

**Fourth report to the European Commission for the year 2006 under
Article 4(1) of Directive 2003/30/EC of the European Parliament and the
Council on the promotion of the use of biofuels or other renewable fuels
for transport**

**Prepared by the Energy Service of the Ministry of Commerce, Industry
and Tourism of the Republic of Cyprus**

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Table of Content

TABLE OF CONTENT	2
LIST OF TABLES.....	3
1. INTRODUCTION	4
2. THE MEASURES TAKEN TO PROMOTE THE USE OF BIOFUELS OR OTHER RENEWABLE FUELS TO REPLACE DIESEL OR PETROL FOR TRANSPORT PURPOSES.....	4
2.1. LEGISLATIVE MEASURES.....	4
2.2. MULTI-ANNUAL PROGRAM FOR THE PROMOTION OF BIOFUELS	5
2.2.1. <i>Replacement of conventional fuel with biofuel.....</i>	<i>5</i>
2.2.2. <i>Tax exemptions.....</i>	<i>6</i>
2.2.3. <i>Financial support.....</i>	<i>6</i>
2.2.4. <i>Measures to stimulate and promote the use of biofuels</i>	<i>7</i>
3. THE NATIONAL INDICATIVE TARGET FOR REPLACING CONVENTIONAL FUELS WITH BIOFUELS.....	8
4. THE NATIONAL RESOURCES ALLOCATED TO THE PRODUCTION OF BIOMASS FOR ENERGY USES OTHER THAN TRANSPORT	8
5. THE TOTAL SALES OF TRANSPORT FUELS AND THE SHARE OF BIOFUELS.....	9

List of Tables

TABLE 1: REPLACEMENT PERCENTAGE OF CONVENTIONAL FUEL WITH BIOFUEL.....	6
TABLE 2: COST OF TAX EXEMPTIONS.....	6
TABLE 3: NATIONAL INDICATIVE TARGETS.....	8

1. Introduction

This report was prepared by the Energy Service of the Ministry of Commerce, Industry and Tourism of the Republic of Cyprus as required by Article 4(1) of Directive 2003/30/EC of the European Parliament and the Council on the promotion of the use of biofuels or other renewable fuels for transport.

The report covers:

- The measures taken to promote the use of biofuels or other renewable fuels to replace diesel or petrol for transport purposes.
- The national indicative target for replacing conventional fuels with biofuels.
- The national resources allocated to the production of biomass for energy uses other than transport.
- The total sales of transport fuels and the share of biofuels.

2. The measures taken to promote the use of biofuels or other renewable fuels to replace diesel or petrol for transport purposes

2.1. Legislative measures

A specific Law on the promotion of the use of biofuels or other renewable fuels for transport purposes (N.66/(I)2005) has been in force since 24/6/2005. The Law adopted the provisions of Directive 2003/30/EC and set the framework for the promotion of biofuels or other renewable fuels in Cyprus. Specifically, the Law empowers the Minister of Commerce, Industry and Tourism to launch, in cooperation with the Minister of Finance, multi-annual programs through which tax exemptions and/or reductions are applied to biofuels in accordance with Article 16 of Directive 2003/96 EC of 27 October 2003, restructuring the Community framework for the taxation of energy products and electricity.

The above Law was amended by Law N.58/(I)2007 in order to apply tax exemptions on biofuels within the framework of the multi-annual program. Law N.58/(I)2007 has been in force since 30/5/2007.

A Ministerial Order (KDP 318/2004) issued under the Law on the specifications of oil products and fuels (N.148(I)2003) adopted standards EN 229 and EN 590, including the provisions for using biofuels blended with petrol and diesel. Furthermore, the Ministerial Order allows the use of conventional fuels with higher concentration (>5%) of biofuels and biofuels in

pure form provided that standard EN 14214 is applied and emission requirements are met.

Under the Ministerial Order KDP 431/2007 issued under the Law on the specifications of oil products and fuels (N.148(I)2003) all the companies selling fuel for transport in Cyprus are obliged to mix 1% of biofuel into the conventional fuel based on their energy content.

