



 **STREnGth_M**
Strengthening EU
Road Transport R&I

Contribution from road transport to the realization of the Green Deal targets and the Paris Agreement



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► Overview

This is the designed version of the formal deliverable D5.3: Contribution from road transport to the realization of the Green Deal targets and the Paris Agreement. This document is based upon extracts from the following STREnGth_M documents which can be found on the [ERTRAC website](#) under the dropdown menu 'Support Action' / [STREnGth_M \(2023-2026\)](#). Listed below are the Deliverable (D) numbers, titles, leads, and submission dates. Full authors and details can be found within the documents.

D1.1 Barriers for the deployment of research results (VOLVO, 2024)

D1.2 Roadmapping methods on European, Member State and international level (CRF, 2024)

D1.3 Training actions supporting road transport area in Europe and internationally (RUPPRECHT, 2025)

D2.1 Future research needs (RWTH, 2024)

D2.2 Timing for roadmap updates (RIC-D, 2023)

D2.3 Overview of roadmaps and process implementation (RIC-D, 2026)

D3.1 Visualization of the sustainable RTR landscape at EU Member States level (ERTICO, 2024)

D3.2 Interactive map of collaboration paths EU and sub-national programmes (POLIS, 2025)

D3.3 Toolbox for multi-level alignment of sustainable RTR roadmaps (VDI/VDE-IT 2025)

D4.1 Sustainable mobility tracker (FIER, 2025)

D4.2 Synergies between European, national and regional programmes (UEMI, 2026)

D4.3 Opportunities and challenges for research and international cooperation (UEMI, 2026)

The information within is also sourced from extracts of the following ERTRAC Working Group Roadmaps, which can be found on the [ERTRAC website](#) on the [documents](#) page.

[Integrated Urban Mobility Roadmap](#) (ERTRAC-ALICE-ERRAC Working Group on Urban Mobility, 2024).

[Circular Economy and Competitiveness of the European Road Transport Strengthening sustainability and resource sovereignty of the automotive industry](#) (ERTRAC Working Group: Circularity and Competitiveness, 2025).

Long Distance Freight Transport, A roadmap for competitive, sustainable and resilient Road Transport (ERTRAC Working Group Long Distance Freight Transport, Publication Pending).

Abbreviations: Clarified within the document.



Contents

1	Introduction	05
1.1	About ERTRAC	05
1.2	About STREnGth_M	05
1.3	Objectives and scope of this report	05
1.4	Establishing a strategic view: Strategic R&I Agendas	06
1.5	Identifying R&I priorities: Roadmapping	06
2	EU research in action	09
2.1	Defining Future Needs	09
2.2	Recent ERTRAC RTR Roadmaps	10
2.3	Horizon Success Stories	11
3	RTR Landscape and Funding Mechanisms	18
3.1	RTR landscape at the EU Member State level – Fact Sheets	18
4	International progress, synergies, and programmes	20
4.1	Sustainable mobility tracker	20
4.2	Synergies between European, national and regional programmes	20
4.3	Opportunities and challenges for research and international cooperation	22
5	Strengthening the RTR Community	24
5.1	RTR Community and Events	24
6	References	26

List of figures

Figure 1-1	R&I roadmaps preparation phases and main related actions	07
Figure 1-2	Education and Training Needs	07
Figure 1-3	Strategies for Advancing Training Programmes	08
Figure 2-1	Strategic Research & Innovation Agenda by the CCAM PPP: Paving the way to Large Scale Demonstrations	09
Figure 3-1	ERTRAC National Activities Interactive Map	18
Figure 3-2	Fact Sheets Example, Belgium	18
Figure 5-1	Role and purpose of the Multiplier Group	25

List of tables

Table 4-1	Indicative summary table	21
Table 4-2	Sector application: indicative synthesis of D4.3 draft themes	23

▶ 1 Introduction

This brochure, formally called 'D5.3 Contribution from road transport to the realization of the Green Deal targets and the Paris Agreement' within the STREnGth_M project, provides an overview of the activities and knowledge gained throughout the project. This information can be used to inform future initiatives and to serve as a resource linking back to the more comprehensive documents created throughout the project.

This first chapter provides an overview. This is followed by a chapter on EU research and action, which provides the European Road Transport Research Advisory Council (ERTRAC) vision, research needs they have identified, and information on recent Research and Innovation (R&I) roadmaps. The chapter also highlights a selection of Horizon success stories. The elements within cover partnerships, outputs, and documents providing a consolidation of knowledge on these topics. The next chapter examines the Road Transport Research (RTR) landscape and funding mechanisms and is focused on the factsheets produced within the project. This is followed by a chapter on international progress, synergies, and programmes. Opportunities and challenges for international cooperation are presented. The final chapter revolves around strengthening the RTR community and covers some key activities that raised visibility and awareness of the project.

The final brochure provides an overview of the STREnGth_M project and outputs, and presents activities and materials provided by the community of experts.

1.1 About ERTRAC

The European Road Transport Research Advisory Council (ERTRAC) is the European technology platform which brings together road transport stakeholders. ERTRAC supports the development of a common vision for road transport research in Europe and the creation of roadmaps outlining the challenges, proposed solutions, and proposing steps towards achieving this common vision.

ERTRAC brings together organisations from a wide range of transport related sectors including the automotive industry, road transport authorities, academia, as well as international organisations – to identify the needs of EU Road Transport Research (RTR) and contribute to improving the effectiveness of current and future funding programmes and policies.

1.2 About STREnGth_M

Stimulating road Transport Research in Europe and around the Globe for sustainable Mobility (STREnGth_M) was a

Horizon Europe Coordination and Support Action (CSA) from 2023-2026 that aimed to contribute to the planning and transport research and innovation in Europe.

STREnGth_M's objectives include:

- Identifying future research needs in road transport
- Updating and supporting the coordination of strategic research agendas and roadmaps in the sector.
- Enabling ongoing collaboration between Horizon Europe road transport partnerships and platforms
- Identifying barriers to the uptake of research outcomes at both European and international levels.
- Assessing the viability of innovative solutions for emerging and future markets in Africa, Asia, and Latin America.
- Supporting the achievement of the European Green Deal and Paris Agreement goals through sustainable, safe, and efficient road transport solutions.
- Supporting RTR planning for ERTRAC and the European Commission to ensure Europe's sustainable mobility goals are met.

1.3 Objectives and scope of this report

The overall objectives and scope of this report is within the title, 'Contribution from road transport to the realization of the Green Deal targets and the Paris Agreement' and scope of the related Task 5.4, 'Disseminate the contribution from road transport, to the realization of the European Green Deal and the Paris Agreement'.

Without going into a deep dive into these well-known initiatives, here is the briefest of over-views. The [Paris Agreement](#) is an international treaty to limit global warming. The [European Green Deal](#) aims to decarbonise all sectors of economy, reduce dependency on fossil fuels, and support transition to renewable sources. This translates strategy into regulations for member states, and serves as the EU's plan to meet the goals of the Paris Agreement. Road transport emissions represent around 25% of greenhouse emissions and is a key sector to decarbonise in order to meet the goals of the Paris Agreement. Key strategies include mandating zero-emission standards, and reducing auto-only dependency through the development of and investment in intermodal transport networks. This includes investment into electric vehicles, right-sizing vehicles, developing the necessary charging infrastructure, as well as consistent policy implementation across countries to support the overall goals.

This document presents progress and contributions towards these targets through project activities, highlights key areas of STREnGth_M deliverables, and serves as a resource for cities, regions, and countries to find key information, collaborate, and to be inspired.

1.4 Establishing a strategic view: Strategic R&I Agendas

Connection to European Technology Platforms and/or Horizon Europe Partnerships

STREnGth_M was a Horizon Europe Coordination and Support Action (CSA) for ERTRAC.

ERTRAC members regularly contribute to Strategic Research and Innovation Agendas (SRIAs), which lay out the timelines and approach to implementing partnerships and objectives. ERTRAC's partnerships include the [2Zero Partnership](#) (2021-2027), a CSA, to accelerate the development of zero tailpipe emission road transport in Europe with a system approach, EGVIafor2ZERO ('European Green Vehicles Initiative Association' – the private side of the partnership), and CCAM (Connected, Cooperative and Automated Mobility) (2021-2027), a public-private partnership to accelerate Cooperative, Connected, and Automated Mobility in Europe. Additional details, as relevant, are included in the text within this paper.

