

# Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Directive	1996/0163(COD) Procedure completed
Quality of petrol and diesel fuels	
Amended by <a href="#">2001/0107(COD)</a>	
Amended by <a href="#">2007/0019(COD)</a>	
Amended by <a href="#">2012/0288(COD)</a>	
See also <a href="#">2014/2931(RPS)</a>	
Amended by <a href="#">2016/0375(COD)</a>	
Amended by <a href="#">2021/0218(COD)</a>	
Subject	
3.60.02 Oil industry, motor fuels	
3.70.02 Atmospheric pollution, motor vehicle pollution	

Key players			
European Parliament			
Former committee responsible			
<b>ENVI</b>	Environment, Public Health and Consumer Protection	ARE <a href="#">MAMÈRE Noël</a>	07/05/1996
<b>ENVI</b>	Environment, Public Health and Consumer Protection	V <a href="#">HAUTALA Heidi</a>	24/09/1997
Former committee for opinion			
<b>BUDG</b>	Budgets		
<b>ECON</b>	Economic and Monetary Affairs, Industrial Policy	ELDR <a href="#">COX Pat</a>	15/10/1996
<b>ENER</b>	Research, Technological Development and Energy	PSE <a href="#">MCNALLY Eryl Margaret</a>	02/10/1996
<b>TRAN</b>	Transport and Tourism	The committee decided not to give an opinion.	
Council of the European Union			
Council configuration		Meeting	Date
<a href="#">Environment</a>		<a href="#">2207</a>	12/10/1999
<a href="#">Competitiveness (Internal Market, Industry, Research and Space)</a>		<a href="#">2094</a>	18/05/1998
Social Affairs		<a href="#">2030</a>	07/10/1997
<a href="#">Environment</a>		<a href="#">2017</a>	19/06/1997
<a href="#">Environment</a>		<a href="#">1990</a>	03/03/1997
<a href="#">Environment</a>		<a href="#">1978</a>	09/12/1996
<a href="#">Environment</a>		<a href="#">1956</a>	15/10/1996

## Key events

25/11/1994	Additional information		Summary
18/06/1996	Legislative proposal published	COM(1996)0248	Summary
20/09/1996	Committee referral announced in Parliament, 1st reading		
15/10/1996	Debate in Council	<a href="#">1956</a>	
09/12/1996	Debate in Council	<a href="#">1978</a>	
03/03/1997	Debate in Council	<a href="#">1990</a>	
19/03/1997	Vote in committee, 1st reading		Summary
19/03/1997	Committee report tabled for plenary, 1st reading	<a href="#">A4-0096/1997</a>	
09/04/1997	Debate in Parliament		Summary
10/04/1997	Decision by Parliament, 1st reading	T4-0163/1997	Summary
02/06/1997	Modified legislative proposal published	COM(1997)0271	Summary
07/10/1997	Council position published	<a href="#">10050/2/1997</a>	Summary
23/10/1997	Committee referral announced in Parliament, 2nd reading		
04/02/1998	Vote in committee, 2nd reading		Summary
04/02/1998	Committee recommendation tabled for plenary, 2nd reading	<a href="#">A4-0038/1998</a>	
17/02/1998	Debate in Parliament		Summary
18/02/1998	Decision by Parliament, 2nd reading	T4-0074/1998	Summary
18/05/1998	Parliament's amendments rejected by Council		
29/06/1998	Formal meeting of Conciliation Committee		Summary
29/06/1998	Final decision by Conciliation Committee		Summary
11/08/1998	Joint text approved by Conciliation Committee co-chairs	<a href="#">3620/1998</a>	
10/09/1998	Report tabled for plenary, 3rd reading	<a href="#">A4-0313/1998</a>	
15/09/1998	Debate in Parliament		
15/09/1998	Decision by Parliament, 3rd reading	T4-0465/1998	Summary
17/09/1998	Decision by Council, 3rd reading		
13/10/1998	Final act signed		
13/10/1998	End of procedure in Parliament		
28/12/1998	Final act published in Official Journal		

Technical information	
Procedure reference	1996/0163(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Directive
	Amended by <a href="#">2001/0107(COD)</a> Amended by <a href="#">2007/0019(COD)</a> Amended by <a href="#">2012/0288(COD)</a> See also <a href="#">2014/2931(RPS)</a> Amended by <a href="#">2016/0375(COD)</a> Amended by <a href="#">2021/0218(COD)</a>
Legal basis	EC before Amsterdam E 100A
Stage reached in procedure	Procedure completed
Committee dossier	CODE/4/10087

Documentation gateway					
Legislative proposal		COM(1996)0248	18/06/1996	EC	Summary
Committee report tabled for plenary, 1st reading/single reading		<a href="#">A4-0096/1997</a> <a href="#">OJ C 132 28.04.1997, p. 0005</a>	19/03/1997	EP	
Text adopted by Parliament, 1st reading/single reading		T4-0163/1997 <a href="#">OJ C 132 28.04.1997, p. 0125-0159</a>	10/04/1997	EP	Summary
Economic and Social Committee: opinion, report		<a href="#">CES0473/1997</a> <a href="#">OJ C 206 07.07.1997, p. 0113</a>	24/04/1997	ESC	Summary
Modified legislative proposal		COM(1997)0271 <a href="#">OJ C 209 10.07.1997, p. 0025</a>	02/06/1997	EC	Summary
Council position		<a href="#">10050/2/1997</a> <a href="#">OJ C 351 19.11.1997, p. 0001</a>	07/10/1997	CSL	Summary
Commission communication on Council's position		SEC(1997)1874	16/10/1997	EC	Summary
Committee recommendation tabled for plenary, 2nd reading		<a href="#">A4-0038/1998</a> <a href="#">OJ C 080 16.03.1998, p. 0004</a>	04/02/1998	EP	
Text adopted by Parliament, 2nd reading		T4-0074/1998 <a href="#">OJ C 080 16.03.1998, p. 0082-0092</a>	18/02/1998	EP	Summary
Commission opinion on Parliament's position at 2nd reading		COM(1998)0241	06/05/1998	EC	Summary
Joint text approved by Conciliation Committee co-chairs		<a href="#">3620/1998</a>	11/08/1998	CSL/EP	
Report tabled for plenary by Parliament delegation to Conciliation Committee, 3rd reading		<a href="#">A4-0313/1998</a> <a href="#">OJ C 313 12.10.1998, p. 0009</a>	10/09/1998	EP	
Text adopted by Parliament, 3rd reading		T4-0465/1998 <a href="#">OJ C 313 12.10.1998, p. 0023-0031</a>	15/09/1998	EP	Summary
Follow-up document		<a href="#">COM(2004)0310</a>	27/04/2004	EC	Summary

Follow-up document		<a href="#">COM(2005)0069</a>	02/03/2005	EC	Summary
Follow-up document		<a href="#">COM(2006)0186</a>	28/04/2006	EC	Summary
Follow-up document		<a href="#">COM(2007)0617</a>	17/10/2007	EC	Summary
Follow-up document		<a href="#">COM(2008)0799</a>	01/12/2008	EC	Summary
Follow-up document		<a href="#">COM(2011)0113</a>	11/03/2011	EC	Summary
Follow-up document		<a href="#">COM(2011)0116</a>	11/03/2011	EC	Summary
Follow-up document		<a href="#">COM(2012)0127</a>	23/03/2012	EC	Summary
Follow-up document		<a href="#">COM(2012)0749</a>	13/12/2012	EC	Summary
Follow-up document		<a href="#">COM(2013)0456</a>	26/06/2013	EC	Summary
Follow-up document		<a href="#">COM(2013)0458</a>	26/06/2013	EC	Summary
Follow-up document		COM(2014)0127	10/03/2014	EC	Summary
Follow-up document		<a href="#">COM(2015)0070</a>	25/02/2015	EC	Summary
Follow-up document		<a href="#">COM(2017)0049</a>	01/02/2017	EC	Summary
Follow-up document		<a href="#">COM(2017)0284</a>	31/05/2017	EC	Summary
Follow-up document		SWD(2017)0178	31/05/2017	EC	
Follow-up document		SWD(2017)0179	31/05/2017	EC	
Follow-up document		<a href="#">COM(2018)0056</a>	06/02/2018	EC	
Follow-up document		<a href="#">COM(2019)0561</a>	31/10/2019	EC	Summary
Follow-up document		<a href="#">COM(2020)0742</a>	19/11/2020	EC	
Follow-up document		<a href="#">COM(2023)0655</a>	24/10/2023	EC	

