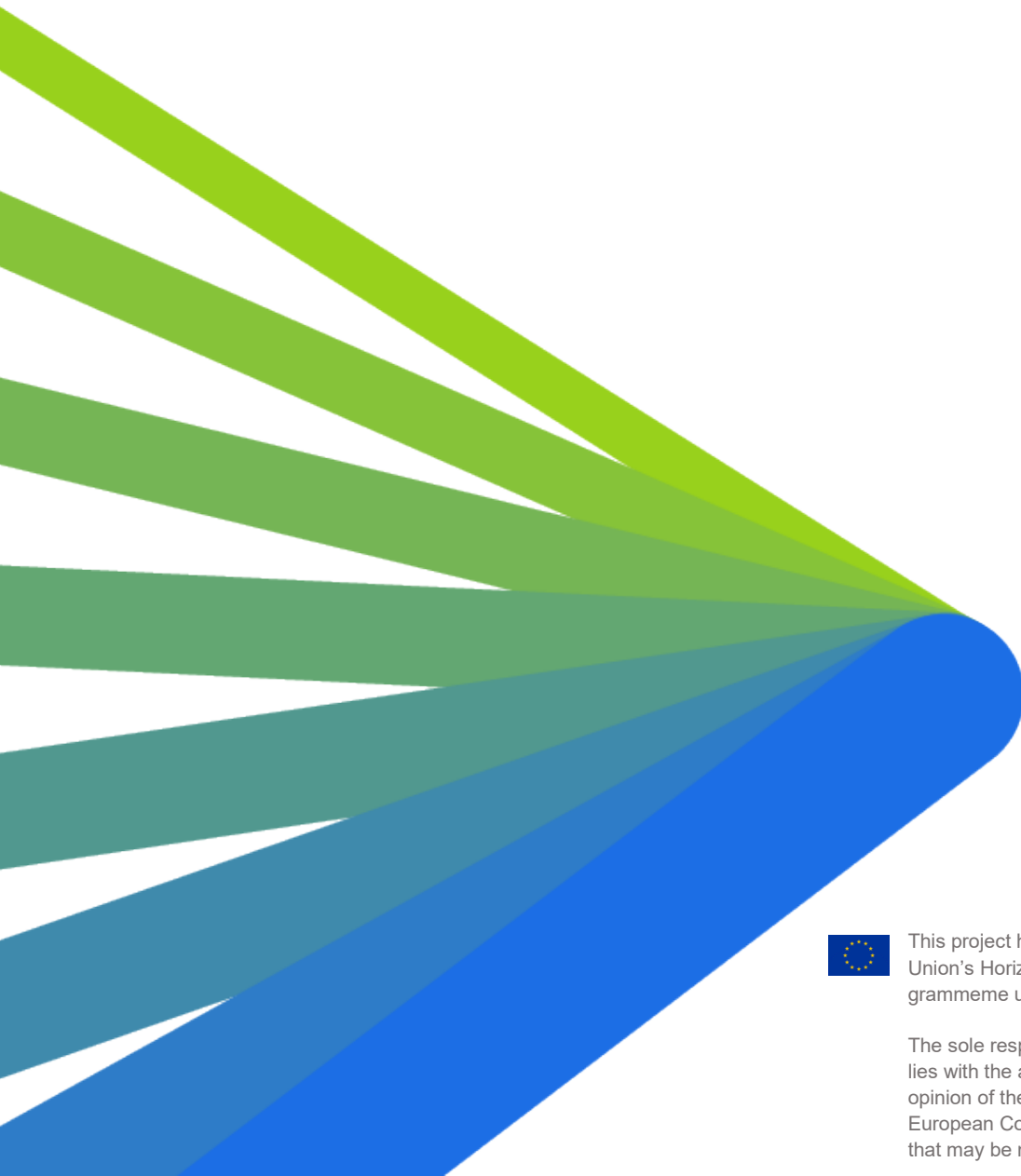




Deliverable 3.2

Map of collaboration paths between EU and subnational Programmes



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Summary sheet

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List of abbreviations and acronyms

Acronym	Meaning
CoP	Community of Practice
CSA	Coordination and Support Action
D	Deliverable
DUT	Driving Urban Transitions Partnership
ERRIN	European Regions Research and Innovation Network
EUI	EU Urban Initiative
ERDF	European Regional Development Fund
ERTRAC	European Road Transport Research Advisory Council
HE	Horizon Europe
LIFE	L'Instrument Financier pour l'Environnement
M	Month
MFF	Multiannual Financial Framework
MS	Milestone
NEB	New European Bauhaus
NRW	North Rhine-Westphalia
R&I	Research and Innovation
RTR	Road Transport Research
SDGs	Sustainable Development Goals
SM	Social Media
SMEs	Small and Medium Enterprises
SRIA	Strategic Research and Innovation Agenda
TRA	Transport Research Arena
WP	Work Package

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1 Introduction to the report

This report, officially titled ‘Deliverable D3.2 – Interactive map of collaboration paths between EU and sub-national Programmes’ aims to provide an overview of a range of ‘use cases’ to demonstrate collaboration paths between RTR (Road Transport Research) on the EU level and the regional and local level. These use cases and the report, once formally approved, will build upon the interactive map on the [ERTRAC National Activities](https://www.ertrac.org/national-activities/)¹ web page.

1.1 Related STREnGth_M work package and task

This report is part of the work carried out under WP3, building on Task 3.1 (T3.1) and Deliverable 3.1 (D3.1), which provided a ‘*Visualization of the sustainable RTR landscape at EU Member States level*’. The present report generally falls with T3.2 ‘*Explore road transport related funding instruments and Programmes on national and regional level*’. This task and the related deliverable (this report) aims to provide further input to T3.3 and D3.3, which will create a ‘*Toolbox for multi-level alignment of sustainable RTR roadmaps*’.

1.2 Objectives and scope of this report

The analysis will be enriched by best practices for the collaboration with cities and regions in established international markets.

This report aims to investigate how the range of funding instruments and programmes related to sustainable road transport aimed at the regional and local levels can be aligned with the ERTRAC roadmap themes and how the R&I priorities of partnerships (ERTRAC, CCAM, 2ZERO) are linked with programmes and the regional and local level. To have a full view of the regional and local level, the initiatives to be examined include the European Partnership Driving Urban Transitions (DUT), the European Mission on 100 smart and climate-neutral cities by 2030, the EU Urban Initiative and Intelligent Cities.

The report aims to support the recognition of the ERTRAC roadmap's applicability to funding instruments and Programmes for cities and ultimately provide recommendations for improving the paths of cooperation between the EU's regional funding Programmes and partnerships and the Horizon Europe work Programme, with better alignment and merging of research funding sources at regional and local levels. It intends to identify potential gaps, overlaps, opportunities and assets in these links and cooperations by asking what is needed and what already works.

Specifically, according to the GA, Task 3.2 presents the following questions:

¹ <https://www.ertrac.org/national-activities/>

‘The key question here is twofold:

- How can the R&I priorities of ERTRAC, CCAM and 2Zero partnerships link into the strategies of the Programmes relevant for cities and regions; and the other way around and
- What information on technology maturity and development paths would those instruments and Programme require for a reasonable planning from ERTRAC and the partnerships.

Secondly, this task will co-create models for:

- The cooperation with key actors in regional funding Programmes on one side and
- EU partnerships and Horizon Europe WPs on the other, e.g. along common policy objectives, critical value chains etc. and considering the differences in the distribution of powers, budget planning and degree of innovation.

The analysis will be enriched by best practices for the collaboration with cities and regions in established international markets.’

During the initial work of this report, another question arose: How best can these questions be answered? The initial assumption was to start assessing EU and sub-national Programmes, such as Horizon Europe, LIFE, Cohesion Fund, and Resilience and Recovery Fund, looking at their description, applicability, management and coordination and possibly good examples from projects. Relevant EU funding programmes and schemes are presented in the report.

The work then steered towards the question of who is building innovation forward on the local level. Therefore, this report looks at local and/or regional innovators to understand how they are pushing innovation forward in different aspects of road transport, from research to implementation, and to know what is needed and what already works. The report presents diverse use cases of local ecosystems, smart specialisation, local clusters and climate city contracts and also presents connections to higher level EU projects, Programmes, and schemes.

This report will be complemented by fact sheets that will be added to the interactive map of National Activities on the ERTRAC webpage. This will provide a comprehensive but easy-to-use overview of collaboration paths between EU and subnational Programmes, alongside the results of other STREnGth_M deliverables already available there.

1.3 Methodology

This report's methodology involves a qualitative approach to understanding the cooperation pathway between local, regional, and EU levels in transport R&I, rather than focusing on a quantitative approach and examining many use cases. The work tried to focus on relevant use cases.

Desktop research was conducted to provide an overview of some of the related funding Programmes. These provide information to help link the actions taking place in cities and regions to EU level Programmes and funding.

A combination of consortium exchange, experience and contact with cities and regions, and desktop research enabled the identification of an initial list of local innovators (use cases) in transport R&I that could be connected to EU Programmes.

To select relevant use cases - diversity in composition, areas of expertise, and involvement in EU projects was analysed. We have looked for different objectives, diverse types of governance, flagship automotive ecosystems, and geographic spread.

A survey questionnaire was created to provide a structure for gathering information on the use cases and conducting interviews (See Annex 1).

The local and regional use cases were researched within this framework to provide background info, context, how they function, and was supplemented with responses to direct outreach and interviews as possible.

The interviews included discussing the structure and benefits of use cases on the local level and how these contribute to higher level goals and can help improve the connectivity of future initiatives.

The work aims to complement the work conducted in T3.1 (D3.1) and serves to build upon the knowledge that will come in T3.3 (D3.3).

2 Innovation resources on the local and regional level

To build a comprehensive picture of the different paths of collaboration between EU RTR funding instruments and Programmes at the local and regional level, it is important to take a close look at local/regional innovation resources. This includes looking at *What are these innovations?*, *Where are they taking place?*, *Who is involved in them?*, and so on. This section will provide examples of transport innovation mechanisms and funding from the perspective of the local/regional level.

2.1 Mechanisms to govern and structure innovation on the local/regional level

With the question of who is building innovation forward on the local level, POLIS combined its experience with the different expertise within the STREnGth_M partnership to gather initial suggestions of local/regional innovators. From these discussions and suggestions, it was possible to identify the different types of actors involved in local/regional transport innovation.

These innovations vary, from piloting new sustainable solutions, researching new materials, adapting vehicles, linking mobility and transport to higher climate strategies, reshaping the role of transport in the future of climate neutrality, strengthening capacity and competitiveness, and the effects and benefits of these on local and regional mobility.

The collective efforts create local/regional clusters and ecosystems, smart specialisation, and multi-stakeholder agreements such as Climate City Contracts.

2.1.1 Local/regional clusters and ecosystems

In the EU context, local/regional clusters and ecosystems generally include groups of interconnected businesses, academic institutions, public authorities, and supporting organisations that are geographically concentrated. Clusters and ecosystems aim to collaborate to promote innovation, economic development, and competitiveness within their specific region. Clusters and ecosystems are not exclusive to the transport sector, but they typically are centred around a particular industry or a set of related industries, and they often benefit from strategic support provided by EU policies and funding.

Local clusters and ecosystems aim to emphasise innovation by promoting knowledge exchange, joint research, technology transfer, and the development of innovative products and services by benefiting from shared infrastructure, skilled professionals, and policies, with strong collaboration between industries, including SMEs (Small and medium-sized enterprises), businesses, research institutions, universities, public authorities, and mediating entities like chambers of commerce.

Clusters and ecosystems can play a pivotal role in economic and social development, particularly in transition economies. Additionally, clusters play a vital role in enhancing resilience and speeding up the shift towards a green and digital economy by focusing on networking, training to improve upskilling and reskilling, and increasing outreach.

2.1.2 Smart specialisation

Complementary to the local clusters and ecosystems are smart specialisations. The Smart Specialisation Strategy (S3) is an EU framework designed to promote innovation-driven growth by enabling regions to identify and develop their unique competitive advantages. The approach focuses on leveraging local strengths and resources to foster economic transformation, innovation, and regional development.

The three pillars of S3 are localisation, prioritisation, and participation. A smart specialisation is a place-based approach that leverages the assets and resources available within a specific territory. It involves identifying and concentrating resources on a limited set of key areas, known as S3 investment priorities. S3s require the active involvement of stakeholders from the quadruple helix of: the public sector, research institutions, the private sector, and civil society. Local actors play a crucial role in defining, reviewing, monitoring, and implementing these S3 investment priorities.

S3 Smart Specialisation CoP Safe and Sustainable Mobility is included as one of the use cases in this paper.

In the programming period of 2021-2027, S3s still have a key role, with a new enabling focus on “Good governance of national or regional smart specialisation strategy”, with seven fulfilment criteria:

1. up-to-date analysis of challenges for innovation diffusion and digitalisation
2. existence of competent regional or national institution or body, responsible for the management of the smart specialisation strategy
3. monitoring and evaluation tools to measure performance towards the objective of the strategy
4. functioning of stakeholder co-operation (“entrepreneurial discovery process”)
5. actions necessary to improve national or regional research and innovation systems where relevant
6. where relevant, actions to support industrial transition
7. measures for enhancing cooperation with partners outside a given Member State in priority areas supported by the smart specialisation strategy.^{2 3}

2.1.3 Multi-stakeholder agreements such as Climate City Contracts

Climate City Contracts and such are the documents and strategies where cities (mainly the ones part of the 112 selected in the EU Mission: Climate-Neutral and Smart Cities), outline plans for climate neutrality across sectors like energy, buildings, waste management, and transport, along with investment strategies. These contracts are developed in collaboration with local stakeholders and citizens. The commitments made in the Climate City Contracts

Endnotes

² https://ec.europa.eu/regional_policy/policy/communities-and-networks/s3-community-of-practice/about_en

³ <https://errin.eu/sites/default/files/2024-09/S3%20WG%20Annual%20Work%20Plan%202024%20Update%20%281%29.pdf>

help cities engage with EU, national, and regional authorities, investors, and their citizens to achieve their climate neutrality goals.

