



PPP – The European Green Cars Initiative

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Partnerství veřejného a soukromého sektoru (PPP) - European Green Cars Initiative

Praha 28. června 2010



The European Green Cars Initiative

Research and development part of EGCI:

Research for heavy duty vehicles based on internal combustion engines (ICE): combustion, alternative fuels, intelligent control systems, recuperation, tyres...

Research on electric and hybrid vehicles: incl. smart electricity grids and charging systems

Logistics and co-modality combined with intelligent transport systems:

- efficient logistics
- smooth interactions between different transport modes

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TECHNOLOGICKE
CENTRUM AV ČR

GC.SST2011.7-1: Specific safety issues of electric vehicles

Contents/scope:

Safe handling, rescue and maintenance, protection against fire
and electric shock

Vehicle acoustic perception

Funding scheme: Collaboratives Projects - small or medium-
scale focused research projects

Expected impact:

Technologies that avoid additional casualties due to electrocution
risks.

Effective acoustic warning

Call: FP7-SST-2011-RTD-1

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TECHNOLOGICKE
CENTRUM AV ČR

GC.SST2011.7-2: Integrated thermal management

Contents/scope:

Electric vehicles - thermal management of the power train
nad vehicle including heating and cooling aspects.

Funding scheme: Collaborative Projects – small or
medium-scale focused research projects

Expected impact:

Reduction of energy requirement for heating and cooling...

Weight reduction of the cooling nad circuits...

Call: FP7-SST-2011-RTD-1

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GC.SST2011.7-3: Efficient long distance transport – waste heat recovery

Contents/scope:

Truck engines - system design for the thermodynamic cycle
Development of expanders, heat exchangers...
Development of simulation methods...

Funding scheme: Collaborative Projects – small or medium-scale focused research projects

Expected impact:

10% fuel consumption reduction

Call: FP7-SST-2011-RTD-1

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GC.SST2011.7-4 : Urban – interurban shipments

Contents/scope:

Urban logistics

New logistics solutions (electric cars, public transport...)
New mechanism for control on ordering, monitoring, supervising...
Decoupling of supply lines
Optimization of terminals
Research on urban distribution of goods
Regulatory solutions
New instruments for urban freight data collection

Funding scheme: Collaborative Projects –small or medium-scale focused research projects

Expected impact:

A more efficient urban freight distribution system

Call: FP7-SST-2011-RTD-1

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GC.SST2011.7-5: Integrated intermodal traveller services

Contents/scope:

Traveller information system

Open platform for planning, booking nad travelling multimodal journeys.

Creation of interfaces to facilitate data exchanges among different transport modes nad different operators

Forecast mechanism of state of relevant transport modes

Information delivery to mobile devices and e-ticket services.

Funding scheme: Collaborative Projects – small or medium-scale focused research projects for specific cooperation actions (Brazil, China, Russia)

Expected impact:

New fully integrated intermodal traveller services

Call: FP7-SST-2011-RTD-1

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GC.SST2011.7-6: Capability of improving and exploiting capacity

Contents/scope:

Logistics – loading factor

Cooperation between manufacturing and transport industries

Methodology to calculate revenues and benefits

New business models for for entire supply chain

Funding scheme: CSA

Expected impact:

New business model

Call: FP7-SST-2011-RTD-1

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TECHNOLOGICKE
CENTRUM AV CR

GC.NMP.2011-1, GC.ENV.2011.3.1.3-1, GC.SST.2011.7-7 - Advanced eco-design and manufacturing processes for batteries and electrical components

Contents/scope: eco-design, assembly/integration and production of **batteries** and electrical components (motors, battery management systems, etc.); recycling
lithium-based batteries
drivetrains/motors

Funding scheme: Collaborative Projects - large

Expected impact: production of cells, battery packs, electrical motors and components with the required performances at competitive costs, eco-efficiency

Additional information:

SME/IND; EU contribution > 4 mil. € (topic budget 25 mil. €)

Call: FP7-2011-GC-ELECTROCHEMICAL-STORAGE

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TECHNOLOGICKE
CENTRUM AV CR

GC.SST2011.7-8: ERA-Net Plus Electromobility

Contents/scope:

Coordination of national research activities for Electromobility.

Funding scheme: CSA

Expected impact:

Reduction of fragmentation of European research, better use of sources

Call: FP7-ERANET-2011-RTD

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TECHNOLOGICKE
CENTRUM AV ČR

GC.SST2011.7-9: Efficient long distance transport-future power train concepts

Contents/scope:

Truck engines – advanced combustion and after treatment

Reduction of fuel consumption

Engine down- sizing

Advanced turbo charging

Friction reduction (piston...)

Faster combustion

Heat management for the after treatment system

Advanced Nox after treatment systems

Funding scheme: Collaborative Projects- large scale integrating projects

Expected impact:

15% efficiency improvement from the power train

Call: FP7-SST-2011-RTD-1

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TECHNOLOGICKE
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GC.SST2011.7-10: Architectures of Light Duty Vehicles for urban freight transport

Contents/scope:

Novel **electrified LDV** concept and solutions

Usability in urban environment

Optimised structural layout

Modularization and standardization

Funding scheme: Collaborative Projects - small or medium-scale focused research projects

Expected impact: Higher energy efficiency (at least 40%)

Call: FP7-SST-2011-RTD-1

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GC.SST2011.7-11: E-freight solutions and supply chain management

Contents/scope:

To create a solid European transport **e-logistic framework**
Demonstrate the interoperability of a wide range of e-logistic solutions that have been developed through EU projects

Funding scheme: Collaborative Projects - small or medium-scale focused research projects

Expected impact:

To prove the attainability of an open e-freight framework.
To demonstrate the costs and benefits for the individual stakeholders

Call: FP7-SST-2011-RTD-1

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GC.ENV.2011.3.1.3-2 - Operational guidance for Life Cycle Assessment studies of the European Green Cars Initiative

Contents/scope:

- specific operational guidance that tailor the general ILCD Handbook for application to future products
- training material and courses for practitioners in industry

Funding scheme: Coordination and **Support Action**

Expected impact: consistency and transparency of the LCA studies carried out on electric vehicles, GC PPP

Additional information:

Up to 1 project, EU contribution < 0,5 mil. €

Call: FP7-2011-GC-ELECTROCHEMICAL-STORAGE

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TECHNOLOGICKE
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FP7-2011-ICT-GC

Contents/scope:

research, development and integration of major building blocks of the FEV, and integrate the FEV with infrastructures

- a) Energy/Power Storage Systems
 - control system solution for bateries and/or super capacitors
- b) Architectures for Energy, Communication and Thermal Management
 - optimised distribution for multiply voltage systems for
 - real-time and fail-safe standard communication systems
- c) Vehicle-to-grid Interface (V2G)
 - controled flow of energy
 - platform independent solution
- d) Vehicle Stability Control

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TECHNOLOGICKE
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FP7-2011-ICT-GC

Expected impact:

- Improved energy efficiency and extended driving range of the FEV
- Reduced costs of the electronic components and the overall FEV at increased performance
- Mitigated constrains for the user of the FEV versus the Internal Combustion Engine vehicle
- The FEV seamlessly implemented in the smart grids and existing infrastructure
- Significant improvement of FEV's safety, comfort and new information and comfort services for FEV users.

Funding scheme: STREP (targeted research), budget 30 M€

More info: ICT NCP, ICT work programme,
Infodays:Brussels - 9 July, ICT conference 27-29 September)

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