II

(Acts adopted under the EC Treaty/Euratom Treaty whose publication is not obligatory)

DECISIONS

COMMISSION

COMMISSION DECISION

of 6 December 2006

on the State and C 22/2006 (ex N 615/05) which Italy is planning to implement for tax rebates on oil emulsions with water

(notified under document number C(2006) 5805)

(Only the Italian version is authentic)

(Text with EEA relevance)

(2007/508/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community, and in particular the first subparagraph of Article 88(2) thereof,

Having regard to the Agreement on the European Economic Area, and in particular Article 62(1)(a) thereof,

Having called on interested parties to submit their comments pursuant to those provision(s) [1] and having regard to their comments,

Whereas:

I. PROCEDURE

(1) By letter dated 5 March 2005, registered as received on 13 December 2005 and supplemented by letter dated 9 January 2006, registered as received on 12 January 2006, the Italian authorities notified the Commission of the abovementioned measure in accordance with Article 88(3) of the EC Treaty. Following a Commission request dated 6 March 2006, the Italian authorities provided additional information by letter dated 6 April 2006.

(2) By letter dated 7 June 2006, the Commission informed Italy that it had decided to initiate the procedure laid down in Article 88(2) of the EC Treaty in respect of the measure.

(3) The Commission decision to initiate the procedure was published in the *Official Journal of the European Union* [2]. The Commission called on interested parties to submit their comments.

(4) The Commission received comments from interested parties. It forwarded them to Italy, which was given the opportunity to react; its comments were received by letters dated 13 September 2006 and 29 September 2006.

II. DESCRIPTION OF THE MEASURE

(5) Emulsified fuels are a blend of approximately 15 % water and 85 % fuel oil or gas oil. They have a lower impact on

[1] OJ C 157, 6.7.2006, p. 8.

[2] See footnote 1.

the environment than conventional fuels. Recent studies ([3]) show that adding water to fuels leads to higher quality of combustion in terms of emissions. Vaporisation of water during the combustion process increases fuel dispersion resulting in increased contact surface between fuel and air. This reduces the emissions of PM particulates by 59 %. Water vaporisation also reduces the combustion temperature, thereby reducing the formation of nitrogen oxides (NO_x) by 6 %. The efficient combustion process reduces carbon monoxide (CO) by 32 % ([4]).

(6) However, production and storage of emulsions is costly and therefore the price for the final blend is higher than the market price of fossil fuels. Emulsions have an energy content 10 % lower than conventional fuel. Using emulsions causes additional operating costs, e.g. costs of periodical reprocessing that prevents the two components from separation, cleaning of tanks and the need for product recirculation systems.

(7) Emulsions have been adopted in Italy for public transport, waste collection and transport of goods (ca 9 000 vehicles) by more than 80 municipalities ([5]). Emulsions are also used for heating purposes in private housing (ca 100 houses) and public buildings like museums, schools and universities (ca 300 heated buildings).

(8) The emulsions that are on the Italian market are mainly based on low sulphur gas oil/water blends and they are used for transport and for heating. In 2005 the emulsions used for transport were all gas oil based, whereas the emulsions used for heating were based either on gas oil or on low sulphur heavy fuel. Other heavy fuel oil emulsions listed in the notification – high and low sulphur content for industrial use and high sulphur content for heating – were not on the market in 2005. In comparison to the consumption of conventional fuels, the consumption of emulsions in Italy is still rather marginal. The volumes consumed in tonnes of emulsions and of conventional fuels in 2005 were as follows:

	Emulsions	Conventional fuels
Gas oil for transport	79 359	24,5 million
Gas oil for heating	12 574	2,9 million
Fuel oil for heating	12 498	151 000

(9) Within the Community emulsions are mainly used in Italy. However, the use of this technology in public transport is at an experimental stage in some Member States, e.g. France, the United Kingdom and the Czech Republic.

