



Alternative Fuels and Alternative Propulsion



This is the Third 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 **"Biofuel incentive Programme in Poland"** presenting the current situation on biofuel policy, p. 2.

We also present some results of the SUGRE Project – this time it is a review of an event taken place in Romania, **"Biofuel Event in Romania"**, p. 3

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

Also included are case studies from Sweden presenting the implementation of new technology for greener fleets (**Clean Cars in Company Fleets**, p 4.) and Germany (**Augsburg an exemplary city for gas powered vehicles**, p 7.) on the development of alternative fuels public fleets.

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: www.greenfleet.info.newsletter.

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

The project SU:GRE- sustainable greenfleets will support 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

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Biofuel incentive programme in Poland – current situation

On 1st January 2007 the Polish government implemented a regulation increasing the level of excise duty tax on biofuels and fuel blends with bio-components to the level required in the European Union (EU).

This regulation diminished the level of existing allowances given to the production of biofuels. The previous system of allowances in the form of excise duty tax reductions are no longer valid as they might be treated as “*forbidden public support*”.

Until now producers of biofuels have been granted tax reductions of:

1,5 PLN (0,375 euro) for production of 1 l. 2-5% bio-component biofuel blend,

1,8 PLN (0,45 euro) for production of 1 l. 5-10% bio-component biofuel blend

2,2 PLN (0,55 euro) for production of 1 l. above 10% bio-component biofuel blend

According to the new regulation, the allowance for the production of one litre of biodiesel decreased to the level of 1 PLN (0,25 euro), while an allowance for petrol with bio-component diminished to the level of 1,5 PLN (0,375 euro).

The newly implemented law has raised criticism from representatives of biofuels producers and leaders of the Polish politician parties representing the votes of the agriculture sector. Agricultural industry representatives, together with producers of bio-components for biofuel production perceive that the new regulation makes production of biofuels no longer cost effective.

Some of the political leaders (like Mr. Andrzej Lepper, Minister for Agriculture) suggest a return to the allowances in the form and level of excise duty tax reduction existing in 2006.

Prime Minister, Mr. Jaroslaw Kaczynski, together with other ministers has promised to create a long lasting government support programme for biofuels producers for 2008-2014. However he claimed that to return to the previous system of allowances and tax reduction is impossible, as it would be against the EU law. Additionally it is believed that excise duty tax reduction helps more importers of biofuels than national producers of bio-components.

Several proposals for incentives for biofuel producers and users of alternative fuel propulsion vehicles are currently being negotiated with the Ministry of Finance and representatives of the Polish biofuels lobby.

One of the suggested solutions is a subsidy of 350 PLN (45 euro)/1ha for crops harvested for

biofuel production. It may relate to the potato harvest for bioethanol production or the rape crops harvest aimed at production of esters for biodiesel.

Another proposal concerns tax preferences for public transport fleets and taxi vehicles using alternative fuels.

Free parking areas in city centres might also be part of the new support programme for using biofuels.

On the basis of the situation and events taking place in Poland one can observe the increasing role of the Polish biofuel lobby.

Some economic experts have already commented on increased food product prices as a result of the lobby's activity. Growth of food product prices is expected, if the tax reduction for biofuels are kept at a high level, or new allowances for biofuel production are introduced.

Prices of food products and crops in particular might grow as the result of increased demand for bio-components for biofuels production. Supply from harvested crops is limited. If farmers decide to produce more crops for industrial purposes then food prices might increase very sharply. This will have the greatest effect in countries with a weaker economic position and large agriculture sector, like Poland. In Poland 27% of all household expenses are devoted to food products. It means that Polish households might be severely affected by increased of food prices. One of the solutions to the situation in Poland, according to experts, is to import raw materials and crops for bio-composites production from countries with lower prices. It is thought that lower tax reduction allowances for biofuel production may preserve food prices at the current level.

Information and materials for this paper were taken from public information sources and news placed in the public media.

There is no clear situation for biofuels production in Poland. Polish experts in the field have different views on the status of biofuels, their cost-effectiveness and even their impact on environmental protection.

