



EGVI
European Green
Vehicles Initiative

European Green Vehicles Initiative PPP Approach, Impact and Future Outlook

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EGCI and EGVI PPPs

- **Successful experience of the European Green Cars Initiative**
 - PPP of the industry and the EU (2009-2013) in FP7
 - €500 Mn EU funding over four years
 - Three pillars:
Electrification, Long Distance Trucks, Logistics & Co-modality
 - Major focus on electrification (2/3 of budget)
 - More than 120 collaborative research projects launched
- **Launch of the European Green Vehicles Initiative PPP in Horizon 2020** involving the automotive, smart systems and smart grids sectors (in December 2013)





Scope of the EGVI PPP

- Defined goal and focus:
Energy efficiency of vehicles and alternative powertrains
- Covers all types of road transport vehicles:
 - passenger cars
 - trucks
 - buses
 - L-category vehicles
 - new vehicle concepts
- Any **technological development** supporting these objectives at the relevant product layers of the value chain
- from modules to systems and vehicles





Technology Content

2-Wheelers

Passenger
Cars & LDV

Trucks

Buses

Resources

Integration

Modules

Systems

Vehicles

Integration

Infrastructure

- Alternative / lightweight materials
- Alternative fuels and energies
- Advanced materials, Equipment, Nano- / Microtechnologies

- Advancement and adaption of resources for green vehicles

- Processing, integrating advanced (lightweight) materials & technologies
- Electrification & hybridization; Components for sensing & control;
- Energy Storage, functional integration; design for manufacturing
- Power electronics

- Drivetrain for alternative / renewable fuels;
- Reliability and robustness
- Advanced ICE and ICE in context of electrification & hybridization
- PT systems design, optimization, modularization and integration

- PT integration, E/E architecture, thermal management, weight reduction
- Simulation, prototyping, testing, recycling
- Safety & security of data
- Novel vehicle concepts; tailored trucks

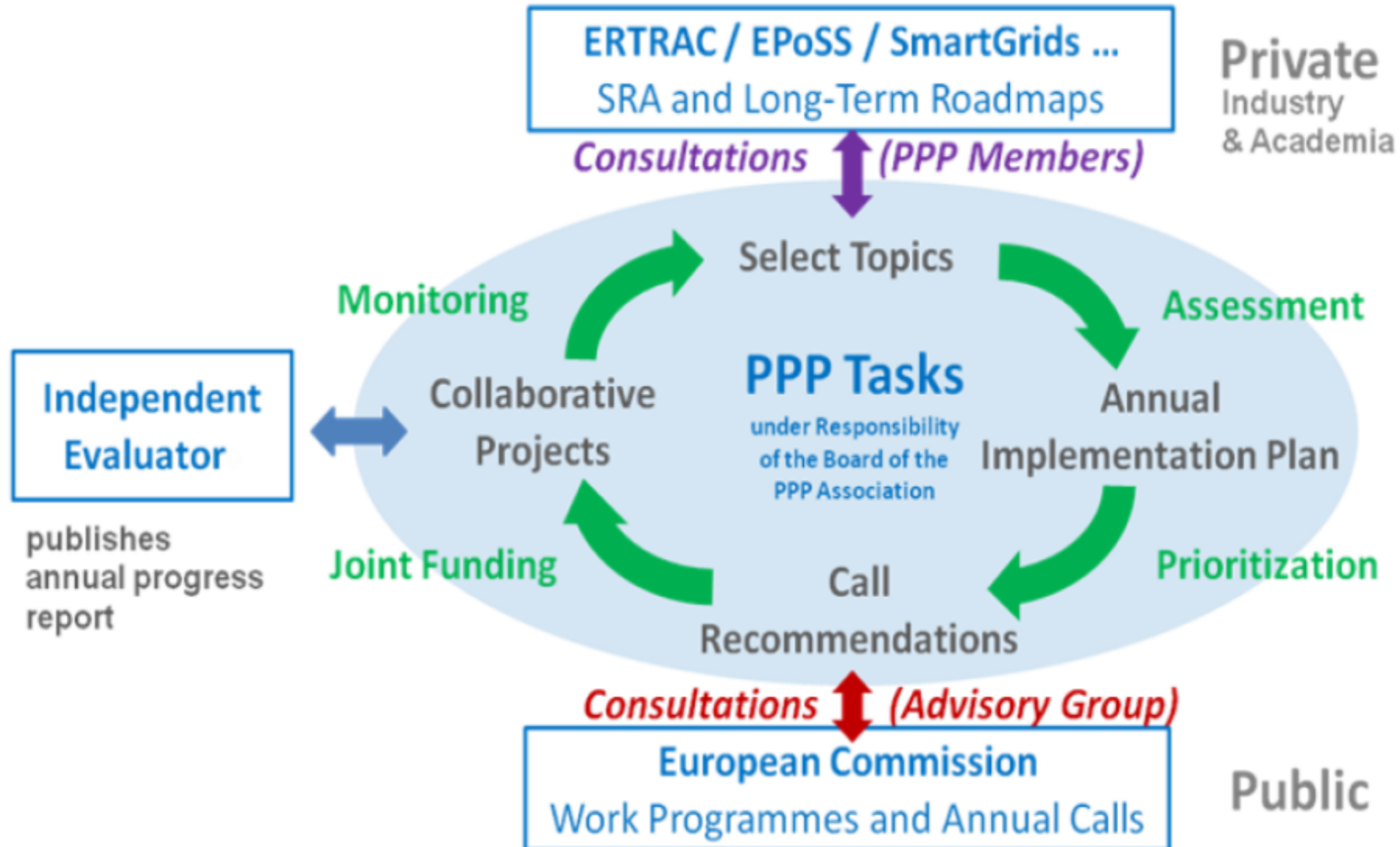
- Interfaces and interaction to infrastructure outside vehicles, e.g. smart grid integration, IST for energy efficiency

