NEWSLETTER

December 2007, No 4

Alternative Fuels and Alternative Propulsion

Think about alternative propulsion - think about a clean and healthy environment!

The project SU:GRE-sustainable greenfleets supports the take up of efficient ultra low emission cars.

Economic as well as ecologic aspects are covered.

We will show the way to successful operational expertise and provide best cases at **www.greenfleet.info**

This is the Fourth SUGRE Newsletter presenting results achieved under the SU:GRE – Sustainable Green Fleets project.

In this issue of the Newsletter you can find information on the recent events organised and results achieved by the SUGRE Team p. 2 -4.

Another four partner descriptions are provided, to inform you about activities and characteristics of our consortium members, p. 5-6.

We also present an interesting case study from Iceland "**President of Iceland and green vehicles"** p. 7

The Newsletter is prepared in printed and electronic versions in 12 languages, and shall be sent to more than 3000 recipients. The SU:GRE Newsletter is updated every six months, together with the information placed on the website:
http://www.sugre.info/newsletter

List of content:

Local Seminar on Biofuels

2007.11.20, Budapest, Hungary

The Budapest University of Technology and Economics, Department of Environmental Economics and the Hungarian Transport Association organized a joint event on biofuels, their availability and possible applications in Hungary. Among the attendants there were representatives of consulting firms, research institutes, and a major oil company (OMV).

After introductions and welcome by Mr. Csaba Orosz and Mr. Miklós Füle, Associate Professors at BUTE, the first presentation was held by Miss Zsuzsanna Farkas mainly about regulations and taxes concerning biofuels in the EU and in Hungary, and introducing the background, aims and achievements of the SUGRE project. The second presentation was held by Mr. Gabor Szendro and contained a more technical approach, covering agricultural, mechanical and emission problems and the strengths of biofuels, focusing on biodiesel and bioethanol. The last presentation, by Mr. Zoltan Borsi, representative of OMV (Österreichichische MineralölVerwaltung) was meant to give the audience an idea about what a major oil company thinks about biofuels and their implementation techniques. After the presentations a discussion ensued, the main conclusions of which can be found below.

1. The most important property of biofuels is - and is likely to remain - **cost**. When it comes to the individual purchaser, environmental benefits are at the bottom of the list.
2. Probably the second most important issue is **availability**. As this article is being written, there are only four E85 filling stations in Hungary, and only one in Budapest. This makes it rather difficult to advocate buying ethanol vehicles. One way to avoid the issue of availability is for a fleet to have its own refueling station. A large enough number of vehicles is needed in the fleet for this to be worth it, however.
3. As a mostly agricultural country, Hungary has the potential to use its abundant crops for biofuel production. Unfortunately, the market does not tolerate the competition between biofuels and foodstuffs, and this has already manifested in the increase of **crop prices**. This gives biofuels a bad press as everyday supplies start to cost more.
4. As for the **energy balance** of biofuels, even the experts disagree. Several studies have concluded that the energy balance is negative using obsolete data and not considering byproducts. These studies are very effective in destroying the little faith people have in biofuels and pave the way for misconceptions. The energy balance becomes more positive if the biofuel is produced from byproducts or waste materials. Biodiesel for example can be made from used cooking oil collected from restaurants, grease or other residues.

For an overall evaluation of the seminar it was found to be very useful for understanding the different views of participants, presenting the SUGRE project and gaining insight into the future plans of an oil company. OMV does not plan to open E85 stations in Hungary in the near future. Instead, they plan on expanding their ETBE (Ethyl-Tertiary-Butyl-Ether) usage to the point of complying with regulations in force. Relying on ETBE, however, does not make it possible for us to reach a 20 % biofuel share. Despite some setbacks, the biofuel sector in Hungary is likely to grow in the coming years, becoming a major segment in terms of employment, income, and environmental benefits.

