

next  
move

collaboration is the driver



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# A WORD

## from the chairman



**Philippe Prével,**  
Chairman

Phase IV is coming to an end with very positive results in each of the cluster's strategic areas. NextMove, the successful merge between Mov'eo, ARIA Normandie and RAVI, now offers our ecosystem a complete collective capacity for innovation, development, experimentation and industrialization of sustainable mobility solutions. The cluster is proud to have supported, through these four years marked by a succession of unprecedented crises and transformations, more than 700 companies in their challenges and their projects. I would like to thank each one of our members and the entire NextMove team for taking part in this wonderful adventure, and of course Rémi BASTIEN, my predecessor.

The numerous economic and structural changes that lie ahead make it necessary to find better mobility solutions that are better for our planet, healthier and safer for people, more connected and more inclusive.

The strategic axes we have selected for phase V aim to address all these needs.

In most cases, the answers to these complex challenges can only come through collaboration. NextMove will have to ensure the synergy of all skills within the Mobility Valley, so that Normandy and Île-de-France emerge stronger from this new 2023-2026 phase, which is expected to be very turbulent.

I'm counting on all the members of NextMove to join forces and work as a network in order to build mobility solutions adapted to the present and future of our regions. Together, let's build our future.

# THE SUCCESSES

## of phase IV

(2019-2022)



### STIMULATE AND AMPLIFY THE ECOSYSTEM, EMBODYING THE MOBILITY VALLEY



**+560**

members, including 440 contributing members

### PROVIDE SOLUTIONS FOR THE REGIONS



**18**

territories supported

### GENERATE NEW PRODUCT, PROCESS AND SERVICES INNOVATION PROJECTS,



**169**

projects accredited and/or supported



**334 M€**

of R&D investment in funded projects

### BOOSTING COMPANY GROWTH



**26**

SMEs grouped



**46**

SMEs accelerated



**+2 400**

jobs created in supported SMEs

### SYNERGIES AND BUSINESS MODEL



**Merge**

ARIA NORMANDIE, Mov'eo & RAVI



**68 %**

of public and private funding for projects in 2022

### SUPPORTING INDUSTRIAL INNOVATION AND EXCELLENCE



**84**

companies supported in the improvement of their industrial excellence

### SHEDDING LIGHT TO THE EVOLUTION OF SKILLS THROUGH INNOVATION



**27**

trainings created or provided

### ACHIEVING LONG-TERM GROWTH IN EUROPE AND INTERNATIONALLY



**12**

new European projects in which the cluster participates



**53**

European projects supported by the cluster



**83**

SMEs accompanied towards the international stage

# THE AMBITION of phase V (2023-2026)

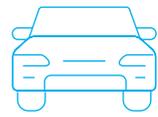
## Our vision

To be an exemplary European ecosystem where sustainable mobility solutions are invented, developed, tested and industrialized.

## Our mission

From research to industry and services, bringing together players in the automotive and mobility sector in our regions to strengthen their competitiveness and support transitions.

### THE MARKETS ADRESSED BY NEXTMOVE



Automotive



Mobility Solutions



Public Transport



Soft Mobility

### RAISON D'ÊTRE 2023-2026

#### Continuing the cluster's core missions and building on the successes of Phase IV:

- > Consolidate our unique role as a **trusted third party**, catalyst, facilitator, federator and mentor for the benefit of our members and the creation of activities and jobs in our territories
- > Strengthen our **European dimension**

#### In an industry in crisis and undergoing radical change:

- > Meet the challenges of **innovation** (products, services, production) driven by the industry, national (France 2030), regional and European policies
- > Meet the challenges of **energy sobriety, relocation and re-industrialization**
- > Seizing **opportunities arising** from environmental, digital and societal change
- > Contribute to the **decarbonization** of mobility

# A unique innovation **ECOSYSTEM**



NextMove animates and represents the **"Mobility Valley"**, one of the leading "Automotive and Mobility" innovation ecosystems in Europe, addressing the entire value chain in the **Île-de-France** and **Normandy** regions. For this fifth phase, NextMove is pursuing its actions around five thematic committees and a business committee.