- Grid and road infrastructures
- Data networks
- Intermodal hubs



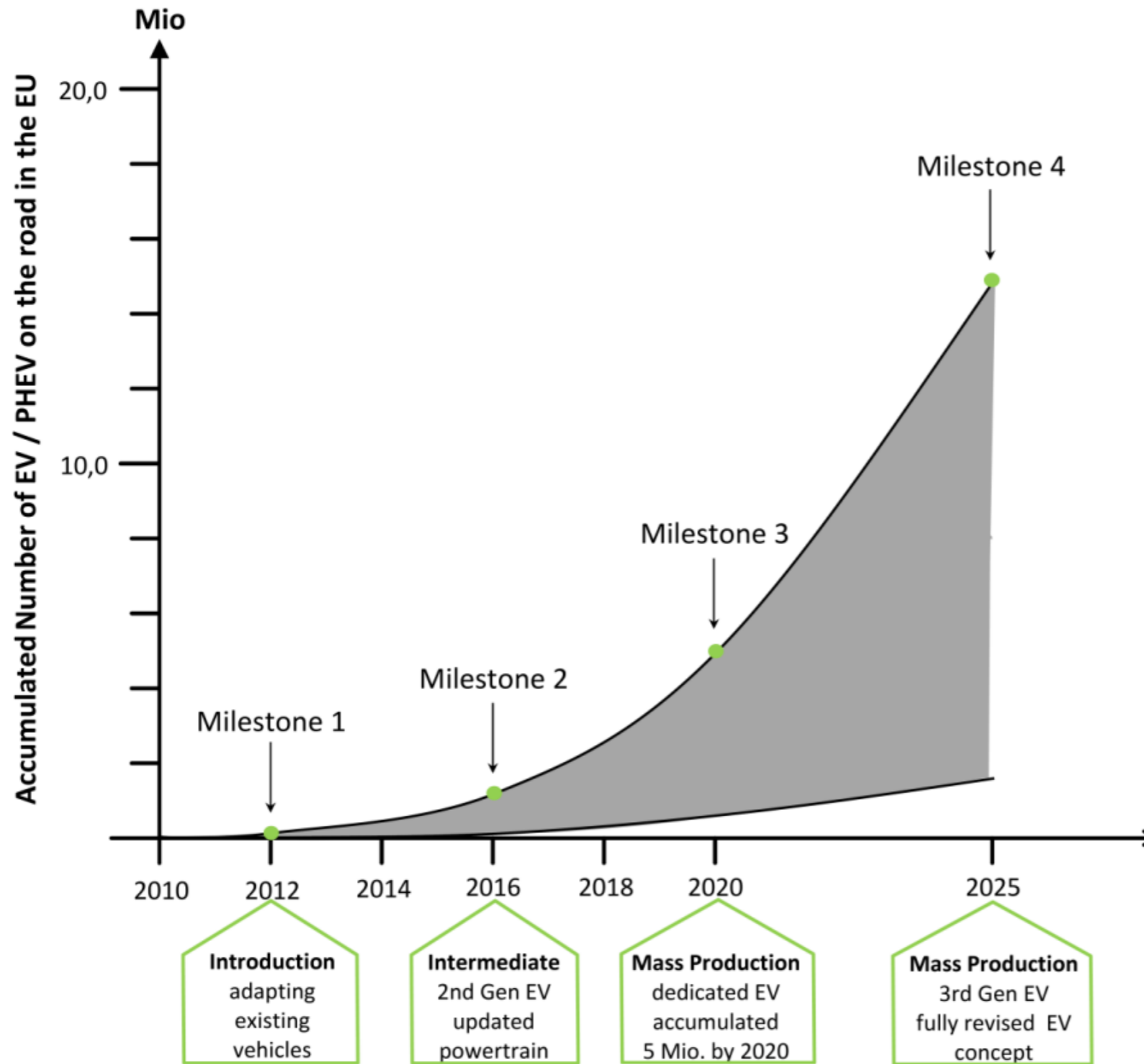


PPP Consultation Process





Electrification Roadmap





Electrification Roadmap

Vehicle System Integration

- Optimized System Efficiency with Existing Components
- Find New Solutions for Heating, Venting, Cooling under Various Environmental Conditions
- Create New Concepts for Space Usage
- Explore Light-Weight Materials, EcoDesign, Recycling
- Establish Testing Facility (Research Testing Methods)
- Enhance Packaging & Integration of Devices Combining Functionalities
- Design Electrical Architecture & Interconnects
- Concepts for Assessing the System Reliability
- Interior NVH
- Functional Oriented Lightweight materials
- Revise ICT Architecture and Middleware
- Develop Novel Concepts for Vehicle Architecture
- Research Modularity and Interfaces into Multi-Modal Transport System
- Implement New Design Employing Novel Materials
- Implement Revised ICT Architecture and Middleware
- Realize Modular Concepts

