MISSION AND VISION STATEMENT

The Towards Zero-emission Road Transport (2Zero) partnership will set an ambitious research programme to accelerate the development of zero tailpipe-emission road transport in Europe with a system approach. It will develop a common vision and deliver a multi-stakeholders roadmap for a climate-neutral and clean road transport system. It will improve air quality, the mobility safety of people and of goods, and hence ensure future European leadership in innovation, production and services. By paving the way to a climate-neutral road transport system, the partnership will make a key contribution to the success of the European Green Deal.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 5: Climate, energy and mobility
Type of partnership: Co-programmed
Coordinating entity: EGVIAfor2Zero AISBL and DG RTD – Future Urban and Mobility Systems Unit
Total estimated budget: EUR 1.23 bn
EU commitments: EUR 615 m
Partners’ commitments: Up to EUR 900 m

FIND OUT MORE

www.2Zeroemission.eu
https://www.linkedin.com/company/2zeroemission/?viewAsMember=true
@2Zeroemission
https://www.youtube.com/channel/UCMVUhvgzYPsmIFz2Z4kKXQ
info@2zeroemission.eu
PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

ACCELERATE THE DEVELOPMENT OF ZERO TAILPIPE-EMISSION ROAD TRANSPORT IN EUROPE WITH A SYSTEM APPROACH

GENERAL LEVEL IMPACTS

REDUCTION OF CO₂ EMISSIONS
SUPPORT THE DEPLOYMENT OF CHARGING INFRASTRUCTURE
DEVELOPMENT OF AFFORDABLE, USER FRIENDLY ZERO TAILPIPE SOLUTIONS

SPECIFIC LEVEL OUTCOMES

DEVELOP NEW ZERO TAILPIPE-EMISSION TECHNOLOGIES AND SERVICES
DEVELOP NEW CHARGING INFRASTRUCTURE CONCEPTS AND TECHNOLOGIES
DEMONSTRATE INNOVATIVE USE CASES
SUPPORT THE USE OF LCA* TOOLS AND CIRCULAR ECONOMY APPROACH

OPERATIONAL LEVEL RESOURCES & ACTIONS

SUPPORT STANDARDISATION ACTIVITIES
ENGAGE NEW STAKEHOLDERS ACROSS THE VALUE CHAIN
SUPPORT NETWORKING AND DISSEMINATION ACTIVITIES

EUROPE’S FIRST CARBON-NEUTRAL ROAD TRANSPORT SYSTEM BY 2050
TECHNOLOGY LEADERSHIP SUPPORTING ECONOMIC GROWTH AND JOB CREATION
EUROPEAN COMPETITIVENESS
IMPROVE QUALITY OF LIFE OF EU CITIZENS

* Life Cycle Assessment
## PARTNERSHIP’S KEY PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>KPI NAME</th>
<th>UNIT OF MEASUREMENT</th>
<th>BASELINE</th>
<th>TARGET 2023</th>
<th>TARGET 2025</th>
<th>TARGET 2027</th>
<th>AMBITION &gt;2027</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESOURCES (INPUT), PROCESSES AND ACTIVITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of funding going to SMEs</td>
<td>%</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>IPR generated in funded projects</td>
<td>#</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>Events organised by the Association</td>
<td>#</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td><strong>OUTCOMES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHG of mobility of people and goods</td>
<td>tonCO₂eq/pkm or tkm and toe/tkm</td>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td>Reduction of GHG and energy intensity of mobility by 30% for personal mobility and 25% for freight by 2030</td>
</tr>
<tr>
<td>Reduction of development time and effort</td>
<td></td>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td>Estimated 20% decrease of development time and effort including via digitalisation</td>
</tr>
<tr>
<td>Improvement of charging efficiency demonstrated</td>
<td>%</td>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td>At least 25% reduction of energy losses during charging (considering both charger and vehicle) by 2030 for all types of chargers</td>
</tr>
<tr>
<td>Number of (public and private) transport operators implementing zero-tailpipe business models and use cases for freight transport and people mobility</td>
<td>#</td>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td>30 passenger transport and freight transport and logistics use cases demonstrated in projects over the lifetime of the partnership</td>
</tr>
<tr>
<td>Reduction of CO₂ emissions from road transport for all types of vehicles</td>
<td>% CO₂ emission at fleet level</td>
<td>1990</td>
<td></td>
<td></td>
<td></td>
<td>Contribution to the overall target of 55% reduction of CO₂ emission in 2030 (public target)</td>
</tr>
<tr>
<td>Number of (publicly available) electric recharging and hydrogen refuelling stations available in the EU in 2030</td>
<td>#</td>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td>Contribution to achieve 3 m public charging points in 2030 (public target)</td>
</tr>
</tbody>
</table>
SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES AMONG STAKEHOLDERS
To implement a system approach, the 2Zero partnership extended its membership beyond the traditional automotive value chain and included new stakeholders, such as end users (both for freight transport and people mobility) as well as stakeholders from the energy sector such as major grid players. By involving roughly equal numbers of industry players and members from the research side, the 2Zero partnership is truly a success story of cooperation between different type of stakeholders, within projects, and at the overall partnership level.

SYNERGIES WITH OTHER PARTNERSHIPS
The 2Zero partnership does not aim at working in an isolated silo; the coordination with other partnerships and sectors will be essential for success in the transition towards a carbon neutral road transport system. Specific attention will be paid to ensure constant links, exchanges of information and the integration of results of the enabling technologies partnerships, such as Clean Hydrogen, Batteries for Europe and the Key Digital Technologies. While these partnerships should develop the necessary building blocks, the 2Zero partnership will ensure a smooth and timely integration at the vehicle level. A close cooperation will also be established with the CCAM partnership to accelerate the transition to the 2030 mobility system (see images below).

SYNERGIES WITH MEMBER STATES
Acting at the European level is the main task of the partnership; however, a lot of initiatives also occur at the national level. The 2Zero partnership intends to rely on the soon to be launched States Representatives Group (SRG) to ensure a better alignment with the relevant national and regional policies and programmes. The main objectives will be to explore synergies, avoid duplication of funding and activities, and maximise the large-scale deployment of innovations supported by the 2Zero partnership to accelerate the transition to a carbon neutral road transport system.
PARTNERSHIP FICHE: Towards Zero-Emission Road Transport

2Zero

Integration
- control
- vehicles
- EV integration into the grid

End-of-life
- dismantling
- re-use
- recycling

Batteries
Materials
Battery cell
Battery module
Battery pack

Clean Hydrogen
Hydrogen production
Fuel cell
FC module
FC system
On-board storage

KDT
Clean Mobility Safe
- Sensors
- Controls
- Actuators
- SW/HW systems and platforms
- Power electronics
- Thermal management
- NVH

2Zero
Integration in
- powertrain
- motors
- battery systems
- chargers

Functional safety
reliability

Building blocks VALUE CHAIN
Integration Requirements

Mobility aspects
Clean Mobility Safe
- KDT
- 2Zero
OVERVIEW OF MEMBERS

MEMBERS PER TYPE

- **INDUSTRY** Other Industrial and/or profit Private organisation
- **UNIVERSITY** University and other higher education organisations
- **SMEs**
- **OTHERS** Non-profit, associations, state companies etc.

GEOGRAPHICAL COVERAGE

Numbers = number of partners in the country

Total number of partners: 111