#### Additional information

European Commission

[EUR-Lex](#)

#### Final act

[Directive 1998/70](#)

[OJ L 350 28.12.1998, p. 0058](#) Summary

Final legislative act with provisions for delegated acts

## Quality of petrol and diesel fuels

PREVIOUS COMMUNITY LEGISLATION: In order to reduce SO<sub>2</sub> emissions in Member States at source, the sulphur content of certain liquid fuels has been lowered gradually by a series of directives, the aim being to improve the quality of air by cutting its sulphur content. -Directive 75/716/EEC (OJ L 307, 27.11.1975, p. 22): The setting of sulphur content (except for power stations and sea-going vessels) in two stages: for type A gas oil (sensitive zones): 0.5% by weight as from 1 October 1976, 0.3% by weight as from 1 October 1980; for type B gas oil (non-sensitive zones): 0.8% by weight as from 1 October 1976, 0.5% by weight as from 1 October 1980; -Directive 87/219/EEC (OJ L 91, 3.4.1987, p. 19): Reduction of sulphur content (also in the case of power stations) to 0.3% by weight as from 1 January 1989 in all zones except for those in which special measures are required pursuant to Directive 80/779/EEC to protect the environment, monuments or human health (0.2% by weight); -Directive 93/12/EEC (OJ L 74, 27.3.1993, p. 81): uniform limit value not exceeding 0.2% by weight in the case of light gas oil (fuel oil, bunker fuel for sea-going vessels, petrol) and gasoil for diesel engines (diesel fuel). Derogation for Greece up to 30 September 1999, by which it may authorize marketing of gas oil for marine use with a sulphur content in excess of 0.2% by weight. A second reduction in the sulphur content of diesel fuel, to no more than 0.05% by weight as from 1 October 1996, is also laid down. This two-stage proposal gives the sectors of industry concerned sufficient time to make the necessary technical adjustments. -Directive 93/12/EEC, however, also stipulates

that the Commission must submit a further proposal prescribing a lower limit for sulphur content by 1 October 1999 and setting new limit values for the sulphur content of aviation kerosene. The Council was to decide on this matter by 31 July 1994 at the latest. PREVIOUS POSITION OF EP: As regards the adoption of directive 93/12/EEC relating to the sulphur content of certain liquid fuels, Parliament recommended a further reduction in the sulphur content of gas oil (OJ C 94, 13.4.1992, p. 209 and OJ C 337, 21.12.1992) and that the deadlines proposed by the Commission be brought forward. Parliament also recommended a ban on the marketing in the Member States of gas oils with a sulphur content exceeding 0.2% by weight. SITUATION IN THE MEMBER STATES: -Directive 87/219/EEC entered into force on 1 January 1989. At present, Belgium, Denmark, Germany, Luxembourg and the Netherlands lay down a limit value of 0.2% by weight as regards the sulphur content of gas oil, whilst the other seven Member States lay down a limit value of 0.3% by weight. -Directive 93/12/EEC: Only Luxembourg has notified implementing measures.

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## Quality of petrol and diesel fuels

OBJECTIVE: on the basis of the results of the Auto-Oil programme, on which the Commission, the European petroleum industry and the European automobile industry have been cooperating for three years, the proposal for a directive seeks to improve the quality of fuels (petrol and diesel) with a view to reducing emissions from automobiles. SUBSTANCE: the proposal for a European Parliament and Council directive provides for: - harmonized limit values, to be applied in the year 2000, for various parameters of lead-free petrol and diesel, such as benzene, aromatics or sulphur. As from that date, only those fuels which comply with the specifications laid down by the directive will be authorized for sale on the territory of the Member States; - the gradual elimination of leaded petrol between now and 1 January 2000 (a temporary derogation may be granted by the Commission for a three-year period to Member States which can show that they are facing serious socio-economic problems); - the possibility for the Member States, in certain areas particularly badly affected by atmospheric pollution, to insist on the marketing of special fuels, having first submitted to the Commission a request for a derogation justified with reference to air quality conditions and the likely impact of the proposed measures; - the possibility for the Commission to authorize higher limit values in a Member State in the event of a sudden change in the supply of crude oil, for a period not exceeding six months; - the development of a uniform system to monitor the quality of fuels distributed on the market, with the assistance of the European Committee for Standardization (CEN). As from 2002, the Member States will submit to the Commission a summary of the results and a description of their national monitoring programmes; - a review of the new fuel specifications in late 1998 at the latest, in the light of the Community air quality objectives and the economic viability of the measures. ?

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## Quality of petrol and diesel fuels

The committee adopted a report by Mr Noël MAMERE (Greenns, F) on the quality of petrol and diesel fuels, amending Council Directive 93/12/EEC. Calling for minimum environmental fuel specifications for petrol and diesel, the report said that Member States needed the right of differential taxation in order to promote the adoption of more advanced fuels. Low-quality diesel should no longer be sold after 1 January 2005. Special specifications were needed for the fuels (diesel, LPG and NGV) of fleets of buses, taxis and commercial vehicles, which are particularly responsible for urban pollution. ?

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## Quality of petrol and diesel fuels

The rapporteur criticised the conditions under which the air quality measurements had been taken. These really should have been taken in the most affected areas. He also regretted that the Auto/Oil study had fixed targets for 2010. In his opinion, more prescriptive standards needed to be set for 2000 and 2005. This would still give refiners the time to modernise their refineries and supply clean diesel. In this respect, he noted that there were already refineries using clean technology to produce clean diesel, even if this was for the United States of America and Japan and not for Europe. While confirming that a ban on leaded petrol was needed after the year 2000, Commissioner Papoutsis justified the derogation until 1 January 2002 at the latest. He added that the Commission could accept around ten of the amendments which particularly dealt with buses, taxis and commercial vehicles and also specific fuels (LPG, natural gas vehicle fuel and biofuels). On the other hand, he rejected the remaining amendments as they worked against the cost-effectiveness criterion, they specified measures shown not to be economically efficient or which were not scientifically proven or they were superfluous.

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## Quality of petrol and diesel fuels

In adopting the report by Mr Noël MAMERE (V, F), the European Parliament calls for tighter mandatory minimum specifications than those proposed by the European Commission for petrol and diesel. As regards the sulphur content of diesel, it proposes the coexistence, during an initial period, of two types of diesel, 'dirty' diesel containing 100 ppm of sulphur and 'clean' diesel containing 30 ppm, with the former being phased out after 2005. Parliament introduces a derogation enabling Member States facing serious economic difficulties in the period after 1 January 2000 to continue to authorize, until 1 January 2005 at the latest, the placing on the market on their territory of fuels which comply with other specifications. Separate specifications are called for in respect of fuels (diesel, LPG, CNG) used by buses, taxis and commercial vehicles, which are largely responsible for urban pollution. Parliament also calls for a Commission proposal clearing the way for the active use of tax incentives (adjusted excise duties) in order to facilitate the introduction of improved fuels. ?

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## Quality of petrol and diesel fuels

The Commission's amended proposal incorporated, in whole or in part, 11 of the 54 amendments adopted by the European Parliament at first reading. In the light of these amendments, the main changes made by the Commission concerned: - taking into account primary air pollutants such as carbon monoxide, benzenes and other toxic exhaust emissions and their secondary pollutants such as ozone; - the need to secure in the short term a reduction, in urban areas, of polluting vehicle emissions, particularly primary pollutants such as unburnt hydrocarbons and

carbon monoxide, secondary pollutants such as ozone, toxic emissions such as benzene and particle emissions; - the special position of captive vehicle fleets (buses, taxis, commercial vehicles) and the need to propose levels of specifications for their fuels); - the need to propose levels of specifications applicable to LPG, natural gas vehicle fuel and biofuels. However, the Commission was unable to accept the amendments seeking to: - alter the specifications proposed for fuels so as to take account of Arctic climates (however, the Commission indicated that it would study this issue to ensure that its proposal would not cause technical problems for vehicles used in such climates); - indicate that the standards in the Directive were minimum standards; - create a distinct fiscal framework (tax incentives) in the Directive; - render more stringent the specifications applicable to fuels from the year 2000 in order to attain acceptable standards of air quality in 2010; - provide for the possibility of a five-year deadline for the introduction of the fuel standards; - lay down mandatory standards applicable to fuels in 2005, without further scientific and technical analyses; - replace the principle of cost-effectiveness with that of cost-benefit. ?

