller projects, including renovating a vacant heritage building. The reclaimed area was once the site where Station Sofia (Stochna Gara) lay, a former transport hub in an industrialised and residential development site.

It will bring together the Ministry of Transport, local government stakeholders, railway companies, academics, students, activists and international and local experts and involve local citizens to design and co-create a community-centred space. Reusing the post-industrial unused urban space offers many opportunities to integrate existing activities and the diverse communities around them.

Our equity start-ups portfolio

An introduction to the start-ups we invested in (status October 2022)



Technology field: Transport Infrastructure

ISRAEL

AD Knight

Moving towards Vision Zero Death through wireless device sensing

- Mission:** Improving pedestrian safety and traffic control by leveraging mobile phones and connected devices for passive data collection while preserving people's privacy.
- Problem solved:** Significant growth in smartphone use by pedestrians and drivers is one of the major causes of the recent increase in pedestrian fatalities.



BELGIUM

Autonomous Knight

Enabling autonomous transportation on land, on water and in the sky

- Mission:** Autonomous Knight develops multi-spectral camera systems to fast-track automation levels in time-critical processes in autonomous mobility, aerospace, industrial automation, security and defence.
- Problem solved:** Autonomous control needs to out-perform the safety, reliability and accuracy that humans achieve. Autonomous Knight provides any mode of transportation with superhuman vision.



FINLAND

Bout Oy Ab

The platform for boat rides and cruises

- Mission:** Bout wants to make sea and maritime locations accessible for everyone, not just for those who own a boat.
- Problem solved:** Bout is a digital platform for water transportation, increasing the accessibility of maritime locations for consumers.



BELGIUM

Fluctuo

Europe's leading aggregator of shared mobility data

- Mission:** Fluctuo helps public stakeholders and private companies to make data-driven decisions on mobility services and infrastructure.
- Problem solved:** To build the city of tomorrow, we need to observe and analyse how people move. However, transport is evolving very quickly. This is where Fluctuo steps in.



SPAIN

HOPU

Advanced air quality monitoring solution & calibration

- Mission:** HOPU supports urban development and digital transformation through data-powered tools with dashboards and Internet of Things devices to monitor impact, sustainability and the environment.
- Problem solved:** HOPU supports urban planners in their decision-making process to accelerate impact and investment for climate change mitigation.



THE NETHERLANDS

ModelMe3D

Co-design the cities of the future

- Mission:** Our co-design tool makes planning and management of public spaces more of a shared task. Citizens, organisations and businesses can share responsibility with the government.
- Problem solved:** The world is urbanising fast. Real estate development is becoming more complex while valuable urban data is being underutilised.



UNITED KINGDOM

MOSA

The smart and secure micromobility parking every urban rider deserves

- Mission:** Making secure parking free and easy to find for all micromobility riders regardless of age, gender or income level.
- Problem solved:** Outdated and insecure parking infrastructure discourages urban micromobility usage.



CZECH REPUBLIC

Mosaic

Robust 360° cameras & solution

- Mission:** Mosaic builds the most robust and highest resolution 360° mobile mapping cameras for large scale mapping and surveying to create a better view of the world.
- Problem solved:** No other company has been able to combine noteworthy 360° cameras, mobile mapping services and software platforms for data analysis of street data.



GERMANY

VePa – Vertical Parking

Rethink parking, rethink mobility

- Mission:** With vertical greening and electric charging stations, VePa can function as urban mobility hubs and facilitate the switch to emissions-free, shared and micro mobility.
- Problem solved:** VePa Vertical Parking has developed vertical parking towers as a sustainable and innovative solution to the parking space problem of real estate projects.





Technology field: Integrated Mobility

SWEDEN

Allihop AB



An easy way to book international sustainable travel

- Mission:** Allihop Travel helps companies reduce their carbon emissions by 30% by redirecting their employees towards train and green urban mobility.
- Problem solved:** Companies want to travel greener but it is complicated. Allihop is the first business-travel platform with direct booking for trains, buses, e-cars, e-scooters and bikes.

DENMARK

Cogo



Shared e-scooters, bikes and cars from 250 mobility operators in one app

- Mission:** Cogo gathers shared rides for frictionless mobility and a better tomorrow.
- Problem solved:** Providing users with a seamless platform that gathers all shared mobility operators in one app, making it easier to choose shared mobility over individual car use.

SPAIN

Eccocar



Unleashing the potential of shared fleets

- Mission:** Taking care of the planet while reinventing mobility. We enhance shared mobility and mobility-on-demand services with seamless communication and connection between platforms and users.
- Problem solved:** Companies cannot offer a good car rental experience with 13 million rental vehicles – more than 99% of the total – not yet accessible with a smartphone.