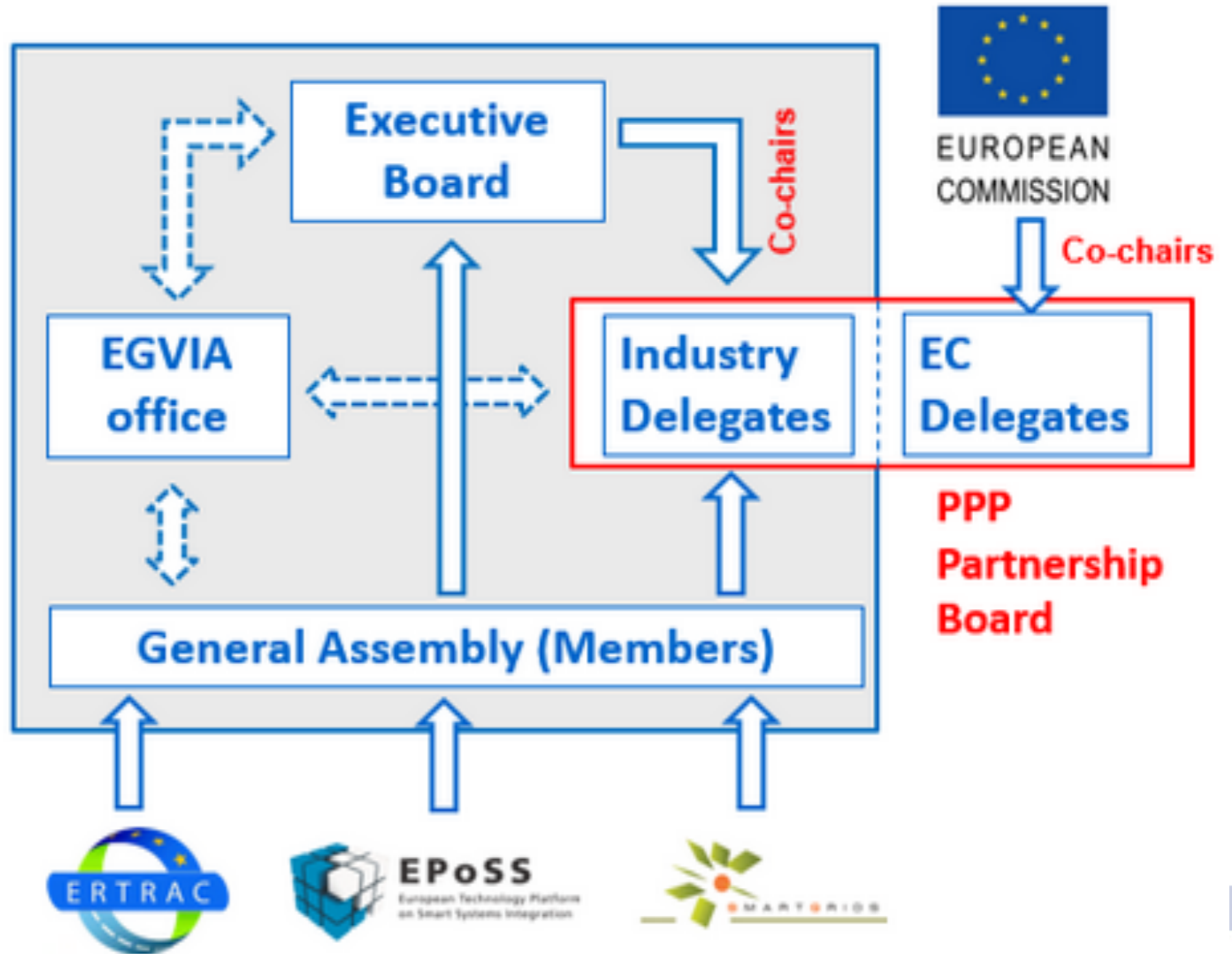




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Governance Model of the PPP

**EGVI
Association**





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More than 100 Projects

Project Portfolio
European Green Cars Initiative PPP
Calls 2010 - 2013

European Green Cars Initiative

Lecture Notes in Mobility

Emma Bric
Beate Müller *Editors*

Electric Vehicle Batteries: Moving from Research towards Innovation

Reports of the PPP European Green
Vehicles Initiative

Springer

Lecture Notes in Mobility

Beate Müller
Gereon Meyer *Editors*

Electric Vehicle Systems Architecture and Standardization Needs

Reports of the PPP European Green
Vehicles Initiative

Springer

www.egvi.eu/projects/research-projects



European Green Vehicles Initiative Association (Private Side of the PPP)

- New association - **European Green Vehicles Initiative Association (EGVIA)** - gathering the private side members of the Public-Private Partnership
- **Main objectives:**
 - deliver research topics recommendations for EGVI calls
 - disseminate information within the research community
 - promote the PPP and its collaborative cooperation
- EGVIA currently composed of **78 industry, research and associate members**





78 EGVI members

- 14 automotive OEMs
- 19 automotive suppliers
- 3 representatives of smart systems industry
- 1 representative of smart grid industry
- 15 research organisations
- 18 universities
- 8 associated members







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Thank you for your attention!

More information? www.egvia.eu

Contact: info@egvia.eu