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## Quality of petrol and diesel fuels

The common position differs from the Commission proposal on a number of points seeking on the one hand to achieve a further improvement in fuel quality and provide clear long term indications for the profession and on the other hand take better account of specific situations at national level. The principal amendments to the modification concern the following: - Definitions: diesel fuels intended for non-road mobile machinery and agricultural tractors are not covered by the directive; - Leaded petrol: the date of expiry of the derogation concerning the final ban was extended to 1 January 2005 instead of 2002. A further condition was added regarding the derogation, that is to say the favourable environmental impact criterion taking account for example of different climatic situations. In addition, Member States may authorize the marketing of small quantities of leaded petrol for collectors' vehicles. - Sulphur content of unleaded petrol: the Council had proposed a derogation until 1 January 2003, seeking to achieve a compromise regarding a sulphur content of 100 mg/kg for unleaded petrol; - Specific requirements for petrol and diesel from 1 January 2000: the Council has reduced benzene content from 2% to 1% and sulphur content from 200 mg/kg to 150 mg/kg. The aromatic compound content is reduced from 45% to 42%. The common position also introduces indicative environmental specifications applicable to fuel for the year 2005. These specifications concern the sulphur and aromatic compound content of petrol and the sulphur content of diesel. The Commission will table a proposal by 30 June 1999 at the latest confirming, amending or adding to these specifications. The common position also provides: - that the improvement in the quality of diesel fuel required from the year 2005 can be progressively introduced on the market; - that future Commission proposal would also include environmental specifications concerning substitute fuels such as pressurized natural gas, liquid petroleum gas and biofuels. It should also be noted that the advisory committee procedure has been replaced with a III B procedure. Finally, transitional measures have been laid down for Austria. ?

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## Quality of petrol and diesel fuels

The Commission notes that its proposals have been made slightly more stringent by the common position. While, at the same time, the basic structure of the text is very close to its initial proposal. The principle of cost effectiveness is maintained, together with the undertaking to base subsequent proposals on detailed scientific and technical assessments. The Commission also welcomes the fact that the common position has been unanimously supported by the Member States. ?

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## Quality of petrol and diesel fuels

A package of anti-pollution measures - the Auto-Oil Programme - designed to clean up road transport in Europe got the green light from the Committee - subject to a raft of amendments. A second-reading recommendation by Ms Heidi HAUTALA (Greens, Fin) is seeking to improve the quality of petrol and diesel fuels; The text conveys the committee's reaction to the Auto-Oil Programme, a collaborative venture between the Commission and the auto and oil industries which was launched four years ago when Parliament and the Council asked the Commission to devise a strategy to reduce road vehicle emissions with the aim of improving air quality. The proposals to improve fuel quality and toughen emission limits prescribe action in two stages: by 2000 and 2005. While it is generally agreed that the first stage should be mandatory, Council and Commission want the last stage to be simply indicative. Rejecting this view, however, the committee decided that there should be mandatory specifications for 2005. The Hautala recommendation, which the committee adopted unanimously, concerns the Auto-Oil Programme's key proposal since improved fuel quality will benefit all vehicles, whether new or old, immediately, whereas emission limits and improved engine technology. ?

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## Quality of petrol and diesel fuels

The rapporteur fought the corner for fuel quality. She particularly denounced the use of diesel which posed a threat to health and called for investment to be made in 'clean' technologies. Commissioner Papoutsis felt that it was premature to define compulsory standards now which would become applicable in 2005. Recalling that the European Union already had a framework for tax incentives to encourage the use of 'clean' cars, he could support the ban in the year 2000 on leaded petrol throughout the Community, provided that some Member States could benefit from an exemption to allow them time to adapt their many vehicles still using leaded petrol. Finally, he indicated the Commission's acceptance of the following amendments: Nos 11, 13, 14, second part, 17, 23, third and fourth parts, and 24, first part. However, he rejected all the other amendments.

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## Quality of petrol and diesel fuels

Adopting the recommendation for second reading by Mrs Heidi Hautala (Green, D), Parliament reaffirmed the key amendments from the first reading. Parliament agrees with the Council that marketing of leaded petrol should be banned throughout the Union from 1 January 2000, unless a ban would result in severe socio-economic problems. In this case, the deadline could be delayed to 1 January 2005. Parliament considers, however, that leaded fuel marketed after 1 January 2000 should comply with all the other environmental specifications which will

enter into force on that date. In addition, unleaded petrol marketed from 1 January 2000 should meet stricter environmental specifications (lower levels than those set by the Council for olefines, aromatics, oxygen and sulphur). This deadline could be delayed to 1 January 2001 if a Member State's industries would encounter severe difficulties in making the necessary changes in their manufacturing facilities. From 1 January 2000, diesel fuel must also meet strict environmental specifications. This deadline could be delayed to 1 January 2003 in the event of serious socio-economic difficulties. It is planned to tighten up the obligatory specifications for petrol and diesel fuel by 1 January 2005. In addition, Member States may in specific areas impose stricter environmental specifications than those provided under the directive, if atmospheric pollution is a serious and recurrent problem. In addition, a better quality diesel fuel than that corresponding to the minimum specification should be available from the year 2000 and the Member States should be able to grant fiscal incentives to more advanced fuels. When the directive is revised in future, the Commission could provide particular specifications for fuel used by buses, taxis and utility vehicles and set levels for LPG, natural gas and biofuels. Parliament also calls for the Commission to be assisted by an advisory committee. ?

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## Quality of petrol and diesel fuels

Of the 36 amendments adopted by Parliament at second reading, the Commission has accepted three in their entirety, 4 partially and one in principle. The amendments accepted seek in particular to: - delete the reference to the date of application (1 January 2000) of specifications and for the marketing of fuels; - introduce the concept of common procedures for sampling and testing the Member States' fuel monitoring systems; - state that changes in fuel composition immediately achieve emission reduction from positive ignition engines (gasoline fuelled) in urban areas; - propose separate specifications for fuels used by captive fleets (buses, taxis, commercial vehicles, etc.) and in particular for liquid petroleum gas, natural gas and biofuels; - establish a committee of an advisory nature, requesting the Commission to take the utmost account of this Committee's opinion. ?

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## Quality of petrol and diesel fuels

A package of anti-pollution measures - informally known as the Auto/Oil Programme - which is intended to clean up road transport in Europe from the start of the next millennium got the green light from the joint Parliament/Council Conciliation Committee. Under the agreement Parliament achieved its major objective of making fuel quality standards and pollution emission limits mandatory for both 2000 and 2005 (Council had wanted to have only indicative arrangements for 2005). In exchange, it accepted the less stringent figures proposed by the Council for the specifications themselves (although these were a considerable improvement on the figures originally put forward by the Commission). Rejecting the Commission's original "cost-effective" approach as inadequate, in its negotiations with the Council Parliament also argued successfully that health and environmental benefits must be taken into account when assessing the cost of measures to improve air quality. The proposal for a directive (amending Council Directive 93/12/EEC) to improve the quality of petrol and diesel fuels in Europe. Parliament's rapporteur is Ms Heidi HAUTALA (Greens, Fin); under last night's agreement, Parliament obtained the phasing out, from 2000 onwards, of the most polluting types of petrol and diesel and the simultaneous phasing in of cleaner fuels to replace them. The Auto/Oil Programme is a collaborative venture between the Commission and the motor and oil industries which was launched four years ago when Parliament and the Council asked the Commission to devise a strategy to reduce road vehicle emissions with the aim of improving air quality through legislation. The programme is to continue but will now concentrate on achieving the mandatory standards agreed for 2005 and on how to adapt those standards after that date. ?

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## Quality of petrol and diesel fuels

Following the delegation meeting held on 17 June, Mr COLLINS, chairman of the Committee on the Environment, and the two rapporteurs attended a further dialogue meeting held the next day (18 June) in Strasbourg. On the basis of the stage reached in the work, and with the agreement of the President of Parliament and the delegation chairman, Mrs FONTAINE, the Conciliation Committee was convened for 29 June, the penultimate day of the British Presidency. The Committee concluded its proceedings after a meeting lasting 4 hours, reaching agreement on all the outstanding points. The key feature of the agreement is that the Council delegation agreed to make the limit values for 2005 compulsory in the two directives; in exchange, Parliament's delegation agreed to the figures which the Council proposed for the limit values in its common position (with the exception of Amendment 27 to the 'fuels' directive, accepted unchanged by the Council). As regards committeeology, the Council withdrew its proposal for a type-IIIb committee in favour of a type-IIIa committee, thereby enabling Parliament to maintain its opposition to the principle of type-IIIb regulatory committees. ?

