


 EUROPEAN COMMISSION
 Community research

DG Research

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EU  TRANSPORT RESEARCH

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New Commissioner New portfolio:

Ms. Maire Geoghegan-Quinn

- Former Member of the Irish government
- Former Member of the European Court of Auditors.
- Innovation is very firmly on her agenda

Research, Innovation & Science

- Innovation, innovation, innovation
- Emphasis on achieving results & implementing them - working with other services on regulation for patents, IPR and increased cohesion
- Emphasis on simplification of management of EU Research funds to involve more SMEs
- Commitment to JTIs, Joint Programming & more PPPs
- Strengthen gender balance in research
- Make Europe more attractive for workers






New mandate

- **Mandate from President Barroso to Commissioner**
- **Take a decisive step forward in building the European Research Area**
 - Make the “fifth freedom” (mobility of researchers) a reality
 - Lead a cross-cutting approach to innovation
 - Coordinate European & national research activities (specialisation based on recognised strengths & excellence)
 - Prepare future R & D policy framework & FP8
 - Rationalise & simplify existing EU financing mechanisms & adapting the current institutional/regulatory framework



Why a Green Car Initiative?

- The current financial and economic crisis is unprecedented
- It happens concurrently with the early signs of a global environmental and energy crisis
- GHGs need to be reduced, fossil sources replaced
- Incremental solutions will not be enough, step changes are needed
- The US car industry example showed that not taking into account energy efficiency and advances in technology is risky
- The survivors will be the leaders of tomorrow's green technology
- Planning large R&D investments at such times is difficult
- The EU recognised the risks and prepared for a global answer



Some facts in the current scenario

- The 130-95g/km targets for car fleet average CO₂ emissions
 - Supercredits for vehicles emitting below 50 g/km
- The post Euro 6/VI pollutant emissions regulations
- Air quality regulations not being met
- Car electrification can be a response to all these challenges, but not viable to reduce CO₂ in cargo transport
- Leading by example in environmental technology makes it easier to promote standards and exports and achieve global results at lower cost
- Emerging car OEMs can leapfrog western manufacturers, we want to support EU industry not to fall in the trap



Europe is there. How efficiently?

- EU efforts (adding up all national efforts and EU funding) are comparable to those of our global competitors
- Duplicated or uncoordinated efforts can however diminish the effectiveness of the investment
- Some issues like education, standardisation and regulation, user studies and infrastructure development beg for a EU-level approach
- R&D at basic and intermediate level also benefits from accessing the best competencies rather than only national ones
- Member state involvement in joint programming is the best answer to these issues and more

European Green Cars Initiative: how it works

- 3 main streams of actions:
 - EIB loans in support of industrial innovation Budget: originally €4 billion (in addition to existing loans), almost doubled last year
 - PPPs for research on greening road transport: Budget: €1 billion (€500 M from EC matched from industry and Member States)
 - Demand side measures & public procurement: e.g. reduction of circulation & registration taxes for low CO2 cars, fleets



The role of the European Investment Bank

- Best tool for innovation support that involves greater risk
- A new loan instrument (ECTF) has been designed specifically for the transport industry.
- Can be used in addition to research grants

EIB and EC: “Risk-Sharing Finance Facility”

- What is RSFF?
A guarantee fund for research, development and innovation.
- What does it offer?
Loans of up to 50% of cost of research and innovation projects. Loans are market priced.
- Who can apply?
Entities of any size and ownership.
- What specific requirements?
Projects must be in line with FP7 objectives.
- How to apply?
Contact RDI@eib.org



EIB Loans: ECTF “European Clean Transport Facility”

- What is ECTF?
Investment support for research (in emission reductions ?).
ECTF is in addition to the Green Car Initiative.
- What does it offer?
Loans of up to 75% of eligible project costs.
4 billion euro budget per year.
- Who can apply?
OEMs and Suppliers in the automotive industry.
Industries in other transport modes (rail, air, shipping)
- What specific requirements?
Emissions reduction projects only.
- How to apply?
http://www.eib.org/projects/cycle/applying_loan/index.htm?lang=en



Contact: RDI@eib.org

Public-Private Partnerships

- Objective: to promote the convergence of public interest with industrial commitment and leadership in determining strategic research activities
- Quick response and smooth start: use existing schemes & structures (FP7 and ETPs)
- Smart investments : to improve competitiveness of European industries & environmental protection
- Implementation approach: via cross-thematic calls while also exploring other possibilities



FP7 Calls

3 calls in 2010

Overall budget: +/- €108 million

Opening Date: 31 July 2009

1. DG RTD main call
2. DG INFSO main call
3. Joint Call on Electric Batteries



DGs INFSO, RTD and MOVE for the Fully Electric Vehicle

Three DGs to focus on road electrification in a coordinated manner. Five key areas for research focus:

- Energy storage systems
- Drive trains
- Vehicle integration
- Infrastructure integration
- Large demonstrations



DG RTD Joint Call on Electric Batteries

Joint Call on Electric Batteries

- Emphasis on step change on advanced materials and chemistry
- Study of degradation
- Consideration for recycling
- Budget: ca. €25 million