### COMPOSITION OF THIS INNOVATION ECOSYSTEM

- > 25 % of the 400,000 jobs in the **upstream automotive industry** in more than 1,000 companies
- > **World-class R&D centers**: Renault Guyancourt, Stellantis Vélizy, Valeo Cergy...
- > **Leading production sites for industrial excellence**: Forvia Caligny, Renault Flins, Stellantis Poissy, etc.
- > **World-renowned research and training centers**: Paris-Saclay, Normandie Université...
- > **Local authorities** in the vanguard of new forms of mobility: Rouen Métropole, Versailles Grand Parc, Le Havre Métropole, Ville de Paris...
- > A representation of all types of local authority from **metropolitan areas** to **sparsely populated rural areas**
- > An **area of deployment of new forms of mobility**: car-sharing, car-pooling, mobility on demand, etc.
- > **Complementary sectors of excellence**: digital, energy, aeronautics, logistics, smart City

### LINK BETWEEN PUBLIC AND PRIVATE RESEARCH

NextMove brings together more than 120 technological, industrial and business experts, representing all types of organizations:

- 36** small and medium-sized companies
- 34** large companies
- 2** medium-sized companies
- 18** research and training centers
- 17** research centers and laboratories
- 3** local authorities
- 11** private institutions

### FIVE THEMATIC COMMITTEES, ONE BUSINESS COMMITTEE

- > **CTGE**: Powertrain and Energy Management
- > **MCE**: Materials, Comfort and Environments
- > **SMI**: Smart Mobility Solutions
- > **SUR**: Road User Safety
- > **EIO**: Industrial and Operational Excellence
- > **MBA**: Mobility Business Accelerator

# European LEADER

NextMove took the European direction from the beginning of Phase III, with the European dimension becoming an integral part of its strategy since 2012. This has enabled the cluster to become, in just 10 years, a key player in the structuring of the European innovation ecosystem in the automotive and mobility sector and to create a network of a dozen partner clusters.

NextMove is at the forefront in its ability to help its members benefit from European and international opportunities, in terms of innovation, business and skills. The cluster wants to reach a new level and play its part in building a stronger industrial Europe, in line with regional, national and European aspirations. This will involve playing an increasingly important role in the structuring of the innovation ecosystem, the development of new value-added services and strengthening cross-industry synergies.

## NEXTMOVE, A GATEWAY TO OPPORTUNITIES IN EUROPE

Integrating Europe into all of the cluster's initiatives and into the daily lives of its members, particularly SMEs.

## NEXTMOVE, A DRIVING FORCE FOR EUROPE-WIDE INITIATIVES

The cluster is positioning itself as the industry's main point of contact when it comes to the European Commission's structural initiatives.

## NEXTMOVE, AN INFLUENCE INSTRUMENT IN EUROPE

NextMove is capitalizing on its strong integration in European Research & Innovation networks and its image as a leader in the field of clusters.



# Our 5 STRATEGIC AXES



**AXE 1**  
DRIVING AND PROMOTING THE MOBILITY ECOSYSTEM in our regions

**AXE 2**  
FOSTERING R&D, innovation, industrial, experimentation and territorial projects

**AXE 3**  
ACCELERATING GROWTH and boosting the competitiveness of start-ups, SMEs, mid-caps

**AXE 4**  
ACTING AS A CATALYST FOR FEDERATING AND IMPACTFUL PROJECTS for the sector and the regions

**AXE 5**  
DEVELOPING SKILLS THROUGH TRAINING for the jobs of the future

# AXE 1

Driving and promoting the mobility ecosystem in our regions



Being a driving force in the innovation and industrialization ecosystem and strengthening its local roots.

- > **Developing and animating a high-quality network:** from research to industry and services
- > **Facilitating network collaboration** by relying on a comprehensive mapping of members' expertise
- > **Mobilizing expertise** through an attractive event program linked to the challenges of members and territories
- > **Strengthening inter sector synergies**, particularly in energy, digital, and electronics
- > **Enhancing connections** with IRT-ITE, Carnot Institutes, and SATT
- > **Increasing the visibility of the cluster's actions** and its members

## OBJECTIVES FOR 2026



**500**

paying members in 2026 (membership growth rate of **+3% per year**)



**80 %**

Participation rate of members in activities and services



**+200/year**

Press coverage impact



**1**

roadmap and 1 annual meeting with each industry and partner actor

# AXE 2

Fostering R&D, innovation, industrial, experimentation and territorial projects

Fostering the emergence of projects, providing support, and facilitating synergies between innovation and industry.