Prepared by: Gabor Szendro
Environmental Engineer
BUTE-DEE

SUGRE Project Results

Romanian Union of Public Transport URTP - Uniunea Romana de Transport Public

Established in 1990, URTP is a professional and employers' association of the Romanian Public Transport operators, including representatives of this sector. It is an independent, non governmental and apolitical organisation, developing nonprofit activities. URTP mision is to assist and encourage its members initiatives in order to improve the quality of their services/products, and meet travelers demands. Among our main objectives and current activities:

- to organize professional debates, conferences and seminars for a comprehensive exchange of knowledge, experience and information, both for technical and economical topics of general interest
- to encourage training courses and workshops in order to improve the administrative, technical and management skills of URTP members' staff
- to initiate and stimulate the process of adapting the European legislation and standards to the specific conditions of our country
- to promote the national industry of public transport for modernizing the current fleet and infrastructure
- to disseminate useful information on PT issues in Europe and worldwide
- to lobby and provide advocacy, at local and central authorities levels, regarding public transport operators protection, road safety and security, environmental protection, specific legislation and standards governing operational activities co-ordination between urban and transport planning.

URTP is a full member of both national (ASRO for standardization and AGIR for Engineering) and European associations (UITP, POLIS and Calypso Network Association from Brussels, Belgium).

URTP staff has experience in carrying out research studies and projects in the field of urban public transport on different dedicated topics.

Tasks to be completed under SU:GRE project

Dissemination in Romanian of the project's results, over 3 years and training mainly our members through different tools such as:

- translating and publishing into Romanian the project materials for training and dissemination activities, including the Newsletters and SUGRE project website
- organising national events for training and information purposes (seminars, workshops, conferences) in order to encourage biofuel implementation in our members' fleet and to promote other alternative fuels in PT sector, in the longer term
- launching national campaigns, addressing both central and local Romanian authorities, for promoting green fleet and alternative propulsion
- attendance of all project meetings and actively participating in fulfilling its objectives.

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SUGRE Project Results

Workshop Results Ljubljana Slovenia

An interactive seminar to explore the possibilities of how Slovenia may pursue the use of alternative fuels

Ljubljana, 24 September 2007

To successfully introduce alternative fuels, an outspoken, long-term and consistent policy is essential along with an implementation plan.

A chicken-and-egg problem does exist, which may be broken by financial conditions more favourable towards alternative fuels. An increasing supply of vehicles should be coupled with an increasing availability of alternative fuels – for example by the state introducing the **"obligation" of offering alternative fuels at fuel stations** which sell more than a certain quantity of fuel per year, as it has been done in Sweden.

Alternative fuel suppliers risk the fading of financial aids, so the market introduction of alternative fuels has to be sustained by other means. Gradually, and in accordance with the vehicle supply, higher blends should be prescribed. Dealers should be trained and motivated so they can present alternative fuels/propulsions.

To build a local critical mass of suppliers and users it is necessary at first to **identify local sources** and choose the most suitable alternative fuel for pilot users. To combat criticism, the certification of fuels is essential. It should focus on a clean and socially acceptable cultivation of energy plants and production of alternative fuels.

In the workshop **fuel quality was mentioned as problem in Slovenia**; however this could be solved easily by establishing authorities for fuel quality verification.

Another important element are **non-financial initiatives**, such as free parking, city centre access without a time limit, no toll or toll discounts, priority lanes/access roads, benefits for private cars with more than 2 people, etc.

Other measures for encouraging fleet owners and individual owners for alternative fuel/propulsion conversion were mentioned:

- It is essential to carry out **information campaigns** for the general public, creating a correct image of alternative fuels and propulsion.
- **Best fleet awards** offers publicity, promoting the awarded company and promoting the alternative fuels or vehicle itself.
- **Joint purchase increases the power of demand.** Public transport operators, taxi companies, driving schools or a municipalities coordinating vehicle purchase may motivate manufacturers to offer more suitable vehicles. Thus also the **"old habits die hard" problem** may be eliminated by these pioneers.
- **Packages** including adaptation and insurance against break down shall be offered for vehicles run on pure plant oil (PPO) or 100% Biodiesel if liabilities may not achieved from the OEMs. This works well in Austria.