► ERTRAC has also recently outlined their own road transport priorities in '[ERTRAC Vision 2050](#)'.

1.5 Identifying R&I priorities: Roadmapping

ERTRAC members regularly contribute to thematic roadmaps through their working groups. Contributions were also made within STREnGth_M to support the related processes and tasks. In order to present this in the context of the project key extracts of public deliverables will be presented.

Barriers for deployment of research results

Ten clusters have been identified based on the review of a selection of projects presented at the RTR2024 research results conference. These clusters cover various aspects from, Technology, Knowledge, User involvement, Eco-system, Standards, Regulations, Infrastructures and finally Financial & Funding. For each cluster different barriers and challenges for deployment have been identified, that will require focused attention to ensure the continued progress and successful deployment of innovative road transport solutions.

The following recommendations have been identified:

- Continued focus on R&I technology.
- Improve the knowledge transfer of research results.
- Increase user involvement and user dialogue.

- Broaden the stakeholder eco-system engagement.
- Ensure continued link to standardisation.
- Strengthen the link to regulation.
- Continue involvement with physical infrastructure.
- Improve the collaboration with energy infrastructure.
- Strengthen digital infrastructures: Services & Data.
- Improve the funding schemes to support the digital and green transition – with focus on deployment of new technologies and the removal of the barriers.

► For further details, please see the full Deliverable: [D1.1 Barriers for deployment of re-search results](#).

Roadmapping methods on European, Member State and international level

In general, preparing Road Transport R&I roadmaps requires a systematic and collaborative approach. Experts in R&I on Road Transport worldwide have already established very effective frameworks for the preparation of Road Transport R&I roadmaps, whose main characteristics can be summarised in the steps listed hereafter. Noticeably, on a case-by-case basis, based on the national or international context and on the roadmap target audience, experts working on Road Transport R&I roadmapping can adopt the most suitable path through these steps grouped in three main phases as shown in Figure 1-1.

Interactive Map of National Activities

Geographic Summaries of Roadmapping methods on European, Member State and international level covered in D1.2 have been extracted and uploaded to the '[National Activities](#)' page of the ERTRAC website to serve as a publicly available resource.

► For further details, please see the full Deliverable: [D1.2: Roadmapping methods on European, Member State and international level](#).

Training actions supporting Road Transport area in Europe and Internationally

The transformation of the road transport sector is essential to address contemporary challenges, including climate change, urban congestion, digitalization, and the growing demand for sustainable mobility solutions. As the sector evolves, training programs must adapt to equip professionals with the knowledge and skills necessary to navigate this rapidly changing landscape.

Research within the project outputs highlight the challenges and needs identified across various sectors shaping the future of road transport.



Figure 1-1 R&I roadmaps preparation phases and main related actions (Source: D1.2)

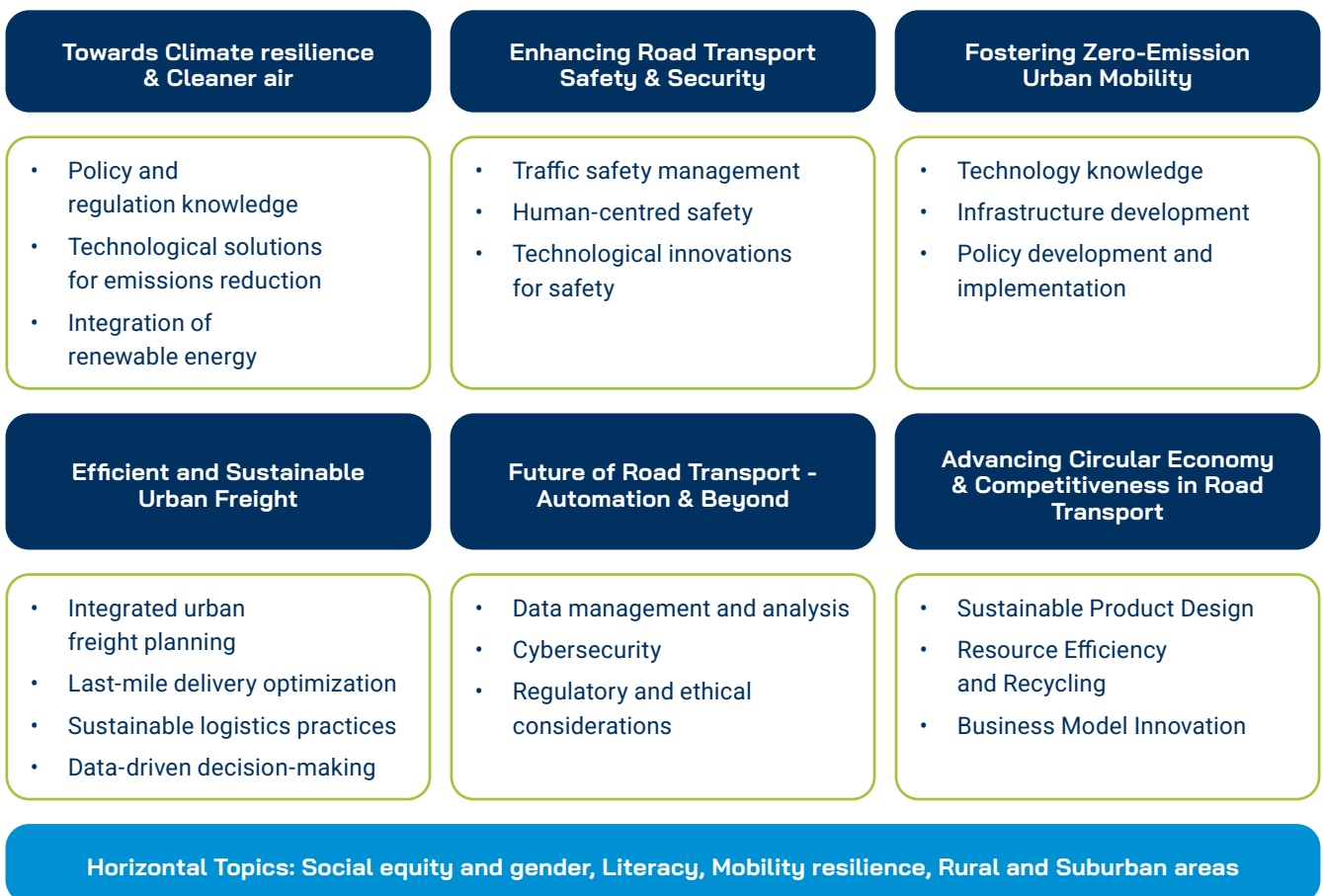


Figure 1-2 Education and Training Needs (Source: D1.3)

However, beyond recognizing these key action fields, it is essential to address the barriers that hinder effective training and implement strategies to modernize and enhance learning methodologies.

One of the primary challenges...is the rapid pace of technological advancements, which makes it difficult for training programs to remain current...Training programs must not only focus on technical competencies but also foster adaptability, critical thinking, and problem-solving skills to enable professionals to respond to ongoing sectoral transformations.

Additionally, outdated training content and a lack of collaboration among stakeholders have contributed to fragmented learning efforts. Addressing these issues requires stronger partnerships between educational institutions, industry players, and policymakers. Establishing

cross-sectoral certifications and training standards will ensure consistency in training quality and content, while promoting a culture of continuous professional development will help professionals stay ahead of industry trends.

By overcoming these barriers and advancing structured training strategies, the road transport sector can cultivate a skilled, adaptable, and forward-thinking workforce. Investing in comprehensive and innovative training solutions will not only enhance operational efficiency but also contribute to a more sustainable and resilient transport system for the future.