Izabela Kijenska
Warsaw University of Technology

RESULTS OF THE PROJECT – Biofuel Event in Romania – URTP

On 15 March 2007 a seminar took place in Romania, Sinaia, dedicated to the GO no. 1844/2005. Implementation, applying the EU Directive 2003/30/EC concerning biofuels use in transport sector. It was a joint event organized by URTP and the Romanian Ministry of Economy and Finances, and a national event for disseminating information from the SUGRE project.

All the presentations given at the seminar are available on URTP website www.urtp.ro.

A very important presentation was made concerning the Fiscal Code provisions on biofuels production, which should take place under a fiscal authorization. Details were given on the current legislation and corresponding procedures.

Another presentation concerned the Certification Standard SR EN 14214:2004 for biodiesel. It was emphasised that only an experienced producer, who is aware of the detailed reaction process, will be able to produce biodiesel of good quality, which meets the national standards. The production of a high quality product will require considerable investment costs. This is discouraging most current small producers who want to invest less and get higher subsidies and profit.

Another topic raised was that the producers are recommending biodiesel use at the high blends (20% or more and up to 100%), without taking into account manufacturers and engine producers/suppliers. Specialists are arguing that blends higher than 20% are causing an increase in NO_x emissions which are over the limits allowed by European norms/standards. CO_x and PM emissions are lower for biodiesel, but the legislation should be entirely observed, without derogations.

The 70 seminar participants, represented about 50 Romanian institutions, including public transport operators from 17 cities, 8 governmental and local authorities, 12 research and producer institutions and 13 other URTP partners from the public transport sector. A survey of the participants generated some interesting results, from one of the five questions: What are the main barriers and opportunities concerning alternative propulsion implementation in your fleet:

30% considered the current legislation as a barrier, being unclear and quite rigid, while 10% are consider it as an opportunity and 60% had no answer.

43% considered that technical aspects are still a barrier in implementation, due to the lack of

information on adapting engines and limited refuelling stations.

37% consider the current financial incentives as a barrier, due to the minimal local and state budgets given to support the required investments, and poor EU funding, while 7% consider these as opportunity.

33% consider the age of the current fleet [of public transport vehicles] a huge barrier, while 3% view this as an opportunity to renew their old fleet and invest in alternative fuel vehicles.

The event ended optimistically, with the hope, that future investments will produce a growing and stable biofuel market thus enabling Romania to reach the target of 5,75% biodiesel use in 2010.

Doina Anastase, URTP



The poster features logos for URTP, the Romanian Ministry of Economy and Finances, and SU:GRE. The title is "SEMINAR BIOCARBURANȚII pentru TRANSPORTUL PUBLIC LOCAL" and "BIOFUELS for LOCAL PUBLIC TRANSPORT". It includes images of sunflowers, a bus, a field, a tree, a sun, a map of Europe, and a red bus. The event details are: "România, Sinaia, Hotel Internațional 15 martie 2007". Sponsors listed are "expur" and "RQC".

Case Study: Clean Cars in Company Fleets – Swedish Experience

Intelligent Energy Europe

Contact Lena Nilsson, WSP Sweden for more information lenna.m.nilsson@wspgruop.se



Ta fram en fordonspolicy



– för en miljöanpassad och trafiksäker fordonsslotta

A strategy for providing information on clean vehicles to private companies has been developed within SU:GRE in Sweden. The aim is to get light vehicle fleet owners to choose more energy efficient vehicles and vehicles that can run on renewable fuel. Private companies in Sweden buy or lease more than 50% of all new cars, but they own about 10% of the whole fleet. This means that company's choice of car has a large influence on the second hand market.

55 companies were contacted in the project and 20 of these were visited. The aim of the visit was to increase the knowledge of clean and energy efficient cars among the companies. Materials on environmental effects, costs and examples of car policies for clean cars were presented. Another goal was also to learn how the companies decide which cars their employees can choose between. 10 car dealers were also visited, to learn about how they present clean cars to customers and get their view on how companies choose cars.

Company car fleets mainly consist of petrol cars. The lower tax for clean cars (cars as fringe benefits) has started to show and employees are choosing clean cars even if their car policy doesn't require it. The share of diesel cars in the company's car fleets increased last year, after the introduction of tax relief for diesel cars with particle filters.