(10) The measure aims at promoting the use of emulsion fuels by ensuring that they are available at a reasonable price. The aid offsets the cost difference between conventional fuels and emulsions. In this way, it tackles a market failure, i.e. that the environmental benefits of emulsions are not reflected in the market price of conventional fuels.

(11) The measure is to apply for one year: from 1 January 2006 to 31 December 2006. The planned budget is EUR 8,9 million. The beneficiaries of the scheme will be between 11 and 50 emulsions producers.

(12) Article 18(1) of the Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electrici ('Energy Tax Directive' ([6]), and in particular the fourth indent of point 8 in Annex II thereof, allowed Italy to apply a reduced excise duty to emulsions of water blended with gas oil or fuel oil until the end of 2005. Italy notified the measure for the period from 1 January 2006 to 31 December 2006, and for the year 2006 Italy intends to apply the scheme using the general provisions of the Energy Tax Directive.

(13) In comparison to the normal rate for fossil fuels that applies in Italy, the advantages of the measure in terms of the reduced rates are as follows (all reductions are granted per litre of the gas oil emulsion concerned and per kilogram of the heavy fuel oil concerned):

([3]) Studies carried out by Laboratori ENI Tecnologie and the European Commission's Joint Research Centre in Ispra (for example, research undertaken within Action 2113 – Emissions Characterisation and Inventories).

([4]) Actual reductions depend on the waterdiesel ratio.

([5]) Including large cities like Milan, Rome, Naples, Turin and Genoa.

([6]) OJ L 283, 31.10.2003, p. 51.

Emulsions	Normal rate	Reduction	Reduced rate	Min. tax level of ETD (*)
water/gas oil, used as motor fuel in transport	EUR 403	EUR 146,3	EUR 256,7	EUR 302
water/gas oil, used for heating	EUR 403,2	EUR 158	EUR 245,2	EUR 21
water/low sulphur heavy fuel oil, used for heating	EUR 64,2	EUR 34,7	EUR 29,5	EUR 15

(*) *ETD – Energy Tax Directive*

The notification also mentions reduced rates for emulsions that are not on the market like water/heavy fuel oil emulsions for industrial use with high and low sulphur content (EUR 41,6 and EUR 20,8 respectively) and high sulphur content heavy fuel oil emulsion for heating use (EUR 99,3).

(14) In its letter of 6 March 2006, the Commission requested the Italian authorities to suspend the granting of the aid under the current scheme until the recovery of any incompatible aid by the firms that are the subject of a negative State aid decision, and in particular Commission Decision 2000/128/EC of 11 May 1999 concerning aid granted by Italy to promote employment (OJ L 42, 15.2.2000, p. 1), Commission Decision 2003/193/CE concerning tax exemption and privileged loans in favour of public utilities in Italy ([7]), Commission Decision 2004/800/EC of 30 March 2004 on the State aid scheme put into effect by Italy providing for urgent measures to assist employment ([8]), and Commission Decision 2005/315/EC of 20 October 2004 on the aid scheme implemented by Italy for firms investing in municipalities seriously affected by natural disasters in 2002 ([9]).

III. **GROUNDS FOR INITIATING THE ARTICLE 88(2) PROCEDURE**

(15) In the case of gas oil emulsions used as motor fuel Italy applies the minimum tax rate of EUR 302 only to the fossil fuel part of the blend. Therefore the final tax for the emulsion is EUR 256,7. The Commission doubted that the tax exemption for emulsions used as motor fuel complied with the levels of taxation applicable under the Energy Tax Directive and that it did not affect trading conditions and distort competition to an extent contrary to the common interest.

(16) Furthermore, the Italian authorities refused to give a commitment to suspend the granting of new aid under the current scheme to firms which have not reimbursed the incompatible aid in compliance with the previous recovery decision. Therefore, the Commission found it impossible to take into account the cumulated distortion arising from the old aid and the new aid.

IV. **COMMENTS FROM INTERESTED PARTIES**

(17) The following interested parties submitted their comments on the initiation of the procedure: the Unione Petrolifera on 3 August 2006 and the European Emulsion Fuel Manufacturers' Association (EEFMA) on 7 August 2006.