These contracts and similar strategies have ambitious goals and actions to support tangible results by 2030 in enabling climate neutrality. Research and innovation are central to this process, as well as mobility and transport, where cities look into the new mobility needs, how to cut emissions, improve air quality, reduce noise pollution, and increase safety and quality of life.

3 Funding Programmes

The following sub-section identifies and ‘explores and sustainable RTR innovation funding instruments and programmes for cities and regions in view of ERTRAC roadmap themes.’ (G.A. T3.2). The following were identified from T3.2, an analysis of the use cases, and a review of financing opportunities from the Covenant of Mayors website⁴ and tools.

3.1 Horizon Europe (HE)

Horizon Europe is the EU’s key funding programme for research and innovation. It is the 9th of the Framework Programmes for Research and Technological Development (FP9).

‘The Programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges.’⁵

The programme supports the creation and sharing of knowledge and technologies, supports job creation, boosts economic growth, and promotes competitiveness. The programme is open to legal entities from the EU and associated countries.

It supports creating and better dispersing excellent knowledge and technologies.

It creates jobs, fully engages the EU’s talent pool, boosts economic growth, promotes industrial competitiveness, and optimises investment impact within a strengthened European Research Area.

Under ‘Pillar 2’ of the programme, in ‘Cluster 5: Climate, Energy, and Mobility’, the themes of transport and mobility are covered.⁶ In addition, the specific work Programme for the Climate Neutral and Smart Cities Mission provide call topics with a specific focus on road transport solutions. An integrated call topic (cities mission, 2Zero and CCAM) was issued.

This project, STREnGth_M, falls under the Horizon Europe programme as a Coordination and Support Action.⁷ The two RTR partnerships 2Zero and CCAM are an integral part of the HE Framework Programme. Several initiatives below are set under the umbrella of HE.

3.1.1 EU Mission: Climate Neutral and Smart Cities

‘EU Missions are a novelty of the Horizon Europe research and innovation Programme for the years 2021-2027.

Aims of the Mission

⁴ https://eu-mayors.ec.europa.eu/en/resources/funding_guide

⁵ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmemes-and-open-calls/horizon-europe_en

⁶ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmemes-and-open-calls/horizon-europe/cluster-5-climate-energy-and-mobility_en

⁷ https://www.etrac.org/support-actions/strength_m/

The Cities Mission will involve local authorities, citizens, businesses, investors as well as regional and national authorities to

1. Deliver 100 climate-neutral and smart cities by 2030
2. Ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050

As foreseen in its implementation plan, the Cities Mission takes a cross-sectoral and demand-led approach, creating synergies between existing initiatives and basing its activities on the actual needs of cities.

State of play

In total, 100 cities in the EU and 12 cities in countries associated to Horizon Europe, were selected to participate in the Mission in April 2022...The 112 cities are testing innovative cross-sectoral approaches including for citizen engagement, stakeholder management and internal governance to accelerate their path to climate neutrality. This makes them experimentation and innovation hubs to enable all European cities to follow suit by 2050.

Climate City Contracts

The 112 selected cities are invited to develop Climate City Contracts, which include an overall plan for climate neutrality across all sectors such as energy, buildings, waste management and transport, together with related investment plans. Climate City Contracts are co-created with local stakeholders and citizens, with the help of a Mission Platform (which is currently managed by the project NetZeroCities). The clear and visible commitments put together by the cities in the Climate City Contracts enable them to engage with the EU, national and regional authorities, with investors and with their citizens to deliver on their ambitious climate neutrality objective.

A first group of cities presented their Climate City Contracts..., which were reviewed by the Commission with the support of experts from the European Investment Bank (EIB) and the Joint Research Centre (JRC)...following a positive review...bringing the total number of cities with the EU Mission Label [to] 53.’⁸

Cities Mission Horizon Europe Work Programme

The Cities Mission is supported by annual HE work Programmes. Projects’ scopes include all climate-related sectors, including transport.

3.1.2 CIVITAS

‘Current CIVITAS projects are funded under the EU’s Horizon 2020 and Horizon Europe’s Research and Innovation Programmes.’⁹

⁸ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en

⁹ <https://civitas.eu/projects>

‘CIVITAS is one of the flagship Programmes helping the European Commission achieve its ambitious mobility and transport goals, and in turn those in the European Green Deal.

It does this by acting as a network of cities, for cities, dedicated to sustainable urban mobility. Through peer exchange, networking and training, CIVITAS fosters political commitment and boosts collective expertise, equipping cities to put mobility at the centre of decarbonisation.

Since its launch in 2002, CIVITAS has advanced research and innovation in sustainable urban mobility and enabled local authorities to develop, test and roll out measures via a range of projects. A series of ten thematic areas underpin these...

At its heart, CIVITAS is a network of and for cities. Over 330 local authorities are currently CIVITAS members. Membership is free of charge and open to all who sign the CIVITAS City Declaration.’¹⁰

Projects: Advancing knowledge and practice for sustainable urban mobility

‘CIVITAS projects span three types, which systematically feed into and complement each other. Read more about these and access the pages of ongoing and past projects below. Current CIVITAS projects are funded under the EU's Horizon 2020 and Horizon Europe's Research and Innovation Programmes.’¹¹ The initiative has thematically clustered ongoing R&I projects and supports cooperation and synergies between Horizon Europe projects.

3.1.3 New European Bauhaus (NEB)

‘New European Bauhaus (NEB) is a policy and funding initiative that makes green transition in built environments and beyond enjoyable, attractive and convenient for all...

The New European Bauhaus works by :

- engaging people at a grassroots level, focusing on neighbourhoods
- providing tools and guidance
- offering tailor-made solutions for different communities
- incorporating the views of various stakeholders into the process of design and implementation
- prioritising people and social inclusion but also the economy to boost competitiveness and EU strategic autonomy’¹²

‘As a cross-cutting initiative, the New European Bauhaus has been financed by various EU Programmes, notably Horizon Europe, Cohesion policy and the LIFE Programme.

As of June 2024, close to EUR 400 million have been committed to the New European Bauhaus. In addition, the NEB principles have been used in numerous calls for proposals on various EU policies financed by EU budget in different Programmes...

¹⁰ <https://civitas.eu/about>

¹¹ <https://civitas.eu/projects>

¹² https://new-european-bauhaus.europa.eu/index_en

From 2025 onwards, the New European Bauhaus is set to have its first-ever multiannual funding tool, the NEB Facility, that aims to revitalise neighbourhoods through design for sustainability and inclusion.

Adopted by the Commission in March 2024, it will anchor the NEB in the EU multi-annual programming from 2025 to 2027. It is a cross-cutting tool that combines different funding instruments of the Commission and covers the full cycle of implementation of solutions – from research and innovation to deployment – through its two components:

- The Research & Innovation component, anchored in Horizon Europe, will cover actions from research to testing and demonstration, with a yearly indicative budget of EUR 120 million.
- The Roll-out component, building on the support to the New European Bauhaus already gathered from other eight EU Programmes, will deploy solutions for the built environment, aiming to increase their impact on the ground. The Roll-out component aims to match the budget ambition of the R&I component through investments across various EU Programmes over the next 3 years.¹³

3.1.4 Driving Urban Transitions Partnership (DUT)

‘Programme Objectives:

- DUT is a public-public partnership, co-funded by 28 European countries and the European Commission under Horizon Europe.
- It is a consortium with 65+ national and regional R&I funders, authorities and agencies dealing with urban policy, research performing organisations and other organisations as strategic partners
- Its annual calls address topics related to three impact pathways
 - Circular Urban Economies (CUE)
 - Positive Energy Districts (PED)
 - 15-minute City (15mC)
- It has a € 450 Mio. minimum indicative budget for 2022-2028¹⁴

Expected results:

‘The DUT Partnership aims to contribute significantly to the European and global mission on climate-neutral cities, the European Green Deal, and the Urban Agenda for the EU by developing and implementing a transformative research and innovation (R&I) Programme.’¹⁵

¹³ https://new-european-bauhaus.europa.eu/funding/how-new-european-bauhaus-funded_en

¹⁴ <https://www.euro-access.eu/en/programmes/119/Driving-Urban-Transitions-Partnership-DUT>

¹⁵ <https://dutpartnership.eu/the-dut-partnership/>

3.2 Initiatives under regional funding

3.2.1 Cohesion Fund

In 2021-2027 EU cohesion policy has set a shorter, modern menu of 5 policy objectives supporting growth for the period 2021-2027. The Cohesion Fund supports policy objectives including:

- 2: a greener, low carbon transitioning towards a net zero carbon economy and
- 3: a more connected Europe by enhancing mobility

'Info

The Cohesion Fund provides support to Member States with a gross national income (GNI) per capita below 90% EU-27 average to strengthen the economic, social and territorial cohesion of the EU. The Cohesion Fund supports investments in the field of environment and trans-European networks in the area of transport infrastructure (TEN-T). It is also possible to use the CF in the form of financial instruments.

Countries

BG, CZ, EE, HR, CY, LV, LT, HU, MT, PO, PT, RO, SI, SK

Who can apply

Local authorities and administrative bodies, NGOs, Social, cultural and educational institutions, Companies, SMEs and association

Type of funding

Grant, Financial instrument, Technical assistance, Financial instrument (equity, bonds, loans and/ or guarantees)

Project size

Project size varies according to the regions and the operational Programme

Co-funding

up to 85%¹⁶

European Regional Development Fund (ERDF)

'Info

The European Regional Development Fund (ERDF) aims to strengthen economic, social and territorial cohesion in the European Union by correcting imbalances between its regions. In 2021-2027 it will enable investments in a smarter, greener, more connected and more social Europe that is closer to its citizens.

The ERDF will enable investments to make Europe and its regions:

¹⁶ https://eu-mayors.ec.europa.eu/en/resources/funding_guide (Cohesion Fund)

- More competitive and smarter, through innovation and support to small and medium-sized businesses, as well as digitisation and digital connectivity
- Greener, low-carbon and resilient
- More connected by enhancing mobility
- More social, supporting effective and inclusive employment, education, skills, social inclusion and equal access to healthcare, as well as enhancing the role of culture and sustainable tourism
- Closer to citizens, supporting locally-led development and sustainable urban development across the EU

Countries

EU-27

Who can apply

NGOs, Social, cultural and educational institutions, Companies, SMEs and association, Local authorities and administrative bodies

Type of funding

Grant, Financial instrument (equity, bonds, loans and/ or guarantees), Financial instrument, Technical assistance

Co-funding

Co-funding depends on the regions.¹⁷

3.2.2 EU Urban Initiative (EUI)

Following up on the programme Urban Innovative Actions (UIA) is EU Urban Initiative (EUI).

'The European Urban Initiative is an essential tool to support cities of all sizes, to build capacity and knowledge, to support innovation and develop transferable and scalable innovative solutions to urban challenges of EU relevance.

EUI has a total ERDF budget of €450 million for 2021-2027¹⁸

The EUI provides different levels of assistance:

- 'Supporting urban authorities with up to 80% direct co-financing and up to €5M European Regional Development Fund (ERDF), allowing EU cities to experiment as testbeds for their innovative idea and transferring it to other cities
- Strengthening capacities of cities in the design of sustainable urban development strategies, policies and practices in an integrated and participative way

¹⁷ https://eu-mayors.ec.europa.eu/en/resources/funding_guide (ERDF - European Regional Development Fund)

¹⁸ <https://www.urban-initiative.eu/what-european-urban-initiative>

- Providing a knowledge environment for cities to ensure easier access to horizontal and thematic knowledge and share the know-how on sustainable urban development¹⁹

3.3 Synergies between HE and ERDF Programmes

Cohesion policy targets include such as specific objective 2.8 for a greener Europe by “promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy”. At a Programme level, these objectives can be compared to destinations and expected outcomes of Horizon Europe calls.

In 2022, the EC published a Guidance Note on Synergies between Horizon Europe and ERDF Programmes, ‘Synergies between Horizon Europe and ERDF Programmes’.²⁰

Here are a few general bullet points on the links between Horizon Europe and EUI of ERDF:

- **Complementary objectives:** The EUI aims to strengthen integrated approaches to sustainable urban development, while Horizon Europe focuses on research and innovation. Both programmes contribute to addressing urban challenges and fostering innovation in European cities.
- **Synergies in funding:** The European Commission encourages synergies between Cohesion Policy funds (including ERDF) and Horizon Europe. This allows for more efficient use of resources and greater impact of EU investments in research and innovation.
- **Smart Specialization Strategies:** These strategies serve as a crucial bridge for developing synergies between Horizon Europe and ERDF programmes, including the EUI.
- **Seal of Excellence:** This instrument allows projects positively evaluated under Horizon Europe but not funded due to budget constraints to receive support from ERDF, including through the EUI.
- **Knowledge transfer:** Both programmes emphasise the importance of sharing knowledge and best practices. The EUI supports capacity building and knowledge sharing on sustainable urban development, while Horizon Europe promotes research collaboration and innovation across Europe.
- **Focus on urban areas:** While Horizon Europe covers a broader scope of research and innovation, the EUI specifically targets urban areas. However, many Horizon Europe projects also address urban challenges, creating potential for collaboration and knowledge exchange
- **Complementary funding opportunities:** Cities and urban areas can potentially benefit from both funding streams, using EUI support for innovative urban projects and Horizon Europe funding for related research and innovation activities

¹⁹ <https://www.urban-initiative.eu/what-european-urban-initiative#anchor-what-we-offer>

²⁰ Synergies between Horizon Europe and ERDF programmes. 2022. [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022XC1104\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022XC1104(02))

The information on other regional funding mechanisms has been laid out broadly to allow a review of other various synergies and differences.

