



Horizon Europe: an overview of the new framework programme for research and innovation

An online event for Polish stakeholders

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Designing a set of
deeply
transformative
policies



Vision for decarbonised transport

- **European Green Deal:** Europe to become carbon neutral by 2050
- **Climate Target Plan:** 55% emission reductions by 2030
- This requires emission reductions in all sectors
- **Transport emissions must decrease by 90% by 2050** to meet the Green Deal objectives



Smarter, more sustainable transport

- Strategy for **Sustainable and smart mobility in 2020**
- Revise **the CO₂ emissions performance legislation** for light duty vehicles by June 2021
- **Extend EU's Emission Trading** to the maritime sector, and to reduce the free allowances for airlines by June 2021
- Support **public charging points: 1 million by 2025**
- Boost the production and supply of **sustainable alternative fuels** for the different transport modes
- Review the **Alternative Fuels Infrastructure Directive** and the TEN-T Regulation in 2021
- More **stringent air pollution emissions standards** for combustion-engine vehicles

HORIZON EUROPE

EURATOM


SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND
Exclusive focus on defence research & development

Research actions

Development actions

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*
Exclusive focus on civil applications

**Pillar I
EXCELLENT SCIENCE**




European Research Council

Marie Skłodowska-Curie

Research Infrastructures

**Pillar II
GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS**




Clusters

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre

**Pillar III
INNOVATIVE EUROPE**



European Innovation Council

European Innovation Ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

Fusion

Fission

Joint Research Center

* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme



New approach to European Partnerships

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

Key Features

- **Strategic orientation**
- **Systemic approach**
- **Simple architecture and toolbox**
- **Common set of criteria for the life-cycle**

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 and implemented by partners; commitment of partners for financial and in-kind contributions

INSTITUTIONALISED

Based on long-term dimension and need for high integration; partnerships based on Art 185/187 of TFEU and the EIT legal acts for 2021-2027

Overview of 49 candidate European Partnerships

HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People	
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	

PILLAR III - Innovative Europe

EIT (KNOWLEDGE & INNOVATION COMMUNITIES)	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

CROSS-PILLARS II & III

European Open Science Cloud

- Institutionalised Partnerships (Art 185/7)
- Institutionalised Partnerships / EIT KICs
- Co-Programmed
- Co-Funded

* Calls with opening dates in 2023-24
 ** Calls with opening dates not before 2022

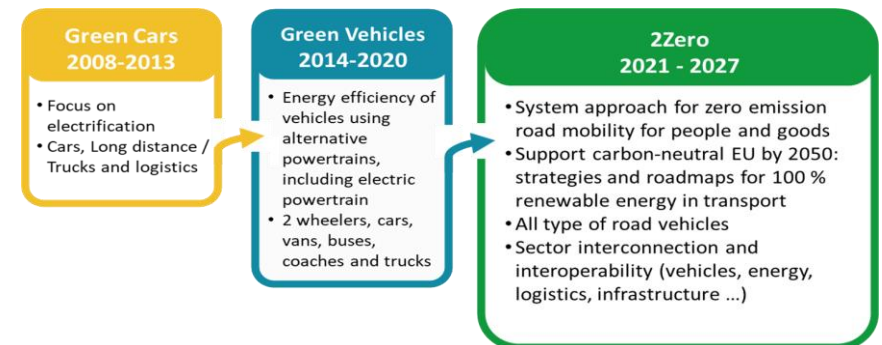
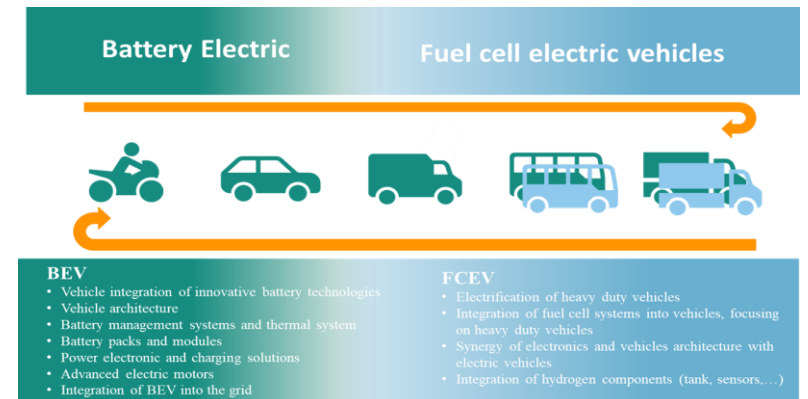
Towards Zero Emission Road Transport (2Zero)

Lead DG: R&I.C2 (Guido Sacchetto)
Predecessor: European Green Vehicle Initiative (EGVI) cPPP
SRIA: May 2021
Launch: 2021 (calls in WP 2021/22)
Budget: 1 230 € in total (615 M€ HE + 615 M€ Partners)

Partners: Open association to all stakeholders: industry, public & private (charging) infrastructure, public authorities, energy provider, logistics companies, academia, NGOs and end-users.

Particularities: The transport sector represents 5% to EU GDP and directly employs 10 million workers. Innovative zero tailpipe emission powertrain vehicles are a key element for the future. Green and Digital transition offers huge opportunities for growth and jobs, and 2Zero will integrate and validate solutions.

