

### **COmplete Vehicle ENergy-saving Technologies**

#### EGVI Workshop Brussels

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**CONVENIENT - Project Introduction** 

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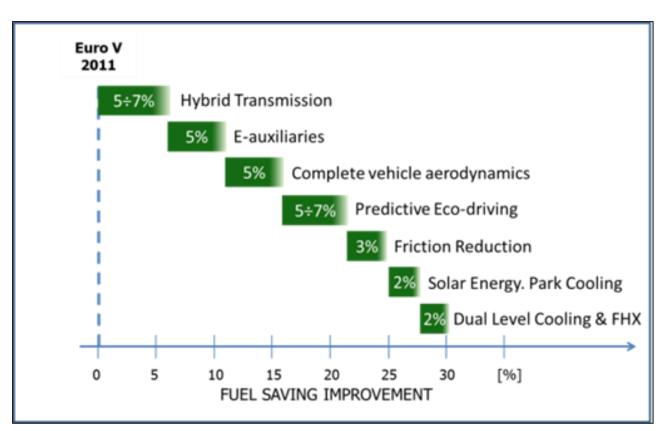
**Facts and Figures** 

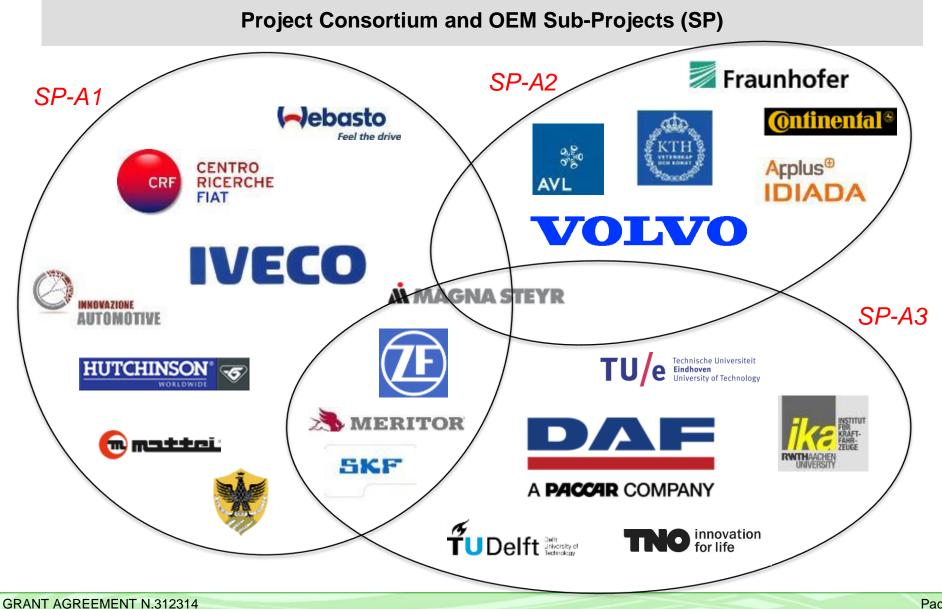
- CONVENIENT: Complete Vehicle Energy-saving Technologies for Heavy Trucks
  - Main OEM partners: IVECO, DAF, VOLVO
    - Total partners: 22
    - EU countries: 7
  - Project coordinator: CRF (Centro Ricerche FIAT)
  - Project duration:
    - November 2012 April 2016
    - 3 years + 6 months extension
  - Project financially supported by European Commission FP7
    - Total budget: 16,6M€ (EU contribution: 9,9M€)



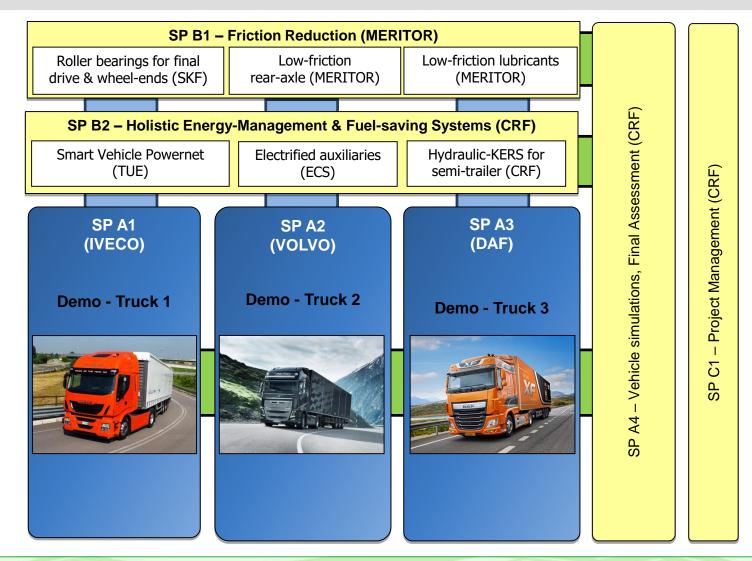
#### Objective

The development of novel long-distance heavy-truck solutions to enable **up to 30% fuel savings** by adopting a holistic approach to on-board energy management, considering the tractor, the semi-trailer, the driver and the mission together.





#### **Project Structure Breakdown**



#### Achievement of 30% fuel-economy target

Three heavy-duty prototype trucks have been developed by the *CONVENIENT* Consortium, featuring:

- Energy-efficient systems including hybrid transmission, electrified auxiliaries;
- Energy-efficient thermal system, including dual level cooling and Parking HVAC;
- Energy harvesting devices, such as photovoltaic solar roof for truck and semitrailer;
- Advanced active and passive aerodynamics devices for the truck and the semitrailer;
- Friction reduction in rear axle (active oil level control and low friction bearings)
- Holistic Energy Management system at vehicle level;
- Predictive Driver Support to maximize the energy saving benefits.

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<b>FUDelft</b> Technische Universiteit Delft	5KF	MERITOR	- <del>C</del> HUTCHINSON*
mattei:	Università degli studi dell'Aquila	INNOVAZIONE AUTOMOTIVE	(-)ebasto
Fraunhofer	KTH		

Total budget 16,6 M€, Total EC funding 10 M€ Start November 2012; Duration 42 months

For full details, consult the CONVENIENT web-site: www.convenient-project.eu