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## Quality of petrol and diesel fuels

Adopting the reports by Mr Bernd LANGE (PSE, D) and Mrs Heidi HAUTALA (V, FIN), the European Parliament approved: - the joint proposal to reduce air pollution from motor vehicles (454 votes to 3 with 7 abstentions); - the joint proposal to reduce air pollution from motor vehicles in relation to light commercial vehicles (465 votes to 11 with 3 abstentions). - the joint proposal on the quality of petrol and diesel fuels (474 votes to 10 with 3 abstentions). Under the agreement, Parliament achieved its major objective of making fuel quality standards for diesel mandatory for 2000 and pollution emission limits mandatory for 2005 (Council had wanted to have only indicative arrangements for 2005). In exchange, Parliament accepted the less stringent figures proposed by the Council for the specifications themselves (although these were a considerable improvement on the figures originally put forward by the Commission). Parliament rejected the Commission's original "cost-effective" approach as limited and inadequate and the principle of taking account of benefits to health (reduction in respiratory, cardio-vascular and other diseases) and to the environment when assessing the cost of measures to improve air quality was included under the terms of the agreement with the Council. In accordance with the wishes of the European Parliament, the three directives provide for a regulatory committee which limits the powers of the Council in favour of the Commission. In addition, the powers of the committee will be limited so that the limit values approved may only be modified by means of the co-decision procedure. A) Quality of fuels: The agreement between the European Parliament and the Council will allow the air quality to be improved by adding oxygen to diesel fuel and significantly reducing the content of sulphur, benzene, olefins and aromatics. Following pressure exerted by Parliament: fuels which comply with the standards set for 2005 will progressively be introduced on the market from the year 2000. In addition, the agreement states that fiscal incentives may promote the

introduction of more advanced fuels. As soon as vehicles using the new fuels appear in one or two Member States, which will no doubt be soon, there will be the added force of market pressure for the fuels to go on general sale and be made available to motorists travelling in other Member States. Under the terms of the Directive, the marketing of leaded petrol will be banned on 1 January 2000, except where climatic conditions warrant it or severe socio-economic problems would result, in which case the deadline may be delayed to 1 January 2005. Similarly, subject to derogations valid until 1 January 2003, unleaded petrol and diesel fuel marketed after 1 January 2000 will need to meet stricter environmental specifications and stricter specifications will enter into force on 1 January 2005 (subject, however, to derogations which apply until 1 January 2007). Member States may benefit from these derogations if they cannot meet the required specifications. To do so they must submit a request to the Commission, which may only grant these derogations under strict conditions and only for limited periods. In addition, Member States may in specific areas impose stricter environmental specifications than those provided under the Directive if atmospheric pollution is a serious and recurrent problem. B) Limit values of emissions: In the case of passenger vehicles, Parliament emphasised the need to install on-board diagnostic (OBD) systems which can monitor the durability of anti-pollution equipment. It also required unrestricted transmission of data to repair workshops and spare part manufacturers on request. However, at the request of the Council, the durability test provided for (type V) will be maintained. Anti-pollution equipment must remain efficient for at least 80,000 km or five years from the year 2000 but, at Parliament's request, the 'kilometrage' parameter will be extended to 100,000 km from 2005 (despite the fact that the European Parliament would have preferred it to be extended to 120,000 km). Type-approval and the certificate of compliance will be refused to any vehicle which does not comply with the Directive. Petrol or diesel engines in service (as opposed to new engines) are also covered by the Directive. The agreement also includes Parliament's amendment on the establishment of a test procedure to check low ambient temperature emissions after a cold start. A voluntary agreement needs to be concluded with the car industry on reducing CO2 emissions. Parliament has called on the Commission to plan the introduction of compulsory legislation if negotiations fail. The Council shares Parliament's opinion, the objective of which is to reduce the average fuel consumption of passenger vehicles to 120g of CO2 per km. C) Other aspects of the compromise: - fiscal incentives can be used to encourage the more rapid commercialisation of vehicles fitted with advanced anti-pollution equipment; - encouragement of more rapid replacement of cars with old engines; - possibility for Member States to introduce measures encouraging the equipment of old motor vehicles with anti-pollution devices; - the Commission should also study the role of chemical additives to fuels in reducing emissions; - Parliament would like to see additional efforts made with a view to the commercialisation of vehicles that are more respectful of the environment; - approval of a Directive to combat emissions from light commercial vehicles. This text covers vehicles used for the distribution of goods in towns, where an improvement in air quality is most urgent. Numerous provisions in the 'passenger transport' directive could also be applied to delivery vans. However, as these vehicles are tuned differently, numerous parameters would need to be adjusted. D) Follow-up: the agreement provides for follow-up work on these standards in a different form in the future. The current Directives will be examined in the light of a proposal to be submitted by the Commission by the end of 1999. They will be examined periodically. However, given that the standards provided for 2005 will now be mandatory, the field covered by this proposal has been drastically reduced, in accordance with the wishes of the European Parliament. This follow-up work will apply to technical progress and the oil supply situation and will concentrate, among other things, on the period after 2005. This means that the Commission cannot make any proposals to alter the parameters which are mandatory for 2005. They can only be 'adapted' (by which Parliament understands 'improved'). The Commission may also propose specific parameters for fuels used by fleets of buses, taxis and commercial vehicles (which make a significant contribution to urban pollution) and parameters which apply to liquefied petroleum gas, natural gas and biofuels.?

## Quality of petrol and diesel fuels

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**OBJECTIVE:** to reduce polluting emissions from cars by means of the introduction of new environmental specifications relating to petrol and diesel fuels. **COMMUNITY MEASURE:** Directive 98/70/EC of the European Parliament and the Council relating to the quality of petrol and diesel fuels and amending Directive 93/12/EEC. **CONTENT:** the Directive is part of an overall strategy to reduce air pollution from road transport. It follows on from the undertaking in Directive 93/12/EC which provided for the subsequent adoption of target values resulting in a substantial reduction in motor vehicle emissions after the year 2000. The Directive lays down the environmental specifications applicable successively (from 1 January 2000 and from 1 January 2005) to fuels for vehicles with positive-ignition (petrol) engines and compression-ignition (diesel) engines. The marketing of leaded petrol will be prohibited after the year 2000. As far as unleaded petrol and diesel fuel are concerned, the Directive provides for the progressive improvement of their environmental quality. Environmental specifications will be applicable from the year 2000 and 2005 successively. The Council has fixed the lead content of petrol at 0.15 g/l maximum, the benzene content at 1%, the sulphur content at 150 mg/kg and aromatics at 42% (Annex I). By way of derogation to the general provisions of the Directive, the Member States may, in certain specific cases, continue to authorise the marketing of petrol or diesel fuels that do not comply with the Directive. Derogations are authorised for: - leaded petrol: until 1 January 2005 at the latest, on condition that the Member State submits a request to the European Commission by 31 August 1999 based on severe socio-economic problems or reasons to do with health or the environment, taking account, among other things, of the climatic situation in that Member State; - sulphur content in unleaded petrol and diesel fuels: until 1 January 2003 and to 1 January 2007, depending on the case, on condition that the Member States submit a request to the Commission by 31 August 1999 and 31 August 2003 respectively containing proof of severe industrial difficulties. The marketing of small amounts of leaded petrol after 1 January 2000 will be permitted for use in certain vintage vehicles. The Member States may impose more stringent specifications with a view to protecting the environment or the health of the population in a specifically environmentally sensitive area. To do so, they have to submit a reasoned request in advance to the Commission, which will then take a decision in the absence of a decision to the contrary by the Council. The Member States will monitor compliance with the environmental specifications of fuels using analytical methods defined in the Directive. The Commission will promote the development of a uniform European system for fuel quality monitoring. The Commission shall periodically and, for the first time by 31 December 1999, submit proposals for a revision of this Directive in the light of any new developments. The Directive provides for a regulatory committee which limits the powers of the Council in favour of the Commission. Limit values may only be modified by means of the co-decision procedure. **ENTRY INTO FORCE:** 28 December 1998. **DEADLINE FOR TRANSPOSITION:** 1 July 1999.?