3.4 Other Initiatives

3.4.1 Intelligent Cities Challenge

'The Intelligent Cities Challenge (ICC) was one of the European Commission's largest initiatives supporting European cities in their green and digital transitions... It did so by offering a tailored support Programme of coaching, facilitation, networking and inspiration to help cities launch Local Green Deal partnerships.

Cities learned how to address these challenges through Local Green Deals: integrated, multi-disciplinary action plans and partnerships to lead the green and digital transition. The Local Green Deals focused on several key sectors: energy, mobility and transport, built environment and construction, tourism, and culture and creative sectors.

Cities were selected to undertake a 2-year journey where they will create an impactful strategy and develop innovative solutions that will place them at the forefront of the green & digital twin transition.'

21

The initiative included 70 core cities, 11 mentor cities, and 7 observer cities. The main output was local green deals.²²

The Intelligent Cities Challenge has officially concluded.²³

3.4.2 LIFE (L'Instrument Financier pour l'Environnement)

*'The LIFE Programme is the EU's funding instrument for the environment and climate action. The financial instrument for the environment or L'Instrument Financier pour l'Environnement (LIFE) started thanks to European Parliament support. The LIFE Programme began in 1992 and has co-financed thousands of projects in the field of environmental protection.'*²⁴

'Info

The LIFE Programme is divided into two strands: one for the environment and another for climate action.

The climate action strand also has two sub-Programmes:

1. Climate change mitigation and adaptation
2. Clean energy transition

Countries

EU-27

²¹ <https://www.intelligentcitieschallenge.eu/about-icc>

²² <https://www.intelligentcitieschallenge.eu/sites/default/files/2024-07/ICC-Factsheet-12june.pdf>

²³ [https://www.intelligentcitieschallenge.eu/news/intelligent-cities-challenge-journey-challenge-change#:~:text=The%20Intelligent%20Cities%20Challenge%20Journey%3A%20From%20Challenge%20to%20Change,-Home&text=The%20Intelligent%20Cities%20Challenge%20\(ICC,the%20EU%20Clean%20Industrial%20Deal.](https://www.intelligentcitieschallenge.eu/news/intelligent-cities-challenge-journey-challenge-change#:~:text=The%20Intelligent%20Cities%20Challenge%20Journey%3A%20From%20Challenge%20to%20Change,-Home&text=The%20Intelligent%20Cities%20Challenge%20(ICC,the%20EU%20Clean%20Industrial%20Deal.)

²⁴ https://cinea.ec.europa.eu/programmemes/life_en

Who can apply

Local authorities, Local agencies (city's stakeholders), NGOs

Type of funding

Grant

Project size

< 1.5 million €, 1.5-5 million €, 5-10 million €

Co-funding

Yes, 60% (By way of exception, a co-financing rate of up to 75% of the total eligible costs may be granted to LIFE Nature and Biodiversity proposals).²⁵

LIFE Technical Assistance Projects**'Info**

The Technical Assistance Projects (TA projects) may include the following:

1. *Projects for the preparation of SNAPs or SIPs (TA-PP).*
2. *Projects to facilitate the upscaling or replication of results (TA-R).*
3. *Projects for the capacity building of member states authorities with low effective participation (TA-CAP)*

Eligible activities are the following:

- Implementation actions such as training activities targeted information campaigns;
- Monitoring and evaluation actions to assess the actual impact of the implementation actions;
- Communication and dissemination actions;
- Actions for project management and quality control.

Countries

EU-28

Who can apply

Local authorities, Local agencies (city's stakeholders), NGOs

Type of funding

Technical assistance

Project size

< 1.5 million €

Co-funding

²⁵ https://eu-mayors.ec.europa.eu/en/resources/funding_guide (LIFE Technical Assistance Projects)

60%, Projects to improve the effective participation in the LIFE Programme (TA-CAP) – 95%²⁶

²⁶ https://eu-mayors.ec.europa.eu/en/resources/funding_guide (LIFE Technical Assistance Projects)

4 Local innovators use cases

It is essential to identify the most pertinent types of use cases that reflect the diverse landscape of local EU innovators. This approach will enable STREnGth_M to gain a comprehensive understanding of the broader European scenario. By capturing a wide range of innovative practices and solutions, this report can provide insight into the unique challenges and opportunities faced by various regions, thereby fostering collaboration and knowledge sharing among innovators across Europe. This detailed examination highlights the significance of individual use cases and also aims to facilitate the identification of trends and patterns that influence the links with EU programmes and schemes.

The selection of use cases can be found in Figure 2 below. Why did we select these particular use cases? We have looked for different objectives, diverse types of governance, flagship automotive ecosystems, and geographic spread. Of course, we also sought use cases where we potentially had a direct connection through our own network or project colleagues in order to gain more direct knowledge than can be obtained from desktop research alone.

Where possible, this was supplemented by direct responses to the survey and/or interviews with colleague involved in the regional use cases.

The information on the use cases is generally structured around the below questions and framework. Since the information was retrieved through various approaches (desktop research, questionnaire, interview) or combinations of the above, the structure of how the use case information is presented varies due to the way it was collected, however the information should overall align for each use case so long as sufficient answers were available or provided.

Local Innovators - Questions

A set of questions was developed to guide the desktop research and the interviews with the contacts of each use case. The questions cover different aspects of the use case and their links with the overall EU programmes and schemes.

The desktop research focused more on the generic characteristics of the use cases and public information on their activities, presence in the region, linked projects, area of focus and action, and similar information. The interviews were intended to fill the gaps and provide a deeper understanding of the subtle aspects, practices and layers of the functioning of the selected use cases. An online questionnaire was made available so that people could reply to the questions on their own time as an alternative to an online interview.

The online questionnaire was also shared with the Multiplier Group during the group's first online meeting in case any participant wanted to provide feedback or share it with relevant local innovators.

The questions that guided the interviews and research revolved around key topics are explained below. The full questionnaire can be found in the Annex. This should provide a comprehensive picture of each use case.

Overall structure of the questions:**I. General information**

To provide context about the use case and its constitution.

II. Innovation capacity

To understand where the use case innovation lies, what kind of innovation and the outreach

III. Competitiveness and financial stability

To understand how the use case competitiveness is perceived and the economic aspects

IV. Cooperations and influences

To understand to who the use case cooperates, how are these cooperations and if there is influence capacity

V. Funding instruments and Programmes

To understand where and how the use case is engaging with EU schemes

Within the use cases, the aim is to understand:

- (1) Are the projects/activities benefiting, cooperating, or linked to any EU instrument, Programmes, and partnerships?
- (2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?
- (3) How central are EU Programmes to innovation and competitiveness in relation to the use case?
- (4) How vital is EU funding to ensure innovation and financial stability in relation to the use case / organisations involved?
- (5) Where are the gaps and opportunities to strengthen the links between the local/regional innovators and the EU/National programmes and priorities?

The key questions to answer here overall are:

- **How can the R&I priorities** of ERTRAC, CCAM and 2Zero partnerships **link** into the strategies of the Programmes relevant for cities and regions; and the other way around
- **What information** on technology maturity and **development paths** would those instruments and Programme **require for a reasonable planning** from ERTRAC and the partnerships.

Use Cases

The most relevant use cases identified were:

- 1./ **CARA – Cluster of the Auvergne-Rhône-Alpes Region and a Competitiveness Cluster, (France)**
 - 2./ **CAAR – Automotive and Mobility Cluster of Aragon, (Spain)**
 - 3./ **Inno Mob project, (various countries)**
 - 4./ **SmartwayZ.NL, (The Netherlands)**
 - 5./ **Leuven 2030, (Belgium)**
 - 6./ **Gothenburg Green City Zone, (Sweden)**
 - 7./ **Brainport Eindhoven, (The Netherlands)**
 - 8./ **S3 Smart Specialisation CoP Safe and Sustainable Mobility, (various countries)**
 - 9./ **Zagreb ecosystem, (Croatia)**
 - 10./ **Smart City Lab and Smart City Poznań, (Poland)**
 - 11./ **Innocam.NRW, (Germany)**
 - 12./ **Regione Piemonte, (Italy)**
- 

Figure 1 - Use Cases

4.1 CARA – European Cluster for Mobility Solutions Auvergne-Rhone-Alpes, (France)

The CARA European Cluster for mobility solutions was established in 2005 in France. It represents the mobility industry in the Auvergne-Rhône-Alpes industrial area of France in the six transportation-related sectors of Automotive, Trucks & Buses, Rail, River and Lake, Aerial Guided and Bike & Micromobility. By fulfilling two purposes, CARA hopes to become the premier French cluster in Europe tackling the worldwide issues of urban mobility and automobiles of the future. Its first purpose is to represent the local industry for automobiles and trucks and the second is to encourage the modernization of urban systems for the transportation of people and goods. The cluster uses collective intelligence to provide creative answers to the emerging problems facing the transportation industry. The cluster carries out group initiatives from

conception to market launch, including research and innovation projects, real-world pilots, and steps for the members' economic and industrial growth.^{27 28}



Figure 2 - CARA: Collective Actions²⁹

Manufacturers, transportation companies, academic institutions, and research and education facilities make up CARA's 420 members, of which 15 are members of the Bikes & Micromobility Commission. Furthermore, CARA is composed of different partners, including local and national clusters. CARA is mainly focused on the French industrial region Auvergne-Rhône-Alpes but it has, in 2023, established a branch in the Centre-Val de Loire area with its headquarters located in Orléans. This was done with the intention of organizing and coordinating the automobile industry at the regional level and uniting local stakeholders, especially around the concept of 'decarbonization'.³⁰

The French cycling business is a vibrant one that strives for innovation and teamwork. The French cycling industry, under the leadership of APIC (Association for the Promotion and Identification of Cycles and Micromobility), is organized around nine commitments in order to satisfy the needs of its stakeholders and the numerous problems of the future. In Auvergne-Rhône-Alpes, CARA (which is known as the regional relay for the economic sector), represents the national sector. A top priority for the industry is restoring France as a cycling nation. Many

²⁷ <https://profile.clustercollaboration.eu/profile/cluster-organisation/bec5c083-180d-4ca7-bc0d-1e97454e541f>

²⁸ <https://www.cara.eu/en/europe-international/european-support/>

²⁹ <https://www.cara.eu/en/about-us/presentation-cara/>

³⁰ <https://www.cara.eu/en/about-us/presentation-cara/>

automotive subcontractors in the area are attempting to diversify their business ventures and are turning to cycling as a way to tackle the difficulties of the future (e.g. Bontaz, Groupe Sab, Saint Jean industries, etc.).³¹

Some of the key projects that CARA is involved in are: L'Usine à vélo, Cooperation Purchase, Grand Plateau and MAD Industrie. L'Usine à vélo, a cooperative for the assembly of bicycles and wheels, was founded by the Auvergne-Rhône-Alpes Region, six manufacturers, and one industrialist. It is a component of an innovative local strategy that aims to increase the competitiveness of local players. This CARA-supported framework makes it possible to pool different services such as assembly, technical competence, etc. In the Cooperation Purchase project, CARA supports L'Usine à vélo's purchasing cooperation programme in conjunction with the Metropole de Lyon. The goal is to collaborate in order to improve purchasing and develop new funding procurement strategies. The goal is "to support the transition of a purchasing strategy for the Auvergne-Rhône-Alpes region, France and Europe". A third key project is the Grand Plateau, the third location centre for micromobility experts in the Lyon metropolitan area, which is being developed with CARA's assistance. It provides a rental space with shared tools, training, skills, and expertise. It serves as a venue for people to interact and share ideas, fostering the development of future mobility. Lastly, four studies on the feasibility of moving bicycle parts in France - the frame, brake, pedal, and transmission - have been conducted by CARA with assistance from the Auvergne-Rhône-Alpes Region (MAD Industrie).³²

Additionally, CARA keeps an eye on and assists with a number of urban logistics initiatives, specifically: The creation of the Urban Logistics Hotel in Lyon (Hôtel de Logistique Urbain (HLU)), the Sustainable City Demonstrator project (Le projet de Démonstrateur de Ville Durable), and the European DECARBOMILE project.

CARA is focused on synergies between sectors. An illustration of cooperation between participants in the cycling and automotive industries are:

- "KLEUSTER and RENAULT TRUCKS (Production and marketing of Freegones cargo bikes.)
- ALEO and EFFIGEAR (Development of a Valeo electric motor integrating an Effigear gearbox.)
- MOTION ENGINEERING and JTEKT (Partnership for the manufacture by JTEKT of parts designed by Motion Engineering.)
- GROUPE SAB and DOUZE CYCLES (Production of a two-wheeled model.)"³³

Like all mobility industries, the micromobility sector is experiencing fast technological development, with significant job and skill-related concerns. CARA is helping businesses build their abilities to tackle this issue, especially in positions involving electric motors and on-board electronics. CARA is furthermore taking part in efforts to increase the appeal of careers in the sector, specifically by creating job descriptions centred around micromobility.