(18) The EEFMA stressed that emulsion fuels are the only fuels that reduce simultaneously the nitrogen oxide, particulate and carbon dioxide emissions of diesel engines without the need for any mechanical modifications.

(19) The EEFMA elaborated in detail on the issue that adding water to gas oil changes the fuel's characteristics. The presence of water gives the emulsion a milky appearance at room temperature, while gas oil is clear and transparent. The distinctive characteristic of the emulsion is its stability by centrifugation. The emulsion's density interval of 842-870 kg/m^3 is considerably higher than that of gas oil which is 820 to 845 kg/m^3. The same is true for the viscosity interval at 40 °C. The average calorific power of gas oil is 10 500 kcal/kg, while that of emulsions is 9 300 kcal/kg. This difference explains why the average consumption of emulsion per km run is higher than that of gasoil.

([7]) OJ L 77, 24.3.2003, p. 21.
([8]) OJ L 352, 27.11.2004, p. 10.
([9]) OJ L 100, 20.4.2005, p. 46.

(20) The Petroleum Union pointed out that the beneficiaries of the State aid in question are not beneficiaries of aid that has been judged illicit pursuant to the decisions mentioned in paragraph 14.

V. **COMMENTS FROM ITALY**

(21) Italy submitted its comments on 11 July 2006 and commented on the third parties' observations by letters dated 13 September 2006 and 28 September 2006.

(22) Italy described in detail the specific character of emulsions. In particular Italy pointed out that, because of their physical structure, emulsions should be considered as having two parts: one 'active', made up of hydrocarbons (diesel or fuel oil) and as such capable of producing energy following carburation or combustion; the other completely 'passive', made up of water, which is present for the purpose of reducing polluting emissions by comparison with diesel or fuel oil used in the pure state. The water present in the emulsions also absorbs energy during the heating process and is transformed into steam. Such emulsions are therefore products with specific characteristics that are different from traditional petroleum products.

(23) Italy emphasized that the water is only temporarily present in the preparation for the purpose of improving combustion with a consequent reduction in polluting emissions and environmental benefits.

(24) The Italian authorities referred to the comments submitted by the Unione Petrolifera to the Commission on the beneficiaries of the aid at issue. In consideration of these comments, the Italian authorities undertook to suspend the payment of the aid at issue if the beneficiary was a company that had not yet reimbursed or paid into a blocked account any illegal and incompatible aid received on the basis of one of the aid measures mentioned by the Commission.

VI. **ASSESSMENT OF THE MEASURE**

(25) Italy has notified the measure to the Commission and its entry into force is subject to the Commission's approval, so Italy has complied with its obligations under Article 88(3) of the EC Treaty. Since Italy notified the aid for the period from 1 January 2006 to 31 December 2006, this assessment concerns only this period and is without prejudice to the measure Italy applied in the past.

Existence of aid within the meaning of Article 87(1) of the EC Treaty

(26) According to Article 87 of the EC Treaty, State aid is (a) any aid granted by a Member State or through State resources (b) which distorts competition (c) by favouring certain undertakings, (d) insofar as it affects trade between Member States.

(27) The aim of this measure is to compensate the emulsions producers for part of their production costs; the measure therefore favours certain undertakings and the production of certain goods. Excise tax reduction is granted from State resources because by reducing the tax burden on the products the State forgoes revenue.

(28) The measure is selective because emulsions production requires specific know-how and specific equipment and the emulsions are sold to a limited number of customers. Therefore, the entry costs into the emulsions market are high. Reducing tax rates for emulsions gives an advantage to only a limited number of emulsions producers.

(29) In consequence of the tax rebates, the prices for emulsions can be lowered to a level that is competitive with fossil fuels. Since emulsions serve as a substitute for fossil fuels, this advantage may distort competition in the EU internal market. As fuels are tradeable internationally, the measure is also likely to affect trade between Member States and therefore constitutes State aid pursuant to Article 87(1) of the EC Treaty.

