



# EU R & I for sustainable urban mobility

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# The urban transport challenges

- Better **meet the diverse urban transport and mobility needs** of citizens, businesses and industry; offer more and **more attractive choices**
- **Reduce the negative impacts** of urban transport
  - Ever-growing **congestion**
  - **Energy-supply security** (oil dependence)
  - **Environment** (air quality, noise) and **Climate Change** (1/4 GHG emissions from urban areas)
  - Citizens' **health** and well-being
  - Traffic **safety**, vulnerable road users



## What the EU does

- Transport is a **shared responsibility** between the EU and the Member States
  - The **subsidiarity principle** applies: the EU may not take action unless it is more effective than action taken at national, regional or local level
- Urban mobility is essentially a local responsibility; however local authorities should not be left alone
- That is why there is a long tradition of EU support:
  1. Setting the Policy Framework
  - 2. Offering funding and financing**
  - 3. Facilitating the exchange of experience and best practice**
  - 4. Raising awareness**

# EU transport policy actions

1. **Action Plan on Urban Mobility** (2009-2012) - implemented
2. **Action Plan on ITS**: Group on Urban ITS (2010-2012) and **C-ITS Action Plan**: Group on C-ITS and automation (2016-2018)
3. **The White Paper on Transport** (2011)
4. **Urban Mobility Package** COM (2013) 913
  - Develop Sustainable Urban Mobility Plans (SUMP)
  - Coordinated action in: Urban logistics, Urban access regulations, ITS deployment in urban areas, Urban road safety
5. **Vehicles and Fuels specific legislation**
6. **Third Mobility Package** (May 2018):
  - Communication on "automated mobility"



# 2011 White Paper

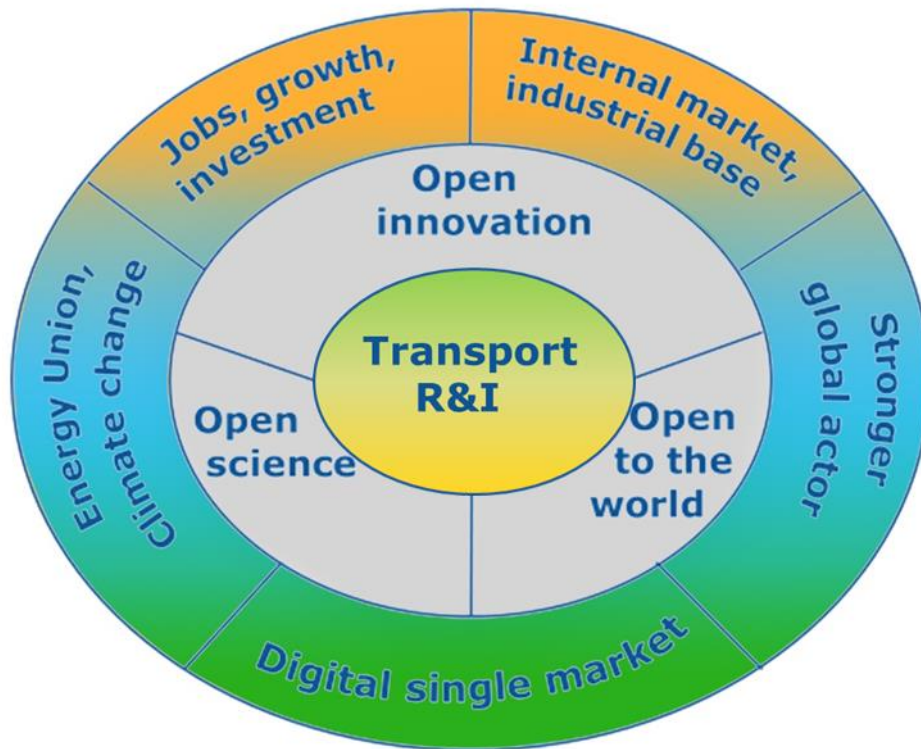
## Roadmap to a Single European Transport Area

- Oil dependency, **-60% GHG emissions by 2050**, Congestion, Competitiveness of the EU economy
- Ten Goals for a competitive and resource efficient transport, including ...**two specifically urban**:
  - **Halve** the use of '**conventionally-fuelled' vehicles** in urban transport by 2030, phase them out by 2050
  - Achieve **CO<sub>2</sub>-free city logistics by 2030** – in major urban centres
- Transition from a **car based mobility** to a **mobility based on walking, cycling and high quality public transport**





# TRANSPORT



## R&I contribution to the EU policy agenda

- ✓ Increase investment, growth, jobs and market shares
- ✓ Enhance mobility, decarbonise transport, boost competitiveness
- ✓ Improve framework conditions, Adapt regulatory framework
- ✓ Promote open access, user engagement, societal uptake
- ✓ Consolidate world leadership, promote knowledge sharing

# Main urban R&I mobility activities – From FP7 to H2020

2 main fields : **decarbonisation & clean vehicles ; digitalisation & connected and automated mobility**

- Improving mobility of people and transport of goods in urban and peri-urban areas: **new transport and mobility concepts**
- **Clean and safe vehicles** for passengers and freight transport
- **High quality Public Transport systems**
- **Intelligent Transport Systems** and **new mobility services, Automated Road Transport Systems**
- **Innovative, clean and efficient freight transport concepts** and Urban Distribution Centers
- Soft transport modes (walking, cycling) and accessibility for all