► For further details, please see the full Deliverable: [D1.3: Training actions supporting Road Transport area in Europe and Internationally.](#)

D1.3 Training actions supporting Road Transport area in Europe & Internationally



Figure 1-3 Strategies for Advancing Training Programmes (Source: Based upon D1.3)

▶ 2 EU research in action

2.1 Defining Future Needs

Future research needs in road transport

The new [ERTRAC Vision 2050](#) is shaped by the complex web of societal, technological, geopolitical, economical and environmental influences. At its core, mobility is recognized as a fundamental right, essential for individual freedom and societal participation. The Vision is structured around five key sub-visions, which are describing the desired situation in 2050 Europe:

- Europe as the world leader for safe and sustainable road transport solutions.
- Seamless mobility of people and goods for the benefit of all EU citizens.
- All-round protection: safety and security.
- Environmental sustainability: energy and resource efficiency, decarbonisation and excellent air quality.
- Highly efficient and resilient road transport: a key element of the European mobility system.

Comparing the Vision to the status quo, the following systemic research needs have been determined. These complement the research needs identified by the focus areas of the existing ERTRAC Working Groups, without significant overlap:

- Ensure seamlessness of mobility services while staying cost effective.
- Joint forces for a well-functioning digital mobility ecosystem for people and goods.
- Cost structure to internalise external costs and finance sustainability.
- Improve the ability to understand and anticipate user roles, needs and behaviour based on existing and future values.
- Encourage societal support for rapid changes and investments in road transport.
- Fair global boundary conditions and reduced dependencies, to enable sustainability.
- Holistic optimisation of resources by maximizing the use of renewable materials and energy.
- Manage access and traffic intelligently.
- Create resilient and safe physical and digital infrastructure.

- Predict and mitigate the impact of climate change on the road transport system, especially when updating the ageing infrastructure, to ensure the resilience of the road transport system.
- Data collaboration to support safe and secure fully connected road transport.
- Advancing Europe's leadership in road transport innovation.
- Attractive and innovative framework conditions for research and education.
- Harmonised curricula and professional carrier development models for life-long learning.
- Master global competition in a responsible and social way, and strengthen EU sovereignty.

Together, the Vision and the systemic research needs form relevant input for the next ERTRAC Strategic Research Agenda (SRA), preparing thematic input for the next Framework Programme. They highlight the importance of collaboration among sectors, such as transport, energy, urban planning, and the digital infrastructure. Only by impactful collaborative re-search, involving actors all along the value chain can these systemic research needs be addressed successfully. Sustained public-private partnerships and targeted investments are essential for positioning the EU as a leader in safe and sustainable road transport, and for driving innovation in a critical sector for the EU's sovereignty, security, industrial competitiveness, and prosperity.

▶ For further details, please see the full Deliverable: [D2.1: Future research needs in road transport](#)

Timing for Roadmap Updates / Related Partnership Activity Plans

EGVIA for 2ZERO

The 2ZERO SRIA was updated in 2023. Thereafter the projected impact of the partnership towards its targets as measured by its key performance indicators (KPI) will be assessed during a complementary CSA named "LeMesurier", which kicked-off in January 2024.

Connected and Cooperative Automated Mobility

The CCAM SRIA shows the current focus of the research planning and is illustrated in the figure below.

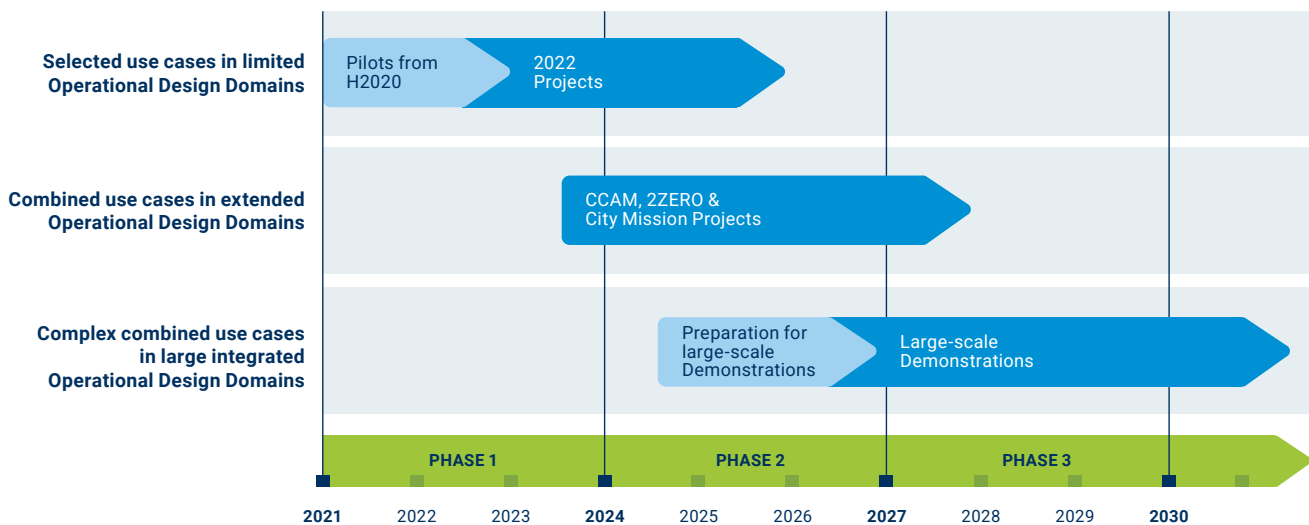


Figure 2-1 Strategic Research & Innovation Agenda by the CCAM PPP: Paving the way to Large Scale Demonstrations (Source: D2.2 / CCAM)

Updating the ERTRAC Vision and Strategic Research Agenda for FP10

This activity was supported by partners within the STREnGth_M project. Since policy targets require fundamental changes to the transport system, STREnGth_M made use of a cross-thematic high-level approach complementing the established bottom-up approach for the identification of research priorities. This was based on a common vision of the future European road transport system. This may effectively be considered as a preparatory step, perhaps even a prerequisite, for an update of the ERTRAC SRA.

► For further details, please see the full Deliverable: [D2.2 Timing for Roadmap Updates.](#)

ERTRAC working group plans, which include the roadmap updates follow in the next sub-section 'Recent RTR Roadmaps.'

Overview of roadmaps and process implementation

The project followed delivery of the ERTRAC Vision 2050 and the preparation of the SRA; plus the coordination and planning for the activities of the various ERTRAC Working Groups and their interactions with partnerships such as CCAM and 2Zero.

This will be delivered in the final month of the project M36 of the STREnGth_M project and will summarise the roadmap writing activities and progress. This will include a review of the progress and processes used to achieve the original plans from both top-down and bottom-up perspectives. It will also provide a brief commentary of the future plans

for ERTRAC in light of the remainder of Horizon Europe and the suggested future formation of a single automotive partnership.

► For further details, please see the full Deliverable: D2.3 Overview of roadmaps and process implementation, which will be available on the [STREnGth_M](#) website once formally approved.

2.2 Recent ERTRAC RTR Roadmaps

The ERTRAC working groups gather experts from the membership to collaborate on SRAs and roadmaps. There are presently six working groups covering the following thematic pillars:

- Urban Mobility.
- Long Distance Freight Transport.
- Energy & Environment.
- Road Transport Safety & Security.
- Circularity and Competitiveness.
- Connectivity and Automated Driving.

Recent roadmaps identify research priorities and address recent developments in road transport. For the sake of keeping this document relatively brief- we invite those interested to read the documents by following the links provided below.

- Urban Mobility Working Group. [Integrated Urban Mobility Roadmap](#) (2024). This document aims to present a comprehensive and integrated perspective on urban mobility, identifying research and innovation needs and

laying the groundwork for the future - towards optimising urban mobility systems and addressing related challenges ahead. The roadmap brings the perspectives of experts and different types of stakeholders, thus representing a holistic perspective on the urban mobility system, and integrates the learnings of thematically focused roadmaps and papers produced by the Working Group over the past years.

- Circularity and Competitiveness Working Group. [Circular Economy and Competitiveness of the European Road Transport: Strengthening sustainability and re-source sovereignty of the automotive industry](#) (2025). The document emphasises the urgent need for the automotive industry to transition towards a circular economy (CE) to enhance sustainability

and resource sovereignty complementing the efforts towards zero-emission road transport. It defines the CE model as one that promotes the continuous reuse, repair, and recycling of materials, contrasting sharply with the traditional linear economy characterised by a take-make-dispose approach. The document highlights the significance of the 9R principles—Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Recycle, and Recover—as essential strategies for implementing a circular economy.