The provisions of Article 16 of Directive 2003/96/EC regarding tax relief applied to biofuels were transposed by the Law on taxes (N.91(I)/2004). According to this Law, the Council of Ministers applied tax exemptions (KDP 405/2007) to biofuels or to other renewable fuels under a multi-annual program as per Article 16 (5) of the Directive.

Law N. 33(I)/2003 on energy conservation and the promotion of RES was introduced in 2003 in order to meet the objectives of Directive 2001/77/EC on the promotion of electricity produced from RES in the internal electricity market. Under the Law, a green levy of 0,13 CYP-cent/kWh (0,22 Euro-cent/kWh) is charged on all electricity consumption. The proceeds of the levy go into a special fund for financing program for the promotion of renewable energy sources and energy conservation. Based on Article 6 of the Law, investments in the utilization of biomass for energy production are eligible for financing.

2.2. Multi-annual program for the promotion of biofuels 2007-2010

The preparation of a program aiming to fulfill the national indicative target for replacing a percentage of the energy content of conventional fuels for transport with biofuels for the period 2007 to 2010 was prepared by the Advisory Committee established by Article 10 of Law N.58/(I)2007.

The main elements of the program are:

- Compulsory replacement of conventional fuel with biofuel by the oil marketing companies in Cyprus,
- tax exemptions in favour of biofuels,
- financial support for the deployment of biofuel plants in Cyprus, and
- measures to promote the production and use of biofuels.

2.2.1. Replacement of conventional fuel with biofuel

According to the multi-annual program, oil marketing companies will be obliged to replace a minimum percentage of conventional fuels (gasoline and diesel) with biofuels based on their energy content over the years 2007 to 2010 as shown in **Table 1**.

	Replacement percentage (%)
2007 ¹	1.00
2008	2.00
2009	2.00
2010	2.00

Table 1: Replacement Percentage of Conventional Fuel with Biofuel.

The percentages in **Table 1** were set based on:

- the availability of biofuels in Cyprus,
- technical problems in using bioethanol blended with gasoline,
- total diesel consumption, and
- standards on conventional fuels (5% of biofuel allowed to blend with conventional fuels)

2.2.2. Tax exemptions

Within the framework of the multi-annual program 2007-2010 biofuels used for transport purposes will be provided without excise tax exemptions (KDP 405/2007). Total tax exemptions on biofuels are justified in Cyprus, since petrol and diesel are taxed with the minimum levels of taxation.

The approximate cost of tax exemptions on biofuels for the period 2007 to 2010 is estimated as indicated in **Table 2**. The calculations were based on the assumption that oil suppliers will favour replacing diesel with biodiesel rather than replacing petrol with bioethanol.

	Cost of tax exemptions (€ mil) ²
2007 ¹	0.70
2008	5.40
2009	5.40
2010	5.40

Table 2: Cost of tax exemptions.

2.2.3. Financial support

A grant scheme for energy conservation and the utilization of renewable energy sources is been operated by the Energy Service under Law N.33(I)/2003 since February 2004. The scheme covers a large spectrum of investments in energy conservation, co-generation and utilization of RES, including the production of biofuels. Under the grant scheme there is a specific provision for funding investments for the production of biofuels for

¹ Calculated based on the date the Ministerial Order is taken into effect.

² Loss of earning from tax not collected due to the replacement of conventional fuel with biofuel.

transport. The grant provided under the scheme can reach 40% with the maximum eligible grant being 400.000 CYP (680.000 Euro) under specific criteria. Since February 2004, when the grant scheme was initiated, investors expressed their sole interest in investments in the production of biofuels for transport, and particularly for the production of biofuels from imported oilseeds and used edible oils.

Seven applications have been submitted for subsidizing biodiesel plants of a total capacity of 8.3ktoe a year. There was a substantial increase since 2006, where the total capacity of the biodiesel plants was 6,4ktoe. Ambrosia Oils 1976 Ltd started the operation of their plant capable of producing 8000MT biodiesel in September 2007. The total annual production of those plants will enable Cyprus to meet the target for replacing a percentage of conventional fuels with biofuels as analyzed in Section 2.2.1. According to the applicants, the production of biofuels will be based almost solely on imported oilseeds. However, some small quantities of biodiesel will be produced from used edible oils.