# Horizon 2020 for Urban Mobility

- **The mode-specific 'Road' area:**

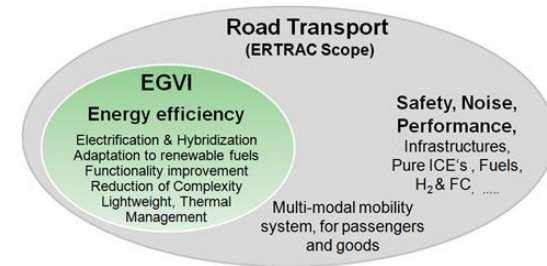
- new concepts for road and urban transport

- **The Calls on Green Vehicles :**

- Improvement of energy efficiency of road transport vehicles & use of alternative fuels (electricity)

- **The 'Urban Mobility' area:**

- Innovation in resource-efficient and competitive urban mobility and transport ('CIVITAS 2020') with a system's approach





# Horizon Europe (2021-2027): evolution not a revolution

European  
Commission

## Specific objectives of the Programme

Support the creation and diffusion of high-quality knowledge

Strengthen the impact of R&I in supporting EU policies

Foster all forms of innovation and strengthen market deployment

**Optimise the Programme's delivery for impact in a strengthened ERA**



### Pillar 1 Open Science

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



### Pillar 2 Global Challenges and Industrial Competitiveness

**Clusters**

- Health
- Inclusive and Secure Society
- Digital and Industry
- **Climate, Energy and Mobility**
- Food and natural resources

Joint Research Centre



### Pillar 3 Open Innovation

European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology

## Strengthening the European Research Area

Sharing excellence

Reforming and Enhancing the European R&I system



# The future Framework Programme for R&I: Horizon Europe

- Urban R&I actions will be funded under several clusters within the Global Challenges and Industrial Competitiveness pillar.
- Cluster 5 on “**Climate, Energy and Mobility**” foresees an **Intervention area on “Cities and Communities”**.
- Mission on “**Climate Neutral and Smart Cities**”.
- An **integrated approach** will be promoted encompassing research, innovation, policy and socio-economic studies and circular economy models.
- Co-creation, co-development and co-implementation with involvement of all relevant **actors and citizens in cities** across the European Union and worldwide.



# R&I Missions

## R&I Missions

Relating EU's research and innovation better to society and citizens' needs; with strong visibility and impact

A mission is a portfolio of actions intended to achieve **a bold and inspirational as well as measurable goal** within a set timeframe, with impact for science and technology, society and citizens that goes beyond individual actions

Horizon Europe proposal defines mission characteristics and elements of governance

Specific missions will be **co-designed with Member States, stakeholders and citizens** and programmed within the Global Challenges and Industrial Competitiveness pillar (drawing on inputs from other pillars)

## Mission Board for Climate-neutral and Smart Cities

- **A call for Expression of Interests** for selection of members of the board was published with 11<sup>th</sup> of June as deadline;
- **Indicative list of expertise:** It covers a broad range of fields e.g. CC mitigation & adaptation, air quality, spatial planning, energy efficiency, energy transformation, urban infrastructures, ICT, water, urban circularity and regeneration, resilience etc.



# New approach to European Partnerships

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

## Key features

- Simple architecture and toolbox
- Coherent life-cycle approach
- Strategic orientation

### Co-programmed

Based on Memoranda of Understanding / contractual arrangements; implemented independently by the partners and by Horizon Europe

### Co-funded

Based on a joint programme agreed by partners; commitment of partners for financial and in-kind contributions & financial contribution by Horizon Europe

### Institutionalised

Based on long-term dimension and need for high integration; partnerships based on Articles 185 / 187 of TFEU and the EIT-Regulation supported by Horizon Europe



# Strategic planning to define multiannual work programmes and calls for proposals

- Transparency and stakeholder involvement
- Prioritisation and flexibility to align to political priorities
- Internal programme coherence & synergies with other programmes

## Multiannual Strategic R&I Plan

- \* Multiannual orientations and priorities in one document
- \* Areas for partnerships and missions

Strategic discussions with Member States and European Parliament

Consultation with stakeholders

**Work Programmes**



## European Commission High-Level Expert Group on “Innovating Cities”

- Launched on **12 June 2018** to assist the EC in formulating a Strategic Research & Innovation Agenda (SRIA) to foster a **systemic** and **cross-sectorial** “urban ecosystem” framework to **guide investment in EU R&I actions for cities.**
- SRIA must account for targets set out at **international** urban-relevant **policy frameworks** (e.g. COP 21 Paris Agreement, 1.5 IPCC for cities, UN Sustainable Development Goals for 2030, notably SDG 11 Sustainable Cities and Communities).
- Report expected to be delivered in **July 2019** and will serve as an input for future R&I activities.

# Upcoming EC R&I events

- **Research & Innovation Days** in Brussels, 24 to 26 September 2019 - Open invitation to participate and contribute to the formulation of the strategic plans for Horizon Europe
- **Transport Research Arena (TRA) 2020** Conference in Helsinki, Finland, 26-30 April 2020
  - *Call for Submissions is open <https://traconference.eu>*
  - *Submit your paper by 31.6.2019*



# *Thank you for your attention*



Find out more:

[www.ec.europa.eu/research/horizon2020](http://www.ec.europa.eu/research/horizon2020)

[www.ec.europa.eu/research/participants/portal/page/home](http://www.ec.europa.eu/research/participants/portal/page/home)

<http://ec.europa.eu/horizon-europe>