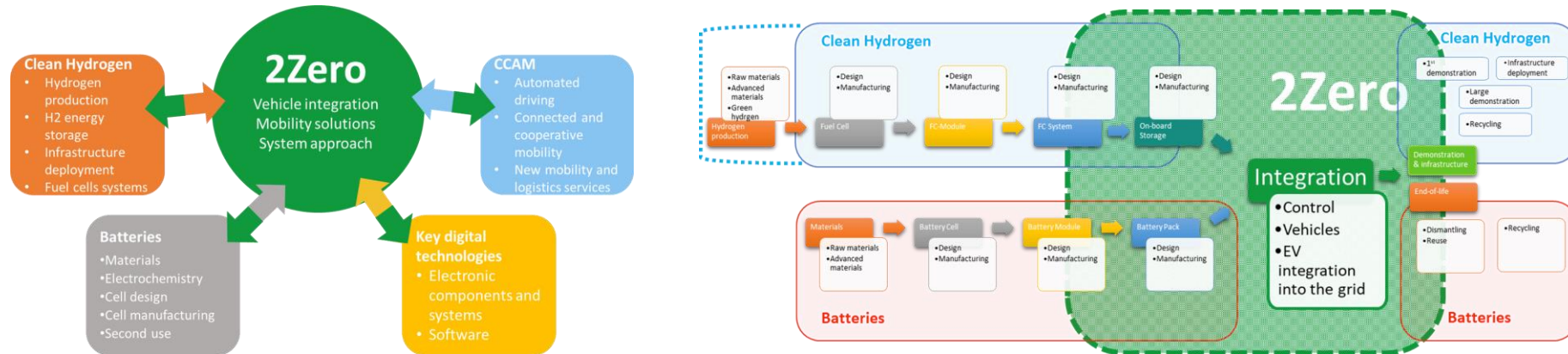
Challenges: EU automotive industry is global leader. Fundamental innovation are needed to stay ahead in the race, significantly reducing emissions and becoming more sustainable.



Towards Zero Emission Road Transport (2Zero)

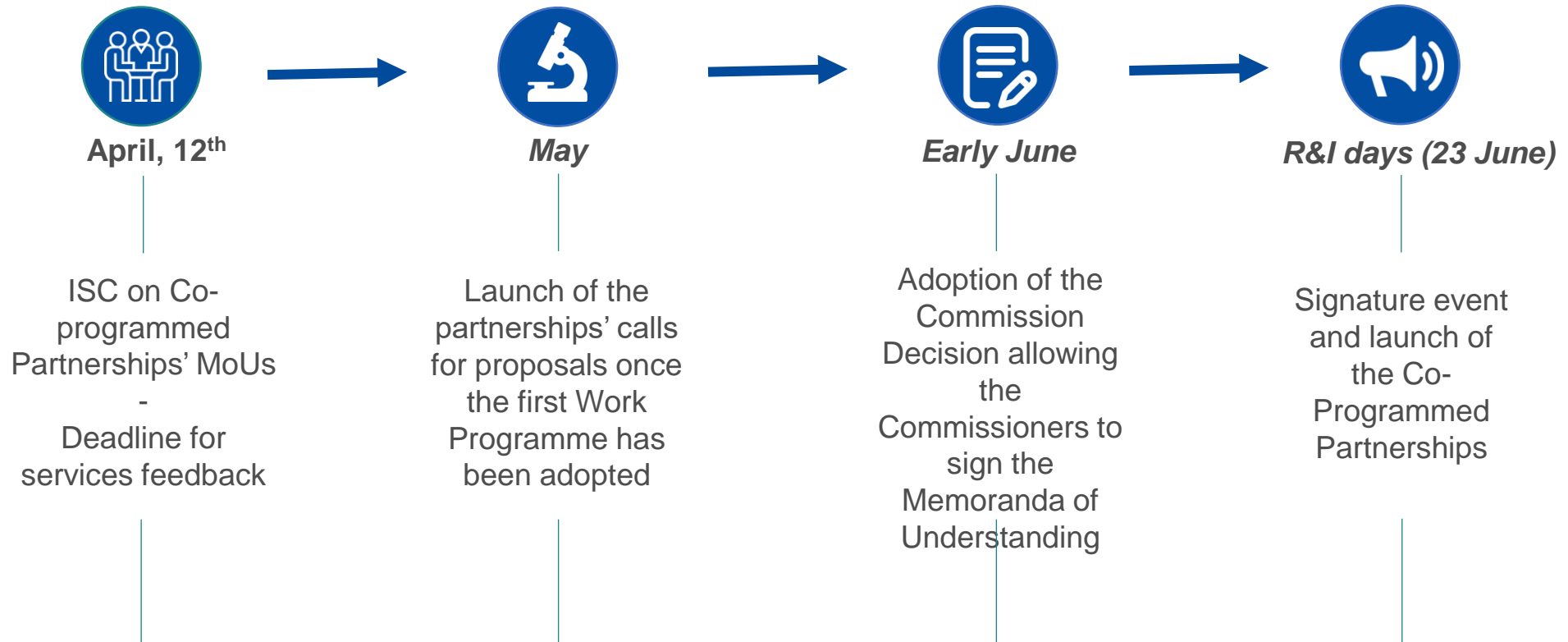
Synergies:

- 2Zero synergies with other partnerships are numerous: **Batteries, Clean Hydrogen, CCAM, Key Digital Technologies, Built4People, Clean Energy Transition, Made in Europe, DUT.**



- Interaction with other EU funding tools** in order to maximise the benefit of R&I action, such as the Connecting Europe Facility (CEF), the EIB Group activities, the ERDF and the Cohesion Fund (CF), and with the Recovery and Resilience Facility (RRF).
- Additional collaboration is also foreseen with the **Mission on Climate Neutral and Smart Cities**, to support objectives of 100 Climate-Neutral Cities by 2030, and on

Co-programmed European Partnerships - Timeline





Thank you

#HorizonEU

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