³¹ <https://www.cara.eu/en/our-fields/bike-and-micromobility/>

³² <https://www.cara.eu/en/our-fields/bike-and-micromobility/>

³³ <https://www.cara.eu/en/our-fields/bike-and-micromobility/>

The aims of the Bikes & Micromobility Commission are the following:

- “Bring the specific needs of companies in the Bikes & Micromobility sector to the attention of France Vélo
- Feed the CARA action Programme throughout the year
- Provide input to the management team to draw up the N+1 action plan
- Informing businesses about CARA’s actions and news
- Identify links between sectors and identify joint actions.” ³⁴

(1) Are the projects/activities benefiting, cooperating, or linked to any EU instrument, Programmes, and partnerships?

“CARA is representing the mobility sector in the French industrial region Auvergne-Rhône-Alpes” in the European Cluster Collaboration Platform”.³⁵ CARA is also a partner in the European DECARBOMILE project, which attempts to identify the green logistics needs of 8 cities.³⁶

(2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?

In order to help decarbonize last-mile logistics, the project, which unites 31 partners from 10 different countries, intends to leverage current solutions by enhancing their effectiveness and complementarity.³⁷

(3) How central are EU Programmes to innovation and competitiveness in relation to the use case?

“CARA is taking part as a partner to the European Cluster Collaboration Platform in the: H2020 funded project AWARD - All Weather Autonomous Real logistics operations and Demonstrations (<https://award-h2020.eu/à>); Erasmus + project PRO.TO.TYPE; Horizon Europe project DECARBOMILE; EUROCLUSTER project E-BOOST.³⁸ -- note: at the sectoral focus it does not mention Bike & Micromobility but mainly sectoral industries and technology fields.

(4) How vital is EU funding to ensure innovation and financial stability in relation to the use case / organisations involved?

Not so vital, many of the projects that CARA has are not funded by the EU. From the Bike & Mobility main projects, solely the DECARBOMILE project has received funding from the EU’s Horizon Europe R&I’s Programme.³⁹

(5) Where are the gaps and opportunities to strengthen the links between the local/regional innovators and the EU/National programmes and priorities?

Potentially awareness raising activities on relevant EU regional funding opportunities.

³⁴ <https://www.cara.eu/en/our-fields/bike-and-micromobility/>

³⁵ <https://profile.clustercollaboration.eu/profile/cluster-organisation/bec5c083-180d-4ca7-bc0d-1e97454e541f>

³⁶ <https://www.cara.eu/en/our-fields/bike-and-micromobility/>

³⁷ <https://www.cara.eu/en/our-fields/bike-and-micromobility/>

³⁸ <https://profile.clustercollaboration.eu/profile/cluster-organisation/bec5c083-180d-4ca7-bc0d-1e97454e541f>

³⁹ <https://www.cara.eu/en/our-fields/bike-and-micromobility/>

4.2 CAAR – Automotive and Mobility Cluster of Aragon, (Spain)

CAAR – Automotive and Mobility Cluster of Aragon, ES (e-boost project)

Established in 2008, the Automotive and Mobility Cluster of Aragon (CAAR) is one of Spain's leading transport clusters and is recognised throughout Europe. The Aragon region is a crucial logistics hub, providing strategic connections to major Spanish cities and ports. Zaragoza, the capital of Aragon, is home to significant logistics centres and training institutions. The region promotes innovation by focusing on clusters specialising in logistics, automotive, information and communication technology (ICT), and clean energy. Zaragoza is increasingly recognised as a centre for sustainable mobility and smart transport, including electric vehicles, autonomous mobility, hydrogen technologies, and circular economy practices.⁴⁰

CAAR and other similar transport clusters, such as the logistics cluster from Aragon (ALIA)⁴¹ strengthen the region's ability to compete on a European and global scale. The clusters foster innovative ideas and cutting-edge research that can be quickly translated into real-world applications. The clusters also facilitate access to national and European funding programmes, ensuring the local ecosystem presence in the EU, which is particularly relevant for SMEs.

National funding allocated to the region typically prioritises infrastructure development, emphasising the importance of establishing robust connections with other areas of Spain. This focus on infrastructure is largely attributed to the region's unique geographical and physical characteristics, which can present challenges in terms of accessibility and connectivity. Thus, resources for innovation and research need to also be looked for elsewhere.

Collaboration with European clusters and participation in initiatives such as the Smart Specialisation Strategies (S3) is instrumental in aligning the region's efforts with broader European goals. However, despite having strengths in certain industries, Aragon faces significant limitations due to its small size and the challenges posed by a dispersed rural population. One of the key challenges is securing adequate funding for projects and maintaining continuity in initiatives, especially amidst political changes.

Nonetheless, there are promising opportunities to bolster regional and European cooperation through clusters and S3 initiatives, particularly in the fields of sustainable mobility and clean energy. Aragon aims to align with European objectives focused on innovation and sustainability; however, to remain competitive, additional support for cluster-driven initiatives is required. This highlights the essential need for improved funding mechanisms to support regional priorities and to foster deeper inter-regional collaboration. As Aragon strives to serve as a model of regional innovation, it recognises the areas where growth is necessary, particularly in enhancing funding and ensuring alignment with European strategies.⁴²

⁴⁰ <https://caaragon.com/en/caar-en/who-we-are/>

⁴¹ <https://aliaragon.es/>

⁴² Interview POLIS and a representative of CAAR- Automotive and Mobility Cluster of Aragon. 15 November 2024.

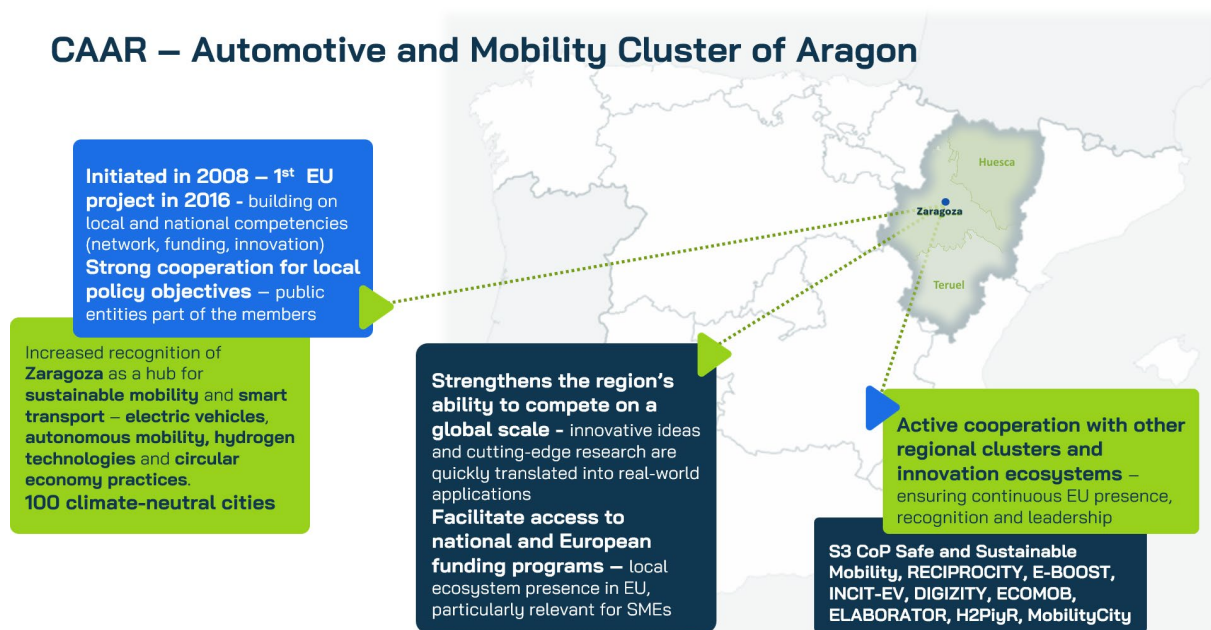


Figure 3 - Overview of CAAR and the Aragon region

4.3 Inno Mob project, (various countries)

Inno Mob project includes OKThess, Thessaloniki Innovation Ecosystem, Poznan Science and Technology Park, Regional agency for entrepreneurship and innovations Varna, and is rooted in various countries.

Launched in February 2023, the INNO-MOB or according to its full title: "Unlocking the potential of Mobility Innovation Ecosystems and Networks" project is a two-year initiative supported by the EU.⁴³

The creation of inclusive networks and initiatives in the mobility sector is the main goal of INNO-MOB. In addition to changing automobiles, infrastructure, logistics, and the provision of transportation services, technological advancements and innovations will have a substantial impact on a number of daily activities, such as traveling, shopping, social interactions, health concerns, interpersonal relationships, working hours, entertainment, etc. Therefore, a variety of inventions and technical developments could be viewed as answers to problems brought about by the dominant worldwide tendencies. The "digital revolution," or the advancement of ICT, fundamentally alters long-standing societal norms. As a result, players in the mobility innovation landscape come from a variety of fields and industries.⁴⁴

In order to improve collaboration in the transportation and mobility industries, the INNO-MOB project will concentrate on the opportunities that networks provide to creative and dynamic

⁴³ <https://inno-mob.eu/2023/04/24/kick-of-meeting-belgrade-23-24-february-2023/>

⁴⁴ <https://inno-mob.eu/concept-methodology/>

businesses via an innovation ecosystem. Through a framework for inclusive mobility innovation and business assistance in the European ecosystem, INNO-MOB focuses on the opportunities that initiatives and networks present to creative and dynamic businesses. The emerging market for sustainable mobility will serve as a platform for analysing the prospects offered and devising strategies to facilitate businesses' ability to swiftly introduce innovations to the market. In addition to utilising the services provided by the seven partner institutions, the project will make use of a wider network of initiatives and clusters operated in the individual nations.⁴⁵

The seven partner institutions are: Thessaloniki Innovation Ecosystem Non-Profit Organisation, Accet Inkubator GMBH, Regionalna Agencija Za Predpriemachestvo I Inovacii-Varna, Fundacja Uniwersytetu Im Adama Mickiewicza W Poznaniu, Inovacioni Centar Masinskog Fakulteta Doo, Booster Labs S.A.S and, Coventry University Services Ltd.⁴⁶ They are comprised of different European countries namely: Greece, Austria, Bulgaria, Poland, Serbia, France and the UK.

What are the main topics the use case is working on, its expertise, and field of action

“The high-growth disruptive technologies sectors where INNO-MOB will cover are (but not limited to):

- Connected–automated vehicles (CAVs)
- Battery and fuel-cell electric vehicles
- Unmanned aerial systems (UASs)
- IoT (Internet of things)
- Big data
- Smart cities solutions
- Next-generation connectivity (e.g. 5G, Li-Fi)
- Cybersecurity
- Advanced manufacturing
- 3-D printing Novel materials and embedded sensors in infrastructure
- Lightweight materials – Stronger and lighter”⁴⁷

The objectives of INNO-MOB are to re-mobilize the current "super clusters," increase the involvement of more varied actors, and establish interconnected mobility innovation networks, such as the Mobility Innovation Network (MIN). A specialized platform called the Stakeholder Chain Map Intelligent Platform (SCMIP) will be created to facilitate this. With an emphasis on utilizing SMEs' inclusivity, it will support mobility innovation networks. The platform will create Pan-European clusters of varied regions where stakeholders can find chances for collaboration by combining national and regional goals and clusters. There will also be a communication exchange forum, offer-demand/marketplace area, and an integrated search engine. In order to expand the innovation mobility networks in Europe, SCIMP will serve as a repository for a variety of data pertaining to the numerous stakeholders (SMEs, investors, universities, the

⁴⁵ <https://inno-mob.eu/>

⁴⁶ <https://inno-mob.eu/partners/>

⁴⁷ <https://inno-mob.eu/concept-methodology/>

government, and others) that may participate in cooperative activities within innovation ecosystems.⁴⁸

(1) Are the projects/activities benefiting, cooperating, or linked to any EU instrument, Programmes, and partnerships?

Through an inclusive mobility innovation European ecosystem business support framework, INNO-MOB is a two-year project funded by the EU that focuses on the potential that initiatives and networks provide to innovative and dynamic companies. “This project has received funding from the European Union’s Horizon Europe Programme under grant agreement No 101096746.”⁴⁹

(2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?

In addition to mapping the ecosystem and determining the needs and relationships among its actors, INNO-MOB will execute a comprehensive market-demand-supply intelligence approach that will give priority to identifying the needs, facilitators, and barriers of the mobility innovation stakeholders. By incorporating important players and users who are pertinent to the mobility industry, the consortium will implement a collective intelligence framework that will concentrate on developing creative solutions.⁵⁰

(3) How central are EU Programmes to innovation and competitiveness in relation to the use case?

To put Europe at the forefront of the new generation of deep tech innovation and start-ups, the Commission adopted a New European Innovation Agenda in July 2022. INNO-MOB will specifically support the New European Innovation Agenda's main action on tackling the innovation divide and boosting and accelerating innovation in European Innovation Ecosystems throughout the EU.⁵¹

(4) How vital is EU funding to ensure innovation and financial stability in relation to the use case / organisations involved?

EU funding plays a crucial role in ensuring both innovation and financial stability within INNO-MOB and the organizations involved. Given that INNO-MOB is an EU-funded project, the financial support enables the initiative to function effectively.⁵²

(5) Where are the gaps and opportunities to strengthen the links between the local/regional innovators and the EU/National programmes and priorities?

