EGVIA Calls for Projects

Bruxelles – 21/01/2014

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EGVI Programs

Call topics planned for 2014 and 2015 under the EGVI PPP				
Topic code	Topic title	Type of Action	Expected Deadline	Budget (M€)
GV 1-2014	Next generation of competitive lithium batteries to meet customer expectations	RIA	August 2014	129 (Transport)
GV 2-2014	Optimised and systematic energy management in electric vehicles			
GV 3-2014	Future natural gas powertrains and components for cars and vans	IA		
GV 4-2014	Hybrid light and heavy duty vehicles			
GV 5-2014	Electric two-wheelers and new light vehicle concepts			
GV 7-2014	Future natural gas powertrains and components for heavy duty vehicles			
NMP-17-2014	Post lithium ion batteries for electric automotive applications	RIA	October 2014	16 (NMP)
GV 6-2015	Powertrain control for heavy-duty vehicles with optimised emissions	IA	August 2015	10 (Transport)
GV 8-2015	Electric vehicles' enhanced performance and integration into the transport system and the grid	RIA		20 (Transport-CNECT)

- **GV**: **G**reen **V**ehicle
- **NMP**: **N**anotechnolgies, advanced **M**aterials, & **P**roduction

Saft. The world leader in advanced and innovative battery systems

Saft is the world's leading designer, developer and manufacturer of advanced technology batteries for industrial and defence applications.

The Group's new generation lithium-ion batteries are now being widely deployed in energy storage systems worldwide.

With over 4,000 employees worldwide, Saft is present in 18 countries

The Saft Group in 2012 - Key figures

* % of total sales excluding non-recurring revenue of €7.4 million

Research and Development

- The quality of its R&D teams is one of the Group's major competitive strengths, allowing it to maintain its technological leadership.
- Saft invested 9% of annual sales in R&D in 2012 including customer-funded development and grants.
- 447 engineers and technicians in Saft's R&D departments are focused on improving the performance of Saft's technologies, in particular Li-ion for industrial and defence applications.

NMP-17 Post lithium-ion batteries for electric automotive applications

- New battery is supposed to double energy density of Li-ion. New should be over 550 Wh/kg
  - > best time being Li-ion is 280 Wh/kg at cell level at moderate rate (18650 size for PC at 3.6 Ah at 3.65 V)
  - > Li-ion is to progress: 300 Wh/kg very probable to 400 challenging
  - > the objective of doubling energy seems very challenging
    - the best primary ($Li/SOCl_2$) is at 750 Wh/kg for low rate
- Few new mechanisms without insertion seem to be eligible
  - > Li-S (Saft already involved in Eurolis consortium) is a Saft priority
  - > Solid electrolyte enabling high voltage materials with good expectation in safety is also a Saft priority
  - > Li-Air (open system needed: very challenging) is not a Saft priority
- But post Li-ion may be Li-ion with 50 % more energy
  - > that requests new material family and deep technical investigations

THANK YOU