## OBJECTIVES FOR 2026



**120**

accredited and/or supported projects in 4 years



**120 M€**

of fundings for projects in 4 years

- > **Mobilizing thematic expert committees** to address the priorities of the technological roadmap
- > **Directing actions towards project generation:** organizing “brokerage events” and identifying project leaders
- > **Supporting projects towards the best available resources** at the regional, national, and European levels
- > **Increasing French participation** in Horizon Europe
- > **Implementing a standardized methodology** to ensure the transition to the industrial phase and facilitate the industrialization of future technologies in our territories
- > **Strengthening project quality** by evolving the accreditation process according to the new charter of the French Association of Competitiveness Clusters and enhancing the analysis of environmental and industrialization criteria

## AXE 3

Accelerating growth and boosting the competitiveness of start-ups, SMEs, mid-caps

Being the trusted third party for SMEs, supporting them, guiding them, fostering their growth, and enabling them to adapt.



### OBJECTIVES FOR 2026



**150**

start-ups, SMEs, and mid-sized companies benefitting from proposed services over 4 years

- > **To strengthen business-oriented exchange** opportunities with large corporations and local authorities
- > **To design and offer dedicated services** that adapt to transformations:
  - **Operational excellence and 4.0 support:** initiating digital transformation
  - **International missions:** developing technological, commercial, and/or industrial partnerships
  - **Mobility Business Accelerator coaching (MBA):** challenging the business strategy
  - **SME clusters:** building a comprehensive offering and fostering collaborative business
  - **Collaborative demonstrators:** showcasing and promoting innovations in real-life conditions
  - **Exhibition booths at industry reference trade shows:** enhancing visibility
  - **Training programs:** developing skills
- > **To be the mobility reference within collaborations** with SME and startup accelerators and incubators: Moove-Lab, PFA-Bpifrance Accelerator, Software République, industrial accelerators, etc.

## AXE 4

Acting as a catalyst for federating and impactful projects for the sector and the regions



Initiating projects that address the challenges of the industry and the priorities of national (France 2030) and regional policies.

> **Initiating, catalyzing, and supporting impactful projects** within the following programs:

- Circular Economy
- Decarbonization of the fleet and air quality
- Energy efficiency and decarbonization of industrial sites

> **Engaging in collaborative programs** with other stakeholders:

- Industry-specific programs: electromobility, power electronics, hydrogen, automated and connected vehicles
- “After Market” and “Active Mobility” themes

### OBJECTIVES FOR 2026



**15**

projects generated, supported, and launched over 4 years



**80**

members actively involved as partners over 4 years



**20 M€**

in reindustrialization projects supported over 4 years

## AXE 5

# Developing skills through training for the jobs of the future

Supporting the transformations of mobility actors and promoting skill development through the implementation of training programs.

- > **Developing the NextMove** training organization and structuring the offering on topics such as “new energies, new materials, new industries”
- > **Promoting the training programs** of our SME and mid-sized company members
- > **Becoming the operational arm for the industrial training centers** of our major groups
- > **Driving impactful training projects:** E-Mobility Industry Academy, Campus des Métiers et Qualifications...
- > **Monitoring emerging technological trends and collecting skill needs**
- > **Fostering relationships** between industry and academics

### OBJECTIVES FOR 2026



50

training programs available (created by NextMove or in partnership)



1,000

individuals trained over 4 years



# Our TECHNOLOGICAL ROADMAP

In a context of multiple crises that are challenging the industry, several technological transformations are underway to address a central issue: **the decarbonization of mobility.**



