The biodiesel market in Cyprus

There are only two biodiesel plants already operating in Cyprus since 2005: one in Limassol, producing around 1,000 tonnes per year, the other in Larnaka that started production in 2007 with a 5,000 tonnes/year capacity.

Legislative framework

Transposition of Directive 2003/30 and national indicative targets

Directive 2003/30/EC has been transposed in national law by a specific legislation on the promotion of the use of biofuels or other renewable fuels for transport purposes (n°66/(I)2005), which has been in force since June 2005. It specifically provides for long-term national programmes to promote the use of biofuels The Ministry of Commerce has set national goals for diesel substitution by Biodiesel at 1% for 2005. The ministerial ordinance 318/2004 allows blending mineral diesel with biodiesel setting the relevant specifications.

Taxation

The excise duty for regular diesel amounts to 143 CYP/m³ which equals to about $245 \in /m^3$.

The law n° 66(I) of 2005 regarding excise duty taxes was amended by a bill and a decree of the Department of Customs and Excise providing <u>for a full exemption of the excise duty for biofuels</u>.

That exemption scheme was notified to the Commission in October 2006 with further information in February 2007 and raised no objections. The aid scheme would cost about 3.77 Million \in and is approved until the end of 2010. The biofuel part of the transport fuel will be fully exempted from the excise tax , but will still be subject to the 15% VAT and to a levy of 0.33 Cyprus cents per litre (0,56 €cents/litre) for covering costs of maintaining security stocks of fossil fuels.

Direct subsidies

Since February 2004, a grant scheme exists for investments in renewable energy sources and is being operated by the Energy Service under Law N.33 (I) /2003. It can cover a maximum of 40% of the amount required, with the maximum eligible amount being $680.000 \in$. Four applications have been submitted for subsidizing biodiesel plants of a total capacity of 6.000 tonnes a year.

The grant scheme also provides for subsidies for legal entities under the category "Energy Saving " of about 1.200€ for hybrid and vehicles running on alternative fuels. The maximum number of cars per company is limited to 7.

Research efforts for the promotion of biodiesel

Since October 2004, the Research Promotion Foundation of Cyprus is funding a project entitled "*Evaluation of Energy Crop Potential in Cyprus*". The aim is to assess the feasibility of some species as energy crops on the basis of experimental cultivations. The project is being implemented by the Cyprus Institute of Energy, the Agriculture Research Institute and the National Technical University of Athens. The grant aid for this project is 136.000 CYP (236.000 Euro). Results are expected to be presented by the end of 2007.



Figure 1. Liquid fuels distribution and relative provisions (Source: Statistical Service of the Republic of Cyprus)

SWOT analysis

<u>Strengths</u>

The supply chain of biodiesel can be characterised by relatively short transport distances, in case of domestically produced and locally used feedstock. The increasing need of feedstock will contribute to the use of set-aside land and prevent further land degradation (anti-desertification). Any plant has a good access to sea. In Cyprus, small & medium scale producers are enthusiastic to participate in the process of Biodiesel market development which can also build up a "positive image" of the industry (decentralised and small-scale producers).

<u>Weaknesses</u>

✓ Lack of available cultivable land and water for irrigation in Cyprus. Additional small farming size and low yields prevent cost effectiveness. As a consequence, biomass production cost is too high, mainly due to irrigation and nitrogen input requirements.

✓Biodiesel produced by conventional sunflower oil does not to comply with the maximum admissible iodine number, specified in EN 14214.

✓There is no crushing capacity for vegetable oils in Cyprus. Economic viability is low because of seed yields and absence of domestic market for the by-product glycerine.

✓The energy cropping premium of 45 €/ha is too low to be considered as an incentive for farmers with low farming size.
Opportunities

✓ Waste vegetable oils could be an interesting raw material.

✓ Identifying low input supply options is part of the land use strategies for the future climate (e.g. water restrictions, etc.). Opportunity to increase the energy cropping premium or shift the existing subsidies from agricultural cropping systems towards energy cropping systems.

✓ Develop a National Biomass Action Plan that would coordinate biomass policy to promote heating, electricity and transport.

✓Opportunity to ensure consistency between energy and environmental policies and enhance the cooperation between relevant organizations

<u>Threats</u>

 $\checkmark {\rm Biofuel}$ production is limited to feedstock production and land availability.

✓Lack of normalisation of high blends and technical difficulties concerning quality control issues.

✓The absence of public transportation in Cyprus hampers a larger and structured market development for biodiesel, since there is not the possibility of:

✓exploiting the public fleets for biodiesel promotion

 \checkmark immediate use of Biodiesel (as for the effort of achieving the national goal) in such fleets

✓ Low cost supply from neighbouring Balkan countries.