## Quality of petrol and diesel fuels

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The European Commission has presented its first annual report on the quality of gasoline and diesel fuel used for road transport in the European Union (reporting years 2001 and 2002). The monitoring of fuel quality in 2001 and 2002 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met. Only very few violations were identified. Member States need to take action in order to ensure full compliance. Most of them are doing so already, and details of the action taken by Member States with regard to non-compliance are included, where provided, in the individual country chapters of the detailed reports for the years 2001 and 2002. The Commission will



continue urging Member States to ensure full compliance with the fuel quality requirements laid down in the Directive. For the abatement of air pollution and the introduction of new engine technology it is important to note that the share of 50 ppm fuels increased significantly from 2001 to 2002, while the shares of 10 ppm fuels remained nearly constant. Six Member States have defined national fuel grades for low (<50 ppm) or sulphur free (<10 ppm) fuels. Low sulphur fuels are available in many countries across the EU (for petrol in Austria, Germany, Ireland, Sweden and the United Kingdom; for diesel in Belgium, Denmark, Finland, Greece, Ireland, Netherlands and the United Kingdom). However, there are still five countries which did not introduce separately marketed low (<50 ppm) or sulphur free (<10 ppm) fuels at all (France, Greece, Italy, Portugal and Spain). Sulphur free petrol was only available in Austria, Germany and Ireland, and sulphur free diesel was only available in Sweden. The fuel quality monitoring systems established at national level differ considerably and require harmonisation in order to provide transparent and comparable results. The implementation of Directive 2003/17/EC is expected to improve the quality of reporting in this respect when Member States are required to report in accordance to the new European Standard, EN 14274, or with systems of equivalent confidence.?

## Quality of petrol and diesel fuels

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The European Commission has published its second annual report on the quality of petrol and diesel fuel used for road transport in the EU.

Article 8 of Directive 98/70/EC requires the Commission to publish annually a report on the actual fuel quality in the different Member States. In compliance with this request this report briefly summarises Member States' submissions on the quality of petrol and diesel, as well as the volumes sold, for the year 2003. All Member States but France submitted national reports for 2003.

Monitoring of fuel quality in 2003 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC were generally met. Very few violations were identified.

For petrol the main parameters of concern were research octane number (RON, 14+ samples), summer vapour pressure (DVPE, 10+ samples) and distillation - evaporation at 100°C (6+ samples).

For diesel the parameters of concern were sulphur content (5 samples), distillation 95% point (2 samples), cetane number (1 sample), density (1 sample) and PAH (1 sample). The Commission has not identified any negative repercussions on vehicle emissions or engine functioning but continues to urge Member States to take action in order to ensure full compliance.

For the abatement of air pollution and the introduction of new engine technology it is important to note that the share of less than 10 ppm and less than 50 ppm sulphur fuels increased significantly from 2001 to 2003. Overall a general trend towards lower sulphur content in petrol and diesel fuel can be identified.

## Quality of petrol and diesel fuels

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In compliance with Article 8 of Directive 98/70/EC the European Commission has prepared this Report which summarises the quality of petrol and diesel, as well as the volumes sold in the Community for the year 2004. For the reporting years 2001 and 2002 please refer to the previous summaries.

The monitoring of fuel quality in 2004 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC have, by and large, been met. Few violations have been identified.

For petrol the main area parameter of concern was again research octane number (RON, 34 + samples), summer vapour pressure (DVPE, 43 + samples) and distillation ? evaporation at 100 degree C (17 + samples). For diesel the parameters of concern related to sulphur content (22 samples), distillation 95% (24 samples) point, cetane number ( 7+ samples) and density (5+ samples).

Although several Member States reported non-compliant samples, far fewer samples exceeded the limit values (and the limits of tolerance for the test methods) compared to previous years. However, both the Czech Republic and Poland reported significant numbers of samples exceeding limit values. The Commission urges the Member States to take action in order to ensure full compliance.

For the abatement of air pollution and the introduction of new engine technology, it is important to note that the share of < 10 ppm and 50 ppm sulphur fuels increased significantly from 2001 to 2004 for the EU-15. For the new Member States (EU-10) the sulphur content is significantly higher leading to a slight increase in average sulphur between 2003 and 2004 for the whole of the EU. However, overall, figures show a general trend towards lower sulphur content in petrol and diesel fuel.

Lastly, the fuel quality monitoring systems established at national level differ considerably and require further uniformity in order to provide transparent and comparable results. The quality of reporting has improved since Member States have been obliged to report in accordance with the new European Standard EN14274 or with systems of equivalent confidence.

## Quality of petrol and diesel fuels

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This Communication is the Commission's fourth annual report on the quality of petrol and diesel as well as the volumes sold in the Community. It covers the year 2005 and has been prepared in accordance with Article 8 of Directive 98/70/EC.

In short, the report finds:

The monitoring of fuel quality in 2005 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC have, by and large, been met. For petrol the main parameters where limit values were exceeded concerns research octane number (RON), summer vapour pressure and distillation/evaporation at 100/150°C. For diesel, the main parameters where limit values were exceeded is sulphur content, distillation 95% point, cetane number and density. Although several Member States reported non-compliant samples, in general far fewer samples exceeded the limit values (and the limits of tolerance for the test methods) compared to previous years. However, several EU-10 Member States reported significant numbers of non-compliant samples. Belgium reported a higher proportion (~3.5%) of non-compliant samples than other Member States, but has improved compliance levels on previous years.

For the abatement of air pollution and the introduction of new engine technology it is important to note that the share of <10 ppm and <50 ppm sulphur fuels increased significantly between 2001 and 2005 in the EU-15. From 2005, it was mandatory for all fuel to meet the <50 ppm sulphur level, and for fuels of <10 ppm sulphur to be introduced in all Member States. Average sulphur content in 2005 is substantially below that reported in 2004.

The share of <10 and <50 ppm fuels has been increasing between 2001 and 2004. For 2005 the proportions have increased significantly, with the <50 ppm sulphur limit becoming mandatory, and the requirement for introduction of <10 ppm sulphur fuels across the EU. Zero sulphur fuels were available in the majority of Member States in 2005 (UK, Malta and Cyprus still need to introduce these fuels). However, according to current indications there are still cases where the grades do not appear to be labelled in certain Member States. Sulphur content for diesel proved a particular problem in 2005 (mainly in the EU-10), due to the new mandatory <50 ppm level from the start of 2005. Several of the EU-10 Member States had problems with sales of higher sulphur grades early in the year, and there appeared to be a higher number of samples contaminated with higher sulphur diesel or gas oil than in previous years.

The Commission is not aware of any negative repercussions on vehicle emissions or engine functioning related to these exceedances, but continues to urge Member States to take action in order to ensure full compliance. Most are doing so already, and details of action taken by Member States with regard to non-compliance are included, where provided, in the individual country chapters of the detailed report for 2005. The Commission will continue monitoring compliance with the fuel quality requirements laid down in the Directive and aims to improve its analysis of the data provided from reporting year 2006 onwards.

## Quality of petrol and diesel fuels

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The Commission reports on fuel quality in Member States pursuant to Article 8 of Directive 98/70/EC which sets minimum specifications on health and environmental grounds for fuels to be used for vehicles equipped with positive-ignition and compression-ignition engines. Fuel quality is environmentally important because it affects engine pollutant emissions and thus air quality as well as the ease and cost with which desired pollutant and greenhouse gas emission limits can be achieved by manufacturers.

Directive 2003/17/EC, amending Directive 98/70/EC, requires a further reduction of the sulphur content of petrol and diesel fuels. Non-respect of the fuel specification can lead to increased emissions and might damage engine and exhaust after-treatment systems, leading to higher air pollutant emissions. This 5<sup>th</sup> Commission Report summarises Member States' submissions on the quality of petrol and diesel, as well as the volumes sold, for the year 2006. All Member States except Malta submitted national reports for 2006.

The monitoring of fuel quality in 2006 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met and again few exceedances were identified.

For petrol the main parameters where exceedances were identified were research/motor octane number (RON/MON), summer vapour pressure and distillation/evaporation at 100/150°C. For diesel the main parameters where exceedances were identified were sulphur content, distillation 95% point, cetane number and density.

Although several Member States reported non-compliant samples, in general fewer samples exceeded the limit values (and the limits of tolerance for the test methods) compared to previous years. Several of the new EU10 Member States previously reported significant numbers of samples non-compliant with limit values, but the number of non-compliant samples they reported has reduced significantly in 2006. Belgium reported a higher proportion

(~3.5%) of non-compliant samples than other Member States in 2005 (though improved on previous years). However insufficient detail has been provided in 2006 to gauge actual non-compliance numbers. Sulphur content for diesel was a particular problem in previous years (mainly for EU-10), due to the new mandatory <50 ppm level from the start of 2005. However, this problem appears to have been resolved in 2006.