- Long Distance Freight Transport Working Group. **Long Distance Freight Transport: A roadmap for competitive, sustainable and resilient Road Transport** (Publication pending, see [ERTRAC](#) website).

2.3 Horizon Success Stories

The following section includes Horizon project ‘Success Stories’, an overview of projects where ERTRAC working group leaders saw notable impacts within their fields of activity, and concrete outputs worth highlighting. The projects included have end dates between September 2022 and August 2025. The information below is extracted from the project resources and results, and links are provided for those who would like to find further details.



AeroSolfd (Fast track to cleaner, healthier urban Aerosols by market ready Solutions of retrofit Filtration Devices for tailpipe, brake systems and closed environments)

[AeroSolfd](#) (2022-2025 / [CORDIS](#)) was a Horizon Europe project supported by the European Commission under grant agreement No 101056661. The project focused on developing market-ready retrofit solutions to immediately decrease the harmful effects on health and the environment of transport-related emissions with effective filtration devices. It aimed to deliver affordable, easy-to-install, and environmentally friendly retrofit solutions to reduce tailpipe and brake emissions and pollution in (semi-) closed environments. A consortium from eight European countries, coordinated by MANN+HUMMEL, joined forces to realize the quick deployment so that people in Europe and beyond can benefit already by 2025 from more eco-friendly mobility.

Key outputs, publications, and tools:

One of the highlights was the tailpipe retrofit within the Horizon Europe project AeroSolfd. VERT-Association as an invaluable project partner provided AeroSolfd with, among other things, a tailpipe retrofit filter and retrofit schemes to advise policymakers on how to proceed to improve urban air. Furthermore, project coordinator MANN+HUMMEL introduced the AeroSolfd solutions for reducing brake dust emissions and pollution in (semi-) closed spaces like metro stations.

<https://aerosolfd-project.eu/results-publications/deliverables/>



AWARD (All Weather Autonomous Real logistics operations and Demonstrations)

[AWARD](#) (2021-2023 / [CORDIS](#)) paved the way for the roll-out of driverless transportation, whatever the weather conditions are. It deployed safe and efficient connected and automated heavy-duty vehicles in real-life logistics operations.

Key outputs, publications, and tools:

Test-sites:

- Automated forklift in Aschaffenburg (Germany).
- Hub-to-Hub shuttle service in Gunskirchen (Austria).
- Airport baggage tractor at Oslo Airport (Norway).
- Port operations in Rotterdam (Netherlands).

<https://award-h2020.eu/>: [Publications](#), and [Deliverables](#)



eCharge4Drivers: Electric Vehicle Charging Infrastructure for improved User Experience

[eCharge4Drivers](#) (2020-2024 / [CORDIS](#)) was an EU-funded Horizon 2020 project working to improve the EV charging experience in urban areas and on interurban corridors, making it more convenient for users to go green.

The project developed and demonstrated user-friendly and innovative charging solutions, such as battery swapping stations for light electric vehicles, smart charging stations, modular charging stations, enhanced booking and routing services, and detailed information to users before, during, and after charging. To foster the broad implementation of charging infrastructure in Europe, the project produced recommendations for standardisation, legal, and regulatory frameworks, as well as decision support tools to ensure the sustainability of the e-mobility investment recommendations and guidelines for investors and authorities to develop further sustainable charging infrastructure services.

Key outputs, publications, and tools:

- [Easy charging, easy driving. Summary of project results](#) (eCharge4Drivers final brochure): Provides a summary of the project, solutions, planning tools, and results. Key lessons learned include the necessity for streamlined regulatory frameworks, particularly regarding battery standardisation across vehicles, and the importance of choosing optimal station locations for greater convenience.
- [EV Charging Location Planning Tool](#): includes socio-demographic data, mobility flows, and charging session data from existing charging stations to predict future needs for charging points, both slow and fast, according to scenarios that include the anticipated adoption of electric vehicles. Feedback indicated this was especially valuable for determining sites to prioritise first and where to deploy additional chargers.
- [eCharge4Drivers Resources, Publications, and Deliverables](#)



FAME (Framework for coordination of Automated Mobility in Europe)

[FAME](#) (2022-2025 / [CORDIS](#)). Summary: Establish a European framework for CCAM testing activities on public road comprising taxonomy, the CEM, CCAM TDS and a legal & ethical framework.

- Develop a common evaluation method (CEM) that provides guidance on how to set up and carry out an evaluation or assessment of direct and indirect (wider socio-economic) impacts directed at different user groups.
- Develop a CCAM test data space (TDS) to establish trusted data sharing between different types of stakeholders within the CCAM community.
- Engage the stakeholder network of the CCAM partnership and enrich it by the broader European and international CCAM stakeholder community for the further development, alignment, and exploitation of the content of the Knowledge Base and the development of a common methodology and testing framework.
- Enhance the EU-wide Knowledge Base with an efficient governance mechanism, ensuring continuous contribution from CCAM stakeholders to serve their needs and the CCAM partnership (SRIA).

Key outputs, publications, and tools:

- CCAM Knowledge Base, a one-stop shop for all CCAM related activities in Europe.
- Stakeholder Engagement.
- Common Evaluation Methodology for CCAM (EU-CEM Handbook).
- Framework for testing on public roads including a CCAM Test Data Space.
- <http://www.connectedautomateddriving.eu>
- <https://www.connectedautomateddriving.eu/methodology/common-evaluation-methodology/>



FITDRIVE (monitoring devices for overall FITNESS of Drivers)

The [FITDRIVE](#) project (2021-2025 / [CORDIS](#)) aimed to improve road safety by effectively monitoring working patterns and the overall fitness of drivers. The AI-based FitDrive system is to identify and prevent driving stress states for professional drivers by generating a “usual” driving profile of each driver, based on this profile, detect “unusual” behaviour and associate that with the most probable causes.

Key outputs, publications, and tools:

FitDrive has contributed to the development of a smart tachograph providing information on driver state, which is now commercialised by a spin-out company of a project partner and won the iF Design Award for UX.

Moreover, FitDrive organised several meetings at the European Parliament on the new Driver Licence Directive related to reduced fitness and dangerous behaviour increasing the awareness of the importance of standardization for fitness to drive solutions and regulations beyond the project duration.

- <https://www.fitdrive.eu/library/>
- <https://ifdesign.com/en/winner-ranking/project/fitdrive-smart-tachograph-app/674916>



MOVE21: Multimodal and Interconnected Hubs for Freight and Passenger Transport Contributing to a Zero Emission 21st Century

The main objective of [MOVE21](#) (2021-2025 / [CORDIS](#)) was to transform European cities and functional urban areas into climate neutral, connected multimodal urban nodes for smart and clean mobility and logistics. MOVE21 used an integrated approach in which all urban systems are connected and addressed both goods and passenger transport together.

Key outputs, publications, and tools:

- [Urban Nodes Competence Centre: Multimodal Freight and Passenger Hubs](#). Covers hubs in general, methodology, good practices, and capacity building.
- [White Paper. Working Together. Public-Private Collaboration in Urban Mobility and Logistics](#). This White Paper highlights how public-private collaboration and partnerships can promote sustainable and innovative urban mobility and logistics solutions, and how collaboration between private and public stakeholders can help accelerate the uptake of good solutions across European cities. Traditional public procurement often falls short or fails to deliver intended effects and impacts for endeavours with high innovation potential. This is why public-private collaboration is often crucial to bring about desired societal changes.
- [Policy Brief – Planning Urban and Trans-European Mobility together](#). MOVE21 invited European cities designated as urban nodes in the new TEN-T regulation and mobility professionals to discuss challenges and opportunities.
- [MOVE21 Resources, Publications, and Deliverables](#).



SAFE-UP (proactive SAFETy systems and tools for a constantly UPgrading road environment)

The [SAFE-UP](#) project (2020-2023 / [CORDIS](#)) developed and tested active and passive safety systems and tools for future autonomous vehicles - to reduce injuries and fatalities in traffic accidents and contribute to the EU's Vision Zero.

