



EGVI
European Green
Vehicles Initiative

Information Day - Green Vehicles session

State of play of the implementation of the Multi-annual Roadmap

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- **The EGVI PPP Multiannual Roadmap is the document of reference for the EGVI cPPP:**
 - Context, rationale and objectives
 - Research and innovation strategy
 - Expected impacts
 - Governance model

- Preparation based on **consultation process** launched in 2012, involving stakeholders from ERTRAC, EPoSS and SmartGrids

- Cross-sector approach based on **Roadmaps and Strategic Research Agendas** of the three European Technology Platforms



Context behind the EGVI PPP

- **Automotive and Smart Systems industries key sectors for Europe:**
 - Automotive industry: 12 million direct jobs and over €500 billion/year in turnover
 - Smart Systems industry: 1 million direct jobs and €10 billion/year in turnover

- **Vehicle market facing pressing situation:**
 - lasting crisis situation in Europe shifts markets and profit generation to outside Europe
 - jobs under pressure from lower labour costs regions, political pressure and industrial policy outside Europe



General Objectives of the EGVI PPP

- Research, development and demonstration of technologies to enable more energy efficient vehicles using alternative powertrains, strengthening the future competitiveness of the automotive industry, following **CARS 2020 Strategy**.
- Help to reach the **ambitious targets** set by the EU transport, energy and climate protection policies:
 - the 20/20/20 targets on renewable energy use,
 - the CO₂ emissions regulation,
 - the Euro emissions standards for road vehicle, contributing to air quality improvement
- Match the transport needs within the EU with highly efficient and more flexible mobility products/services, by providing EU citizens with best-in-class technology, and matching with the **Grand Societal Challenges**, e.g. decarbonisation, safety, etc
- Support the policy goals of the **EU Transport White Paper** thanks to accelerated research, development and demonstration of technologies that allow the efficient use of clean energies in road vehicles



- Multi-annual implementation plan based on relevant **research and innovation roadmaps and strategic agendas** developed by the ETPs - ERTRAC, EPoSS and SmartGrids.
- Guiding objectives and milestones defined in the following documents:

- ERTRAC-EPoSS-SmartGrids joint roadmap Electrification of Road Transport
- ERTRAC roadmap European Technology and Production Concept for Electric Vehicles
- ERTRAC roadmap Hybridisation of Road Transport
- ERTRAC roadmap Light-duty Powertrains and Fuels
- ERTRAC roadmap Sustainable Freight System for Europe / Heavy Duty Truck
- ERTRAC roadmap European Bus System of the Future
- EPoSS Strategic Research Agenda chapter Automotive
- ERTRAC Strategic Research Agenda