Exemption under Article 87(3)(c) of the EC Treaty

(30) Article 87(3)(c) of the EC Treaty provides an exemption from the general rule of incompatibility with the common market as stated in paragraph (1) of that Article for aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.

(31) The proposed aid measures are designed to enhance the use of environmentally friendly fuels in order to reduce pollutant emissions, including particulates, and slightly reduce greenhouse gas emissions. The Commission notes that the reduction of these gases and the reduction of pollutant emissions have been encouraged since 1985 by numerous Community measures ([10]), the most recent overview being the Thematic Strategy on Air Pollution ([11]). The objectives of the present scheme are in line with EU policy in this sector.

(32) Emulsion fuels are not included in the definition of renewable energy sources in Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market ([12]) and are not considered biofuels by Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport ([13]). However, using emulsion fuels results in a reduction in pollution and greenhouse gas emissions. The measure therefore contains a clear environmental benefit. This was also confirmed by the Auto-Oil II programme ([14]). The Commission recalls that emulsion fuels have been shown to result in a 59 % reduction in particulates, a 6 % reduction in nitrogen oxides (NO_x) and a 32 % reduction in carbon monoxide (CO) (actual reductions depend on the waterdiesel ratio). Other tests and studies have reported minor reductions in greenhouse gas emissions. These benefits are fully in line with Community environmental policy.

([10]) Among others, the White Paper of 1997 on renewable energies (COM(1997) 599 final, 26.11.1997), the Commission Green paper on energy supply safety in the European Union (COM(2000) 769, 29.11.2000), and the Commission's communication on alternative fuels for road transport and on a set of measures to promote the use of biofuels (COM(2001) 547, 7.11.2001).

([11]) COM(2005) 446.

([12]) OJ L 283, 27.10.2001, p. 33.

([13]) OJ L 123, 17.5.2003, p. 42.

([14]) See the final report on the Programme prepared for DG Energy on the following website: http://ec.europa.eu/energy/oil/fuels/doc/alternative_fuels_en.pdf

(33) According to section E.3.3 of the Community Guidelines on State aid for environmental protection ([15]) (the Environmental Aid Guidelines), operating aid for the production of renewable energy will usually be allowable. The Commission takes the view that such aid qualifies for special treatment because of the difficulties these sources of energy have sometimes encountered in competing effectively with conventional sources.

(34) Point 6 of the Environmental Aid Guidelines defines renewable energy in the same way as Directive 2001/77/EC. As explained above, the emulsions do not fall within this definition. For the following reasons, however, the Commission considers that the notified aid can be assessed by analogy with point E.3.3. of the Environmental Aid Guidelines:

— As explained in paragraph 31 above, the scheme is in line with Community policy objectives and it adds to the improvement of environment.

— The emulsions face similar difficulties as fuels derived from renewable energy sources (e.g. biofuels) in competing effectively with fuel from conventional sources: namely high (initial) production costs, lack of accommodating infrastructure in the distribution chain and lack of users with appropriately adapted combustion systems in their vehicles.

— Distortion of competition with respect to conventional fuels will be relatively limited given the strong position conventional fuels still have on the market and given the limited number of emulsions users.

— Distortions of trading conditions with respect to conventional fuels will also be limited because of specific transport and storage needs of emulsions, e.g. the need for periodical reprocessing.

([15]) OJ C 37, 3.2.2001, p. 3.

— Italy will submit monitoring reports that will enable the Commission to assess the application of the scheme.

(35) According to point 56 of the Environmental Aid Guidelines, operating aid for the production of renewable energy may be allowable. Point 56 of the Environmental Aid Guidelines provides for aid to cover the difference between the costs of producing energy from renewable energy sources (in the present case emulsions) and the market price of that energy. This implies that the production costs of emulsions, after taking into account the aid, should not show any over-compensation, i.e. should not be below the market price of comparable energy obtained from fossil energy sources for which no aid is granted.