Key outputs, publications, and tools:

SAFE-UP presented four physical demonstrators of new safety solutions:

- Adaptable restraint systems for new seating positions (as expected in highly automated vehicles) including a new injury risk curve for the lumbar spine.
- Advanced detection system for vulnerable road users in bad weather conditions.
- Advanced intervention functions avoiding crashes by autonomous emergency steering and braking based on a collision-free path planner.
- Warning system for drivers and vulnerable road users to avoid collisions based on V2X communication.
- <https://www.safe-up.eu/demonstrators>
- <https://www.safe-up.eu/deliverables>



SHOW (Shared automation Operating models for Worldwide adoption)

[SHOW](#) (2020-2024 / [CORDIS](#)) supported the deployment of shared, connected and electrified automation in urban transport, to advance sustainable urban mobility. During the project, real-life urban demonstrations took place in 20 cities across Europe to see the integration of fleets of automated vehicles in public transport, demand-responsive transport (DRT), Mobility as a Service (MaaS), and Logistics as a Service (Laas) schemes.

SHOW was the biggest and most holistic ever initiative piloting automated vehicles in urban environments of its time. It gathered a strong partnership including 66 partners from 13 EU-countries and fostered international cooperation by collaborating with organisations from the US, South Korea, Australia, China, and other countries.

Key outputs, publications, and tools:

- <https://show-project.eu/sites/>
- <https://show-project.eu/media/deliverables/>



SOLUTIONSplus: Integrating Urban Electric Mobility Solutions in the Context of the Paris Agreement, the Sustainable Development Goals and the New Urban Agenda

[SOLUTIONSplus](#) (2020-2023 / [CORDIS](#)) co-developed innovative and integrated e-mobility solutions for urban passenger and freight transport in participatory Living Labs. Local authorities, industry, research and implementing partners established a global platform for shared, public and commercial e-mobility solutions to foster the transition towards low-carbon urban mobility.

Key outputs, publications, and tools:

- [e-Mobility Toolbox](#): An online information portal to support development, implementation and monitoring of innovative electric mobility solutions. The structure of the toolbox reflects the priority areas identified through extensive collaboration of stakeholders from government, private sector, academia, finance and civil society working on e-mobility around the globe.
- [Electromobility and Road Safety making Zero-Carbon support Vision-Zero](#)
 - [Policy Brief](#): This Policy Brief explores six key issues where Electromobility brings new challenges and opportunities for Road Safety: (1) speed and acceleration, (2) noise, (3) size and weight, (4) charging infrastructure in the street, (5) diversity of vehicles, and (6) fire safety.
- [SOLUTIONSplus final results brochure](#): The final brochure includes all project results, including all demonstration outcomes, business models, scale-up activities, as well as capacity building activities.
- [SOLUTIONSplus Resources, Publications, and Deliverables](#).



SPROUT: Sustainable Policy Response to Urban mobility Transition

The [SPROUT](#) Project (2019-2023 / [CORDIS](#)) provided a city-led innovative and data driven policy response to address the impacts of emerging mobility patterns, digitally enabled operating & business models, and transport users' needs.

The project had five main objectives:

- Understand the transition in urban mobility, by quantifying the current status and defining the main drivers of the transition.
- Foresee and identify the impact of the drivers of urban mobility transition on cities' policies and measures for urban mobility.
- Formulate a city-led innovative policy response, which can be applied widely to cities in Europe and beyond.
- Provide tools to contribute to an evidence-based policy-making and enhance local policy making capacity.
- Navigate future policy by channelling project results into future EU policy initiatives.

Key outputs, publications, and tools:

- [SPROUT Results Brochure](#): The brochure provides resources demonstrating the process, progress and results of the project, which can be used towards future city-led innovation initiatives of cities and the sustainable urban mobility community.
- [SPROUT Toolbox](#): The urban mobility transition confronts cities with new challenges in dealing with technological innovations and disruptive changes. The SPROUT toolbox provides tools, methods and data that cities can use to steer the mobility transition and harness its positive impacts. It represents the results of the SPROUT project, which were co-created by researchers and practitioners in the SPROUT demo projects.
- [SPROUT Resources, Publications, and Deliverables](#)



TUBE (Transport derived Ultrafines and the Brain Effects)

[TUBE](#) (2019-2023 / [CORDIS](#)). Air pollutants have been shown to cause a vast amount of different adverse health effects. These effects include the impairment of respiratory and cardiovascular function. However, in recent years, the evidence showing effects beyond the lung and circulatory system, has become more evident.

TUBE-project united interdisciplinary expertise to study these adverse effects of extremely fine particles (UFP's) in the human lung and brain. Leaning on this interdisciplinary approach and state of the art research methodologies, TUBE aimed to discover the harmful components of air pollution and identify biomarkers for early detection of brain disease related to air pollution. This could improve brain health, reduce the prevalence of brain diseases, provide significant economical savings, and provide data that will be used to support planning future traffic policy across the EU.

Key outputs, publications, and tools:

- <https://www.tube-project.eu/publications-and-media/>



TranSensus LCA (Towards a European-wide harmonised, transport specific LCA Approach)

[TranSensus LCA](#) (2023-2025 / [CORDIS](#)). A life cycle assessment (LCA) approach for a zero-emission road transport system involves assessing the environmental impact of every stage, from the extraction of raw materials to the disposal of end-of-life products. In this context, the EU-funded TranSensus LCA project developed a unified, evidence-based LCA approach that is in line with the EU's Green Deal goals to make Europe a climate-neutral and circular economy. By bringing together industry and research stakeholders, the project aimed to harmonise the LCA approach, taking into account environmental, economic and social factors. The ultimate goal was to enable mobility providers and planners to optimise their products and solutions in a sustainable way, contributing to the fight against climate change.

Key outputs, publications, and tools:

The TranSensus-LCA project delivered a final harmonised methodology for life cycle assessment of zero-emission road transport vehicles, marking a major step towards a single, robust, and transparent European-wide framework. Building on state-of-the-art reviews, gap analyses, and early deliverables, the project has now consolidated more than 130 methodological requirements, including over 50 mandatory ones, covering environmental and social life cycle assessment. The methodology addresses product, prospective and fleet-level LCAs, including passenger and commercial vehicles with battery and fuel cell technologies, while also considering the full battery value chain and cradle-to-cradle mobility scenarios. Developed through a structured consensus process, the approach has been refined with input and votes from industry and scientific partners, ensuring both scientific credibility and stakeholder acceptance.

- [Results](#)
- [Deliverables](#)



▶ 3 RTR Landscape and Funding Mechanisms

3.1 RTR landscape at the EU Member State level – Fact Sheets

One aspect of the project aimed to foster the links between European, national and regional roadmaps and strategies for sustainable and competitive road transport research. This also involved identifying strategic links between funding programmes of Horizon Work Programmes and Partnerships and those addressing cities and regions. A 'toolbox' was created to support alignment of sustainable RTR activities of the EU with Member States.

The results of the core of this work can be found in the ERTRAC website '[National Activities](#)' page. On the interactive map, the fact sheets which were the result of this work are listed under countries, where available.

The Fact Sheets follow the following themes:

- RTR policy goals.
- RTR programmes.
- Value chain structure.
- Socio-economic trends related to mobility.
- Regional Case in focus.
- Take away.

▶ For further details, see the Deliverables on the [STREnGth_M](#) website (once available):

D3.1 Visualization of the sustainable RTR landscape at EU Member States level

D3.2 Interactive map of collaboration paths EU and sub-national programmes

D3.3 Toolbox for multi-level alignment of sustainable RTR roadmaps

An ai tool was also developed, called the 'RTR Programme and Roadmap Alignment Navigator'. This tool helps you explore how different road transport research programmes and roadmaps can connect and complement each other across EU, national and regional levels. It allows you to navigate opportunities from your various perspectives. The prototype (in development) can be accessed through a link on the '[National Activities](#)' page of the ERTRAC website.





