



Project Summary

Lombardia & Rhein-Main towards Zero Emission: Development & Demonstration of Infrastructure Systems for Alternative Motor Fuels (Bio-fuels and Hydrogen)

ZERO REGIO

Action Line: Alternative motor fuels
Contract Type: Integrated projects
Activity area: Biofuels and Hydrogen

Coordinator:

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Project details

Reference:	AMF1/503190/2003	Start Date:	15/11/2004
Status:	Execution	End Date:	15/11/2009
Project Cost (€):	20.149.954	Duration (months):	60
Project Funding (€):	7.461.265		

Summary

With an overall objective of developing low-emission transport systems for European cities, the specific objectives of the project 'ZERO REGIO' are:

- Use of hydrogen as an alternative motor fuel, produced as primary or waste stream in a chemical plant or via on-site production facilities
- Development of infrastructure systems for alternative motor fuels (bio-fuels & hydrogen) and integrating them in conventional refuelling stations
- Adaptation and demonstration of 700 bar refuelling technology for hydrogen
- Demonstration of high blends of bio-fuels in fuel flexible vehicles
- Demonstration of alternative fuels via. automobile-fleet field tests at two different urban locations in the EU, Rhein-Main, Germany and Lombardia, Italy
- Showing ways and prospects for faster penetration of low-emission alternative motor fuels in the market at short and medium term.

Fuel sources are available at locations near the envisaged refuelling stations. The conventional part of the refuelling stations will also be made available for the project. The infrastructure for fuel transport from source to the station will be realised in the project. For hydrogen different transport solutions will be addressed: pipelining and trailers from a centralised production facility as well as local on-site production. Car fleets will be delivered and implemented by the automobile manufacturers Opel and Fiat. Field tests with the low-emission vehicles will be performed by respective city transport authorities and airport authorities in the Rhein-Main region. The car fleets will serve for local deliveries, post distributions, taxi operations, passenger transfer etc. Technical as well as socio-economic evaluations of field tests will lead to suggestions and models for faster penetration of alternative motor fuels over larger urban areas in the EU.



Partners

1	Infraserv GmbH & Co. Höchst KG	DE
2	Linde AG, Linde Gas Division	DE
3	DaimlerChrysler AG	DE
4	Fraport AG Frankfurt Airport Services Worldwide	DE
5	TÜV Technische Überwachung Hessen GmbH	DE
6	AGIP Deutschland AG	DE
7	Lunds Universitet	SE
8	Roskilde University	DK
9	Saviko Consultants ApS. (Saviko Roskilde ApS)	DK
10	European Commission - Directorate General Joint Research Centre	IT
11	ENITECNOLOGIE S.p.A.	IT
12	Regione Lombardia	IT
13	Sapio Produzione Idrogeno Ossigeno S.r.l.	IT
14	Comune di Mantova (Mantua City Hall)	IT
15	Università commerciale Luigi Bocconi	IT
16	C.R.F. Società Consortile per Azioni	IT