The visits have been appreciated by the companies. They had a lot to discuss and many questions were raised about different fuels, supply of cars, traffic safety, renewable fuels etc. "Is diesel better for the environment than petrol", "What is a clean car?" are examples of questions. The following material has been the most appreciated: a presentation of a step by step guide towards a clean car fleet, a leaflet "Cars, fuel and the environment" from the Swedish Road Administration and information on where to find all data on clean vehicles: www.miljofordon.se

The project will be evaluated later in 2007 by a second contact with the companies to find out if they have changed their car policy after the visit.

Case Study: Hydrogen is the Fuel of the Future

The Hellenic scientist, Dr. Athanasios Konstandopoulos, Director of the Chemical Processes Engineering Research Institute/CERTH/Thessaloniki/Greece, Coordinator of project HYDROSOL, is the winner of the Descartes Prize 2006. HYDROSOL, a technology for generating "clean energy" recently achieved considerable distinction in the European Descartes Prizes. The prize consisted of a monetary amount of 333,333 Euros and a special diploma which was presented to the HYDROSOL team coordinator (Dr. A.G. Konstandopoulos), at a special ceremony held in Brussels on March 7, 2007.



The HYDROSOL team has developed an innovative solar thermo-chemical reactor for the production of hydrogen from water splitting, resembling the familiar catalytic converter of automobiles. The reactor contains no moving parts and is constructed from special ceramic multi-channeled monoliths that absorb solar radiation. The monolith channels are coated with active water-splitting nanomaterials that are capable of splitting water vapour passing through the reactor by trapping its oxygen and leaving as product pure hydrogen in the effluent gas stream. In a next step, the oxygen trapping material is solar-aided regenerated (i.e. releases the oxygen absorbed) and a cyclic operation is established on a single, closed reactor/receiver system. The integration of solar energy concentration systems with systems capable of splitting water will have an immense impact on energy economics worldwide, as it is a promising route to provide affordable, renewable solar hydrogen with virtually zero CO₂ emissions.

The uniqueness of the HYDROSOL approach is based on coating nanomaterials with very high water-splitting activity and regenerability (produced by novel routes such as aerosol & combustion synthesis) on special ceramic reactors with high capacity for solar heat absorption. The production of solar hydrogen will offer opportunities to many poor regions of the world which have a huge solar potential. Producing solar hydrogen will create new opportunities for countries of Southern Europe that can become local producers of energy.

Partner's description:

ECORYS Nederland BV

Main activities

ECORYS Nederland BV is part of ECORYS Research & Consulting a European group of multidisciplinary research and consulting companies. Over 550 staff-members help public and private clients worldwide to solve challenging policy, management and market problems in the fields of transport, innovation, science and technology policy, macro and sector economics, urban and regional development, housing and commercial real estate, financial management, energy and environment and legal services.

Tasks to be completed under SU:GRE project

- national contact point for SUGRE
- responsible for the base line analysis
- assistance in creation of best cases directory
- stake holders interviews
- training, workshops
- assistance in dissemination and evaluation



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Partner's description:

TV Energy

The Thames Valley Energy Agency (TV Energy) is a 'not for profit', independent regional renewable energy agency. The principal interests of the Agency relate to renewable energy (wind, bioenergy, solar, hydro) but also embrace green waste and green transport initiatives including biofuels and other alternative propulsion methods. Activities are targeted at both rural and urban environments and their respective communities, including businesses, other organisations and individuals. TV Energy embraces the ethos: 'think globally' and then 'act locally'.

Sponsors and supporters are drawn from the public and private sector, as well as academic and voluntary organisations. This creates a broad base for TV Energy's activities and facilitates private - public sector partnerships.

TV Energy has a core staff of 12 specialists with expertise in the renewable energy and energy efficiency sectors.

TV Energy is responsible for the following tasks:

- WP2, Task Leader 2.5: Base-line analysis of markets, campaigns and effects
- WP3, Task Leader 3.3: Directory of best cases
- WP4, General assistance
- WP6: General assistance, translations, printing, distribution



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Partner's description: RAEE



RhônAlpÉnergie-Environnement (RAEE) is the regional energy and environment agency in the Rhône-Alpes region, France. Created 25 years ago by the Regional Council of Rhône-Alpes the agency aims at contributing to the promotion, to the co-ordination and to the development of actions in favour of the rational use of energy, the promotion of renewable energies, the protection of the environment and the practical application of the sustainable development concept, for instance through minimizing pollution from transport.