UNITED KINGDOM

Gotikket



All-in-one solution for your travelling needs

- Mission:** Gotikket's mission is to empower and inform users, making multi-modal transportation services, including trains, buses and ferries, easy to access and easy to book.
- Problem solved:** Access to transport information and reservations a highly fragmented and difficult to obtain. Gotikket provides a single point of access for up-to-date information and service provision.

SWEDEN

Jonna AB



A bike that always works

- Mission:** Jonna's purpose is to get more people cycling and help normalise biking as well as re-using parts and refurbishing bikes to extend their life cycle.
- Problem solved:** Many commuters don't cycle due to not owning a bike, maintenance problems or fear of theft. Jonna makes access to personal, quality, working bikes possible.

SWEDEN

MIOO Cycling AB



Making cycling easy

- Mission:** MIOO's mission is to make it as simple as possible for as many people as possible to use a bicycle regularly.
- Problem solved:** With more than two billion bikes in use around the world and bicycle sales continually increasing, the need for service, support and insurance is higher than ever.

SPAIN

Nemi



Flexibilising public transport to make it more efficient, sustainable and inclusive

- Mission:** Nemi makes public transport in low-density areas feasible by providing a software solution that enables flexible bus services.
- Problem solved:** Regular bus services are sub-optimum for users (eg. slow, infrequent buses, stops too far away) and operators (eg. low demand, long distances and limited budget).

SWEDEN

Nudgd



Sustainable choices made easy

- Mission:** Nudgd is a SaaS Platform using behavioural science to establish climate friendly habits by switching from cars to active mobility and public transport.
- Problem solved:** Being experts in behavioural design and nudging, Nudgd has developed a scalable digital platform for behavioural change, making sustainable mobility easy.

GERMANY

Veomo



Making today's mobility your best asset

- Mission:** VEOMO aggregates multimodal mobility information on its cloud platform to provide companies and cities with a view of multimodal departure boards, location analyses, utilisation reporting and real-time dashboards.
- Problem solved:** Real-time mobility information to reduce daily commuter stress and to promote the commercialisation and attractiveness of a location as well as sustainable mobility behaviour.

FRANCE

Vianova



The trusted platform for mobility intelligence to achieve carbon zero and Vision Zero

- Mission:** As cities grow denser and mobility more complex, making better decisions faster is what sets apart the great cities to live in or mobility services people want to use.
- Problem solved:** The Vianova platform helps cities and mobility providers better integrate and manage shared, connected, electric and autonomous transport solutions in the urban space.



Technology field: Sustainable City Logistics

PORTUGAL

Meight

The data-powered road freight platform



Mission: Meight learns from data to help drivers spend less and use less, so every journey has a positive impact on the world.

Problem solved: Truck drivers have the highest impact in the sector and the highest potential to increase its competitiveness. For every litre of diesel saved 2.68kg of CO² are not emitted.

TÜRKIYE

Optiyol

Automates and optimises transportation route planning



Mission: Optiyol enables on-time and low-cost logistics for shippers and carriers so that they can survive in ever more demanding and faster supply chains.

Problem solved: Realising that most organisations still rely on manual route planning, Optiyol captures managers', dispatchers', drivers' and customers' needs for the most realistic representation of operations.

FRANCE

Urban Radar

Spatial analytics for smart cities



Mission: Urban Radar wants to reach climate goals with data-driven strategies and by making urban planning easier.

Problem solved: Through data visualisation and analytics, Urban Radar helps to inform cities' decisions about all aspects of urban life from mobility and logistics to sustainability.

SPAIN

VONZU Tech

100% adaptable software for logistics and delivery



Mission: VONZU wants to help businesses optimise their logistics operations, thus improving their clients' experience and multiplying their revenues.

Problem solved: We integrate retailers and logistics operators in a single cloud-based ecosystem to make the distribution of goods more integrated, more sustainable and more profitable.

GERMANY

AVO Mobility GmbH

E-cargo bikes when you want - where you want



Mission: Avocargo offers flexible and city-friendly access to electric cargo bikes. As every second ride substitutes a car trip, Avocargo is significantly contributing to more sustainable cities.

Problem solved: Flexible e-cargo bike ownership addresses the issues of expense, infrequent use and scarce urban-housing zone parking spaces.

DENMARK

Chainge

Sustainable last-mile logistics, 100% by electric cargo bike



Mission: At Chainge we want to advance the logistics services available by using electrically assisted cargo bikes to deliver goods to end recipients.

Problem solved: Reducing traffic congestion, noise nuisance and air pollution by lowering the number of delivery vans on the roads.

THE NETHERLANDS

geoFluxus

Redefining the value of your waste



Mission: geoFluxus wants to bridge the gap between administrative burdens and societal and business benefits by giving the data back to its producers.

Problem solved: geoFluxus aims to make the Circular Economy actionable by mapping, analysing and predicting where materials can be saved from becoming waste.



