

of the project. ILK has made a study entitled "Economic, energetic and ecological efficiency of the combined power, heat and cold generation" for FEE.



Plant for biogas conditioning built as a block (photo: Carbotech)

The advantages

Advantages for biogas production, conditioning, cogeneration, operators of grids, administration, investors and consumers are:

- Non-technical barriers can be brought to the attention of the EU Commission via the project.
- Barriers will be validated in terms of impact on use and distribution of biogenous natural gas.
- In cooperation of biogas plant operators, gas upgrading plant operators, points of infeed, compressor stations and gas grid operators, solutions will be generated for the use of biogas.
- Proposals for elimination of barriers can be brought before the administration on EU and local level.
- Best technologies and methods will be spread over the EU and the countries that are partners in the project.
- Cogeneration will get impulse.
- The situation in the countries under analysis will become more transparent for potential users and investors.
- Synergies with landfill gas, swage gas and technical gasification will be identified and analogies will be developed.

Contact

All parties interested in the project are invited to contact FEE. REDUBAR will gladly accept information on barriers that came up during planning and realisation of projects as well as during operation. These information may also be reported to national and European authorities. FEE is especially interested in practical experience of project developers and plant operators. The project started in 2006 and has a duration of 30 months. More information is available at www.redubar.eu. □

Dipl.-Ing. Dominik Rutz M.Sc. and Dr. Rainer Janssen*

Biodiesel: reducing CO₂ emissions

The carbon labelling project

Road transport contributes about one-fifth of the EU's total emissions of carbon dioxide and it is one of the few sectors where emissions are still rising rapidly. Today, passenger cars alone are responsible for around twelve per cent of EU CO₂ emissions. An opportunity to reduce CO₂ emissions in transport is provided by the use of biofuels with beneficial life cycle CO₂ emissions.

CO₂star
care for climate!



This 60 per cent reduction of CO₂ emissions is a conservative, accepted and scientifically based GHG reduction for biodiesel (RME) produced from rape seed in Germany.

CO₂Star at Q1 stations

The Carbon Labelling initiative actively promoted this carbon reduction to consumers. This was done by developing a "CO₂Star" label



Organizers of the CO₂Star campaign at Q1



Consumer survey and consultation at Q1 filling stations

The Carbon Labelling project (Project No. EIE/06/015) promotes the use of biofuels in Europe by applying the carbon label "CO₂Star" to biodiesel, efficient lubricants and biofuel based freight services.



CO₂Star Sticker promoting 60 per cent CO₂ reductions

CO₂ calculation

A supportable methodology for the quantification of carbon life cycle reductions was identified in co-operation with recent and on-going activities and methodologies by European and worldwide expert groups such as SenterNovem (Netherlands), ifeu Institute (Germany) and Imperial College (United Kingdom). For the pilot labelling initiative of biodiesel (B100) at fuel pumps of the German retailer Q1, a CO₂ reduction of 60 per cent is promoted based on results of the ifeu Institute.

and promotion material including flyers, banners, T-shirts, posters, pump signs and stickers. The CO₂Star labelling campaign was launched at a public press day on 12th July 2007 at a Q1 fuel station in Osnabrück. A consumer survey was conducted in order to assess the success of this initiative.

CO₂Star for freight services

The carbon labelling initiative will include the promotion of a horticulture truck fleet in the Netherlands operating on biodiesel as "low carbon" freight carriers to freight customers. This initiative will be implemented in cooperation with the "Schoon product, Schoon vervoerd" pilot project in the Netherlands. In early 2008, the CO₂Star label will be applied at 100 trucks running on B100 and on a filling station. The initiative will be monitored and evaluated. Furthermore, expansion options of the pilot project will be explored. □

* WIP – Renewable Energies, Sylvesteinstr. 2, 81369 Munich, Germany, phone: +49 89 720 12739, fax: +49 89 720 12791, e-mail: dominik.rutz@wip-munich.de, website: www.wip-munich.de, website: www.co2star.eu