

Malta's Annual Report for 2009 in line with the requirements of Article 4 of Directive 2003/30/EC on the promotion of biofuels and other renewable fuels for transport

Background information

Biofuels in Malta were at first relatively successful, registering increases in the initial years when they were introduced in 2003. This trend, however, did not continue in recent years. The steady decrease in the price of fossil oil and the increase in the costs of raw material used to produce biofuel have resulted in a lower price margin between the two products, and hence a substantial decrease in the amount of biofuels placed on the market in 2008 was observed. This continued in 2009 albeit the increase in the prices of petroleum products.

Measures to promote the use of biofuels or other renewable fuels

Legislative instruments

Currently, the Use of Biofuels or other Renewable Fuels for Transport Regulations (LN528/2004) is the main legislative instrument regulating biofuels. These Regulations transpose Directive 2003/30/EC.

Exemption from excise duty

The main instrument used for the promotion of biofuels in Malta is the exemption from the payment of excise duty on the biomass content (that is, the percentage element) in biodiesel granted by the Government.

National resources allocated to biomass for energy uses other than transport

Electricity generation from biomass waste

A Solid Waste Management Strategy for the Maltese Islands¹ was published for consultation in 2009. This document intends to update the 2001 strategy and the following options are considered as the most favoured configuration:

- the construction of three mechanical biological treatment (MBT) plants all equipped with energy recovery; and
- the development of a waste to energy plant for the treatment of the residual fraction of waste, including Refuse Derived Fuel from the mechanical separation of Municipal Solid Waste and rejects from the sorting of dry recyclables at the Marsascala Refuse Facility.

¹ <http://www.mrra.gov.mt/wastestrategy.asp>

The first mechanical biological treatment plant (MBT) in Malta is expected to start treating and receiving waste in 2010. In addition to this plant, two further MBTs are planned to be constructed by 2013 and, when operational, would generate more than 30GWh of electricity annually.

Previous projections that had been made regarding the potential of energy production from the installation of the gas extraction system at the Maghtab landfill have proved to be too optimistic since the gas quality resulted to be poor and unfit for electricity generation. However, Malta is actively pursuing the production of biogas from the Ta' Żwejra and Ghallis engineered landfills and figures have been reviewed to include the latter sites in the recent estimates.

Electricity generation from sewage sludge

The potential of energy recovery from sewage sludge and the waste resulting from animal husbandry is not yet established. Co-digestion of various waste streams with solid waste is being considered for this type of waste.

Malta is presently implementing the required sewage treatment infrastructure, namely by the construction of three new sewage treatment plants, one in Gozo and two in Malta. The Gozo plant (40,000 population equivalent capacity) started operation in November 2007 whereas the Malta North plant (45,000 population equivalent capacity) was commissioned in March 2009. The largest plant in the South with an anticipated treatment capacity of 500,000 population equivalent will be equipped with anaerobic sludge digestion facilities generating enough biogas to supply 32% of the plant's electrical power requirements. It is estimated that the plant will have an electricity generating capacity of 990kW and 1046kW in heat.

Total sales of transport fuel and the share of biofuels

Out of the three companies which were active in the Maltese biofuel market up to 2007, only one continued with its operations during 2008 and 2009, supplying both the transport and the industry sector. This company remained in the market throughout 2009.

Similar to previous years, biofuel for the transport sector was supplied both as pure biodiesel (B100) from petroleum filling stations, as well as in mixed blends direct from the biofuel plant. At the retail level, around 30 petroleum filling stations, equivalent to about 40% of the total number of stations present in Malta, were retailing biodiesel to consumers in 2009.

Total sales of biodiesel for 2009 per sector are summarised in Table 1 below.

Table 1 – Consumption of Biodiesel per sector

| Biofuel Type | Industrial Sector (Million Litres) | Transport Sector (Million Litres) | Total (Million Litres) |
|---------------------|---|--|-------------------------------|
| Biodiesel | 0.205 | 0.750 | 0,955 |

Based on the data collected and considering the standard figures for the calorific values of the fuels used in road transport, the share of biofuels used for road transport is that shown in Table 2 below.

Table 2 - Use of road transport fuels in Malta during 2009 and the share of Biofuels

| Fuel | Litres | Energy Content MJ/l² | Energy TJ | Percentage of total Petrol and Diesel sales |
|--------------------------------------|---------------|--|------------------|--|
| Petrol Sales | 98,249,842 | 31.2 | 3,065.40 | 46.28 |
| Diesel Sales | 99,667,528 | 35.7 | 3,558.13 | 53.72 |
| Total Petrol and Diesel sales | 197,917,370 | | 6,623.53 | 100.00 |
| Biodiesel Sales | 750,000 | 32.8 | 24,6 | 0.371 |

The share of biofuels in 2009, therefore, based on energy content, accounted for 0.371% of the total petrol and diesel sales used for road transport. This figure shows a continued downward trend initiated in 2008.

Measures being taken

In order to meet national targets, Malta will impose new obligations on importers of fuels to the Maltese Islands. In anticipation of what was happening in the biofuels market, the Malta Resources Authority (MRA) issued a consultation paper³ entitled Biofuels in Transport. The object of the public consultation process and documentation is to increase the knowledge of the general public not only on the obligations set out in front of Malta by the European Directives but also on the manner by which these obligations would be met for the benefit of the nation. The public consultation also promotes the use of biofuel in transport by providing stakeholders with information, thereby enabling them to make informed decisions and educated choices.

The document also indicates the way forward for an increase in the biofuel share for the years post-2010, which includes:

² Kavalov Boyan, Jensen Peder, Papageorgiou, Schwensen Carsten and Olsson Jens Peter, "Biofuel Production Potential of EU-Candidate Countries", Institute for Prospective Technological Studies, EU Joint Research Centre, September 2003.

³ <http://www.mra.org.mt/Downloads/Consultations/BiofuelsConsultation%20v%2013%20Final.pdf>

- the proposal of a legal framework to be put into place with the aim of laying down not only the obligations of all players in the biofuel market but also their rights and modus operandi;
- a 'substitution obligation' on all importers and/or wholesalers of petroleum fuel, similar to that in place in other countries, is necessary. The MRA is proposing an annual mandatory substitution obligation starting from 1.5% in 2011 and gradually increasing to reach the final 10% target by 2020; and
- continued promotion of local production of biofuel from waste.

The public consultation ended on 23 July 2010 and the results are currently being evaluated.