The Commission is not aware of any negative repercussions on vehicle emissions or engine functioning related to these exceedances, but continues to urge Member States to take action in order to ensure full compliance. The Commission will continue monitoring compliance with the fuel quality requirements laid down in the Directive.

The share of <10 and <50 ppm fuels have been increasing from 2001 to 2005. For 2006 the

proportions have increased significantly, with the <50 ppm sulphur limit becoming mandatory, and the requirement for introduction of <10 ppm sulphur fuels across the EU.

Zero sulphur fuels were available in the majority of Member States in 2006 (UK, Malta and Cyprus still need to introduce these fuels). However, from current indications there are still cases where the grades do not appear to be labelled in certain Member States.

This lack of labelling could hamper the introduction of vehicles using technology requiring sulphur-free fuels before full mandatory introduction in 2009 since without labelling consumers have no possibility to choose these fuels. This is particularly important for owners of vehicles utilising technology that requires sulphur-free fuel and significantly undermines the value of having fuels meeting this criterion available. As a result the full potential offered for reductions in CO<sub>2</sub> from the road transport sector would not be realised. Belgium, Czech Republic, Ireland, Latvia, Luxemburg, Slovakia and Slovenia are countries where action could be taken to ensure zero sulphur fuels are labelled in future years. Reporting on this labelling could help the automotive industry gain confidence in fuel availability so that vehicles taking full advantage of the zero sulphur content are more widely introduced leading to an environmental gain through lower pollutant and greenhouse gas emissions. In general very limited information has been provided by Member States on the geographical availability of zero sulphur fuels. Most Member States simply stating they were widely available, but provided no supplementary information to provide a measure of the geographical availability.

The fuel quality monitoring systems established at national level differ considerably and require further harmonisation in order to provide transparent and comparable results. The implementation of Directive 2003/17/EC has led to improved quality of reporting as it requires Member States to report on monitoring in accordance to the new European Standard, EN 14274, or with systems of equivalent confidence.

## Quality of petrol and diesel fuels

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In accordance with the requirements under Directive 98/70/EC, as amended by Directive 2003/17/EC, the Commission presents its sixth

annual report on the quality of petrol and diesel, as well as the volumes sold, in the EU for the year 2007.

Fuel quality is environmentally important because it affects engine pollutant emissions and thus air quality as well as the ease and cost with which pollutant and greenhouse gas emission limits can be achieved by manufacturers. The monitoring of fuel quality in 2007 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met and very few exceedances were identified. For petrol the main parameters where exceedances were identified were research/motor octane number, summer vapour pressure and distillation/evaporation at 100/150°C. For diesel the main parameters where exceedances were identified were sulphur content and distillation 95% point. As exceedances are relatively rare and most Member States take action to remove non-compliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances. However, the Commission urges Member States to continue to take action to ensure full compliance so that such problems do not arise in the future. The Commission will continue monitoring compliance with the fuel quality requirements laid down in the Directive and propose appropriate and proportionate action where necessary.

All petrol and diesel sales in the EU are now of low-sulphur or sulphur-free fuels. Of all petrol sold, 53% was low-sulphur and 47% sulphur-free. Of all diesel sold the equivalent split was 58% and 42%.

The share of sulphur-free and low-sulphur fuels increased from 2001 to 2005. Lower sulphur content helps the abatement of air pollution and the introduction of new engine technology. The average sulphur content of fuels has stabilised since 2005, when low-sulphur fuels became mandatory and sulphur-free fuels were introduced across the EU. However in a number of Member States they are still not always labelled properly at the pump. Without labelling, consumers have no ability to choose sulphur-free fuels and are less likely to utilise technology requiring these fuels. This significantly undermines the value of having fuels meeting this criterion available. Therefore, this lack of labelling could hamper the introduction of vehicles using technology requiring sulphur-free fuels. As a result the full potential offered for reductions in CO<sub>2</sub> from the road transport sector may not be realised.

Reporting on labelling could help the automotive industry gain confidence in fuel availability so that vehicles taking full advantage of the sulphur-free fuels are more widely introduced, leading to lower pollutant and greenhouse gas emissions. Very limited information has been provided by Member States on the geographical availability of sulphur-free fuels; most Member States simply stated that they were widely available, but provided no supplementary information to provide a measure of the geographical availability.

The fuel quality monitoring systems established at national level differ considerably and require further uniformity in order to provide transparent and comparable results. The implementation of Directive 2003/17/EC has led to improved quality of reporting as it requires Member States to report on monitoring in accordance to the new European Standard, EN 14274, or with systems of equivalent confidence. Where Member States do not report according to EN 14274 format, justification for this must be provided.

## Quality of petrol and diesel fuels

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In accordance with the requirements of Directive 98/70/EC the Commission presents its seventh annual report covering the year 2008 on the quality of petrol and diesel fuel used for road transport in the European Union. The report summarises Member States' submissions on the quality of petrol and diesel, as well as the volumes sold, for the year 2008. All Member States except Luxembourg, which had already failed to deliver a report in 2007, submitted national reports for 2008.

The quality of Member States' monitoring system design, level of compliance with limit values, and information provided in report submissions is still improving. The Commission will continue monitoring compliance with the requirements laid down in the Directive and propose appropriate and proportionate action where necessary.

Sales: all petrol and diesel sales in the EU are now of low-sulphur and sulphur-free fuels. Of all petrol sold, 55% was low-sulphur and 45% sulphur-free (<10 ppm). Of all diesel sold the equivalent split was 49% and 51%. The variety of RON and sulphur grade fuels available across the EU decreased in 2005 with the new mandatory limit of <50ppm sulphur. The majority of petrol sales in 2008 comprised RON 95 (84%, with 46% low sulphur and 38% sulphur-free).

Fuel quality monitoring in 2008 showed that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met and again few exceedances were identified. For petrol the main parameters where exceedances were identified were research/motor octane number (RON/MON), summer vapour pressure and distillation/evaporation at 100/150°C. There was also an increase in the number of samples exceeding sulphur content limit values. For diesel the main parameters where exceedances were identified were sulphur content, distillation 95% point and cetane number. As exceedances are relatively rare and most Member States take action to remove noncompliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances. However, the Commission urges Member States to continue to take action to ensure full compliance so that such problems do not arise in the future.

The Commission will continue monitoring compliance with the fuel quality requirements laid down in the Directive.

Low sulphur content helps the abatement of air pollution and the introduction of new engine technology. Average sulphur content fell in 2008 and is substantially below the level reported in 2004. This was the largest fall since 2005, when low-sulphur fuels were made mandatory and sulphur-free fuels were introduced across the EU. 2008 is the final year that low-sulphur fuels will comply with the Directive. Therefore the fall in average sulphur content may have been the result of Member States preparing for the 2009 limit of <10ppm.

The report notes, however in a number of Member States sulphur-free fuels are still not always labelled properly at the pump. This may have delayed the introduction of vehicles using technology requiring sulphur-free fuels before full mandatory introduction in 2009. Without labelling, consumers can not choose these fuels and are less likely to utilise technology requiring sulphur-free fuel. This undermines the value of having fuels meeting this criterion available. As a result, the full potential offered for reductions in CO<sub>2</sub> from the road transport sector may not have been realised. Also, limited information has been provided by Member States on the geographical availability of sulphur-free fuels; most Member States simply stated that they were widely available, but provided no supplementary information to provide a measure of the geographical availability. However, this should no longer be an issue in 2009 when sulphur-free fuels will become mandatory.

The fuel quality monitoring systems established at national level differ considerably and require further uniformity in order to provide transparent and comparable results. The implementation of Directive 2003/17/EC has led to improved quality of reporting as it requires Member States to report on monitoring in accordance to the new European Standard, EN 14274, or with systems of equivalent confidence.

Where Member States do not report according to EN 14274 format, justification for this must be provided.

## Quality of petrol and diesel fuels

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In accordance with the requirements of Directive 98/70/EC the Commission presents its eighth annual report covering the year 2009 on the quality of petrol and diesel fuel used for road transport in the European Union. The report summarises Member States' submissions on the quality of petrol and diesel, as well as the volumes sold, for the year 2009. All Member States except Luxembourg, which had failed to deliver a report in the previous two years, submitted a full report for 2009. Luxembourg has provided fuel sales data, but carried out no sampling in 2009, meaning that its report is incomplete. In 2010 it has been reported that Luxembourg has started to sample.