Businesses, including SMEs, have a clear chance to create innovative products and services in this field. There is currently a visible market failure in the transportation industry, however, since smaller businesses' innovations are being stifled by the rigid value chain when they are being implemented into new vehicles and transportation-related products. By integrating a

⁴⁸ https://inno-mob.eu/wp-content/uploads/2023/11/INNO-MOB_D4.1.pdf

⁴⁹ <https://inno-mob.eu/>

⁵⁰ <https://inno-mob.eu/outcomes/>

⁵¹ <https://inno-mob.eu/2023/05/23/eu-innovation-agenda/>

⁵² <https://inno-mob.eu/>

range of actors and closing the innovation divide in Europe, it is imperative to adopt a comprehensive viewpoint and transition from traditional approaches to innovation to a systems innovation approach.⁵³

“INNO-MOB will address this failure and focus on the opportunities that initiatives and networks offer to innovative and dynamic businesses through an inclusive mobility innovation European ecosystem business support framework. The emerging (sustainable) mobility market will be used as the vehicle to examine the opportunities provided and develop mechanisms to support the deployment potential of companies in bringing innovations to the market quickly.”⁵⁴

4.4 SmartwayZ.NL, (The Netherlands)

SmartwayZ.NL smart mobility Programme – Noord-Brabant and Limburg, NL

Established in July 2016, SmartwayZ.NL has more than 200 partners collaborating with the initiative. Operating in the south of the Netherlands, on Noord-Brabant and Limburg, SmartwayZ.NL was initiated to improve accessibility and encourage innovation in the region's mobility. The Programme brings together the Ministry of Infrastructure and Water Management, Rijkswaterstaat, Noord-Brabant, and Limburg's provincial governments, companies, and knowledge institutions to create in the region a smart mobility system linked with urbanisation ready for the future.

SmartwayZ.NL works following three core ideas.

- Together: As a collaborative initiative, it involves the government, business community, and knowledge institutions, as well as other mobility actors.
- Innovative: it emphasises innovative thinking and learning from both successful and unsuccessful projects to navigate the dynamics and uncertainties of the mobility transition.
- Adaptive: it remains adaptive by monitoring environmental changes and leveraging insights from one project to enhance others.

Along with these primary core, SmartwayZ.NL places significant importance on secondary objectives, specifically focusing on enhancing liveability and ensuring traffic safety for communities.

The initiative works by facilitating, innovating, and implementing smart mobility solutions, which are one of the main overarching tasks. Within smart mobility, SmartwayZ.NL carries out activities on Mobility as a Service (MaaS), smart logistics, traffic management, data and digitalisation, the Brabant mobility network, reducing nuisance and behavioural change, and a target group approach.

Fully anchored and in cooperation with the national level, SmartwayZ.NL is a reference in innovation in the Netherlands and beyond. Monitoring and evaluation are central to its success

⁵³ <https://inno-mob.eu/challenges/>

⁵⁴ <https://inno-mob.eu/challenges/>

and ensure lasting results and greater outreach. Despite being tailored to the South Netherlands context, the various projects undertaken by the initiatives also represent the broader EU needs in transport innovation. In the fields of Traffic Management and CCAM, SmartwayZ.NL engages in European projects aimed at advancing and disseminating knowledge and innovations. It recognises the European initiatives at their inception and collaborates to shape policies and regulations that support innovation and implementation.

One example, the province of Noord-Brabant has been part of the Horizon Europe SINFONICA⁵⁵ project since 2022. This project focuses on the accessibility of CCAM vehicles, focusing on the travellers, especially vulnerable groups, rather than the technical aspects of the vehicles.

Since the summer of 2022, the province of Noord-Brabant has been part of the SINFONICA project. This Horizon Europe project focuses on the accessibility of self-driving vehicles (CCAM). While many other projects focus on the technical aspects of these vehicles, SINFONICA focuses on travellers, developing tools to help adapt vehicles, infrastructure, and accessibility policies to accommodate vulnerable travellers.⁵⁶

The strategy employed by SmartwayZ.NL ensures consistency for users, employers, and knowledge partners by facilitating the exchange of knowledge, enhancing implementation capabilities, and encouraging economies of scale⁵⁷.

SmartwayZ.NL has a newly established work Programme which equips their network to establish good implementation programmes together with regions and focus on strategic areas that benefit the present and future context of their own geographic areas.^{58 59}

In addition to desktop research, an interview⁶⁰ was conducted with a representative of SmartwayZ.NL. Some of this information is summarised below and general themes that aligned with other use cases are carried over to the conclusions and recommendations chapter.

AI was utilised from the interview transcript to assist in summarising the answers to some of the key questions.

(1) Are the projects/activities benefiting, cooperating, or linked to any EU instruments, Programmes, and partnerships?

SmartwayZ.NL is linked to several EU instruments and Programmes. This initiative aligns with EU objectives for sustainable and smart mobility. Additionally, the Programme participates in EU-funded projects like Sinfonica and Interreg Europe's NEXT RIDE^{61 62}, which focus on autonomous public transport and connected, cooperative, and automated mobility (CCAM)

⁵⁵ <https://sinfonica.eu/>

⁵⁶ <https://smartwayz.nl/actueel/sinfonica-bereikt-nieuwe-onderzoeksfase/>

⁵⁷ <https://www.smartwayz.nl/>

⁵⁸ <https://smartwayz.nl/actueel/afspraken-tussen-rijk-regio-bekrachtigd/>

⁵⁹ <https://smartwayz.nl/over-smartwayznl/programmemaraad-partners/>

⁶⁰ Interview POLIS and a representative of SmartwayZ.NL. 05 March 2025

⁶¹ <https://www.interregeurope.eu/news-events/news/third-call-projects-are-approved>

⁶² <https://www.interregeurope.eu/next-ride>

services. These projects are part of broader EU efforts to enhance mobility solutions across member states.⁶³

(2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?

SmartwayZ.NL extends beyond the local/regional level, aligning with EU Research and Innovation (R&I) targets. As a result of the complexity of the colleagues involved in SmartwayZ.NL, methods to improve collaboration between the various levels of government are further explored. The SmartwayZ.NL Programme's involvement in EU-funded projects like Horizon Europe and Interreg Europe demonstrates its commitment to advancing smart mobility solutions that contribute to EU-wide objectives. These initiatives support the EU's Green Deal and digitalisation goals by focusing on sustainable, zero-emission, and interconnected transport systems.

(3) How central are EU Programmes to innovation and competitiveness in relation to the use case?

EU Programmes are central to innovation and competitiveness in this context. The SmartwayZ.NL Programme leverages EU funding to pilot and scale innovative mobility solutions, such as autonomous public transport and CCAM services. These projects not only enhance local mobility but also position the region as a testbed for cutting-edge transport technologies, fostering competitiveness within the EU's broader innovation landscape.

(4) How vital is EU funding to ensure innovation and financial stability in relation to the use case/organisations involved?

EU funding is vital for ensuring both innovation and financial stability. The SmartwayZ.NL Programme relies on EU grants to implement projects that could otherwise be financially unfeasible due to limited local budgets. For instance, participation in Horizon Europe projects provides 100% funding, which is crucial for public authorities that traditionally lack the resources to invest in such initiatives independently.

(5) Where are the gaps and opportunities to strengthen the links between local/regional innovators and EU/National Programmes and priorities?

Gaps:

- **Administrative Burden:** Complex and time-consuming administrative processes in EU Programmes, particularly in Interreg Europe, discourage participation.
- **Resource Constraints:** When there is a lack of additional personnel to manage EU-funded projects limits the capacity of local/regional authorities to engage effectively, leading to internal resistance and administrative burdens.
- **Governance Challenges:** The absence of a legal entity for the SmartwayZ.NL Programme complicates its direct involvement in EU projects, necessitating reliance on partner organisations to act as legal entities.

⁶³ https://transport.ec.europa.eu/news-events/news/eu-invests-record-eu7-billion-sustainable-safe-and-smart-transport-infrastructure-2024-07-17_en

Opportunities:

- **Streamlining Administrative Processes:** Simplifying application and reporting procedures could reduce the administrative burden and encourage more local/regional participation.
- **Capacity Building:** Providing training and resources to local/regional authorities can enhance their ability to manage and implement EU-funded projects effectively.
- **Enhanced Collaboration:** Establishing clearer governance structures and facilitating direct involvement of local/regional entities in EU Programmes can strengthen the links between innovators and EU/National priorities.

In summary, while EU Programmes play a crucial role in advancing smart mobility initiatives, addressing administrative complexities, resource limitations, and governance issues can further enhance the effectiveness and participation of local/regional innovators in these Programmes.⁶⁴

4.5 Leuven 2030, (Belgium)

Leuven 2030 climate-neutral city - Leuven, BE (mobility thematic actions)

Leuven 2030 is a non-profit organisation with its roots in the city's outspoken ambition to become climate-neutral. As a founder member, the city of Leuven (BE) had a chairmanship for the first 4 years, also providing a significant part of the funding. Leuven 2030 is an organisation by and for everyone in the city, with a membership base approach with six different membership categories: citizens, civil society organisations, businesses, knowledge institutions, authorities and semi-public authorities. Each category has the same number of votes at the general meeting and is represented on the Board by the same number of directors. The city continues to be an essential partner of Leuven 2030, but the organisation has the freedom to challenge and explore new paths in the transition to climate neutrality.

Established in 2013, Leuven 2030 has more than 600 progressive and determined inhabitants, organisations and businesses amongst its members. It was initiated following the idea that, as an innovative, value-driven city, Leuven has a responsibility to play a pioneering role in Europe. The organisation wanted to seize the opportunities that a path towards a sustainable future can bring and ensure that life is and continues to be good for everyone in Leuven.

With a strong vision and a Roadmap to 2050 guiding the actions, Leuven 2030 is fully engaged in accelerating a climate-neutral city, emphasising that a city with less emissions is a city with more future. Leuven 2030 operates under the agreement to bring key actors from all sectors of Leuven society, with as many citizens and organisations as possible. With strong concrete commitment from all stakeholders, it aims for ambitious breakthrough projects that can be up-scaled. As a two-way collaboration, Leuven, being one of the climate-neutral and smart cities

⁶⁴ Interview POLIS and a representative of SmartwayZ.NL. 05 March 2025

of the EU mission, offers a great opportunity to accelerate the execution of the Roadmap to climate neutrality.

Working on different key areas such as Energy, Mobility, Buildings, Consumption, Adaptation, Circularity, and Financing, Leuven 2030 is fully aligned with the local context of policies and needs and is participating in several projects. Leuven 2030 and the city of Leuven have a strong presence in the Belgian and European scenario on leadership in climate neutrality innovation. They are engaged in the region and also contribute to regional initiatives. Leuven 2030 innovations are geared toward concrete changes in infrastructure and behaviour.

Within the initiative, sustainable and safe urban mobility and transport are thought and implemented in coordination with other urban aspects, following the City Climate Contract that the city developed and committed to. Several different pilots have already been implemented in the city, such as accessible shared mobility, connected new neighbourhood development and improved low-speed streets. In its current framework, Leuven 2030 is intrinsically aligned and benefiting from NetZeroCities and the overarching goals of Horizon Europe.⁶⁵

The initiative is in alignment with the EU climate neutral goals for 2050 and the mission ‘100 Climate-Neutral and Smart cities by 2030’.⁶⁶ The city of Leuven was selected as one of the mission cities in 2022.⁶⁷ The Leuven Climate contract is the plan to achieve this through the collaboration of the City of Leuven, Leuven 2030, more than 30 key organisations, breakthrough projects, and a financial model to finance and achieve the goals.

Leuven 2030 also has a link to EU Horizon2020 projects. For example, since 2021 there is involvement with a pilot location in the JUSTNature project. This project involves interventions, traffic adjustments, and the redesign of a street for climate resilience and for the city to investigate what is needed to optimise the roll out heating networks using local, renewable energy sources, and implementing circularity as much as possible in the reconstruction.⁶⁸

In addition to desktop research, an Interview⁶⁹ was conducted with a representative of Leuven 2030. Some of this information is summarised below and general themes that aligned with other use cases are carried over to the conclusions and recommendations chapter.

AI was utilised from the interview transcript to assist in summarising the answers to some of the key questions.

(1) Are the projects/activities benefiting, cooperating, or linked to any EU instruments, Programmes, and partnerships?

Leuven 2030 is actively involved in EU initiatives, particularly as one of the EU’s 100 Mission Cities under the Climate-Neutral and Smart Cities Mission. It has submitted a Climate City Contract containing 86 breakthrough projects. Additionally, the city participates in programmes

⁶⁵ <https://en.leuven2030.be/>

⁶⁶ <https://op.europa.eu/en/publication-detail/-/publication/39b35c66-d644-11ee-b9d9-01aa75ed71a1/language-en>

⁶⁷ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en

⁶⁸ <https://www.leuven2030.be/doorbraakproject/groene-warmte-en-vergroening-voor-c-meunierstraat>

⁶⁹ Interview POLIS and a representative of Leuven 2030. 05 March 2025.

like Urban Nodes and CEF (Connecting Europe Facility), which support infrastructure development and sustainable mobility. However, there is concern over the financial planning and the high complexity of accessing these EU funds.

(2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?

The use case aligns with broader EU R&I (Research and Innovation) goals on climate neutrality and sustainable mobility. By participating in the Mission Cities initiative and proposing breakthrough projects in areas like mobility and infrastructure, Leuven 2030 contributes to EU-level targets. However, implementation and follow up on some levels is dependent upon political interest at the local level and prioritisation by city leadership.

(3) How central are EU Programmes to innovation and competitiveness in relation to the use case?

EU Programmes are crucial but can present challenges. While they provide essential support for innovation and infrastructure development (particularly through CEF and Urban Nodes), the process to access these funds is seen as overly complex, costly, and sometimes consultant-dependent. This discourages smaller or less-resourced cities from fully engaging, weakening their competitive edge in innovation.

