

PROJECT

## ECOMOVE

### Cooperative Mobility Systems and Services for Energy Efficiency

**Funding:** European (7th RTD Framework Programme)

**Duration:** Apr 2010 - Jan 2014

**Status:** Complete

**Total project cost:** €21,873,367

**EU contribution:** €13,700,000



**Call for proposal:** FP7-ICT-2009-4

[CORDIS RCN : 94140](#)

#### Background & policy context:

The eCoMove concept rests on the idea that, for a given trip by a particular driver in a particular vehicle, there is some least possible fuel consumption that could be achieved by the perfect eco-driver travelling through the perfectly eco-managed road network. In reality, both drivers and traffic management systems fall short of this ideal, and much fuel is wasted and CO2 emitted unnecessarily.

#### Objectives:

The eCoMove project will create an integrated solution for road transport energy efficiency by developing systems and tools to help drivers sustainably eliminate unnecessary fuel consumption (and thus CO2 emissions), and to help road operators manage traffic in the most energy-efficient way. By applying this combination of cooperative systems using vehicle-infrastructure communication, the project aims to reduce fuel consumption by 20% overall. This target can be achieved by:

- Saving unnecessary kilometers driven (optimising routes)
- Helping driver to save fuel (optimising driver behaviour)
- Managing traffic more efficiently (optimising network management)

Key objectives of eCoMove innovation are to develop and validate the following applications: ecoSmartDriving to improve driver eco-performances, including: ecoTripPlanning, on trip dynamic green routing, ecoDriving support, ecoPostTrip and ecoMonitoring; ecoDriver Coaching System and in-vehicle Truck eCoNavigation for good vehicle drivers cooperative ecoFleet Planning and Routing for environmental sound ecoFreight & Logistics ecoAdaptive Balancing & Control system as well as cooperative Fuel-efficient Motorway system as means for ecoTrafficManagement & Control.

These important eCoMove innovations are enabled by the use of cooperative information exchange, such as vehicle fuel consumption data & route destination by the traffic system, the traffic lights phase data, speed and route recommendations by the vehicle.

The eCoMove project will target three main causes of avoidable energy use by road transport to bring fuel wastage to a minimum:

1. inefficient route choice
2. inefficient driving performance
3. inefficient traffic management & control

#### Methodology:

The eCoMove innovations will target the two sources of this avoidable fuel consumption: private trips and freight/logistics trips. This integrated project (IP) will structure into six different sub-projects:

- Coordination and Management
- Core Technology Integration both to develop common core technologies and to ensure strong technical coordination across the IP

- ecoSmartdriving to develop solutions for eco-driving support for car drivers
- ecoFreight & Logistics, for both eco-driving support for trucks and eco-freight and logistics management
- ecoTrafficManagement & Control to develop applications for cooperative eco-traffic network management
- Validation & Evaluation to validate the performance and effectiveness of all applications in a number of urban, non-urban and motorway environments

**Parent Programmes:**

[FP7-ICT - Information and Communication Technologies](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

**Lead Organisation:**

**Association Of European Railway Industries**

**Address:**

avenue Louise 221/11  
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**Organisation Website:**

<http://suzanne.lami@unife.org>

**EU Contribution:** €2,071,969

**Partner Organisations:**

**Bmw Forschung Und Technik Gmbh**

**Address:**

HANAUER STRASSE 46  
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Germany

**EU Contribution:** €398,271

**Fundacio Privada Racc**

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Avenida Diagonal 687  
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Spain

**EU Contribution:** €0

**Association Professionnelle Des Societes Francaises Concessionnaires Ou Exploitantes D'autoroutes Ou D'ouvrages Routiers**

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France

**EU Contribution:** €16,895

**Tomtom Germany Gmbh & Co Kg**

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31177 HARSUM  
Germany

**EU Contribution:** €41,300

**Volvo Bus Corporation**

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Fästningsvägen 1  
40508 Gothenburg  
Sweden

**Organisation Website:**

[http://www.volvo.com/bus/global/en-gb/home\\_new.htm](http://www.volvo.com/bus/global/en-gb/home_new.htm)

**EU Contribution:** €704,080

**Gemeente Helmond**

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**EU Contribution:** €27,750

**Autoroutes Du Sud De La France Sa**

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PLACE DE L EUROPE 9  
92500 RUEIL MALMAISON  
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**EU Contribution:** €88,322

**Cofiroute Sa**

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**EU Contribution:** €39,408

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**Address:**

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**Organisation Website:**

<http://www.continental-corporation.com>

**EU Contribution:** €0

**Robert Bosch Gmbh**

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**Organisation Website:**

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**EU Contribution:** €544,632

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**Organisation Website:**

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**EU Contribution:** €632,603