The timeliness of the submission of reports has improved considerably in 2009. Fourteen Member States submitted their 2009 report before the annual deadline, of the remaining thirteen reports submitted, all except two were received less than one month after the reporting deadline.

Fuel quality monitoring in 2009 showed that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met and again few exceedances were identified. For petrol the main parameters where exceedances were identified were research/motor octane number (RON/MON), summer vapour pressure, distillation/evaporation at 100/150°C<sup>4</sup> and the maximum sulphur content. For diesel the main parameters where exceedances were identified were sulphur content, distillation 95% point and cetane number.

As exceedances are relatively rare and most Member States take action to remove non-compliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances. However, the Commission urges Member States to continue to take action to ensure full compliance so that such problems do not arise in the future. The Commission will continue monitoring compliance with the fuel quality requirements laid down in the Directive.

Low sulphur content helps reduce air pollution and the introduction of new engine technology. Under Directive 2003/17/EC, a new specification for automotive road fuels came into force on 1 January 2009 that limits the sulphur content of all automotive road fuels in the EU to 10 ppm (sulphur-free fuels). This represents the first year of reporting since this conversion and, accordingly, the average sulphur content fell in 2009 and is substantially below the level reported in 2004.

National monitoring systems: Commission Decision 2002/159/EC and European Standard EN 14274, have enhanced the usefulness of the information and facilitated analysis of EU fuel trends. The quality of the monitoring systems design, compliance with limit values and information provided in report submissions is continuing to improve. However, there are still a few key areas for improvement, summarised as follows:

- Member States are encouraged to continue to improve the timeliness of the submissions;
- several Member States do not fulfil sufficient sampling numbers for all fuels or are not sampling in sufficient numbers at refuelling stations (as opposed to depot/refinery) to meet with the requirements of European Standard EN 14274. Any such samples should be additional to the minimum number of samples required at refuelling stations;
- where Member States use their own national systems, they should be fully described in order to verify whether they comply with the European Standard. This description should show the monitoring systems equivalency in statistical confidence to EN 14274.

Lastly, Member State reports are assessed according to the appropriate seasonal periods to ensure comparability for EU-wide reporting. Where a Member State has chosen to utilise a different seasonal period to that specified, appropriate information should be provided in the national annex within the Fuel Quality Monitoring report.

## Quality of petrol and diesel fuels

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In accordance with the requirements of Directive 98/70/EC, the Commission presents its 9th annual report on the Quality of petrol and diesel fuel used for road transport in the European Union, covering the year 2010.

The monitoring of fuel quality in 2010 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met and very few exceedances were identified.

The report adds that low sulphur content helps reduce air pollution and the introduction of new engine technology. A new specification for automotive road fuels came into force on 1 January 2009, which limits the sulphur content of all automotive road fuels in the EU to 10 ppm (sulphur-free fuels). This represents the second year of reporting since this requirement came into force and the average sulphur continued below this level in 2010,

Petrol: the parameters found to be out of specification most frequently within the Union in 2010 were:

- summer vapour pressure was exceeded 215 times in 2010 or 1.85% of the total samples. However it is becoming apparent that many exceedances are the result of transitional fuels when suppliers swap the summer specification fuel for winter specification fuels and vice versa;
- RON/ MON samples found to be out of specification in 2010 totalled 59 samples or 0.5 % of the total samples;
- the sulphur content maximum of 10ppm was exceeded in 34 samples or 0.29 % of the total samples, with the highest sample value being 45.9 mg/kg. However the average sulphur content for all Member States remains below the mandatory limit of 10ppm at 5.8 ppm.

Diesel: for diesel the main parameters where exceedances were identified were sulphur content, distillation 95% point and cetane number.

- in spite of the average EU sulphur content remaining below the mandatory 10ppm limit - at 6.5 ppm, - there were 169 samples or 1.26 % of the total samples found to be non-compliant;
- a total of 38 samples exceeded distillation limits in 2010;

in total, 4 samples tested for cetane number were found to be out of specification.

As exceedances are relatively rare and most Member States take action to remove non-compliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances. However, the Commission urges Member States to continue to take action to ensure full compliance so that such problems do not arise in the future and to ensure that reports are submitted to the Commission within the requested deadlines.

The progressive adoption of standard EN 14274 by Member States is leading to greater consistency in the data available for assessment of the various fuel quality parameters and Member States have been making efforts to improve their understanding of reporting requirements.

However, the report encourages Member States to continue to improve the timeliness of the submissions. It adds that several Member States do not complete sufficient sampling for all fuels or are not sampling sufficiently at service stations (as opposed to depot/refinery) to meet the requirements of EN 14274. Where Member States use their own national monitoring systems, such systems should be fully described in order to be able to verify whether they comply with the European Standard.

## Quality of petrol and diesel fuels

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In accordance with the requirements of Directive 98/70/EC, the Commission presents its annual report on the quality of petrol and diesel fuel used for road transport in the European Union, covering the year 2011.

The monitoring of fuel quality in 2011 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met and very few exceedances were identified.

**Petrol reporting:** in 2011, most Member States provided full information about petrol sample compliance. In order to determine compliance, it is necessary to know which test method has been used to test for some parameters (because reproducibility and tolerance levels differ according to test method). Provision has been made for Member States to give this information within the reporting template although this is not a mandatory part of the reporting it is vital to determine compliance levels.

The parameters found to be out of specification most frequently within the EU in 2011 were:

- Summer Vapour Pressure was exceeded 106 times in 2011. However, it is becoming apparent that many exceedances are the result of transitional periods, when suppliers swap the summer specification fuel for winter specification fuel and vice versa.
- RON/MON samples found to be out of specification in 2011 totalled 38 samples.

Some Member States did not provide full details of samples found to be out of compliance with tolerance limits.

**Diesel reporting:** in 2011, some Member States did not provide full details of samples found to be out of compliance with tolerance limits. Of the 6 parameters required to be tested for diesel in 2011, parameters found to be out of specification were:

- the sulphur content maximum of 10ppm was exceeded by a total of 126 samples. However the average sulphur content for all Member States remains below the mandatory limit of 10ppm at 5.8 ppm.
- in total, 19 samples tested for distillation limits were found to be out of specification.

The revision of standard EN 14274 will provide further clarification to the Member States, which will lead to greater consistency in the data available for assessment of the various fuel quality parameters.

There is also a recognized will by the Member States to make an effort to improve their understanding of reporting requirements and of their fuel quality monitoring systems (FQMS).

As exceedances are relatively rare and most Member States take action to remove non-compliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances. However, the Commission urges Member States to continue to take action to ensure full compliance so that such problems do not arise in the future.

## Quality of petrol and diesel fuels

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Article 8a of Directive 98/70/EC requires the Commission to report its conclusions on the development of a test methodology to assess the risks for health and the environment from the use of metallic additives in fuels to the European Parliament and the Council.

Metallic fuel additives (MFA) are substances intentionally added to fuel (petrol, diesel and biodiesel) to improve its performance. These additives eventually enter the environment since their metallic portion is not degraded during any stage of their production or use. Thus, they can become a source of exposure for humans and/or biota throughout their life cycle. This creates a possible impact on health and the environment. This potential impact justifies their regulation through the adoption of limit values based on the precautionary principle.

- **Assessment of potential risks for health and environment of MFA:** to assess the potential impacts of MFA on the compounds produced during vehicle fuel combustion and/or remaining in the exhaust it is necessary to compare the emissions produced with and without using MFA. In this context, the Commission's Joint Research Centre has developed a test protocol for monitoring and calculating the emission data with regard to MFA, focusing on the use stage of their life-cycle. In this protocol, measurements are made at the tailpipe and the emissions are compared for fuel containing MFA with the same fuel without the MFA.

There is a potential impact on health and the environment by the use of MFA in fuel. This impact is affected by several factors: the type of MFA; the level of concentration; the level and duration of the exposure; and the pathway for this exposure. The metallic components of MFA could be a hazard for both humans and the environment due to their intrinsic reactivity, toxicity and their possible capacity to accumulate within living organisms.

In the past, health concerns associated with MFA (such as lead) have led to the phasing out of their use. It is apparent that MFA have metallic components which could in themselves be a hazard for both humans and the environment due to their intrinsic reactivity, toxicity and their possible capacity to accumulate within living organisms.

New substances are being developed for which the available health and environmental data are limited and little is known about their eco-toxicity and toxicity. Determination of their toxicity and eco-toxicity is a prerequisite to assessing their actual impacts on the environment and health. Hence there is a need to develop a test methodology.