Powertrain and energy management



Road user safety



Smart mobility solutions



Materials, comfort and environments

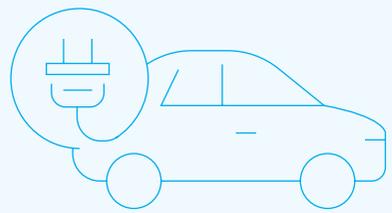


Industrial and Operational Excellence

- > If the current decarbonization indicator primarily focuses on the usage phase, the industry must prepare to integrate it throughout the entire life cycle of mobility products and services while expanding it to address other concerns such as:
  - Biodiversity preservation
  - Elimination of harmful substances in accordance with the European Chemicals Strategy for Sustainability (CSS)
  - Air quality preservation
  - Resource scarcity, which calls for frugal solutions in response
- > This transformation occurs in a context of health, geopolitical, energy, and social crises, which makes it more necessary than ever to create favorable conditions within our ecosystem to develop mobility solutions that are:
  - Low-carbon
  - Inclusive for all territories and users
  - Industrially viable within our territories, while maintaining a significant part of the value chain
  - Affordable for users in a *Total Cost of Ownership approach*
- > Furthermore, we should not overlook the existing fleet, which will continue to represent the largest source of emissions for many years. Solutions for addressing the existing fleet include:
  - Drop-in fuels (low-carbon fuels)
  - Eco-driving
  - Retrofitting
  - Car-sharing and carpooling
- > These technological transformations also present an opportunity to develop:
  - New business models for mobility services
  - New services related to connectivity and automation
  - New, competitive value chains on circular economy

# PRIORITIES

## of the technological roadmap



Powertrain and  
energy management

### MISSION

**TO DEVELOP AND OPTIMIZE AFFORDABLE POWERTRAINS WITH LOW CO<sub>2</sub> AND POLLUTANT EMISSIONS**

#### Powertrains with low environmental impact

- > Electric machines
- > Fuel Cells (PAC)
- > Thermal engine technologies using renewable energy carriers: hydrogen, e-fuels, biofuels, biogas...
- > Power electronics
- > Architecture and systems: hybridization, energy management, retrofit

#### Energy storage systems

- > Batteries: electrochemistry, packs, BMS, thermal management...
- > Supercapacitors
- > Hydrogen storage: liquid or solid
- > Phase change materials, flywheels...

#### Infrastructure and network

- > Charging or refueling infrastructure
- > Smart Grid, including vehicle-to-grid or second-life batteries in their operation

#### Tools, methods, and new business models

- > Modeling, design, optimization, and development tools and methodologies: HIL, LCA...
- > Functional safety with a system approach
- > New business models



Road User Safety

### MISSION

**TO REDUCE ROAD INSECURITY FOR ALL TYPES OF USERS IN URBAN AND RURAL AREAS**

#### Interactions in urban, peri-urban and rural ecosystems

- > Infrastructure/vehicle/user interactions
- > New uses, involving all types of users, including safety considerations for active and soft mobilities: motorized two-wheelers, cyclists, personal electric devices, pedestrians, seniors, vulnerable users...
- > Inter-vehicle compatibility
- > Traffic flow management

#### Understanding respective roles in human-system interaction

- > Learning, training, variability of human capabilities
- > Vehicle-infrastructure-user-ecosystem communication
- > Standardization, simplification

#### Mobility automation

- > Sensors, sensor fusion, decision algorithms based on scenarios
- > Reliability, operational safety
- > Specifications that inherently include the human factor

#### Cooperation

- > (Inter)connectivity: services provided, V2V, V2I (including 5G)
- > Information sharing

#### Data/data processing

- > Data collection and decision support
- > Data processing
- > Cybersecurity



## Smart Mobility Solutions

### MISSION

**TO PROMOTE AND SUPPORT THE DESIGN, DEVELOPMENT, AND INTEGRATION OF SMART AND SUSTAINABLE MOBILITY SOLUTIONS FOR PEOPLE AND GOODS IN URBAN AND RURAL AREAS**

#### Mobility: Value-Added Services

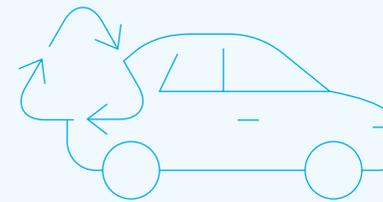
- > Mobility within an integrated multimodal chain: intermodality, multimodality, services related to electromobility and automated road mobility, new vehicle uses (shared, pooled, and optimized vehicles), soft mobility, alternative mobility, active mobility, urban logistics...
- > Economic and social dimensions: legal and regulatory environment, value creation, social and solidarity economy, collaborative economy, measurement/evaluation/impact on the environment and society

#### Human-centric approach: Mobility for all

- > Human-Machine Interfaces, ergonomics, usability of onboard functions and services
- > Acceptance of new mobility solutions, including automated and connected road mobility
- > Technologies and services for everyone and for all use cases (People with Reduced Mobility, mobility in sparsely populated areas)

#### Technology: Smarter Mobility

- > Vehicles and data: vehicles as multifunctional sensors (connectivity, IoT, 5G), vehicle platforms (data exchange, sharing, and management), data protection, and cybersecurity
- > Automated and connected road mobility
- > Artificial Intelligence for mobility
- > Intelligent Transport Systems services: ICT, multimodal information, payment, reservation
- > Exploring new technologies for mobility: blockchain, metaverse...