Figure 3-1 ERTRAC National Activities Interactive Map

RTR landscape at EU Member States level: BELGIUM

Energy & Environment Electrification Automation & Connectivity Urban Mobility Freight & Logistics Road Safety Circularity



RTR Policy Goals

Policy Goal: Creation of an inclusive open, resilient and internationally connected region that creates prosperity and well-being for its citizens in a smart, innovative and sustainable manner (long-term strategy)
Document:
 -Flander's Vision 2050 (esp. Industry 4.0) from 2016
 -Belgium's Recovery and Resilience Plan

Policy Goal: Establish a mobility system that ensures fluidity, accessibility, health, and safety for all by 2030, focusing on a modal shift towards sustainable transport options and aligning with broader environmental goals for mobility of goods & people
Document: Regional Mobility strategy Wallonia (2019-2030)

Policy Goal: Improving quality of life, supporting economic development, promoting sustainable mobility, enhancing safety
Document: Good Move – Regional mobility plan for Brussels Region

RTR Programmes

Initiative: Flanders Make – Strategic Research Centre supported by Flemish Government, Limburg Fund and ERDF
Objective: Strategic research for the technological development of the vehicles, machines and factories of the future
Link to EU-programmes/partnerships: ERDF

Programme: Mobilidata - Programme of the Flemish government supported by imec & CEF
Objective: Innovative traffic solutions in cooperation with private partners, based on digital infrastructure, intelligent traffic lights and high-quality sustainable data sources
Link to EU-programmes/partnerships: CEF

Initiative: Pole Mechatech
Objective: innovative products, equipment and processes with high added value in the technological fields of Advanced Materials, Advanced Manufacturing, Mechatronics, Data Technologies (IoT, IA, ...)

Initiative: VIL – Vlaamse Logistieke Cluster
Objective: single point of contact for logistics sector for projects encompassing digitalisation, alternative fuels, renewable energy, circular economy, multimodality, last mile delivery, data sharing, hyperloops, automated cars and ships, warehousing

Initiative: Logistics in Wallonia Cluster
Objective: strengthen Wallonia's position as a leading logistics hub, attract investments in logistics infrastructure, and foster the development of a sustainable and innovative logistics sector

Value Chain Structure

Which parts of the automotive value chain are represented most in the country? What are strong competence areas? In which competence areas does the county aim to catch up with?

Belgium is covering the entire automotive value chain, specializing in logistics, high-value components, and sustainable mobility initiatives (R&D&I)
Strong competence areas: Logistics and Distribution, advanced materials and coatings, smart and multimodal transportation
Weak competence areas: Gradual disappearance of the manufacturing of vehicles (e.g. Audi, Vanhool, Ford, Opel, Caterpillar, DAF trucks from full trucks to parts)

Socio-Economic Trends Related to Mobility

Which trend drive mobility in the country (e.g. climate crisis, tech sovereignty, aging society, favour for public transport, etc.)

- Business spending on R&D is the highest in the EU, however Innovation is concentrated in a few sectors & large companies
- Tax systems favour road transport
- Demographic ageing drives changing mobility needs and ADAS development
- Decreasing numbers of drivers licenses

Regional Case in Focus

Leuven 2030 climate-neutral city

- Broad civic alliance (600+ members) driving climate neutrality with a Roadmap to 2050 and 86 breakthrough projects.
- One of the EU's 100 Climate-Neutral and Smart Cities, linked to Horizon Europe (JUSTNature, Urban Nodes, CEF).
- Focus on integrated mobility, energy, and urban pilots (shared mobility, low-speed streets, climate-resilient neighbourhoods).

Take Away

- RTR is generally handled at the level of the 3 regions Flanders, Wallonia and Brussels and supported by concrete research initiatives
- National level RTR programmes are mostly only commissioned on an ad-hoc basis and nationally/regionally RTR is relatively low in comparison to Belgian participation in EU research programmes
- National research institutes, Universities and clusters shape RTR with basic funding from the state and/or region
- Under the Recovery and Resilience Plan important policy measures were launched to support investment in sustainable mobility and reforms to promote electric road transport

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101096253 - Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

This factsheet is based on STEnGth_M D3.1/D3.2. Reflects research at preparation time. V1.0, 2025.

Figure 3-2 Fact Sheets Example, Belgium

► 4 International progress, synergies, and programmes

4.1 Sustainable mobility tracker

The project also aimed to facilitate an exchange between Europe and emerging economies in particular within Africa, Asia and Latin America, and foster the links between international research and development cooperation projects and programmes. Contribute research and international cooperation agendas and roadmaps.

Sustainable mobility tracker

Two dashboards were produced about global EV registrations. This effort is made to complement and coordinate global initiatives such as the Global EV outlook, Asian Transport Observatory, European Alternative Fuels Observatory, Africa E-mobility Alliance, etc. for the sake of reliable public data on sustainable mobility. This is presently in the form of an internal version with global coverage. The database is still being worked on. Further details and the links to this dashboard should be available within the full deliverable.

There is already a public dashboard focusing on Latin America: [Observatory](#), [Dashboard](#).

These two interactive dashboards will be accompanied with a written report including some aspects of road safety. Besides the report, the data behind the dashboards will be placed in a data repository on Zenodo or Github.

► For further details, please see the full Deliverable: D4.1 Sustainable mobility tracker, which will be available on the [STREnGth_M](#) website once formally approved.

4.2 Synergies between European, national and regional pro-grammes

One system, many actors – packaging EU, national and sub national instruments for sustainable transport transitions and international cooperation.

Problem/context

Rapidly growing urbanisation and freight demand across Africa, Asia and Latin America are driving up transport emissions and congestion while leaving large segments of the population with inadequate, unsafe, or unaffordable mobility. This raises the question of how European support can be sequenced and packaged—across EU level, Member State and sub national instruments—to deliver durable system benefits, notably decarbonisation, access, and safety. The draft deliverable indicates that Europe now deploys a dense toolbox (NDICI–Global Eu-rope grants, EFSD+ guarantees, EIB lending, bilateral finance from AFD/KfW/Sida/Danida, and city to city cooperation),

yet uptake on the ground remains uneven and at times fragmented. From a governance perspective, the core challenge is to align this multi level architecture with partner country institutions to turn pilots into policy change and scaled investment.

Analytical frame

The extract applies a policy packaging lens within a multi-level governance setting. Packaging combines “benefit first” measures (service improvements, investment and enabling regulation) with later “restriction” and pricing instruments to manage demand; multi level governance clarifies roles among EU institutions, Member States, metropolitan authorities and cities. Mechanistically, the package mobilises concessional finance and guarantees (EFSD+ EIB/AFD/KfW), standardises planning (e.g., Sustainable Urban Mobility Plans), and couples research pilots (e.g., Horizon funded e mobility living labs) with implementation finance (Team Europe/Global Gateway) to mitigate rebound risks and strengthen policy feedback. These interdependencies underscore that technology is one lever within broader institutional alignment, coalition building, and participatory governance arrangements.

Findings (examples)

Coordinated approaches work: Team Europe packages that combine EU grants and EFSD+ guarantees with EIB/AFD/KfW lending are enabling large urban and corridor projects that single actors would struggle to finance, such as the ~€320 m Dakar bus network upgrade, where EU grant/guarantee, EIB, AFD and KfW moved as one offer. A core element of success is early agreement on common procurement and safeguards to lower transaction costs for host institutions.

Shared technical platforms reduce fragmentation: MobiliseYourCity (EU–France–Germany) supplies SUMP that create bankable pipelines, while SOLUTIONSplus links R&I pilots (e buses, e two wheelers, charging) to city deployment and subsequent development finance. This approach highlights policy feedback loops—evidence from pilots informs national strategies and unlocks scale up.

Bottlenecks persist: misaligned procedures, capacity constraints in city agencies, visibility competition among donors, and gaps in freight and rural access slow delivery. Delegated co-operation and joint implementation support units are cited as remedies to strengthen institutional continuity and reduce coordination fatigue.