Implementation scheme

ERTRAC / EPoSS / Smart Grids
SRA and Long-Term Roadmaps

Private side

Consultations



Monitoring

Select Topics

Assessment

Collaborative
Projects

PPP Tasks

Multi-annual
Roadmap

Joint Funding

Call

Recommendations

Prioritisation



Proposal

Public side

European Commission
Work Programmes and Calls for proposals

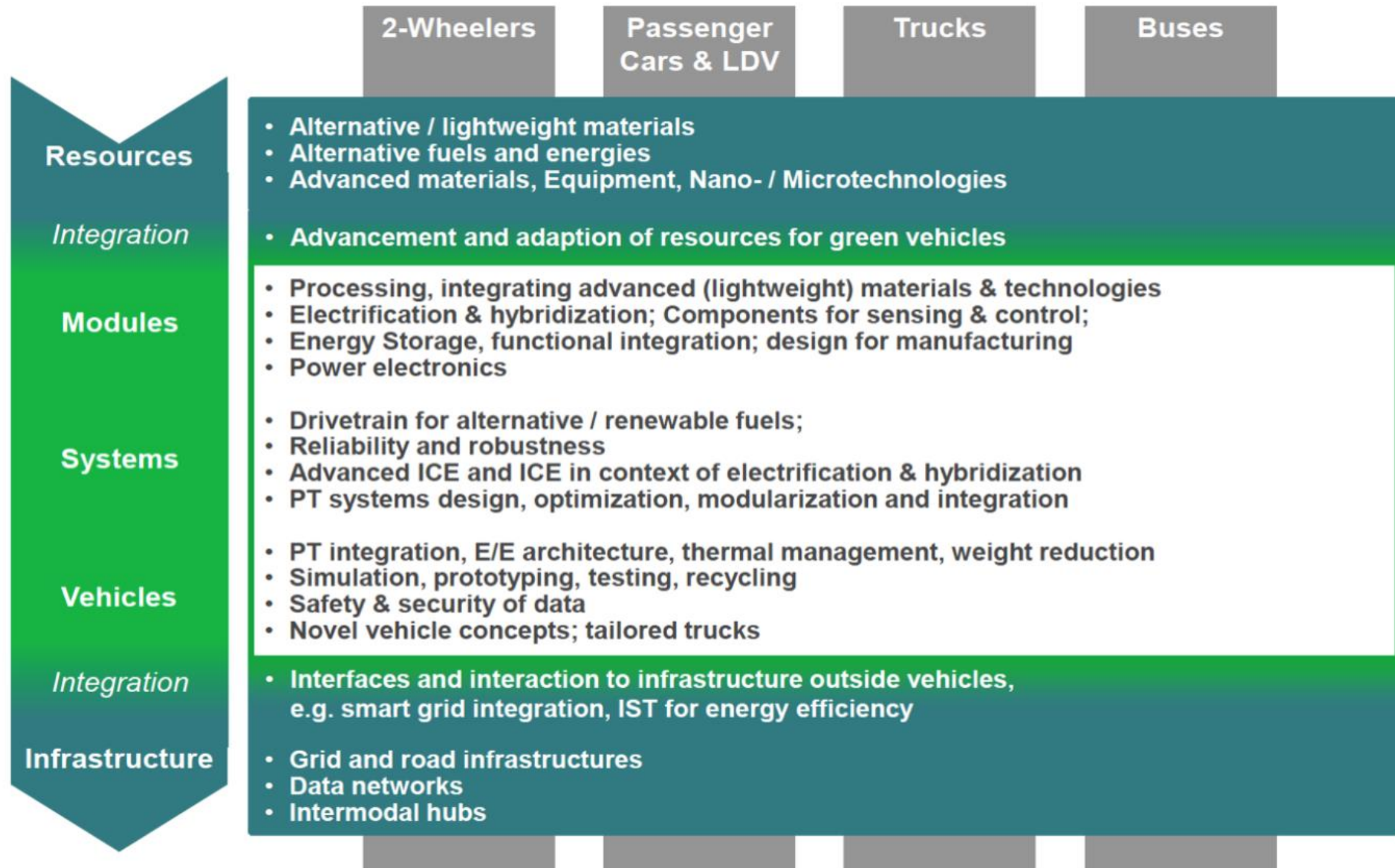


- **Covers all types of road transport vehicles:**
 - passenger cars
 - trucks
 - buses
 - L-category vehicles
 - new vehicle concepts
- **Defined goal and focus: energy efficiency of vehicles using alternative powertrains**





Example of technology content





Expected Impacts of the PPP

- **Improvement of the energy transport system efficiency by 50% from 2010 to 2030, including:**
 - +80% energy efficiency of urban passengers transport
 - +40% energy efficiency of long distance freight transport

- **Deployment of alternative powertrains like electric and plug-in hybrid technologies, according to milestones in 2016 and 2020 and matching respective performance parameters (cf. Electrification roadmap):**
 - 5 million electric & hybrid vehicles in the EU by 2020 (0.5 million by 2016)
 - battery life-time and energy density doubled, at 30% lower cost, in 2020 compared to 2009 Li-Ion technology



Seven EGVI call topics funded in 2014:

- GV.1-2014. Next generation of competitive Li-ion batteries to meet customer expectations
 - GV.2-2014. Optimised and systematic energy management in electric vehicles
 - GV.3-2014. Future natural gas powertrains and components for cars and vans
 - GV.4-2014. Hybrid light and heavy-duty vehicles
 - GV.5-2014. Electric two-wheelers and new ultra-light vehicle concepts
 - GV.7-2014. Future alternative fuel powertrains and components for heavy-duty vehicles
 - NMP17-2014. Post lithium-ion batteries for electric automotive applications
- **Total EU funding for the 2014 EGVI Call: €129 M**





Two EGVI call topics in 2015:

- GV.6-2015. Powertrain control for heavy-duty vehicles with optimised emissions
- GV.8-2015. Electric vehicles' enhanced performance and integration into the transport system and the grid





Outcomes of 2014/2015 calls

Call Reference	Submitted proposal			Evaluation results		Success rate%
	Submitted proposals	Eligible proposals	% of retained	Above threshold	Selected for funding	
H2020-GV-2014	77	76	98.70%	31	15	19.48 %
H2020-NMP-GV-2014	22	22	100%	4	2	9.09 %
H2020-GV-2015	46	42	91,30%	23	5	11,90 %
Total	145	140	97%	58	22	16,%





Outcomes of 2014/2015 calls

Call Reference	Publication date	Evaluation period	Nr of GAs signed	Indicative budget [max funding] (M€)	Funding	
					EU contribution	Private /cPPP contribution
H2020-GV-2014	11 th December 2013	Sept - Oct 2014	15	€ 129	€ 133.6	€ 23.7
H2020-NMP-GV-2014	11 th December 2013	Nov - Dec 2015	2	€ 16	€ 14.9	-
H2020-GV-2015	24th June 2015		5	€ 30	€ 34	€ 4.2
Total			22	€ 175	€ 182,5	€ 27,2





EGVI calls 2016/2017

#	Topic title	Year	Type of action
GV-01-2017	Optimisation of heavy duty vehicles for alternative fuels use	2017	IA
GV-02-2016	Technologies for low emission light duty powertrains	2016	RIA
GV-03-2016	System and cost optimised hybridisation of road vehicles	2016	IA
GV-04-2017	Technologies for low emission light duty powertrains	2017	RIA
GV-05-2017	Electric vehicle user-centric design for optimised energy efficiency	2017	RIA
GV-06-2017	Physical integration of hybrid and electric vehicle batteries at pack level aiming at increased energy density and efficiency	2017	IA





EGVI calls 2016/2017

#	Topic title	Year	Type of action
GV-07-2017	Multi-level modelling and testing of electric vehicles and their components	2017	RIA
GV-08-2017	Electrified urban commercial vehicles integration with fast charging infrastructure	2017	IA
GV-09-2017	Aerodynamic and flexible trucks	2017	IA
GV-10-2017	Demonstration (pilots) for integration in transport system of electrified L-category vehicles	2017	IA
GV-11-2016	Stimulating European research and development for the implementation of future road transport technologies	2016	CSA
GV-12-2016	ERA-NET Co-fund on electromobility	2016	ERA-NET Cofund
NMP-08	Affordable weight reduction of high-volume vehicles and components taking into account the entire life-cycle	2016	RIA





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Thank you for your attention!

More information? www.egvi.eu

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