2.2.4. Measures to stimulate and promote the use of biofuels

The Government is considering using biofuels for the needs of its captive fleet. The measure is aiming to stimulate biofuel market in Cyprus since the Government purchases fuels from the distribution chain of the local oil marketing companies. According to the current two-year contract for supplying the governmental sector with fuels, the fuel supplier has the contractual obligation to handle any volumes of biofuels provided by the Government. The Supplier is mandated to store the biofuels, to blend them with conventional fuels and to deliver them to the Government's installations.

A Tax relief accounts for 700 CYP (1200 Euro) towards the cost of purchasing a new flexible fuel vehicles, including electric and hybrid vehicles. The measure is aiming to encourage the owners of captive fleets to use biofuels, especially those who can produce biofuels from their own resources (used edible oils) such as restaurants, hotels and etc.

Measures to promote indigenous production of biofuels are being undertaken by means of research programs. Specifically, a grant aid of 136.000 CYP (236.000 Euro) has been provided by the Research Promotion Foundation of Cyprus for the preparation of a study on the evaluation of energy crop potentials in Cyprus. The ongoing project is aiming at investigating the feasibility of some crop-species as energy plants on the basis of experimental cultivations. Within the framework of the project, bio-ethanol and biodiesel will be produced in order to evaluate their quality and their energy content. The project is being contacted by the Cyprus Institute of Energy, the Agriculture Research Institute and the National Technical University of Athens. The project was launched in 2004 and the final results will be announced in the year 2008.

Cyprus is part of the Biofuel Chains Project that aims to understand and promote favourable conditions for the establishment of biodiesel market chains and the Energy Service of the Service of the Ministry of Commerce, Industry and Tourism has shown an active role in promoting the ideas and aims of the program in Cyprus.

3. The national indicative targets for replacing conventional fuels with biofuels

The national indicative targets for replacing a percentage of the total energy content of conventional fuels for transport with biofuel have been set by the Government of Cyprus. The national indicative targets for the years 2007 to 2010 are presented in **Table 3**.

	Replacement percentage (%)
2007	1.00
2008	2.50
2009	2.50
2010	2.50

Table 3: National Indicative Targets.

It is expected that the above national indicative targets will be met by enforcing compulsory replacement of conventional fuel for transport with biofuel and by taking into account any biofuel produced in Cyprus from used vegetable oils and other animal fats.

4. The national resources allocated to the production of biomass for energy uses other than transport

For the promotion of biomass for heating/cooling and electricity production, Cyprus has introduced since 2004 support measures. These measures include:

- Operation of a Support Scheme for the promotion of RES and Energy conservation, which includes the provision of grants on the initial investment for heating/cooling, tele-heating/ tele-cooling and the Co-generation from biomass. The grant amounts to a maximum of 40% of the eligible costs for companies with a 400.000 CYP (680.000 Euro) upper limit and 55 % for others (non legal entities) with maximum grant of 11.000CYP (19.000 euros) for households and not profitable organizations for space heating. Moreover, a grant is provided for investments on district heating with maximum amount 117,000 euros.

- After the evaluation of the support mechanisms for Co-generation from biomass proved to be not very effective and therefore Cyprus introduced a new support scheme for electricity production from biomass. The new support

scheme for electricity production from biomass is more generous and provides operating aid (Feed-in purchase price per KWh) up to 7.2 cents (12.3 euro cents) per KWh depending upon the technology used and raw biomass.

5. The total sales of transport fuels and the share of biofuels

The consumption of conventional fuels for transport in 2006 was 683ktoe as shown analytically in **Table 4**. Small quantities of biodiesel from used edible oils were produced and used on private initiatives. An oil marketing company blends small quantities of bio-additives (25,000 ltr) with fuels marketed for transport.

Fuel	toe
Unleaded 95	301,052
Unleaded 98	35,986
Unleaded 100	2,545
Total	339,583
Diesel	343,390
Total	682,973

Table 4: Consumption of conventional fuels for transport in 2006.