(36) Italy supplied production cost calculations based on the data for 2006. The main factor determining the production costs of emulsions is the price of the raw materials (e.g. surfactant and antifreeze) that must be added to fossil fuels and water. Further costs are logistics costs such as storage in special tanks and transport in dedicated lorries. In addition to the production costs it has to be taken into consideration that, due to the lower energy value of emulsions in comparison to fossil fuels, the consumption of emulsions is estimated to be 10 % higher. Furthermore, using emulsions imposes additional operating costs on consumers (e.g. cleaning tanks and recirculation systems). The calculations of total emulsions production costs include a fair profit margin of 5 %. The market price of fossil fuels reported by Italy for comparisons with gas oil emulsions is an average of the prices of gas oil over the first 15 days of March 2006 ([16]).

(37) From the table below, which is based on the information provided by Italy, it is clear that the aid enables producers to sell the emulsions at a price that is just sufficient to compete with fossil fuels.

(38) In order to avoid overcompensation during the entire period of the scheme, Italy has undertaken to monitor changes in fossil fuel prices and emulsions production costs every six months. Where the difference between the production costs of emulsions and the reference price of fossil fuels exceeds the value of the reduction, Italy will adjust the tax rebate to avoid overcompensation.

([16]) For comparisons with heavy fuel oil emulsions an average market price surveyed by the Milan Chamber of Commerce has been used.

	Water emulsions with:		
	gas oil, used in transport	gas oil, used for heating	low sulphur heavy fuel for heating
Raw materials:			
(A) Fossil fuel	387	387	362
(B) Deionised water	0,5	0,5	0,5
(C) Surfactant and research amortization	62	62	14,5
(D) Antifreeze	8	8	
(E) Cetane improver	3,5	3,5	
(F) Bactericide	1	1	
Logistics costs:			
(G) Storage in tanks	6	6	6
(H) Transport in special lorries	4	4	4

	Water emulsions with:		
	gas oil, used in transport	gas oil, used for heating	low sulphur heavy fuel for heating
(I) Other costs (extraordinary)	1	1	1
(J) Production costs	10	10	10
(K) Total costs: sum from A to J	483	483	398
(L) Profit margin: 5 % of K	24,15	24,15	19,9
(M) Total, excluding taxes: K + L	507,15	507,15	417,9
(N) Emulsion excise tax	256	245	29,5
(O) Energy content adjustment factor: 10 % of (M + N)	76,31	75,21	44,74
(P) Extra operating costs	10	10	10
(R) Emulsions end price excl. VAT: (M + N + O + P)	849,46	837,36	502,14
(S) Fossil fuels end price excl. VAT (*)	843	831	490
Difference (R – S) (**)	6,46	6,36	12,14

(*) *This refers to the average price for Platt's Low sulphur Diesel over the first 15 days in March 2006 + EUR 25/1 000 litres which corresponds to an average of the difference between the extra-network price and Platt's. It has been assumed that the density of the gas oil is 0,845 kg/l. For heavy fuel for heating the price refers to the average market price surveyed by the Milan Chamber of Commerce.*

(**) *If the difference is positive, the level of aid is allowable. If the difference is negative, the level of aid is too high and results in overcompensation.*

(39) The Commission thus comes to the conclusion that the aid is restricted to covering the difference between the cost of producing energy from renewable energy sources and the market price of that energy and that there is no overcompensation within the meaning of the Environmental Aid Guidelines.

(40) As the measure concerns an excise tax rebate for an energy product, the Commission also assessed it with respect to the Energy Tax Directive.

(41) The Energy Tax Directive lays down minimum levels of taxation for energy products. As far as fuel blends are concerned, the minimum levels are applicable to final products. In order to implement policies appropriate to national circumstances, the Energy Tax Directive allows Member States to apply exemptions and tax rebates when they are not detrimental to the proper functioning of the internal market and do not result in a distortion of competition.