(4) How vital is EU funding to ensure innovation and financial stability in relation to the use case / organisations involved?

EU funding is vital, especially for capacity building and early-stage study work. Local institutions can lack sufficient resources and staffing to initiate and manage complex mobility and climate-neutrality projects without extra support. The investment of time and effort can be challenging to balance to ensure the potential benefits outweigh the low success rates and bureaucratic barriers.

(5) Where are the gaps and opportunities to strengthen the links between the local/regional innovators and the EU/National programmes and priorities?

Key gaps include:

- Shifts in local political will and the prioritisation of sustainability goals.
- Complexity and opacity of EU proposal processes.
- Administrative capacity in municipalities to handle innovation projects.

Opportunities:

- Simplifying EU funding applications to make them more accessible.
- Investing in local capacity building to empower city departments.
- Improving coordination and accountability through clearer expectations and monitoring by the European Commission, which would support continued progress and involvement through evolving local political climates.

- Facilitating partnerships with experienced stakeholders (e.g., universities, national companies) to share expertise and reduce entry barriers.⁷⁰

4.6 Gothenburg Green City Zone, (Sweden)

The Gothenburg Green City Zone initiative represents an innovative effort to transform urban mobility and transportation systems to align with ambitious climate goals. The initiative started from a discussion of Volvo Cars and the City of Gothenburg to explore electrification and sustainable transport. Nowadays, it is established in collaboration between key stakeholders, including Gothenburg City, Volvo Cars, RISE (Research Institutes of Sweden), and local universities. With the city playing a leadership role through its Business Development Agency, the initiative seeks to redefine sustainable transport. Its main objectives include reducing transport-related emissions by 90% and overall traffic volume by 25% by 2030, transforming Gothenburg as a leader in climate innovation.

Initially centred on a clear zone in the city, the Gothenburg Green City Zone now targets specific transportation needs, clustering efforts where relevant (e.g., around events or residential areas) and adopting a holistic approach that addresses the interconnections of urban mobility systems. Acting as a neutral facilitator, the initiative fosters dialogue among public and private stakeholders, encouraging collaboration on innovative solutions while ensuring projects align with both local and European sustainability targets.

The Gothenburg Green City Zone operates not just within the city but also across a regional framework involving the 13 municipalities in the surrounding region. This broader regional involvement helps to approach transport and mobility systems in an integrated way rather than as isolated local systems delimited by theoretical borders between cities.

Gothenburg Green City Zone actively engages with Viable Cities⁷¹, a Swedish national programme inspired by the EU Cities Mission. This initiative includes around 27 municipalities across Sweden that have signed climate contracts targeting significant emissions reductions by 2030. This collaboration facilitates knowledge sharing, joint efforts, and alignment of climate objectives among municipalities. For the initiative, this platform and different national funding schemes have a central role to play in their activities, not because of topics and issues supported by these schemes, but mostly because they are closer in context and with easier-to-navigate practicalities and familiarity to the different stakeholders involved.

Moreover, seven Swedish cities are participating in the EU Cities Mission, and Gothenburg is one of them, engaging in it through the Gothenburg Green City Zone. Also, within the EU landscape, these cities work together to exchange insights and experiences, aiming to create unified strategies and leverage each other's strengths in achieving shared goals. For Gothenburg Green City Zone, this cooperation also helps streamline approaches to mobility and transport systems across the country, ensuring businesses and other stakeholders can operate effectively in multiple cities without encountering inconsistent local policies or practices.

⁷⁰ Interview POLIS and a representative of Leuven 2030. 05 March 2025.

⁷¹ <https://viablecities.se/en/>

Nevertheless, in practice, being part of the EU Cities Mission has limited effects, working more as leverage and positioning within the EU than facilitating practical implementation.

Overall, Gothenburg's Green City Zone is extensively integrated into EU programmes, using them as both a resource and a platform to advance its climate and mobility goals while contributing to European innovation and sustainability agendas. The initiative actively engages with EU Programmes to accelerate innovation and its transition pathway and align with broader climate goals. As a participant in the EU's Cities Mission, Gothenburg leverages this alignment to gain strategic direction and resources. The Net Zero Cities Pilot Programme, a two-year project that explores innovative pathways to sustainable transport solutions, was a more practical and useful opportunity for the city and the initiative. This pilot allowed Gothenburg to test, implement, and showcase new strategies while contributing to the EU's collective effort to decarbonise urban mobility.

EU funding programmes, such as Horizon Europe, also play a crucial role in supporting specific projects within the Green City Zone. These funding streams have enabled activities like testing cutting-edge technologies, including wireless charging and vehicle-to-grid solutions, which are vital for achieving the city's ambitious climate targets. By harnessing these resources, Gothenburg not only fosters local innovation but also ensures its work aligns with Europe's broader sustainability agenda.

The initiative's engagement with EU programmes can bring several benefits. Strategically, these collaborations help unify local efforts with European climate priorities. EU programmes also provide essential funding that drives innovation and pilot projects forward. Moreover, the framework enables Gothenburg to collaborate with other cities across Europe, sharing insights and learning from their experiences to refine its approach. This exchange fosters a sense of community and a shared vision among participating cities, further amplifying the impact of each initiative.

However, navigating these relationships is not without challenges. Accessing EU funding often requires detailed pre-project planning and a clear identification of participating stakeholders, which can limit flexibility and slow down project initiation. It is not always clear beforehand if the available funding stream will align with local needs or the other way around.

For the initiative, it is still challenging to integrate diverse stakeholders while complying with the rigid requirements of some EU funding calls. While EU Programmes provide valuable guidance and resources, their large-scale focus may not always address localised needs. Gothenburg Green City Zones seeks to balance its regional priorities with broader EU directives. When considering the scalability and replication of its pilots and projects, there is an identified need to better connect EU-funded projects across the city and bordering municipalities to avoid redundancy and enhance impact. Based on the initiative's experiences, many cities, including those in Sweden, tend to repeat similar pilot projects without fully building on previous results. This redundancy wastes resources and limits progress. Moreover, the initiative also reinforced that aligned approaches across different cities are essential to support a healthy collaboration with businesses, ensuring consistency, efficiency and a higher probability of scalability of solutions and services.

Long-term success relies on consistent political support, which is often hindered by changing leadership and shifting priorities. Implementing bold decisions to achieve the initiative's goals

without stable political support can become difficult, even when funding is available. While local governments in Sweden have significant authority over mobility, regulatory frameworks are not always suited to accommodate innovative transport solutions, and the normal cycle of politicians and public authorities without long-term commitment can also slow down innovation.

While the Gothenburg Green City Zone has its funds secured to act in its facilitation role, individual projects depend on external sources like EU and national funding. Securing these funds often requires extensive upfront planning, and this pre-planning needed to apply for funds depends on significant in-kind contributions from stakeholders, which can limit flexibility and delay project application and initiation. Not all stakeholders have the resources available within the funding opportunities timeline, whether EU or national.

Looking ahead, Gothenburg aims to strengthen its role as a testing ground for EU-aligned innovations, showcasing its successes and influencing broader European strategies. The initiative also advocates for simplified and more flexible funding frameworks that allow cities to adapt projects dynamically to meet evolving challenges. By maintaining its strong ties to EU programmes and frameworks, the Gothenburg Green City Zone continues to act as a bridge between local action and continental ambition, pushing the boundaries of sustainable urban mobility while contributing to shared European goals.^{72 73 74 75 76}

4.7 Brainport Eindhoven, (The Netherlands)

With a long history, Brainport Eindhoven is distinguished by its strong focus on technology and innovation. It specialises in energy, mobility, food, health, safety and security, AI, and others. With its cooperation structure dating from around 1994, this vibrant hub is home to prominent global tech leaders and a robust ecosystem of startups that contribute to its dynamic atmosphere. One key element driving Brainport Eindhoven's success is its Triple Helix collaboration model, which fosters innovative partnerships between government, businesses, and academia. The Eindhoven University of Technology (TU/e) plays a crucial role in this ecosystem, spearheading research initiatives.

With around 990 establishments in the smart and green mobility enterprise, Brainport Eindhoven plays a significant role in transport research and innovation (R&I) within the European Union, particularly in developing smart, sustainable, and integrated mobility solutions. This aligns with EU priorities such as the European Green Deal and the Horizon Europe framework for fostering innovation. Additionally, the region aligns with the EU's Smart Specialisation Strategy by concentrating on knowledge-intensive industries and promoting sustainable innovation.

Brainport Eindhoven's economic impact is substantial, driving job creation, entrepreneurship, and significant investment in research and development, all of which greatly enhance the Dutch GDP. This region is characterised by key initiatives like the High Tech Campus Eindhoven, which serves as a lively hub for tech companies and startups, fostering collaboration and

⁷² Interview POLIS and a representative of the Gothenburg Green City Zone. 08 November 2024.

⁷³ <https://www.investingothenburg.com/front-runner-sustainability/gothenburg-green-city-zone#explore>

⁷⁴ <https://www.businessregiongoteborg.se/naringslivsutveckling/hallbar-utveckling/gothenburg-green-city-zone>

⁷⁵ <https://netzerocities.eu/gothenburgs-pilot-activity-fastforward-green-city-zone/>

⁷⁶ <https://smartcitysweden.com/gothenburg-green-city-zone-leads-the-way-towards-zero-emissions-transportation/>

knowledge sharing. Equally important is Brainport Development, the regional economic development agency dedicated to supporting innovation, business growth, and internationalisation.

The region plays an active role in EU research focused on zero-emission mobility and smart logistics. Brainport is a leader in Intelligent Transport Systems (ITS), concentrating on CCAM and traffic management systems. The Eindhoven area serves as a Living Lab for smart mobility solutions, implementing real-world applications such as smart traffic lights and vehicle-to-infrastructure communication.

There is a strong emphasis on supporting the EU's sustainability goals, which include reducing carbon emissions and transitioning to clean energy in transport systems. The region's research and innovation activities encompass the development of hydrogen fuel technologies and the adoption of circular economy practices in vehicle manufacturing. Brainport Eindhoven has a strong tradition of collaboration with other regions and corridors in constant knowledge exchange and cooperation.^{77 78}

4.8 S3 Smart Specialisation CoP Safe and Sustainable Mobility, (various countries)

The context of the Smart Specialisation Community of Practice (CoP) includes mobility and logistics clusters with a range of public and private shareholders with diverse interests in a central role to collaborate and contribute towards the competitiveness of the EU transport industry. This was established in 2019 and supports larger EU strategic goals on increased usage of smart and clean vehicles fuels in the context of increasing fuel costs and reducing emissions.

The specific thematic area of Safe and Sustainable Mobility has a mission to gather the science, technology and economic industrial challenges in the transition to decarbonise and digitalise road transport.

The main goal is to strengthen the capacity for regional innovation beyond the auto industry to facilitate investment based on innovation in infrastructure and technology from regional ecosystems and to connect innovative SMEs and value chains.

The initiatives include giving attention to the most promising innovations for regional development, allocating funding more effectively, and identifying investments with qualities of replicability/scalability.

Aragon (ES), Bavaria (DE), and Île-de-France (FR) are the leading regions, with multiple other participating regions, organisations and clusters such as Regional innovation agencies (BIZ-UP, IAF) and Brainport Eindhoven (NL).

Participating regions include Castile and Leon (ES), Helsinki-Uusimaa (FI), Navarra (ES), Normandie (FR), North Brabant (NL), North Netherlands (NL), Northern Ostrobothnia (Pohjois-Pohjanmaa; Oulu subregion (city of Oulu)) (FI), Upper Austria (AT), and Zala (HU).

⁷⁷ <https://brainporteindhoven.com/en/>

⁷⁸ <https://brainporteindhoven.com/en/discover-brainport>

The thematic area was also linked to the Horizon 2020 funded project RECIPROCITY, which ran from 2021 to 2023. The project aimed to equip at least 20 city cities across Europe (of various size and mobility networks) with knowledge, tools, and methods to speed up the replication of existing innovative mobility solutions. The project involved clusters, mobility experts and research institutions to bring a balanced of expertise and geographic areas.⁷⁹

This represents aligning funding from above by supporting regional clusters in focusing on building EU wide networks of experts and knowledge of potentially transferable solutions to be replicated, and also to enable innovative regional clusters to come together and have financial instruments to strengthen the regional ecosystems and solutions.⁸⁰

4.9 Zagreb ecosystem, (Croatia)

For the Zagreb ecosystem (city, university, ODRAZ), answers were provided directly via email to the questionnaire⁸¹, which follows, with support in the summarisation of the initial questions via AI.

The Asphalt Art initiative in Zagreb commenced in 2023 as part of Bloomberg Philanthropies' European expansion of the Asphalt Art Initiative, which awarded grants to 19 cities to transform streets and public spaces through art-driven street redesigns. The City of Zagreb received a grant to implement the project.

The initiative focuses on creating a greener, more humanized urban environment by transforming streets into vibrant public spaces. Key projects include the transformation of Martićeva Street into a pedestrian zone featuring an asphalt mural. The selected design incorporated motifs found in the courtyards and staircases of historic buildings, then traced onto the asphalt. Masarykova Street reflects the true spirit of Zagreb with its street performers and thriving shops and restaurants. There were several previous attempts at closing the street to cars, but this new installation is designed to make the new pedestrian zone permanent.

Financially, the project has been stable, with funding provided by Bloomberg Philanthropies and lower maintenance costs compared to previous conditions.

While there has been no formal cooperation with other similar initiatives or regional partners, the project's alignment with local policy objectives, such as promoting a more sustainable and greener way of living, demonstrates its contribution to local policy goals. The initiative has not yet influenced national or EU-level policies.

