

RESEARCH & INNOVATION SUSTAINABLE & SMART MOBILITY

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The **EU strategy for sustainable and smart mobility** will put European transport on track for a future with significantly reduced emissions. An irreversible shift towards zero-emission mobility is a precondition for the success of the European Green Deal, which in turn requires a much more sustainable transport system in Europe.

THE ROLE OF RESEARCH AND INNOVATION

EU research and innovation is vital for the implementation of this strategy, shaping future mobility by **developing and deploying innovative and sustainable technologies in transport**.

Hydrogen-powered buses or e-shipping, for instance, need sustained investment now to become a reality in the years to come.

EU research programmes such as Horizon Europe will be crucial to **accelerate these solutions and turn them into reality**, alongside other initiatives such as the Connecting Europe Facility (CEF), the Climate Change Innovation Fund, the European Regional Development Fund, and InvestEU.

HORIZON 2020

A **€1 billion Green Deal Call** has been launched to address the urgency of climate action and green recovery. Specific call topics cover also smart and sustainable mobility topics like the green transformation of ports and airports.



€2.5 billion

allocated to support transport projects in 2014–2020



almost

400 multi-partner projects

funded to drive sustainable transport solutions

HORIZON EUROPE

Partnerships will, in close cooperation with e.g. the **Clean Hydrogen Alliance** and the **European Battery Alliance**, bring together private and public partners to address some of the most pressing challenges through research and innovation initiatives.



“Sustainable and smart mobility is key to turn the European Green Deal into a reality. European research and innovation is laying the foundation for zero-emission mobility and a radically different way of living, moving and protecting our planet for the future.”

Mariya Gabriel, EU Commissioner for Innovation, Research, Culture, Education and Youth

Research and
Innovation

RESEARCH AND INNOVATION WILL CONTRIBUTE TO THE FOLLOWING SUSTAINABLE AND SMART MOBILITY STRATEGY FLAGSHIPS:



FLAGSHIP 1

Boosting the uptake of zero-emission vehicles, renewable & low-carbon fuels and related infrastructure

The [Partnership for batteries](#) will help prepare and equip Europe to manufacture and commercialise the next-generation battery technologies by 2030.

The [Partnership '2Zero'](#) will accelerate the development of zero-emission transport in Europe with a systems approach, supporting a climate neutral and clean road transport system.

The [Partnership on clean hydrogen](#) aims to accelerate development and deployment of technologies, contributing to a sustainable, decarbonised and fully integrated energy system.

The [Partnership on zero-emission waterborne transport](#) shall develop and demonstrate innovative solutions to transform maritime and inland waterborne transport towards the goal of climate neutrality and the elimination of all harmful environmental emissions.

The [Partnership for Clean Aviation](#) foresees to put aviation en route to climate neutrality by accelerating development, integration, and validation of disruptive research and innovation solutions, for deployment as soon as possible.



FLAGSHIP 3

Making interurban and urban mobility more sustainable and healthy

The [Horizon Europe Mission on climate-neutral and smart cities](#) aims to support, promote and showcase 100 European cities in their systemic transformation towards climate neutrality by 2030.

The [Partnership driving urban transitions to a sustainable future \(DUT\)](#) will engage and enable local authorities, municipalities, business and citizen) to co-create innovative, systemic and people-centric solutions in support of urban transformative transitions.



FLAGSHIP 6

Making connected and automated multimodal mobility a reality

The [Partnership on Connected and Automated Driving \(CCAM\)](#) will develop and implement a shared, coherent and long-term European agenda to accelerate the implementation of technologies and services, bringing together actors of the entire value chain.

The [Partnership for transforming Europe's rail system](#) aims to develop solutions with broad support across the EU – up to 75% market uptake by 2030, improving the competitiveness of rail and support European technological leadership in rail.

The [Sesar Joint Undertaking](#) aims to ensure the modernisation of the European air traffic management system by federating research & development efforts in the Community.



FLAGSHIP 7

Innovation, data and Artificial Intelligence for smarter mobility

The EU aims to become a prime deployment destination for innovators, where R&I will help shape smart, future-oriented regulation and policies for innovators to 'think outside the box' and find new solutions for social and environmental transitions.

Artificial Intelligence (AI) is becoming essential for transport automation in all modes, with digital technologies and components at their core. An AI ecosystem of both excellence and trust will be shaped through [Horizon Europe](#) and [Digital Europe programmes](#).

For more information visit:

https://ec.europa.eu/info/research-and-innovation/research-area/transport_en