The activities of RAEE (see the Internet site below for more details) are mainly targeted to local authorities and the public sector. The agency provides information, advice and assistance which takes several forms, for instance in the transport field :

instigation of a resource and exchange centre like the regional observatory of energy GHG emissions

advising and assisting local authorities and other public bodies during the preparation and implementation of projects (school travel plans, alternative fuels, etc.)

assisting and carrying out programs or global actions on a territory (set up of school travel plans, network of sustainable mobility in Rhône-Alpes etc.)

RAEE is a non-profit association and contains about 40 members, including the Regional Council of Rhône-Alpes, the 8 « départements », several towns, the energy producers, organizations and consumers federations, financial bodies etc... At the national level RAEE is part of the RARE network regrouping 11 regional energy and environment agencies, which serve to relay and disseminate information.. At the European level, RAEE is member of the FEDARENE (65 agencies in 13 EU member states, www.fedarene.org) and assures its presidency.

RAEE has a long experience in managing European projects covering investment projects as well as studies, analysis of market potentials and dissemination activities. As regional energy and environment agency, the staff of RAEE has also a great experience in organising conferences and seminars, as well as producing brochures or setting up Web pages.

Concerning transport the mobility the agency participates actively in the following areas:

inventory of polluting emissions generated by energy consumption (POLYEN: DG XVII), clean vehicles and fuels (assistance to local authorities to study their capacity to buy some clean vehicles), assistance in the setting up of School Travel Plans or Travel Plans in Rhône-Alpes and promotion "Walk to School Week", in the framework of MOBASTO and PROVIDER two European projects that take into account greenhouse gas emissions with six European partners and three French regions (www.schoolway.net), assistance in the

setting up of Urban Travel Plans for small and medium sized cities in France and in Europe taking in account greenhouse gases, as part of the European SAVE programme (www.mobasto.org), assistance in the promotion of soft mobility in the Alps as part of the European INTERREG programme (www.alpineawareness.net) training of other energy agencies in the field of transport as part of the European STEER programme Competence (www.transportlearning.net) within the framework of the Intelligent Energy – Europe Programme EIE participation in a sub-group of the French network "RARE" dedicated to transport.

Partner's description: OEINERGE

OEINERGE is a not for profit association established in 2003 and has the mission to promote and develop activities that contribute to the increase of energy efficiency, to a greater use of domestic energy sources and to environmental management in relation to energy, aiming a local sustainable development in Oeiras.

The Municipality of Oeiras is located in the Metropolitan Area of Lisbon, on the north bank of the Tagus River. In the Portuguese context, Oeiras is seen as innovative and pro-active in territorial and development policies and planning, including a special interest in energy management.

Concerning mobility and/or transport activities, OEINERGE is involved in several local and regional projects, including other EU funded projects, such as OILPRODIESEL (www.oilprodiesel.com) and e-TREAM (www.e-tream.eu).

Under the scope of SUGRE, and because Oeiras Municipality is one of OEINERGE's shareholders and presented its own fleet for a SUGRE Show Case through a "Letter of Intent", OEINERGE is intends to develop actions to respond to Oeiras Municipality Fleet's demand to become a Sustainable Green Fleet.



World's first double-decker hybrid bus goes into service in London on March 2007

Transport for London (TfL) has announced, that the world's first hybrid diesel electric double-decker bus goes into service.

Hybrid buses, which use a combination of diesel and electric power, are central to the Mayor of London, Ken Livingstone, and TfL's plans for a cleaner, greener fleet, and will contribute to cutting the capital's carbon dioxide emissions.

These hybrid buses are an important step towards the long-term goal of a low carbon transport system.

A leafy motif on the buses will help passengers recognise their environmentally-friendly status.

Ken Livingstone said: 'This is a world-first for London marking our commitment to a cleaner, greener public transport network.'

'Hybrid vehicles emit less harmful emissions helping to improve air quality and tackle climate change.'

The adoption of hybrid buses is a key part of a range of measures being developed by the Mayor and TfL to meet London's contribution to tackling climate change.