Technology field: Mobility and Energy

SPAIN

Bia Power

Optimised EV charging for a sustainable future



Mission: BIA Power has developed a platform featuring high-performing forecasting algorithms and a powerful optimisation engine to intelligently predict and optimise flexibility in electric vehicle charging.

Problem solved: Most electric vehicle operators do not operate their charging facilities efficiently. Neither are they well prepared to manage the increased demand for electric vehicle charging.

SWEDEN

Elonroad AB

High-tech electric road system for all types of electric vehicle charging



Mission: Elonroad envisions the electrification of the entire transport sector and making fossil fuel a thing of the past, without increasing the demand for batteries.

Problem solved: High local emissions and poor air quality can be improved by providing flexible electric roads enabling all types of transport to share the same infrastructure.

PORTUGAL

Evio

Out-of-the-box and value-added services platform for different electric mobility players



Mission: Evio creates a complementary network of charging stations by using third-party resources installed in private places and by making them available to the public.

Problem solved: Electric vehicle charging services are basic and limited since they are mainly located in private places. By sharing, owners can also monetise their charging service.

SPAIN

Solum

Last-generation solar-backed charging stations for light electric vehicles



Mission: Revolutionary solar charging station, designed to minimise visual impact and respect the urban environment by integrating panels at ground level.

Problem solved: Micromobility solutions continue to face a lack of secure parking, logistics complexity and deficient urban integration and charging facilities.

FRANCE

Transition-One

Converting internal-combustion vehicles into electric ones



Mission: Retrofitting is one of the ways of decarbonising mobility in the face of the climate emergency. Transition-One converts vehicles to make our mobility clean.

Problem solved: Electrical retrofitting consists of modifying or restoring technological functions in aging systems. Transition-One has designed a retrofitting unit suitable for existing vehicles.

SPAIN

YupCharge

Sustainable charging docks for scooters and bikes



Mission: YupCharge wants to be a key player developing a full ecosystem of infrastructure to improve charging services for personal mobility vehicles.

Problem solved: YupCharge offers street furniture for car parks and safe and sustainable parking lots for electric scooters and bikes, including a battery charging service.

SWEDEN

Zipforce AB

Turn your normal bike in to an electric bike



Mission: Zipforce was founded to create an economically and environmentally sustainable alternative to the electric bicycle market.

Problem solved: Zipforce's small, portable electric motor can easily be moved between bicycles removing the need to invest in new electric bikes. And so reducing the drain on nature's resources.



Technology field: Future Mobility

FRANCE

Cezigue



Valorising data to define the mobility and connected city of tomorrow



Mission: Our mission is to allow businesses to offer automotive users valuable connected services by reducing the complexity of accessing inside vehicles.



Problem solved: Our platform enables the easy building of automotive connected services without worrying about compatibility, while controlling costs.

GREECE

Deeptraffic



The future of dynamic traffic management



Mission: Deeptraffic aims to act as a catalyst by providing an integrated solution to achieve smart and dynamic traffic management.



Problem solved: While vehicles come with ever-increasing connectivity and automation capabilities, traffic management systems do not fully exploit automation and intelligence capabilities, and real-time data remains underutilised.

IRELAND

Luna Systems



Urban mobility safety platform



Mission: Luna creates an opportunity to turn shared scooter fleets into mobile sensor networks' for smart cities.



Problem solved: Luna's solution provides real time and irrefutable confirmation to operators that light electric vehicles are parked correctly or riding in the right lane, avoiding pedestrians.

GERMANY

Skyroads



Let's build roads in the sky



Mission: Safe, scalable and efficient, our technology will open up the skies to people, businesses and service providers across the world.



Problem solved: The system is a simple way for cities to manage air mobility. It revolutionises the management and navigation of both passenger and cargo drone traffic.

GREECE

Vertliner



Autonomous indoor assessments in building assets



Mission: Vertliner provides an integrated robotic platform driven by autonomous aerial robots and AI-enabled software for the digitalisation of indoor environments transforming the physical world into digital assets.



Problem solved: Autonomous assessment offers precision and safety and, by integrating data, delivers efficiency and operational value.

ITALY

Volvero



Drive the power of sharing



Mission: Volvero is an app for sharing vehicles, which connects owners and drivers in a simple, reliable and innovative way, saving time and money.



Problem solved: For 96% of the time vehicles remain parked while millions of people struggle to find a workable and affordable solution for their daily mobility needs.

LATVIA

VOOV00



Retrofitting intelligent speed assistance for commercial leets



Mission: VOOV00 was established to deal with road safety's two main problems: speeding and aggressive driving. With their custom-built technology, VOOV00 are eliminating both.



Problem solved: The product Intelligent Speed Assistance regulates the vehicle's speed in real-time according to the road speed limits based on digital map and GPS technologies.



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More Information
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