In terms of innovation, the Asphalt Art initiative represents a novel approach in this part of Europe, aiming to develop new pedestrian streets that serve as the city's "living room." The project's success has garnered attention and may serve as a model for similar initiatives in other cities.

⁷⁹ <https://reciprocity-project.eu/about/>

⁸⁰ https://ec.europa.eu/regional_policy/policy/communities-and-networks/s3-community-of-practice/im_safe_sustainable_mobility_en

⁸¹ Questionnaire responses from a representative of the Zagreb ecosystem / University of Zagreb. 04.2025.

Within the use cases, the aim is to understand:

(1) Are the projects/activities benefiting, cooperating, or linked to any EU instrument, Programmes, and partnerships?

Yes, all case studies that [this] department has cooperated on or developed are in accordance with proper EU strategies or programmes, but very often it is only to satisfy expected results of case study (lack of political will or insufficiently capacities of public bodies).

(2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?

Yes, but only in some parts. Reasons are very specific project descriptions, available times, political will or capacity of public body that are responsible for developing use case, which often creates some kind of challenges to go further then local/regional level.

(3) How central are EU Programmes to innovation and competitiveness in relation to the use case?

Only on paper, but in reality, a lot of challenges are based on the availability of data (often datasets simply don't exist), which leads to financial struggles because a lot of the budget is spent on the collection of data rather than on analysing and validating different solutions that can lead to innovation, and then it is hard to develop innovation levels that are demanded by different EU programmes.

(4) How vital is EU funding to ensure innovation and financial stability in relation to the use case / organisations involved?

It is vital, without that, a use case cannot be developed or tested in real conditions. Local and regional budgets are often only enough for yearly maintenance.

(5) Where are the gaps and opportunities to strengthen the links between the local/regional innovators and the EU/National programmes and priorities?

Primarily, lack of cooperation from both sides (innovators and public bodies that are responsible for the promotion of EU/national programmes and priorities) and lack of useful information (not basic information such as: dates, total available budget, acceptable activities, etc., but also information that can support innovators to develop their ideas into real use cases much easier (innovators cannot be focused on administrative and budget activities of the projects) they must be focused on developing their idea into reality).

The key questions to answer here overall are:

How can the R&I priorities of ERTRAC, CCAM and 2Zero partnerships link into the strategies of the Programmes relevant for cities and regions; and the other way around

Better cooperation between institutions that develop R&I priorities and strategies of the Programmes relevant for cities and regions. Also, enabling and involving different cities and

regions with specific challenges and geographical features to be involved into developing R&I priorities.

What information on technology maturity and development paths would those instruments and Programme require for a reasonable planning from ERTRAC and the partnerships.

Simple and understanding text of calls for project applications and very clear criteria's for applicants.⁸²

4.10 Smart City Lab and Smart City Poznań, (Poland)

The Poznań CityLab and Poznan Smart City have been initiated by the city reflecting on its future and started asking critical questions such as “How do we imagine Poznań in the future? In what direction will we develop our city? What should we do to make the space in which we live better?”. Based on these questions they decided to plan and act wisely, following the course of the UN Sustainable Development Goals. Smart City Poznan is defined as “a dynamic and future-oriented city deeply rooted in the activities of its conscious and creative residents who can decide for themselves”.⁸³

When new technology made it possible for a city to be as mechanised and optimised as possible, the idea of "smart cities" was born. Nevertheless, it was quickly shown that a city is neither a more nor less effective mechanism. People are equal to a city. For this reason, Poznan inhabitants are the main focus of the Smart City Poznan Model.

The Poznań CityLab is composed of different ambassadors such as: Centrum Sztucznej Inteligencji Uniwersytetu im. Adama Mickiewicza w Poznaniu, Centrum Sztucznej Inteligencji i Cyberbezpieczeństwa Politechniki Poznańskiej, Poznańskie Centrum Superkomputerowo-Sieciowe, Łukasiewicz - Poznański Instytut Technologiczny, Polish Blockchain Association and Collegium Da Vinci.

The seven main topics that the smart city Poznan is working on are: smart digital city, smart living, smart environment, smart economy, smart community, smart mobility. The objectives of smart city initiatives are similar: to make life easier while saving energy, money, time, and the environment. The goal of a smart city is to incorporate the criteria that will improve a city's quality of life.

⁸² Questionnaire responses from a representative of the Zagreb ecosystem / University of Zagreb. 04.2025.

⁸³<https://www.poznan.pl/mim/public/smartcity/attachments.att?co=show&instance=1017&parent=81579&lang=pl&id=337477>

Figure 4 - Smart City Poznań⁸⁴

The main project related to mobility is the 'Smart Mobility' objective. The objective here is to provide cutting-edge, environmentally responsible, and integrated transportation systems to make getting around the city and agglomeration simple. Smart Mobility is furthermore seen by the city as multi-platform mobility. The Poznań Smart City Model is driven by a transportation network that is comfortable, modern, integrated, and constantly evolving. Some of the ongoing projects of the Smart Mobility city Poznań are: GTFS-RT Schedules, PEKA-Poznań Electronic Agglomeration Card and the Park & Ride Stage One. There are also several ideas for future projects such as: E-INK, Mobile PEKA card, Electromobility Strategy, Park & Ride Stage Two and Traffic Model (Big Data) And Developing Its Potential.

The Smart City Poznań is focused on innovation on the local level, the level of their city. And as quoted by the city itself: "We have ambitious, yet realistic plans. We know what we want to do in the near future and we also know how to do it. We base Poznań Smart City Model on people."⁸⁵

(1) Are the projects/activities benefiting, cooperating, or linked to any EU instrument, Programmes, and partnerships?

"Project title: Greening of impermeable surfaces in the City of Poznań. The project is financed by the European Funds Programme for Infrastructure, Climate, Environment 2021-2027 under Measure 1.5 Nature protection and development of green infrastructure. The aim of the project is to strengthen the protection and conservation of nature, biodiversity and green infrastructure in urban areas, reduce pollution and unsealing impermeable surfaces, resulting in the creation of areas developed with greenery, including with the participation of blue infrastructure, conducive to the preservation and protection of biodiversity (over 80%)."⁸⁶

(2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?

⁸⁴ <https://www.poznan.pl/mim/public/smartcity/attachments.att?co=show&instance=1017&parent=81579&lang=pl&id=337477> (p.6)

⁸⁵ <https://www.poznan.pl/mim/public/smartcity/attachments.att?co=show&instance=1017&parent=81579&lang=pl&id=337477>

⁸⁶ <https://www.poznan.pl/fundusze-europejskie/>

“Poznań CityLab is an initiative that is the result of the evolution of the idea of Smart City Poznań. It puts residents at the center of innovation, aims to develop the city and region through cooperation of the local ecosystem, resulting from the active attitude of the city.”⁸⁷

“The Poznań smart city model is characterized by quality, broadly understood savings (including time, energy, space) and pragmatics. We are mainly interested in universal solutions, ideas that can be used by all social groups. We focus on integration and ease of access”⁸⁸

(3) How central are EU Programmes to innovation and competitiveness in relation to the use case?

There are different projects with different EU funding: European Funds for Infrastructure, Climate, Environment 2021-2027 European, Funds for Wielkopolska for 2021-2027, European Funds for Digital Development and European Funds for Social Development.⁸⁹

(4) How vital is EU funding to ensure innovation and financial stability in relation to the use case / organisations involved?

Not vital, but preferable, as many projects are linked to some EU funding. There is furthermore the In_Spire Foundation.

“The In_Spire Foundation was established by the Poznań International Fair in 2022. The mission of the In_Spire Foundation is, among others, the development of the economy, in this respect the Foundation conducts activities related to, among others, the promotion and support of the Polish economy, promotion and dissemination of innovation and entrepreneurship, as well as the promotion of the city and region. In the area of entrepreneurship, the foundation also operates in the field of promoting and disseminating access to the latest technologies; promoting digitization, digitization, as well as knowledge transfer, development of skills and competences. The In_Spire Foundation operates in four basic areas: support for entrepreneurs, cultural, social and sports activities. In the first half of 2022, the Foundation focused its activities on a campaign supporting, among others, the City of Poznań in managing the refugee crisis in connection with the outbreak of war in Ukraine. Currently, the Foundation, in addition to social activities, focuses its attention on projects aimed at business recipients.”⁹⁰

(5) Where are the gaps and opportunities to strengthen the links between the local/regional innovators and the EU/National programmes and priorities?

Unknown.

4.11 innocam.NRW, (Germany)

‘innocam.NRW, is the competence network for automated and connected mobility in North Rhine-Westphalia’ (NRW)

⁸⁷ <https://www.poznan.pl/mim/smartcity/-,p,25877,38303,71025.html>

⁸⁸ <https://www.poznan.pl/mim/smartcity/obszary-smart-city,p,25877,38303,50499.html>

⁸⁹ <https://www.poznan.pl/mim/main/srodki-ue-2021-2027,p,13631,75022.html>

⁹⁰ <https://www.poznan.pl/mim/smartcity/operator,p,25877,38303,80311.html>

Answers were provided directly via email to the questionnaire⁹¹ as presented below:

General information

1. Name of the local cluster, smart specialisation, local ecosystem or initiative

innocam.NRW

2. Year of establishment/initiation

2023

3. Short description of how it started/initiated. The reasoning behind

Funded by the ministry to support innovation and implementation of CCAM with regard to all modes of transport within NRW

4. Number of associated institutions/members/organisations

innocam's operational activities are managed by four academic institutions:

- Future Mobility Partnership (FMP) e.V.
- RWTH Aachen University
- Institute for Technologies and Management of digital Transformation, Bergischen Universität Wuppertal (TMDT)
- Institut für Positive Computing, Hochschule Ruhr West (HRW)

In its activities, innocam.NRW works closely with around 15 other organizations. To achieve wide impact, networking with local development hotspots and multipliers is promoted. These serve as local contacts for members and local experts and contribute the knowledge of the innocam.NRW network.

5. The geographical reach/influence:

Mostly NRW, however EU-wide partners involved.

Innovation capacity

6. What are the main topics the use case is working on, its expertise, and field of action

CCAM/Smart mobility in NRW is covered for all transport modes (rail, road, waterborne, airborne) and with all stakeholders (authorities, companies, research and society) in scope. [innocam.NRW] try to push innovation and implementation via working groups (project initiation and CCAM needs discussion) and inform [the] network about current topics (societal, legislative, economical, user needs, technological) in CCAM. Also, we support the building of CCAM capacity in local authorities.

Within the use cases, the aim is to understand:

⁹¹ Questionnaire responses from representatives of innocam.NRW. 04.2025.

(1) Are the projects/activities benefiting, cooperating, or linked to any EU instrument, Programmes, and partnerships?

Innocam.NRW is the competence network for Connected, Cooperative and Automated Mobility (CCAM) in North Rhine Westphalia. It is funded by the Ministry of the Environment, Nature Conservation and Transport of NRW. Although no direct EU funds are allocated, the network maintains systematic exchanges with the CCAM Partnership and related European associations to disseminate information within NRW on EU funding opportunities and CCAM research and innovation (R&I) progress. Innocam.NRW plans to participate and create a link in the closer collaboration between the CCAM partnership and local authorities.

(2) Does this use case go beyond the local/regional level and support/align with higher EU R&I targets?

While the primary mandate is to accelerate CCAM deployment in NRW and strengthen regional stakeholder cooperation, innocam.NRW explicitly aligns its activities with EU wide smart mobility targets under the “Sustainable and Smart Mobility Strategy”.

Nationwide, EU-wide and cross border (NL,NRW, BE) initiatives are of interest and enable the translation of international R&I outcomes into regional and interregional applications - integral elements of innocam.NRW. All transport modes are being considered, increasing interoperability and transfer across all transport modes.

(3) How central are EU Programmes to innovation and competitiveness in relation to the use case?

The implementation of CCAM in municipalities and cities, together with the Urban Nodes and the SUMPs, is part of the direction set by the EU Programmes for the transformation of cities and municipalities. EU-wide research projects generate important innovations that drive this implementation forward. In view of global competition and the strategic relevance of CCAM for resilient, autonomous public transport systems, a strong EU centred innovation ecosystem is indispensable for technological sovereignty.

(4) How vital is EU funding to ensure innovation and financial stability in relation to the use case / organisations involved?

EU funding is very important, as CCAM is a matter of international development and competition. CCAM can create new business models, make transport safer, more efficient, helps with the rising worker shortage within public transport while securing the efficient connection of urban and rural areas.

However, ROI-horizons are long for all, the technology supplier, mobility provider and the municipality. Municipalities or cities often lack both capital and personnel capacity to implement CCAM in public transport and infrastructure while global players advance rapidly due to extensive private funding. Additionally, stronger public funding is enabling a competitive and welcoming research and innovation environment to attract world's best talents and businesses. Therefore, to foster resilience and competitiveness for CCAM in EU, funding for CCAM is very vital.

(5) Where are the gaps and opportunities to strengthen the links between the local/regional innovators and the EU/National programmes and priorities?

Innocam.NRW aims to connect local authorities and stakeholders within NRW and above and to also connect with EU programmes to bridge the gap. Right now, it is important to strongly connect with the cities and municipalities, as they need to be informed about benefits and roll-out strategies of CCAM. Clear pathways and good practices to CCAM implementation covering not only the technological but also legislative, financial, infrastructural and operational implications would support the local authorities in their role.

