Intelligent Energy Europe

Project Fact Sheet

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Fleet Environmental Action and Assessment (FLEAT)

Programme area:	STEER – Energy efficiency in transport
Status:	Ended
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Partners:	AEA – Austrian Energy Agency, Austria TRT - Trasporti e Territorio, Italy IPA - Institute for research, design and production of equipments, Romania Geonardo Environmental Technologies, Hungary B.A.U.M. Consult, Germany SenterNovem, Netherlands CRES - Centre for Renewable Energy Sources, Greece Mobiel21, Belgium BEMAG, Austria RFOL - Örebro county Regional Development Council, Sweden
Website:	www.fleat-eu.org
Objective:	Implement actions on energy efficient fleet management for captive fleets and assess the impact.
Benefits:	Create insight in the effectiveness of different actions (clean vehicles, eco-driving, mobility management) for fleets.
Keywords:	Fleets, pilot actions, Energy Efficiency
Duration:	10/2007 – 03/2010
Budget:	€ 1.322.215 (EU contribution: 50%)
Contract number:	EIE/07/007/SI2.466261

Short description

FLEAT had the objective to increase energy efficiency for different types of fleets: fleets of public authorities, public transport fleets, private fleets with mainly company cars, private fleets with mainly utility vehicles. FLEAT offers existing tools and instruments to fleet operators to increase energy efficiency in 3 fields: improve energy efficiency and environmental performance of the vehicle fleet, encourage energy efficient use of vehicles and support energy efficient use of the fleet with mobility management actions. 37 pilot actions ran in different fleets focussing on different types of actions. Towards policy makers FLEAT summarised and disseminated effective policy instruments for supporting more energy efficient fleets. Pilot actions ran in Belgium, Austria, Italy, Germany, the Netherlands, Romania and Greece. A direct reduction of 4,3 kton CO_2 was achieved, the multiplier effect is estimated to be 0.087 Mton CO_2 reduction.

Achieved results

- Different types of actions in the field for energy efficient fleet management were implemented: low carbon vehicles (green car policy, CNG-vans, electric vehicles, ...), driving behaviour (ecodriving training, long term monitoring & feedback schemes, ...), mobility management (improved logistics, commuting, …). In total more than 37 actions were implemented in the vehicle fleets of private companies, public institutions and public transport companies.
- A total of 4.300 tons of CO_2 were directly saved in the pilot actions, with the largest contribution from ecodriving actions. If all vehicles in the participating fleets were to be included in the action, more than 30.000 tons of CO_2 would be saved annually.
- Insight was gained in effectiveness of different measures in different circumstances (lease fleets, utility vehicles, buses) by means of a harmonised monitoring & assessment approach. Effectiveness of clean vehicles, ecodriving courses and mobility management was assessed.
- Recommendations for policy makers on supporting programmes and learnings from pilot actions & networking were listed.
- A toolbox for fleet operators with info on possible measures is available at the FLEAT-website.
- Dissemination activities were successful, with a lot of promo material, exposure in the press, and the organisation of 8 national events and 1 final international event.

Lessons learnt

After the completion of the project, it is possible to draw the following conclusions:

- The many pilots on ecodriving proved that these courses are cost effective, and the greatest benefit can be reached with heavy duty vehicles (trucks and busses). Fuel reduction and thus CO_2-reduction of more than 6% can be achieved for light duty, and this increases to more than 9% for trucks.
- Since no additional costs are related to implementing a green car policy, this is the most cost effective measure to implement in a company car fleet. In the FLEAT pilot actions on car policy, the new vehicles emitted 10,5% less CO_2.
- The use of CNG-vehicles is most beneficial in a light duty vehicle fleet (eg. vans). The technology is already in a mature state for light duty which means the additional cost for a CNG-vehicle is relatively low. This combined with a low usage cost, mainly due to the low fuel price of natural gas, makes it a competitive technology. The environmental benefit of CNG lies not only in a lower CO2-emission, but also in a very low emission of PM and NOx, which is of high importance in urban areas.
- When comparing fuels, it is important to not only consider the direct (or tank-to-wheel) emissions, but to consider the production process as well (well-to-wheel).
- The potential of a smart mobility management in order to reduce the number of kilometres driven is still underestimated. Our pilot actions proved that a reduction in CO_2-emissions can be achieved, but also a reduction in costs related to mobility.
- The fleet operators that participated in the FLEAT project were mainly middle sized companies. For larger companies the decision making structure is most of the time too heavy to participate in the project or at the other hand have already a lot of knowledge and experience available on energy efficient fleet management. Small companies on the other side lack personnel to support the implementation of the action, although they prove to be cost efficient.
- The support of the management to participate is essential, and some basic knowledge and interest also has to exist to convince them to invest further in energy efficiency actions.
- Monitoring the (long term) effect and costs of energy efficiency investments is necessary for the fleet itself to prove the cost effectiveness and support the implementation. Only in this way, best practices can be built up for policy makers and other fleet operators. Although agreements had been made with the pilot fleet operators, it was not always easy to get the monitoring data that were needed to make a sound cost benefit analysis of the actions. Especially the monitoring of actions on mobility measures proved to be difficult because of the wide variety of actions which makes it difficult to compare. Also cost data are sometimes difficult to receive from fleet operators.
- National governments and the European government have to create the appropriate framework in which energy efficient and environmental friendly vehicles are advantaged and should give information about efficient fleet management. The need for cost reduction and the creativity of companies will drive them towards cleaner fleets, within such a framework.
- Under influence of policy instruments like CO_2-based company car taxation, the market itself seems to react in promoting energy efficient vehicles in for example green lease programmes.