Recommendations of the Ad-Hoc Industrial Advisory Group

European Green Cars Initiative

European Economic Recovery Plan (November 2008):

<u>3 Public Private Partnerships implemented:</u>

- Factories of the Future
- Energy Efficient Buildings
- **European Green Cars Initiative**

Public Private Partnership between the industry, the European Commission, and Member States.

www.green-cars-initiative.eu

Ad-Hoc Industrial Advisory Group EGCI

Role of the Industrial Advisory Group:

- Get together industries and Commission services and ensure a strategic dialogue on the Initiative
- Implement the European Green Cars Initiative as a Public Private Partnership.
- Give advice for the R&D priorities of FP7 calls
- Represent the involved economic sectors

www.green-cars-initiative.eu

Ad-Hoc Industrial Advisory Group EGCI

Membership:

ERTRAC: AVL, Bosch, Continental, FEV, Fiat Research Center, IFP, Renault, Ricardo, Valeo, Volkswagen, Volvo

EPoSS: Bosch, Continental, Fiat, Siemens, VDI|VDE-IT, Volkswagen

Smartgrids: Iberdrola, KUL

Logistics: Procter & Gamble, PTV, Schachinger, ECT

DG RTD
DG INFSO
DG MOVE
DG ENV
DG ENTR
+
EIB

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Recommendation Roadmap

2009

- **Electrification**

Electric vehicles, infrastructure, electric batteries, hybrid technologies

2010

- **Electrification**
- **Trucks**
- **Internal Combustion Engines**
- **Logistics**
- **ITS**

2011/12

- **Electrification**
- **Long Distance Transport**
- **Logistics and Co-Modality**

www.green-cars-initiative.eu

Recommendations 2011/12 Calls RTD/ICT

Priority Area 1: Electrification 2nd Step (1)

- Smart Management of Energy Storage Systems
- Vehicle-to-Grid Interfaces
- Advanced Drive Train Controls
- Energy Efficient Architectures
- Functional Safety and Durability
- Integration into the Road Infrastructure

Recommendations 2011/12 Calls RTD/ICT

Priority Area 1: Electrification 2nd Step (2)

- Architectures of Electrified Vehicles for Urban Use
- Safety of Electric Vehicles
- Thermal Management
- Advanced and Sustainable Manufacturing of Batteries and Electric Components
- Life Cycle Assessment and Strategic Materials

Recommendations 2011/12 Calls RTD/ICT

Priority Area 2: Long Distance Transport

- Efficient drivelines for long distance transport: future power train concepts (advanced combustion and aftertreatment)
- Efficient drivelines for long distance transport: waste heat recovery
- Efficient vehicles for long distance transport

Recommendations 2011/12 Calls RTD/ICT

Priority Area 3: Logistics and Co-Modality

- Urban – interurban shipments
- Capability of improving and exploiting capacity
- Demonstrating Green Corridors
- Efficient interfaces for transport modes
- Direct consumer delivery

Future Visions

Roadmap follow-up: maintain a system approach of the objectives and the innovation fields.

Objectives:
- Mobility
- Energy Security
- Climate Protection
- Economic Growth
- Integrated Solutions
- Usability and Acceptance

Innovation Fields:
- Vehicle Technologies
- Mobility Services
- Freight Transport Solutions
- Infrastructures
- Energy Sources
- Materials and Resources
- Manufacturing

Future Visions

Context of future actions (1)

The decarbonisation of road transport with clean and energy efficient vehicles has important implications for the global competitiveness of the European industrial sectors involved.

Europe to challenge the position of world leader in this drive towards decarbonisation of mobility.

Future Visions

Context of future actions (2)

The internal combustion engine and a range of hybrids will coexist with the FEVs and remain of dominant importance for long distance transport and freight, requiring combined substantial R&D efforts.

Support is needed for all stages of the innovation chain, from targeted strategic technology development to manufacturing and deployment.

Future Visions

Lighthouse Projects

A strategic approach implies projects of large scale and long duration, able to reach leverage effects. Examples:

• Reference centre, e.g. KIC, focusing on performance testing and impact assessment of clean and energy-efficient vehicles, bringing together knowledge from automotive engineering and the ICT and energy sectors.

• Green corridors and mode interfaces for electric and low-CO_2 vehicles.

• Anticipation of the challenges and needs of the innovation chain from technology development to deployment, by a roadmap with milestones and actions agreed by all involved sectors.

Future Visions

Funding instruments, involvement of Member States, procurement and incentives (1)

Large scale investments in prototyping and manufacturing facilities are particularly justified when clusters of vehicle manufacturers and suppliers promise a rapid uptake of innovations into internationally competitive value chains.

Public Private Partnership models involving the respective Member States and regional public authorities, the European Commission, and the industry, are particularly appropriate for this kind of spending.

Future Visions

Funding instruments, involvement of Member States, procurement and incentives (2)

Close coordination of the R&D and implementation programmes of the European Union and the Member States should be aimed at.

Action fields for a timely pan-European market deployment:

- Harmonized demand side measures for EVs and low CO_2 vehicles.
- EU wide availability of charging infrastructure for electric vehicles.
- EU common plug standards, billing processes ("roaming"), and CO_2 certification of energy.

Future Visions

Funding instruments, involvement of Member States, procurement and incentives (3)

Measures creating early demand are needed in order to reach the high production volumes, which will allow Europe to become market leader.

Public procurement schemes are effective demand side measures, in particular if implemented on a large scale with cooperation of regions, and if coordinated at a European Union level.

European Green Cars Initiative

The Ad-Hoc Industrial Advisory Group, considering a permanent status of the European Green Cars Initiative in Framework Programme 8, is committed to support such action from the perspective of R&D and technology development.

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