Sector application

Packaging service improvements with targeted regulation accelerates inclusive mode shift and mitigates rebound. Evidence suggests that a three step sequence increases feasibility and political acceptance:

- **Step 1 – Benefits:** Co-finance high-impact services (BRT/urban rail, unified ticketing, first/last mile walking and cycling) through NDICI grants, EFSD+ backed loans and bilateral support; embed safety and accessibility standards from the start.
- **Step 2 – Enablers:** Institutional reforms (authority consolidation, public service con-tracts), data platforms, and fleet transition programmes (e-bus leasing backed by guarantees) to crowd in private operators and address veto players.
- **Step 3 – Management:** Phased parking and road space management, clean vehicle standards, and targeted pricing once reliable alternatives exist. Participatory governance and gender responsive design (e.g., women driver training in e-mobility pilots) build durable coalitions and policy legitimacy. From a governance perspective, outcomes are strongest where measures are implemented as a package rather than in isolation and where metro/city actions are co produced with national ministries and financiers.

Sector application – Strategic corridors and green freight

Corridor investments produce larger and fairer benefits when packaged with logistics efficiency and decarbonisation measures. Under Global Gateway, Team Europe focuses on multi-country road/rail links (e.g., West Africa coastal and East Africa Northern Corridors). Pack-aging here combines (i) climate resilient designs and trade facilitation “soft” measures, (ii) rail revival and intermodal terminals, and (iii) pilot green

freight projects (Euro VI/zero-emission trucks, charging depots, digital platforms) financed via EFSD+ de-risked PPPs. This is likely to reduce costs and emissions while raising reliability, provided regulatory harmonisation and maintenance finance are secured to avoid rebound and lock in risks. These interdependencies underscore the value of national–regional alignment and results frameworks shared by EU, Member States and MDBs.

Synthesis/implications

The deliverable focused on these topics (D4.2) suggests that sequencing and packaging across levels—EU strategy and guarantees, Member State finance and TA, and sub national peer to peer support—are the most reliable paths to durable system change. While technology readiness is improving, it is important to recognise that delivery depends on institutional continuity, coalition building around visible early benefits, and coordination mechanisms that lower transaction costs for host administrations. From a governance perspective, three actions are likely to yield outsized returns by 2030: (i) formal Team Europe transport plans per country with joint results frameworks; (ii) a transport implementation support facility to de risk multi donor delivery; and (iii) targeted expansion into under served areas (green freight, rural access) with integrated finance and policy support. This raises the question of how programming in 2025–2027 (NDICI mid term, Global Gateway pipelines, Horizon work programmes) can be tuned to lock in these packages and track co benefits and policy feedback consistently across the system.

- For further details, please see the full Deliverable: D4.2 Synergies between European, national and regional programmes, which will be available on the [STREnGth_M](#) website once formally approved.

Table 4-1 Indicative summary table (Source: D4.2)

Aspect (indicative)	Indicative evidence from D4.2	Selected instruments / actors
Joint finance synergy	Dakar bus network (~€320 m) co-financed by EU grant/guarantee, EIB, AFD, KfW under a Team Europe umbrella; pipeline examples in Quito and Dar es Salaam.	NDICI grants, EFSD+ guarantees, EIB/AFD/KfW loans (Global Gateway/TEI).
Research scale pathway	SOLUTIONSplus pilots (e-moto/e-bus) informing city plans and unlocking follow on investment; SUMP via MobiliseYourCity leveraged by MDB loans.	Horizon Europe (R&I), MYC (TA), EU blending facilities, MDB co finance.
Bottlenecks & remedies	Fragmented procedures, limited local capacity, visibility competition; remedies include delegated cooperation and implementation support facilities.	EU Delegations’ coordination, delegated cooperation via GIZ/AFD/KfW, joint PIUs.

4.3 Opportunities and challenges for research and international cooperation

Collaboration with regional experts on mobility innovation mapping

Sustainable mobility transitions in emerging economies required evidence on which innovations could scale and through which coalitions and instruments. This raised the question of how a tri-regional consortium could be sequenced to produce comparable regional innovation maps and policy relevant country deep-dives in a six-month window. From a governance perspective, outcomes were likely to be stronger where measures were implemented as a package rather than in isolation and embedded in multi-level arrangements.

Analytical frame

The collaboration applied a common frame across Africa, Asia, and Latin America: (i) a service oriented lens privileging public and shared mobility; (ii) policy packaging that combines regulation, finance, business models, and capacity building; and (iii) multi level governance, aligning national–metro–local action and anticipating veto players. These interdependencies underscored that technology was one lever within integrated strategies and that policy feedback from early pilots should inform prioritisation.

Method/sequence

UEMI and UN Habitat coordinated three academic teams—University of Cape Town (UCT), Asian Institute of Technology (AIT), and Tecnológico de Monterrey (TecM)—through a shared protocol: (1) desk reviews to surface policy baselines and project pipelines; (2) ≥6 semi-structured interviews and ≥2 focus groups per region to elicit practitioner knowledge; (3) construction of regional priority matrices across Technology, Policy/Regulation, Business Models, and Capacity Building; and (4) “collaboration opportunity maps” linking each priority to prospective European and international partners and instruments. Regular cross-regional calls and a harmonised template secured institutional continuity, while joint webinars functioned as participatory governance checkpoints. By late September 2025, the teams had concluded the core consultations and were populating matrices and maps; by November they had circulated draft rankings to peers, and by December they consolidated regional reports, executive summaries, and slide decks ready for dissemination to European platforms. A core element of success was “benefit first, restriction later” sequencing—showcasing co benefits via pilots before proposing tighter standards—paired with capacity supports for local operators and SMEs.

Findings

Across regions, the mapping indicated convergent priorities: electrification pathways for two-/three-wheelers and minibuses; professionalisation and clean-fleet renewal for informal transit; financeable e-bus models (including leasing and risk sharing); battery swapping and distributed charging in weak grid contexts; and skills ecosystems for EV maintenance and safety. Regional specificity emerged in emphasis and delivery risks: for example, grid adequacy and tariff design shaped Asia’s timelines; credit access for micro-operators dominated Africa’s feasibility; and procurement standards and vendor diversity were salient in Latin America. These patterns suggested the value of policy packages that couple standards and incentives with concessional finance, SME support, and operator training, thereby containing rebound risks (e.g., unmanaged induced demand) and widening co benefits for air quality, safety, and jobs.

Synthesis/implications

From a governance perspective, the collaboration showed that coalition-building—across transport, energy, and finance agencies with city authorities and operator associations—was a prerequisite to durable outcomes. Designing for consensus-capable packages (pricing + standards + finance + capacity) mitigated veto risks and increased policy stability. This approach highlights that European R&I agendas can be more globally relevant when triangulated with development finance and city implementation channels through structured “priority > partner > instrument” mappings.

Analytical frame

Within the scope of the project, Deliverable 4.3 covered ‘Opportunities and challenges for research and international cooperation’, under a Work Package on the theme of ‘Global progress and exchange’. The deliverable organised an analysis into five linked components—Impact pathways, Bottlenecks, Opportunities 2025–2030, Scenarios to 2030, and Recommendations—explicitly aiming to connect R&I pilots with policy change and scaled investment while foregrounding coordination among European and partner country actors.

Findings

The “Impact pathways” section illustrated how coordination can move from pilot to policy to investment. Cases emphasised that targeted pilots, inclusive design, and shared metrics created policy traction and unlocked blended finance for scale, with city authorities and development banks aligning around agreed strategies. The narrative underscored the complementarity of measures—technical assistance, demonstration, regulatory updates, and de-risking finance—operating as a package.

The document identified recurring bottlenecks—fragmented procedures, visibility and credit sharing frictions, absorptive capacity constraints in implementing agencies, and misaligned incentives—suggesting institutional remedies such as mutual recognition of procedures, delegated cooperation, and strengthened project management units to steward multi-donor portfolios.

Looking ahead, the report signalled near term opportunities between 2025 and 2030: (i) the NDICI–Global Europe mid-term review to steer additional grants and guarantees toward green mobility; (ii) Global Gateway investment packages moving from pipeline to construction; and (iii) the final Horizon Europe work programme (2025–27) as a bridge from R&I to deployment, ideally aligned with Team Europe initiatives. These are framed as entry points for policy pack-aging at national–metro–local scales.

The scenarios chapter contrasted an “optimistic” pathway (high coordination and ambition), a “business as usual” pathway (incremental, uneven progress), and a “fragmented” pathway (missed targets and widening gaps), reinforcing the value of institutional continuity and multi-level alignment to reach the optimistic outcome.