**Nederlandse Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek Tno****Address:**

ANNA VAN BUERENPLEIN 1  
2595 DA DEN HAAG  
Netherlands

**Organisation Website:**

<http://www.tno.nl>

**EU Contribution:** €977,167

**Tomtom Polska Sp Zoo****Address:**

PROSTA nr 51  
00-838 WARSZAWA  
Poland

**EU Contribution:** €5,225

**Rheinisch-Westfaelische Technische Hochschule Aachen****Address:**

Templergraben  
52062 Aachen  
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**Organisation Website:**

<http://www.rwth-aachen.de>

**EU Contribution:** €560,950

**Fundacion Tecnalia Research & Innovation****Address:**

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**Organisation Website:**

<http://www.tecnalia.com>

**EU Contribution:** €113,612

**Technische Universitaet Muenchen**

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**Organisation Website:**

<http://www.tu-muenchen.de>

**EU Contribution:** €659,829

**Daf Trucks N.v.****Address:**

HUGO VAN DER GOESLAAN 1  
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**Organisation Website:**

<http://www.daf.com>

**EU Contribution:** €375,301

**Ford Forschungszentrum Aachen Gmbh****Address:**

SUESTERFELDSTRASSE 200  
52072 AACHEN  
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**EU Contribution:** €840,000

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06210 MANDELIEU LA NAPOULE  
France

**EU Contribution:** €33,443

**Tomtom Belgium Nv****Address:**

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Belgium

**EU Contribution:** €87,825

**Tomtom Global Content Bv****Address:**

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**EU Contribution:** €0

**Cgi Nederland Bv****Address:**

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**EU Contribution:** €385,388

**Ptv Planung Transport Verkehr Ag**

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Stumpfstrasse 1  
76131 KARLSRUHE  
Germany

**Organisation Website:**

<http://www.ptv.de>

**EU Contribution:** €640,251

**Fundacion Para La Promocion De La Innovacion, Investigacion Y Desarrollo Tecnologico En La Industria De La Automocion De Galicia**

**Address:**

Poligono Industrial A Granxa 249  
36400 PORRINO PONTEVEDRA  
Spain

**Organisation Website:**

<http://www.ctag.com>

**EU Contribution:** €244,437

**Deutsches Zentrum Fr Luft Und Raumfahrt E.v**

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**Mathias Paul**

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**EU Contribution:** €44,050

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**EU Contribution:** €5,571

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<http://www.technolution.eu>

**EU Contribution:** €237,706

**Meta System S.p.a****Address:**

Via Majakovskij 10 Bcde  
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**EU Contribution:** €0

**Reial Automobil Club De Catalunya****Address:**

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**EU Contribution:** €33,396

**Avl List Gmbh****Address:**

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**Organisation Website:**

<http://www.avl.com>

**EU Contribution:** €132,776

**Continental Automotive France Sas****Address:**

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**Organisation Website:**

<http://www.siemensvdo.com>

**EU Contribution:** €338,450

**Here Global B.v.**

**Address:**

KENNEDYPLEIN 222  
5611 ZT EINDHOVEN  
Netherlands

**EU Contribution:** €527,240

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WEST END ROAD ATHENE ODYSSEY BUSINESS PARK SOUTH RUISLIP  
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HA4 6QE  
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**Organisation Website:**

<http://www.neceurope.com>

**EU Contribution:** €229,454

**Continental Ag****Address:**

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Germany

**Organisation Website:**

<http://www.conti-online.de>

**EU Contribution:** €69,850

**Automobil Club Assistencia Sa****Address:**

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**Organisation Website:**

<http://www.fundacionracc.es>

**EU Contribution:** €18,991

**Cobra Automotive Technologies Spa****Address:**

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**EU Contribution:** €0

**Gogreen Trafik & Miljo Ab****Address:**

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44460 Stora Hoga  
Sweden

**EU Contribution:** €89,850

**Telecom Italia Spa**



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**Organisation Website:**

<http://www.ict-strongest.eu/>

**EU Contribution:** €98,750

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2031 Haarlem  
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**EU Contribution:** €0

**Peek Traffic B.v.****Address:**

BASICWEG 16  
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**EU Contribution:** €365,667

**Vialis Bv****Address:**

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**EU Contribution:** €172,450

**Magneti Marelli S.p.a.****Address:**

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**EU Contribution:** €332,589

**Q-Free Asa****Address:**

THONNING OWESENSG 35 C  
7044 TRONDHEIM  
Norway

**EU Contribution:** €287,112

**Technologies:**

Information systems  
Eco-Drive app

**Development phase:** Research/Invention

Documents:

 [D5.2 - Architecture and System Specification.pdf \(Other project deliverable\)](#)

**STRIA Roadmaps:**

Cooperative, connected and automated transport, Network and traffic management systems

**Transport mode:** Road transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Digitalisation

**Geo-spatial type:** Other