FP7 funding mechanisms

- The participation to these calls is open to all entities in EU Member states, associate and INCO countries
- Minimum number of countries applies, project must be of really European scale
- Typical project size 4-6 M€, with 2-3M€ funding
- Some larger budgets for complex integration projects, mostly for proof of concept vehicles
- 50% funding of actual costs for large companies, 75% for SMEs, research centers and Universities
- Past success rate around 25%, GCI calls likely to be higher



European Technology Platforms involved



European Road Transport Research
Advisory Council



European Technology Platform on Smart
Systems Integration



European Technology Platform for the Electricity
Networks of the Future



Info websites

European Green Cars Initiative

PPP European Green Cars Initiative

The European Green Cars Initiative is one of the three Public Private Partnerships (PPP) of the European Economic Recovery Plan announced by the President of the European Commission on the 26th of November 2009. The objective of the initiative is to support R&D on technologies and infrastructures that are essential for achieving breakthroughs in the use of renewable and non-polluting energy sources, safety and traffic fluidity. Despite its name the Green Cars Initiative is not only for passenger cars. Under the Green Cars Initiative, the topics include research on trucks, internal combustion engines, bio-methane use, and logistics. However a main focus is on the electrification of mobility and road transport. Beyond providing loans through the European Investment Bank, the PPP European Green Cars Initiative is making available a total of one billion Euro for R&D through joint funding programmes of the European Commission, the industry and the member states. These financial support measures will be supplemented by demand-side measures, involving regulatory action by Member States and the EU, such as the reduction of car registration taxes on low CO2 cars to stimulate car purchase by citizens.

For a rapid implementation of the PPP European Green Cars Initiative, the instruments of the 7th Framework Programme were chosen, and an Ad-Hoc Industrial Advisory Group was established as a high-level forum for a strategic dialogue between the European Commission and the involved industrial sectors. Due to the horizontal character of the topic, various services of the European Commission work tightly together in this PPP: DG Research, DG Information Society and Media, DG Transport and Energy, DG Environment and DG Enterprise. The industry is represented by select members the European Technology Platforms European Road Transport Research Advisory Council (ERTRAC), European Technology Platforms on Smart Systems Integration, Smartroads and other stakeholders. The Ad-Hoc Industrial Advisory Group is chaired by Prof. Dr. Wolfgang Steger from Volkswagen.

A first round of calls for the European Green Cars Initiative with a total budget of 100 Mio Euro was launched in July 2009. Initiatives with member states' programmes shall be created.

ec.europa.eu/research/transport/info/green_cars_initiative_en.htm
www.green-cars-initiative.eu

WP 2011

**Taking shape
Input from**

- ERTRAC
- Green Car's Ad hoc Advisory Group
- Transport Advisory Group
- Member States
- Academia

2011 Call emphasis

- 2008, 2010: CO₂ emissions reduction and mitigating climate change
- **2011: the characteristics and performance of the overall transport system**
 - 3 research challenges
 - Group of topics" have been defined:
 - Efficient rail services
 - Eco-innovations in shipbuilding and waterborne transportation
 - Implementing research for the 'European Green Car Initiative'
 - Reintroduction of some topics from previous calls



EGCI WP 2011

- **Three groups of topics**
 - Electric vehicles
 - Heavy duty vehicles
 - Logistics & co-modality
- **For the Green Car initiative this represent a move forward from the quick start of a "vehicle only" approach for 2010 to a CO₂ reduction in freight**
- **Emphasis on**
 - long distance freight (technical changes will reduce CO₂ output)
 - logistics (organisational changes will reduce CO₂ output)



EGCI ad hoc Group

- Input to DG RTD, DG INFSO and DG MOBILITY & TRANSPORT
- Identified a number of topics within each of the categories for EGCI
- Using a score-based system helped prioritise the most significant topics for each category
- Analysed the priority topics for selection into the Work Programme
- A medium term strategy is being elaborated on what topics should be raised over the future Calls



trío.es Spanish Presidency initiatives

- **Competitiveness Council 8th February 2010**
 - Discussion document on Electric Vehicles
 - Launching the debate on the future of electric vehicles
 - Included Global Competition & Competitiveness, Safety, Placing on the market, Standards & Legal Considerations, Energy/Environmental dimension, Industrial Structure
- **Conference on PPPs Valencia 14th April 2010**
 - “From economic recovery to sustainability”
 - 3 sessions on EGCI
 - ◆ A fundamental step towards decarbonisation of transport
 - ◆ Technology for Green & Electric Vehicles
 - ◆ Sustainably moving forward with PPP





Community research

ETP Conference: 11th-12th May



- **Theme: “Working together on Societal Challenges”**
- **Aim: to engage ETPs**
 - To work together on key areas of common interest that tackle specific societal challenges
 - To extend actions beyond research agendas to issues related to innovation & the demand side complementary to research activities
- **Four parallel sessions: one on “Sustainable transport”**
- **Three workshops to provisionally cover**
 - Decarbonisation of transport
 - Urban Mobility
 - Safety & security

To be organised in conjunction with the Technology Platforms
- **& of course there will be a concerted DG RTD presence at TRA 2010 in Brussels on 6-10 June....**



Community research



European Green Cars Initiative

**Thank you for your
attention!**

Any questions?

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