





"CWA" COOPERATION WORKING ARRANGEMENT between REGIONE PIEMONTE, the 'European Green Vehicle Initiative Association for the 2Zero Partnership (EGVIAfor2Zero) and the EUROPEAN COMMISSION, DG RESEARCH AND INNOVATION (DG RTD) Points of attention

## Par. 3.1. Scope Technical alignment and promotion of excellence

**Mobility development paths** and **areas of application** within the current <u>Smart specialisation</u> <u>strategy</u> of Piedmont.

#### **PRIORITY SYSTEM - MOBILITY**

- a. Technology and components for alternative propulsion:
  - Development of EV and FCEV solutions (components, sensors, modules, systems, architectures for different vehicles and applications);
  - Components and systems for energy management, storage systems;
  - Development and integration of alternative fuel components and systems;
  - Eco-design methodologies (LCA materials, manufacturing with LCA criteria, recovery and recycling).

#### b. Development of EV based mobility infrastructure:

- Development and use of advanced manufacturing for the production and recovery of battery systems;
- Development of EV based mobility infrastructure and Battery Management Systems (smart charging, wireless charging, vehicle to grid integration, battery swap);
- Development of storage systems for electric, hybrid and fuel cells (high-density energy and power cells, integrated battery pack, battery management);
- Development of infrastructure for hydrogen vehicles (H2 production, storage, distribution, refuelling).

# c. Technologies for connectivity and data and infrastructure management (smart and connected transport):

- Development of solutions (HW, SW and sensors), integration with V2X communication infrastructure, safety optimisation and in-vehicle comfort. Connectivity Infrastructure and Devices (Low Power Wide Area Network and 5G) and V2V and V2X communication (infrastructure communication, on-board and road-side units): technology capable of enabling real-time and secure onsite exchange, computing and processing of large amounts of data acquired from IoT networks (Computing Continuum);
- Intelligent and cooperative transport systems, and advanced traffic management and optimisation models (such as data analysis and fusion, connectivity, secure infrastructure and networks, simulation, real time data processing);
- Solutions for the optimal management of existing infrastructure (roads, parking), equipment (electric recharging points) and means of transport (public vehicles, bicycles, cars in car sharing/pooling).
- d. Managing and optimising demand for sustainable, safe, intermodal, shared and alternative mobility:







- Advanced systems for acquisition, processing, visualisation and sharing of data/information to, between and from users, including on-board means;
- Infomobility solutions and journey planning tools that can make the choice of travel more sustainable and can foster the development of the mobility as a service paradigm (dynamic pricing, customisation of supply, integration of mobility services, including e-mobility services in real time);
- Solutions for safe and secure transaction management and recording.

### e. Design and implementation of new mobility systems and solutions for people and goods:

- Development and integration of systems for analysis, detection, traffic solutions, smart cities, emission detection with applications based on connectivity systems (e.g. 5G);
- Use of solutions and technologies for micro-mobility (vehicles, infrastructure, software).
- Long-distance smart freight delivery and logistics solutions for peripheral urban areas;
- Design and implementation of transport systems and mobility solutions for people, alternative, inclusive and accessible;
- Development and implementation of innovative solutions (technologies, materials, means) and processes capable of reducing the environmental impact of freight traffic and ensuring market-oriented service levels (lower traffic and delivery times, last mile);
- Fleet management applications for passenger and freight transport.

# **Regional Mechanisms** to activate synergies under the ERDF programme and **promote excellence** and results related to the 2Zero objectives.

Piedmont Regional Programme F.E.S.R. 2021/2027 - Action I.1i.1. Support for R&D&I activities and the economic exploitation of innovation - **SWIch Call, 2025 edition:** 'Support for research, development and innovation activities and the phases of industrialisation of their results in order to speed up production and/or marketing' – and reward schemes:

### **Maximum number of grant applications allowed:**

Each applicant may not submit more than 2 applications under each cut off of the Call, both as an individual proposer and as a partner or leader, regardless of the line of intervention or project category – with the exception of:

- proponents that fall within one of the following categories of rewards provided for in the document "Criteria for the selection of operations" approved by the Monitoring Committee of PR FESR 21/27, in the maximum number of additional 2 applications per cut off (a total of 4 applications for Call):
  - Partnership set up by companies associated with Innovation Poles;
- $\,^\circ$  Proposals that enhances synergies between EU funds and between EU funding and national/regional funding

#### Rewards

Rewards attributing additional points (also useful to reach the minimum overall score threshold):

• Projects that enhance synergies with EU funding and/or with EU and national/regional funding projects relating to the trajectories and areas of application of S3 – see Annex 8 – consistent with the technological roadmaps identified in the Memorandums of Cooperation / Cooperation Working arrangements signed with the European Partnerships or with Joint Undertakings operating under the Horizon Framework Programme Europe (2021-27) or other European Programmes, supporting research programmes aimed at achieving the objectives of the Green Deal.