The measures include:

- Continuing modal shift from private car usage to public transport, cycling and walking
- Greater energy efficiency across all TfL businesses and modes of transport
- The adoption of more energy from renewable sources and innovative technology to recycle energy
- Support for the continued research and development of low carbon fuels
- Strategies and support for organizations and individuals to travel in more environmentally-friendly ways through Travel Demand Management schemes, including in the London Borough of Sutton the largest of its kind in the UK

Based on a press release from:

<http://www.tfl.gov.uk/corporate/media/newscentre/4552.aspx>

SUSTAINABLE GREEN FLEETS - Options to Reduce Global Warming for Slovenian Fleets - Examples from the EU

● **workshop, press conference and round table** ●
Ljubljana, Slovenia, 24-25/09/07

We kindly invite you to a two-day information and discussion event organised by Alianta d.o.o. in cooperation with the Municipality of Celje in the framework of the SU:GRE project.

PRESS CONFERENCE

Location: Ljubljana, Center Evropa

Date: 24/9/2007

Duration: 10:30-11:45

Audience

We will provide brief information packages for media – print and electronic media. The press conference will present the SU:GRE project, its aims, the workshop and best practice cases from Slovenia and other countries to members of the press, to politicians and the general public.

Speakers:

Workshop speakers and public officials.

Language

Slovene/English, simultaneous translation will be provided.

Contact: eva.stare@alianta.si

WORKSHOP

Location: Ljubljana, Center Evropa

Date: Monday, 24/9/2007

Duration: 12:00 - 17:00

Audience

The workshop is best suitable for you if you are a **public or commercial fleet owner/ manager** or **public official** interested in conversion of fleets to alternative fuels. Since in Slovenia there are not many green fleets yet the workshop will depict **ways to start going green**. There will also be possibilities to get answers to more **specific technical implementation questions** from fleet owners and experts in the SU:GRE consortium.

Speakers

SU:GRE consortium experts are professionals from different kinds of organisations: municipalities, cities, private or public fleet managers, universities, interest associations, institutes, companies dealing with urban transport, energy saving, renewable energy sources, and from different countries: Austria, Bulgaria, France, Germany, Greece, Hungary, Iceland, Italy, the Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and Great Britain.

Language

Slovenian/English, simultaneous translation will be provided.

Agenda:

- Introduction of alternative fuels possibilities
- Best practice cases from the EU and Slovenia
- Decision support for fleet managers/owners
- Problem oriented workshops
- Summary & evaluation of the Workshop
- Closure

Registration:

You will find a registration form on the SU:GRE internet portal: www.sugre.info. Final registration date: **17/9/2007**. The attendance is free of charge if you participate in the evaluation.

Contact:

For more information about the conference, accommodation and how to get there please contact: eva.stare@alianta.si

ROUND TABLE ON URBAN TRANSPORT

Location: Ljubljana, Delegation of the European Commission in Slovenia

Date: Tuesday, 25/9/2007

Duration: 17:00-19:00

Audience

The representatives of the Slovenian Ministry of Transport, representatives of transport departments in Slovene cities, municipalities, representatives of NGOs, representatives of public transport operators, media and general public. The aim of this discussion is to point out the major issues on urban transport in Slovenia and to consider possible solutions:

- the traditional urban transport system;
- sustainable urban transport.

Speakers

Speakers will be: a representative of the Slovenian Ministry of Transport, representative of the Public Institute for Environment Protection at the Municipality of Ljubljana, representative of the Urban Planning Institute of the Republic of Slovenia, representatives of cities in the SU:GRE project.



Language Slovenian/English, simultaneous translation will be provided.

Registration and contact: tina.vilfan@alianta.si

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- Netherlands Rotterdam ECORYS
- Germany Berlin EFA - Erdgas-Fahrschul-Agentur GmbH
- Austria, Graz, City of Graz, European Programmes and International Cooperation Unit
- Austria Graz GVB Public Transport Operator
- Germany Heidelberg IFEU - Institute for Energy and Environmental Research Heidelberg
- Sweden Stockholm Inregia AB
- Bulgaria Sofia IVECOL Co.
- Portugal Oeiras OEINERGE - Energy and Environment Agency of Oeiras
- Great Britain Berkshire TV Energy, The Enterprise Centre
- Slovenia Celje City of Celje
- Poland Warsaw University of Technology, Faculty of materials Science (WUT-FSME)
- Island Reykjavik Icelandic New Energy Ltd.(INE) / Islensk NyOrka ehf.
- Germany Bremen BrEK
- Slovakia Bratislava Slovnaft VURUP, a.s.
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