Partner's description:

Erdgas Fahrschul-Agentur EFA

EFA (CNG driving school agency) is a developer of projects and measures to implement knowledge transfer and application of alternative propulsions/fuels in driving schools, which are the most important multiplicators to increase the medium-term adoption of new alternatives by future drivers. The agency serves as a link between potential partners like car and fuel industries, gas providers, insurance companies, publishers, politics and driving schools as well as their associations. Having the increasing use of renewable biogas in mind EFA at present emphasises CNG as the widest spread alternative fuel in Germany.
Within the SUGRE-project EFA is primarily involved in showcasing eco-driving-schools, clarifying the necessities for implementation and dissemination, conceptualizing and realizing of relevant trainings/materials for driving schools and also for secondary schools.

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The Department of Environmental Economics was established as an institutional Environmental Economics Section in 1989, and then in the '90s, an independent department was formed, which set the target of developing and deepening the environmental economic attitudes of engineering undergraduates.

Research has always been regarded as a basic condition of efficient education. In the past 16 years, the staff have taken part and been successful in important Hungarian and international projects as the scientific qualifications testify.

Main activities:

- Environmental economics - environmental management – environmental policy
- Resource economics
- Economic instruments in environmental policy
- Environmentally sound material and energy management
- Economics of the energy and climate policy
- Waste management – recycling, company environmental management (EMAS, ISO)
- Industrial background of environmental management, environmental market
- International environmental cooperation – EU harmonization

Partner's description: **AUTh-LHTEE**

Description of LHTEE

The Laboratory of Heat Transfer and Environmental Engineering belongs to the Energy Section of the Mechanical Engineering Department of the Aristotle University Thessaloniki, Greece. The Laboratory has a long record of research and consulting activities, both at national and international level. The staff of the Laboratory includes 5 senior scientists, 27 young researchers and 7 technical and administrative members. Most of the research funds of the Laboratory originate from competitive programmes of the European Commission, while it has also received substantial grants from national funding agencies. Research activities of the Laboratory are primarily related to air quality at the urban and local scales, including indoor air pollution issues. Furthermore, research is conducted and consulting activities are provided in the areas of environmental management, energy technology, energy systems and economics, as well as solid waste management.

LHTEE-SUGRE

The Laboratory has actual involvement in the first 6 Work Packages of the project, while it has leading role in 3 Tasks. It has already contributed to the initial research activities (WP2: Baseline Analysis Policy) and analysed in depth financial and legal issues, environmental and economical aspects. Moreover, it has significant involvement on the preparation of the dissemination handbook, defining the steps to be taken during the dissemination phase (WP3) and it will also assist on the production and validation of the training material (WP4), as well as on the training and dissemination activities (WP5). Finally, in collaboration with other partners it will compile an evaluation handbook and monitor the effects of the training and dissemination campaigns regarding the share of alternatively propelled vehicle in fleets (WP6).

Aristotle University of Thessaloniki (AUTh)
Department of Mechanical Engineering
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IVECOL Co. is a private owned independent consulting company with main activities of Environmental Impact Assessment Studies and Reports, Environmental surveys, monitoring and programs, Bio-Energy studies, Waste Management, Marketing and Project’s Management.

The tasks to be completed by IVECOL Co. under the SUGRE project are:

- studies and assistance for Baseline Analysis Policy (legal issues and environmental aspects) developmet and analysis of fuels & refuelling logistics markets, campaigns and effects;
- assistance to set up an implementation plan for the dissemination of the experiences and good practices;
- performance of guidance for fuels & refuelling logistics;
- assistance and monitoring/evaluation support for organising a network of proud fleet owners with alternative propulsion;
- assistance, translations and distribution of materials according to the SUGRE dissemination strategy.

Case Study

The President of Iceland, Ólafur Ragnar Grímsson, with the new Lexus LS460 hybrid

President of Iceland and green vehicles

During the last few years Iceland has been evaluating the option of replacing fossi fuel in Iceland with alternative fuel, with special emphasis on hydrogen. The government of Iceland already launched policy statements regarding reducing its dependency on imported fossil fuels in 1998. But as the new hydrogen technology develops closer to commercialisation, the country wants to take steps immediatelly. Already 11 hydrogen passenger vehicles are now in service but Iceland is also looking towards technologies that can immediatelly reduce the use of fossil fuels. Therefore Icelanders are looking towards all alternatives to reduce the total greenhouse gas emission from the country.