Synthesis/implications

From a governance perspective, the draft pointed to a limited set of actionable priorities to institutionalise coordination (e.g., Team Europe working groups and joint country action plans), expand de risking windows for e-buses and corridors (EFSD+), and invest in city capacity and data systems so that R&I is embedded in durable administrative routines and results frameworks.

This raises the question of how these steps can be sequenced alongside domestic reforms to maximise co-benefits and manage rebound risks—first enabling benefits through visible pilots and capacity supports, then tightening standards and pricing as coalitions consolidate.

The regional innovation mapping and D4.3 converge on the same issue: fragmented architectures dilute impact, while integrated packages accelerate it. UCT, AIT, and TecM identified high-impact niches (e.g., two-/three-wheelers, clean minibus renewal, e bus leasing, battery swapping), D4.3 sketched the instruments and institutional fixes that make these niches investable and governable in practice. These interdependencies underscore that technology readiness without institutional alignment underperforms.

A core element of success is to hard wire coordination: (i) formal working groups at HQ and country level; (ii) joint results frameworks; (iii) dedicated guarantee windows; and (iv) city planning and M&E capacity that persist beyond project cycles. This approach highlights how regional innovation maps can feed directly into D4.3’s opportunities windows, enabling coalition-building and policy feedback loops that sustain implementation.

► For further details, please see the full Deliverable: D4.3 Opportunities and challenges for research and international cooperation, which will be available on the [STREnGth_M](#) website once formally approved.



Table 4-2 Sector application: indicative synthesis of D4.3 draft themes (Source D4.3)

Aspect (indicative)	Indicative evidence	Selected draft section(s)
Impact pathways	Coordinated pilots plus TA led to policy adoption and MDB co-financing; shared metrics supported credibility.	Impact Pathways; ToC framing
Bottlenecks	Fragmented procurement, credit sharing frictions, capacity gaps, misaligned priorities inhibited impact.	Bottlenecks
Opportunities 2025–2030	NDICI mid term reallocation, Global Gateway packages, Horizon Europe 2025–27 alignment.	Opportunities 2025–2030
Scenarios	Optimistic vs BAU vs Fragmented clarify stakes for institutional continuity and coalition building.	Scenarios 2030
Recommendations	Institutionalise Team Europe coordination; scale EFSD+ products; invest in planning capacity and monitoring.	Recommendations (overview)

5 Strengthening the RTR Community

5.1 RTR Community and Events

The STREnGth_M project also played a role in the organization of dedicated events such as the Road Transport Research (RTR) conference, and presence at major conferences like Transport Research Arena (TRA).

RTR strengthens the exchange of and learnings from research and innovation projects among experts and provides opportunities for new collaborations and partnerships between industrial providers and technology users, by more widely promoting R&I activities in road transport. Participation in the TRA Conference boosts overall visibility for the project and participation of experts.

A multiplier group of external experts was also created to share progress, complete knowledge gaps and aid in dissemination.

The project also hosted a series of webinars to share the progress, learnings, and resources available more widely to the public.

STREnGth_M Webinar #1- Future in Motion: Hosted by POLIS. This webinar included an Introduction to the STREnGth_M project and covered topics including the Multiplier Group, the ERTRAC Working Groups, ERTRAC Road Transport Vision 2050, and presentation of new ERTRAC Working Group Roadmaps.

STREnGth_M Webinar #2- Transport Innovation: Needs, priorities and opportunities in Asia, Africa and Latin America. Hosted by UEMI and UN-Habitat. This webinar included presentations on Innovation needs and priorities in Emerging Economies, and also covered the topic of Electric Mobility Innovation and Research Centres.

STREnGth_M Webinar #3- Advancing Sustainable Road Transport Through Future-Oriented Education & Training Programs. Hosted by Rupprecht Consult. This webinar covered D1.3: Training actions supporting Road Transport area in Europe and Internationally, The EN-HANCE Alliance @ RWTH Aachen University, Capacity Building in Sustainable Urban Mobility for Low Income Countries, and Technology, Markets, and Users: Training the Future Mobility Experts.

A news item published on the ERTRAC website includes further details, as well as the [presentations](#) provided by speakers.

The project also explored the potential of end user and citizen-oriented events through a pair of webinars. The first webinar, hosted by POLIS, included the POLIS Small and Medium-Sized Cities (SMC) Platform.

The webinar spotlighted the vital role SMCs play as testbeds for innovation and research, by establishing long lasting cooperation pathways with academia, industry and civil society. It also highlighted how STREnGth_M is developing insights and frame-works needed to amplify impact, and accelerate meaningful, scalable innovation. The second webinar, hosted by UITP, explored how STREnGth_M's strategic research coordination enables practical innovation in collective, zero-emission transport, using eBRT2030 as a live ex-ample of how European R&I delivers results on the ground.

Road Transport Research (RTR) Conference

2025 RTR Conference: Information and a link to the conference website and agenda can be found through an [event](#) page on the ERTRAC website.

2026 RTR Conference: 10-12 February. Information and a link to the conference website and agenda can be found through an [event](#) page on the ERTRAC website. The conference took place over three days and featured 98 EU-funded projects and 32 sessions, structured around 11 thematic topics reflecting Europe's key road transport priorities.

[RTR Conference website](#)

TRA (Transport Research Arena) Conference

2025 TRA Conference: The STREnGth_M project was represented with a booth to provide added visibility and share results. The conference provided an opportunity for engagement with the research community, industry, policy makers, experts and representatives working across the range of transport modes.

2026 TRA Conference: 18-21 May. The conference gathers stakeholders from all transport networks, bringing research and research communities closer and providing a forum for exchange with policy makers on industry challenges and opportunities.

[TRA Conference website](#)

Role and purpose of the Multiplier Group



Figure 5-1 Role and purpose of the Multiplier Group



6 References

This document is based upon extracts from the following STREnGth_M documents which can be found on the [ERTRAC website](#) under the dropdown menu 'Support Action' / [STREnGth_M](#) (2023-2026). Listed below are the Deliverable (D) numbers, titles, leads, and submission dates. Full authors and details can be found within the documents.

D1.1 Barriers for the deployment of research results (VOLVO, 2024)

D1.2 Roadmapping methods on European, Member State and international level (CRF, 2024)

D1.3 Training actions supporting road transport area in Europe and internationally (RUPPRECHT, 2025)

D2.1 Future research needs (RWTH, 2024)

D2.2 Timing for roadmap updates (RIC-D, 2023)

D2.3 Overview of roadmaps and process implementation (RIC-D, 2026)

D3.1 Visualization of the sustainable RTR landscape at EU Member States level (ERTICO, 2024)

D3.2 Interactive map of collaboration paths EU and sub-national programmes (POLIS, 2025)

D3.3 Toolbox for multi-level alignment of sustainable RTR roadmaps (VDI/VDE-IT 2025)

D4.1 Sustainable mobility tracker (FIER, 2025)

D4.2 Synergies between European, national and regional programmes (UEMI, 2026)

D4.3 Opportunities and challenges for research and international cooperation (UEMI, 2026)

The information within is also sourced from extracts of the following ERTRAC Working Group Roadmaps, which can be found on the [ERTRAC website](#) on the [documents](#) page.

[Integrated Urban Mobility Roadmap](#) (ERTRAC-ALICE-ERRAC Working Group on Urban Mobility, 2024).

[Circular Economy and Competitiveness of the European Road Transport Strengthening sustainability and resource sovereignty of the automotive industry](#) (ERTRAC Working Group: Circularity and Competitiveness, 2025).

Long Distance Freight Transport, A roadmap for competitive, sustainable and resilient Road Transport (ERTRAC Working Group Long Distance Freight Transport, Publication Pending).

Other resources:

[CCAM](#)

[EGVIAfor2Zero](#)

[ERTRAC / EU research funding / CCAM](#)

[ERTRAC / National activities](#)

[ERTRAC / Vision 2050](#)

[European Commission / Mobility strategy](#)

[European Commission / The European Green Deal](#)

[2Zero](#)

[UNFCCC / The Paris Agreement](#)







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