Identified gaps and opportunities include limited municipal awareness of CCAM benefits, unclear implementation roadmaps (technical, legal, financial and operational) and complex access to EU funding. Innocam.NRW recognises the need to address these gaps (in cooperation with CCAM Partnership) by:

- establishing structured information channels between municipalities, regional actors and EU Programmes;
- providing information and decision support on C-ITS based traffic management (What are the benefits in traffic management, what are associated costs and which technical solutions are to be implemented?);
- offering guidance on automated shuttle introduction (Which operational, financial, technological strategies for the implementation of automated shuttles are recommended and which shuttles are available on the market?);
- facilitating regular exchanges among EU, inter regional and NRW stakeholders to align needs with funding instruments.

Importantly, large scale model regions for implementation and good practices and innovation hubs for research could strengthen the link between EU programmes and local authorities and highly accelerate regional CCAM uptake and reinforce Europe's overall innovation capacity.⁹²

4.12 Regione Piemonte, (Italy)

The analysis will be enriched by best practices for the collaboration with cities and regions in established international markets. A range of best practice examples of local/regional R&I ecosystems have been presented above. Regione Piedmont provides an example of a more direct route to cooperation.

This use case revolves around a Cooperation Working Arrangement (CWA) which is a strategic collaboration between the 2Zero Partnership (EGVIAfor2Zero), the European Commission, DG Research and Innovation (DG RTD) and Regione Piemonte.

The cooperation 'Towards zero emission road transport' aims to maximise synergies between national and regional funds managed by the region and 2ZERO Work Programmes, and to align regional objectives and R&I priorities, topic and resources to contribute to

⁹² Questionnaire responses from representatives of innocam.NRW. 04.2025.

2ZERO objectives and the implementation of the Strategic Research and Innovation Agenda (SRIA).

The region is interested to technically align their R&I Programmes, investments and funding with the 2ZERO Work Programmes and objectives and aim to establish a framework supporting EU roadmaps at the regional level.

The purpose of the CWA is also to seek funding from relevant programmes on the EU, national, and regional levels supporting the uptake of key innovative solutions and regional development.

This 'cooperation umbrella' includes preparing a national/regional Common Technical Roadmap, and common meetings to implement this roadmap. R&I topics and funding schemes identified in the roadmap can be used towards national and regional calls aligned to the 2ZERO Work Programmes which contribute to common objectives.⁹³

In summary, 'The CWA establishes a strategic cooperation umbrella to promote synergies among EU and regional funds, particularly Horizon Europe and ERDF... The core of the Arrangement is to foster joint efforts to support parallel and sequential funding opportunities for innovation, training, and regional development, maximizing scientific, socioeconomic and environmental impact.'⁹⁴

⁹³ CWA EGVIafor2Zero and DG RTD

⁹⁴ <https://www.2zeroemission.eu/mediaroom/signature-of-the-cooperation-working-arrangement-between-2zero-and-regione-piemonte-italy/>

5 Conclusions and Recommendations

This deliverable was compiled before the series of important reports addressing the EU's lagging competitiveness and before the EC established its key-strategies to address this issue, and its perspective on R&I in the next Multi-Annual Framework. The digest of the information gathered above is bringing initial conclusions but leaves room for further questions and outlook. A spotlight of some best practices for the collaboration with cities and regions in established international markets have been presented, with a balance of geographic location, approach, and levels of collaboration.

Conclusions

Ultimately, models should be co-created for:

- the cooperation with key actors in regional funding Programmes on one side and
- EU partnerships and Horizon Europe WPs on the other, e.g. along common policy objectives, critical value chains etc. and considering the differences in the distribution of powers, budget planning and degree of innovation.

This report highlights the intricate relationship between EU and sub-national programmes fostering innovation in sustainable mobility. By examining local clusters, ecosystems, and smart specialisation strategies, the report underscores the essential role of local and regional actors in achieving broader European research and innovation goals.

We looked for a variety of approaches to the creation of local R&I ecosystems. Some are goal-oriented (e.g. climate neutrality), others are more economic development-oriented. We managed to find a good geographical distribution.

Local innovators, such as the CAAR cluster in Aragon and initiatives like Gothenburg Green City Zone, illustrate the power of targeted collaboration to drive advancements in sustainable mobility transition.

However, the report also reveals persistent challenges, including resource constraints, the need for enhanced continuity amidst political changes, and the complexity of aligning local and European objectives. There was also input indicating a desire for simplified application, administrative and reporting processes. These obstacles demand further exploration to understand what improved funding mechanisms, streamlined governance, and stronger inter-regional and EU collaborations could look like. Despite many of the local innovators working on topics and objectives that are in line with EU objectives or ERTRAC priorities, there are not always clear connections and a seamless framework to tap into these higher objectives.

The complexity, broader approach, or even the lack of clear communication paths from EU schemes, Programmes, and initiatives can be barriers for local innovators to engage with and benefit from them. Local innovators are not disassociated from the EU context. Still, they seem to rely on having local cooperation and networks (such as clusters) and structures in place to engage and benefit more effectively from the EU structures.

Different national and regional context particularities also seem to influence whether local innovators leverage national or EU schemes. In the case of CAAR, innovation activities rely on the EU level, and the Gothenburg Green City Zone and Brainport Eindhoven are supported at

the national and EU levels. A deeper look into these context particularities is still needed; so far, it is not possible to identify patterns or recurrences in those.

Overall, the key questions to answer were:

- **How can the R&I priorities** of ERTRAC, CCAM and 2Zero Platforms and Partnerships **link** into the strategies of the Programmes relevant for cities and regions; and the other way around and
- **What information** on technology maturity and **development paths** would those instruments and Programme **require for a reasonable planning** from ERTRAC and the Partnerships.

The findings of this report coincides with other ecosystem players in improving this system.⁹⁵

Key-recommendations:

Recommendation 1: Strengthen strategic approach to RTR R&I place – based ecosystems

- As the report shows, the local ecosystems are engaged in comparable and complementary practices. If fragmentation could be reduced and connectivity strengthened between this regional ecosystems, competitiveness would be boosted.
- This defragmentation could happen by establishing common goals and collective strategies – such as R&I roadmaps, so innovation-oriented investments can be better coordinated on all levels.
- Regional development strategies should include regions as key stakeholders and aim to align financing, investments, and goals to align with local, national and EU approaches. Specifically, for RTR, the territories are an essential partner, as providers of test-beds (the road network), procurers, data-owners etc.
- The regional ecosystem can take up the role of ‘director’ to facilitate extensive collaboration between R&I stakeholders for initiatives supporting place-based innovation in the future MFF funding instruments (FP10 and the future competitiveness fund).

Recommendation 2: Set up a clear support framework for regional RTR R&I ecosystems

- Establishing well-defined roles for R&I stakeholders to support alignment and links with similar policies and Programmes
- This could be accomplished by focusing on a key thematic RTR R&I area and bringing together stakeholders with similar functions at the local and national level to find an approach through co-creation that all levels could construct, which aligns with or improves upon the EU approach. This could be replicated once refined.
- Support the removal of complexities and administrative barriers to RTR R&I funding mechanisms, Programmes, application processes, and reporting.
- Co-create and improve the mechanisms of checks and balances in place with the EU to hold formally funded RTR R&I initiatives and less formal contracts, as well as the included cities and regions accountable to a reasonable level, regardless of political

⁹⁵ 2025.03 ERRIN. Connected regional innovation ecosystems - key for Europe's competitiveness. Towards the EU long-term budget post-2027. https://errin.eu/system/files/2025-03/250311%20ERRIN%20Input%20Paper_Ecosystems_final_0.pdf

shifts, to demonstrate clear progress and financial plans, and to ultimately provide the results agreed to.

Recommendation 3: Proactive networking between RTR R&I ecosystems to increase the overall competitiveness of the EU innovation ecosystem

- Support collaboration and the transfer of knowledge between emerging RTR R&I and established RTR R&I leaders and ecosystems.
- Construct RTR R&I clusters which go beyond local politics, such that political and financial support can be balanced and maintained through fluctuations of local economic de-/prioritisations and politics.

Once STREnGth_M Task 3.3 has been completed, the work from WP3 will be added as fact sheets to ERTRAC's [National activities](#) interactive map to facilitate the visualisation of initiatives, approaches, and resources. This will also support links with other STREnGth_M tasks already available there.

Next steps and remaining questions for further research

The current challenges and limitations this report presents are being addressed in future activities already in planning and could, thus, be refined in the upcoming factsheets. Moreover, the STREnGth_M Multiplier Group activities will also support addressing the challenges and limitations and.

This report will be complemented by fact sheets that will be added to the interactive map of National Activities on the ERTRAC webpage.⁹⁶

⁹⁶ <https://www.ertrac.org/national-activities/>

6 Annex

6.1 Annex I – Local Innovators' Questions



<https://forms.office.com/e/JznmLQWjPf>

or

<https://forms.gle/suqbznmmhwrvaXhXA>

Figure 5 - QR code to access the questionnaire online

A screenshot of a web form titled 'Local innovators use cases questionnaire'. The form has a light blue header with the title. Below the header, there is a section titled 'Competitiveness and financial stability' with a sub-header 'Some questions might not be relevant to all initiatives/clusters/ecosystems. Feel free to skip questions or add any other information you might judge relevant to understanding your competitiveness and financial stability.' The first question is 'How do you see your initiative/cluster/ecosystem competitiveness in relation to its field action/expertise at the national, European and global levels?' with a text input field below it. The second question is 'Does the initiative/cluster/ecosystem contribute to increasing/strengthening the competitiveness capacity of its region?' with a text input field below it. The background of the form has a blue and green geometric pattern.

Figure 6 - Screenshot of part of the questionnaire online

General information

1. Name of the local cluster, smart specialisation, local ecosystem or initiative
2. Number of associated institutions/members/organisations
3. Year of establishment/initiation
4. Short description of how it started/initiated. The reasoning behind
5. Number of associated institutions/members/organisations
6. The geographical reach/influence

Innovation capacity

7. What are the main topics the use case is working on, its expertise, and field of action
8. What are the main projects/activities/research/measures in which the use case (or members) is involved or leading

9. Do they represent innovation on the local level, and what are the aspects that make them innovative
10. What is the outreach of the innovation – do they influence national and European level innovation
11. Is the innovation creating a long-lasting effect, encouraging and sustaining constant innovation and visibility for the area?

Competitiveness and financial stability

12. How does the use case see its competitiveness in relation to its field action/expertise at the national, European and global levels?
13. Does the use case contribute to increasing/strengthening the competitiveness capacity of its region?
14. How is the financial stability/sustainability of the use case, and how does this translate to its members/associates?

Cooperations and influences

15. Is the cooperation with other similar initiatives (clusters, innovation ecosystems) relevant to their competitiveness & innovation in their field of action and to their financial sustainability
16. Are these projects/activities/research/measures contributing to the local policy objectives? How? Is there strong cooperation within the local policy context?
17. Does the policy influence go beyond the local level and reach the national and EU levels?
18. Is there any indication of the use case supporting higher EU R&I targets?
19. Does the use case cooperate with other similar initiatives in other regions?

Funding instruments and Programmes

20. Is the use case and its projects/activities/research/measures benefiting, cooperating, or linking to any EU instrument, Programmes, and partnerships? (e.g. Horizon Europe, The Driving Urban Transition, European Urban Initiative, LIFE, Cohesion Fund, ERDF – European Regional Development Fund, Resilience and Recovery Fund, European Social Fund Plus (ESF+), Just Transition Fund, 2ZERO, CCAM) Which ones?
21. How are these cooperations and links?
22. How central or vital are the EU funding and Programmes to ensure the innovation, competitiveness, financial stability and influence of the use case?
23. Does the use case see any gaps or shortcomings in these cooperations and links?
24. Does the use case see any opportunities to be explored and improved in these cooperations and links?

7 References

General References

- Călinoiu, Eduard. 'THE ROLE AND IMPORTANCE OF CLUSTERS IN EUROPE. GERMAN MODEL VERSUS ROMANIAN MODEL'. *Law Review*, no. Supliment1 (2019): 207–16.
- 'Cluster Policy - European Commission'. Accessed 1 December 2024. https://single-market-economy.ec.europa.eu/industry/cluster-policy_en.
- 'ERRIN: European Regions Research and Innovation Network'. Accessed 1 December 2024. <https://errin.eu/>.
- Foray, Dominique, Martin Eichler, and Michael Keller. 'Smart Specialization Strategies—Insights Gained from a Unique European Policy Experiment on Innovation and Industrial Policy Design'. *Review of Evolutionary Political Economy* 2, no. 1 (April 2021): 83–103. <https://doi.org/10.1007/s43253-020-00026-z>.
- Fundeanu, Daniela Doina, and Cosmin Sandu Badele. 'The Impact of Regional Innovative Clusters on Competitiveness'. *Procedia - Social and Behavioral Sciences*, Challenges and Innovations in Management and Leadership, 124 (20 March 2014): 405–14. <https://doi.org/10.1016/j.sbspro.2014.02.502>.
- Haus-Reve, Silje, and Bjørn T. Asheim. 'The Role of Clusters in Addressing Societal Challenges in European Regions'. *European Planning Studies* 32, no. 9 (September 2024): 1927–42. <https://doi.org/10.1080/09654313.2023.2273317>.
- 'Homepage | European Cluster Collaboration Platform'. Accessed 1 December 2024. <https://www.clustercollaboration.eu/>.
- Krammer, Sorin M. S. 'Science, Technology, and Innovation for Economic Competitiveness: The Role of Smart Specialization in Less-Developed Countries'. *Technological Forecasting and Social Change* 123 (1 October 2017): 95–107. <https://doi.org/10.1016/j.techfore.2017.06.028>.
- 'Smart Specialisation | ERRIN Website'. Accessed 1 December 2024. <https://errin.eu/working-groups/smart-specialisation>.