## Materials, comfort and environments

### MISSION

**TO REDUCE THE ENERGY DEMAND AND ENVIRONMENTAL IMPACT OF VEHICLES BY ADDRESSING MATERIALS AND THEIR ASSOCIATED PROCESSES WHILE IMPROVING RELIABILITY AND ENHANCING COMFORT AND HEALTH INTERACTIONS ONBOARD**

#### Weight reduction and associated processes

- > Metallic materials, composites, plastics, glass
- > 3D printing
- > Assemblies
- > Architecture

#### Environment and associated processes

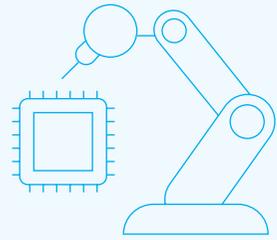
- > Recycled materials
- > Biomaterials
- > Substitution of strategic materials
- > Recycling
- > Circular economy

#### Onboard well-being

- > Electromagnetic compatibility
- > Acoustics, vibrational behavior
- > Cabin air quality
- > Lighting, plasronics
- > Functionalized materials

#### Design

- > Digital tools: multiphysics, materials, processes...
- > System approach, architectures, cyber-physical systems (CPS)...
- > Reliability, dynamic behavior, electromagnetic compatibility
- > Eco-design, life cycle assessment (LCA)



## Industrial and operational excellence

### MISSION

**TO PROMOTE AND SUPPORT THE DEVELOPMENT OF DECARBONIZATION SOLUTIONS FOR PRODUCTION SITES, IMPROVE INDUSTRIAL PERFORMANCE, AND ENSURE HUMAN AND ENVIRONMENTAL WELL-BEING**

#### Supporting transitions

- > Design and develop production modernization solutions: integration of lean and Industry 4.0 concepts in production methods
- > Implement circular economy concepts
- > Foster frugal innovations (product/process breakthroughs)
- > Support business relocation and industrial revitalization projects
- > Support industrialization projects for future products (decarbonized automobiles and sustainable mobility)

#### Industrial economic performance

- > Continue to support operational excellence and Industry 4.0: Lean Manufacturing, Lean Office, digital transformation, use of industrial data, additive manufacturing, energy efficiency, and decarbonization

- > Design for manufacturing/process coupling
- > Human-Machine interfaces, ergonomics
- > Acceptance of new solutions
- > Logistics and supply chain management

#### Strengthening and promoting the industrial sector

- > Facilitate inter-company relationships, collaboration between major groups and SMEs, and cross-sector collaboration
- > Develop local business ecosystems
- > Promote local manufacturing compared to the procurement policies of major groups
- > Showcase the future of the industry
- > Promote industrial innovation
- > Enhance the attractiveness of industrial jobs

#### Managing skills evolution

- > Acquire industrial skills to support industry evolution: batteries, hydrogen, electric powertrains, power electronics...
- > Foster a generational approach
- > Establish effective management models and develop leadership
- > Enable skills mobility

# SYNERGIES

## within and across sectors

### RELATIONS WITH THE AUTOMOTIVE AND MOBILITY SECTOR



- > **Enhanced cooperation with the 4 Automotive and Mobility clusters** (ID4CAR, CARA, Pôle Véhicule du Futur, NextMove) in line with the priorities of the Automotive sector Strategic Committee (CSF)



- > **Strengthening synergies and collaborations** with the VEDECOM Institute of Energy Transition in the areas of Europe, SMEs, Training, Events, and services to local authorities



- > **Collaboration with ARIA Hauts-de-France** on the topics of industrialization of electric vehicles and batteries

### CROSS-INDUSTRY RELATIONS



- > Consolidated cooperation with the Normandy clusters: NAE, TES, Normandie Energies



- > Consolidated cooperation with the Parisian clusters: Systematic, AS Tech, CapDigital



- > Inter-cluster organization Smart Energy Alliance



- > Collaboration with the electronics industry (ACSIEL)



- > AFPC (French Association of Competitiveness Clusters)

- > Bicycle sector



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La certification qualité a été délivrée au titre de la catégorie d'action suivante  
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