From early on the President of Iceland, Ólafur Ragnar Grímsson, has been a strong supporter of green fuels in the country. Stating something is usually easy, acting seems often to be more complicated. This is not correct in the case of the Icelandic President. As the President was renewing his vehicle earlier this year he decided to support his verbal statements with actions and the new Presidents vehicle is a Lexus LS460 hybrid.

To be able to increase the usages of green vehicles it is of utmost importance that government officials show by acting that they are serious about statement to reduce emissions from the transport sector. Iceland has a special circumstances that the country is blessed with abundant renewable energy sources like hydro and geothermal power. Providing electricity and/or hydrogen will therefore be a sustainable way of providing fuel to the future tranport fleet and at the same time reducing the countries dependence on imported fossil fuels and increasing the countries security of supply.

Prepared by: Jon Bjorn Skulason

Icelandic New Energy Ltd

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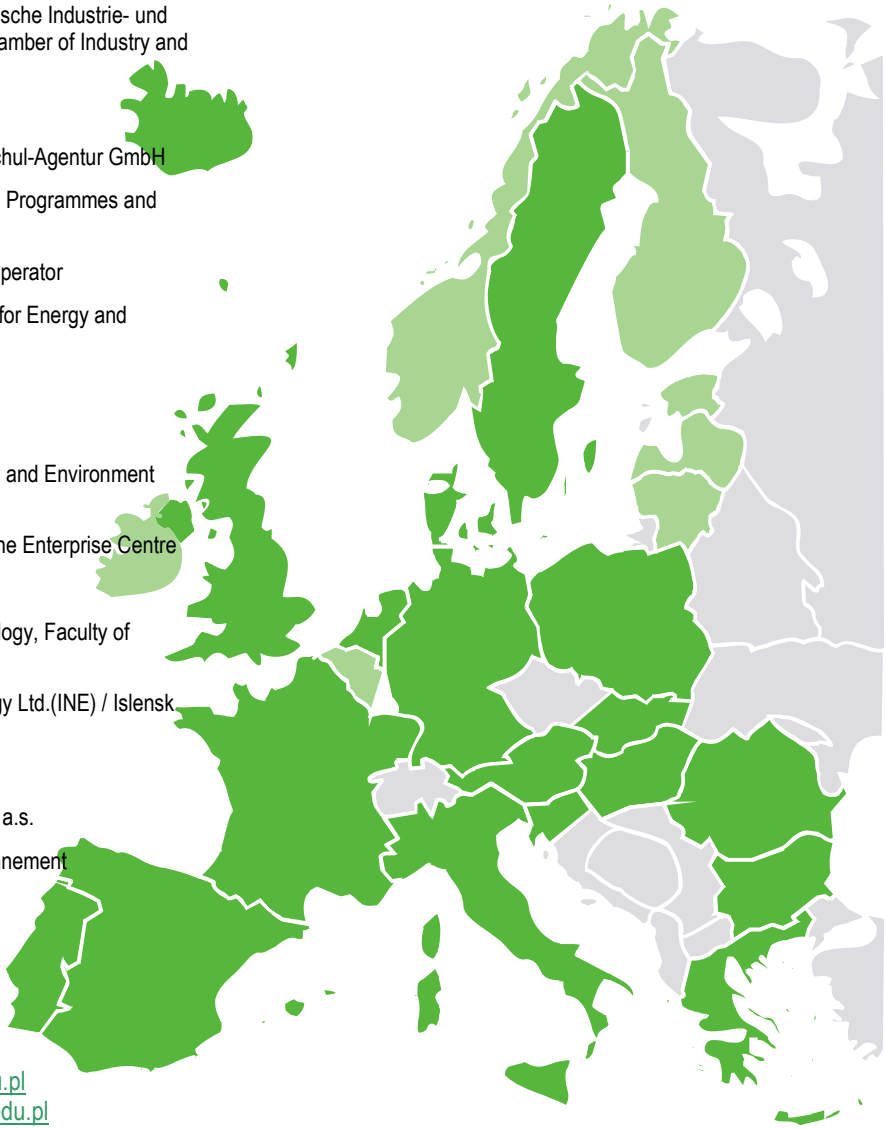

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