(42) In principle Article 5 of the Energy Tax Directive allows Member States to reduce tax rates of final fuel products from the normal rate to a level not lower than the minimum level of taxation in certain cases, e.g. when there is an improvement in the quality of the fuels. Article 16 allows Member States to apply an exemption or reduced rate of taxation to the renewable and to the water part of the blend.

(43) In order to apply Article 5 as justification for tax rebates, emulsions must be fuels with improved quality in comparison to corresponding fossil fuels. The information provided by Italy and the comments of the third parties clearly prove that adding water to fossil fuel changes its physical characteristics and brings environmental benefits.

(44) After adding water the fuel changes with regard to its appearance, density, viscosity and caloric value. The presence of water improves the combustion quality and results in less polluting emissions of PM particulates, nitrogen oxides and carbon dioxide. Therefore emulsions can be treated as an improvement in the quality of fossil fuels as such. Applying Article 5 to emulsions allows reduction of the excise tax rate to the minimum level specified in the Energy Tax Directive.

(45) In the case of gas oil emulsions used as motor fuel, Italy makes use of Article 16 and, starting from the Community minimum level of taxation of EUR 302, exempts the water part of the blend. Therefore the final tax for these emulsions is 15 % below the minimum tax rate and it amounts to EUR 256,7.

(46) The Commission finds that, in the particular case of emulsions, this approach is justified by Article 5 and Article 16 of the Energy Tax Directive, considered jointly. Adding water to fossil fuels results in a physically different product with improved combustion quality and consequent environmental benefits. This gives rise to the application of the first indent of Article 5 of the Directive. Simultaneously, the final product contains 15 % water, which is eligible for tax concessions in accordance with Article 16.

(47) For the reasons stated above, the reductions in taxation for emulsions proposed by Italy are in conformity with the Energy Tax Directive.

(48) Further, the Commission pointed out the problem of potential cumulation of the distortion arising from the aid under the excise reduction scheme and other distortions deriving from other illegal and incompatible aid, in particular under the schemes mentioned in paragraph 14, which has not yet been reimbursed. According to the Court of Justice judgment of 15 May 1997 ([17]), the compatibility of new aid could depend on the existence of any previous unlawful aid that has not been repaid, since the cumulative effect of the aid could distort competition in the common market to a significant extent.

(49) The Commission notes that, as regards the application of the Deggendorf judgment, Italian authorities referred to the comments submitted by the Unione Petrolifera to the Commission, which stated that 'the beneficiaries of the aid at issue are different from the beneficiaries of the so-called illegal aid'. In consideration of these comments, the Italian authorities undertook, in the context of this measure, to suspend the payment of the aid at issue if the beneficiary was a company that had not yet reimbursed or paid into a blocked account any illegal and incompatible aid received on the basis of one of the aid measures mentioned by the Commission in its decision initiating the procedure.

(50) The Commission further notes that during the procedure under Article 88(2) of the EC Treaty it did not receive any comments from third parties that the proposed aid may affect trading conditions and distort competition to an extent contrary to the common interest.

VII. **CONCLUSIONS**

(51) On the basis of the foregoing, the Commission concludes that the measure complies with the relevant provisions of the Environmental Aid Guidelines applied by analogy and the relevant provisions of the Energy Tax Directive. Furthermore, Italy has undertaken to suspend the granting of new aid under the current scheme to firms which have not reimbursed the incompatible aid in compliance with the relevant previous recovery decision. The measure can therefore be deemed compatible with the common market pursuant to Article 87(3)(c) of the Treaty,

HAS ADOPTED THIS DECISION:

Article 1

The measure which Italy is planning to implement for tax rebates on emulsions for 2006, amounting to EUR 8,9 million, is compatible with the common market within the meaning of Article 87(3)(c) of the Treaty.

Implementation of the measure is accordingly authorised.

Article 2

This Decision is addressed to the Republic of Italy.

Done in Brussels, 6 December 2006.

For the Commission

Neelie KROES

Member of the Commission

([17]) Case C-355/95P Textilwerke Deggendorf GmbG (TWD) v Commission [1997] ECR I-2549, paragraphs 25-27.