- Test methodology: the purpose of the methodology is to assess the risks for health and the environment from the use of MFA. It is intended to be sufficiently generic so as to apply to any MFA. Prior to the assessment, a holistic approach for evaluating the environmental implications of various choices among chemicals, products and technologies may be needed to prioritise efforts and to provide input to risk managers to enable better targeted decisions. The report provides a description of the methodology: characteristics of emissions during the life-cycle, hazard assessment, exposure assessment, risk characterisation, risk management, as well as its application. This methodology has been developed to be employed by any party interested in the establishment or revision of limit values for MFA in the Directive. The Commission will monitor its application and take all appropriate initiatives.

## Quality of petrol and diesel fuels

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This report presented by the Commission represents a consolidation of the eleventh year of Member States submissions under Directive 98/70/EC, summarising the quality of petrol and diesel used for road transport in the EU for 2012.

The Directive also stipulates that Member States are required to report, using a reporting template, summaries of the quality of fuels sold in their territories. All Member States receive a reporting template in order to include all pertinent details to enable a European wide analysis and comparison of the results of the fuel quality monitoring undertaken in Member States. The report notes that there is a clear improvement on the submissions of reports received within the deadline compared with 2009 and 2010, but a slight decline regarding 2011, when 21 Members States reported on time.

The main findings of this report are as follows:

Fuel sales in the Europe: fuel sales in 2012 were heavily weighted toward diesel with 242 829 million litres of diesel fuel sold compared to 109 328 million litres of petrol fuel sales.

Since 2004 petrol sales have continued to decline and 2012 saw another year when petrol sales were less than in the previous year. Diesel also declined for the third year in a row.

Total fuel sales in 2012 were less than sales in 2011 seeing a decrease in both petrol (reduction of 7 565 million litres) and diesel (reduction of 2 398 million litres) sales resulting in an overall total decrease of 9 963 million litres of automotive road fuels sold.

Fuel availability 2012: one of the main facts of 2012 is that RON 91 has almost disappeared from the market, now only being sold in four countries, with Denmark alone having any significant presence. E10 is only sold in three Member States: France, Finland and Germany.

Some general points can be noted as regards the quality and the types of fuel sold by the Member States:

- diesel dominates the market in all but two Member States (Greece and Cyprus);
- Belgium, on the other hand, demonstrates the heaviest dependence on diesel fuel (83.2% share of the market);
- the greatest volume of fuel sales in 2012 took place in Germany, with 18.5% of total EU fuel sales;
- UK fuel sales totalled 12.4% of all fuel sales with a ratio of 41.3% / 58.7% for petrol/diesel;
- in most countries the tax rate for diesel is lower than for petrol (sometimes significantly).

Fuel monitoring: the report notes that in 2012, all Member States have complied with the fuel specifications that require road fuels to contain less than 10 ppm sulphur content. In addition, Member States have begun to report fuels with added ethanol, which is a reporting requirement from 1 January 2011.

The monitoring of fuel quality in 2012 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met and very few deviations from the relevant provisions were identified. Even if there is an improvement in the way Member States meet their reporting and monitoring obligations and in their fuel quality monitoring systems, in some cases they are still not attaining the expected level sampling.

As cases of non-compliance are relatively rare and Member States generally take action to remove non-compliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances. The Commission urges Member States to continue to take action to ensure full compliance so that such problems do not arise in the future.

## Quality of petrol and diesel fuels

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This report represents a consolidation of the twelfth year of Member States submissions under Directive 98/70/EC, summarising the quality of petrol and diesel used for road transport in the EU for 2013.

Fuel sales in the Europe: fuel sales in the EU in 2013 continue to be heavily weighted towards diesel with 243,516 million litres of diesel sold compared to 106,082 million litres of petrol sold. There is a continued reduction in consumption with 2013 being the fourth year in a row that saw a fall in sales. For petrol there is also a reduction in consumption in 2013; in fact petrol sales have continued to decline since 2004

Fuel availability 2013: in terms of fuel grades, RON 91 has almost disappeared from the market, and is only now being sold in four countries. Denmark is the only country where this fuel has any significant presence. The sale of E10 continues to be limited to only three Member States: France, Finland and Germany.

Some general points are noted:

diesel dominates the market in all but two of the 28 Member States with petrol fuels representing 57.8% share of Greek fuel sales and 60.5% of Cypriot fuel sales;

Belgium, on the other hand, has the heaviest dependence on diesel fuel with an 82.8% diesel share of the market. Above 80% of diesel share

can also be found in Lithuania (82.7%), Luxembourg (82.1%) and France (81.2%).

The greatest volume of fuel sales in 2013 took place in Germany, with 19.1% total EU fuel sales. The next biggest market was France with a 14.3% share of EU petrol and diesel fuel sales. UK fuel sales totalled 12.9% of all fuel sales in the EU.

In most countries the tax rate for diesel is lower than for petrol (sometimes significantly), and this coupled with the higher efficiency of diesel vehicles (vs. petrol equivalents) and improvements to diesel cars has been a key driver in the shift to increasing diesel use in the EU.

RON 95 is by far the most popular type of petrol fuel in most Member States, followed by 95<RON.

Fuel monitoring: the monitoring of fuel quality in 2013 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met with very few deviations from the relevant provisions being identified.

The report recalls, however, that Member States must establish a Fuel Quality Monitoring Systems (FQMS) in accordance with the requirements of the relevant European standard and if, an alternative fuel quality monitoring system (a national system) is used, it should ensure results of equivalent confidence. As noted in the annual report for 2012 it would appear that some Member States were not in full compliance with these requirements. The main issues of divergence regarded the number of samples, location of the sampling and the measurement of all necessary parameters to ensure appropriated fuel quality. The continuing divergence of some of these issues may be seen in this report.

The Commission launched and closed 20 EU Pilots during 2014, the main issues addressed being sampling procedures, the number of samples, the confidence level of national systems and incorrect parameters being measured. The Commission was satisfied with the replies it received from the Member States. However as this exercise was conducted during 2014, the 2013 report does not reflect the improvement. The Commission expects to see the full result of these improvements in the 2014 report.

Non-compliance: in general, of the 10,095 samples tested for petrol in 2013, 248 were found to be out of specification with tolerance limits for one or more parameter, which represents a non-compliance rate of 2.5%. Of the 14,764 samples tested for the six mandatory parameters for diesel in 2013, 161 were found to be non-compliant with the specified limits, representing 1.1% of all samples reported. As cases of non-compliance are relatively rare and Member States generally take action to remove non-compliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances.

The Commission urges Member States to continue to take action to ensure full compliance with the requirements of the Fuel Quality Directive.

## Quality of petrol and diesel fuels

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In accordance with Directive 98/70/EC, the Commission has presented a report on the quality of petrol and diesel fuels used for road transport in the Union for the reference years 2014 and 2015.

The fuel quality monitoring data provided for the years in question make it possible to draw the following conclusions:

- the number of infringements of the specifications for gasoline and diesel fuels under the Fuel Quality Directive is very limited;
- all Member States apply the specifications for fuels according to which road fuels must contain less than 10 ppm of sulphur;
- Member States met their reporting and monitoring obligations better than in the past by improving their fuel quality monitoring systems and which enabled more comprehensive and reliable fuel sampling;
- by 2014, all Member States have provided the required minimum information on the compliance of fuels. The Commission requested further information from the Member States which had not provided the necessary data by 2015;
- non-compliance of fuel put on the market in both years is reported to be rare. When this happens Member States generally indicate taking action to remove non-compliant fuel from sale.
- there is no evidence of any negative repercussions on vehicle emissions or engine functioning due to these instances of non-compliance.

## Quality of petrol and diesel fuels

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The Commission submitted a report in accordance with Article 9 of Directive 98/70/EC on the quality of petrol and diesel fuels.

On the basis of the assessment of certain parts of the Directive as part of its Regulatory Fitness and Performance Programme (REFIT), the Commission concluded that the Fuel Quality Directive provides EU added value in improving and maintaining the quality of transport fuels. It is found to be generally fit for purpose and, based on the evidence available, it is considered to achieve its aims in an effective and broadly efficient manner.

The available evidence showed that a change in the Directive is not justified at the present time.

The quality of fuels and related greenhouse gas issues: the Directive also includes an obligation on fuel suppliers to reduce the greenhouse gas intensity of the fuel mix they supply by 6% in 2020 compared to 2010.

Under [Council Directive \(EU\) 2015/652](#), to be transposed by 21 April 2017 at the latest, Member States are required to monitor and report in detail the emission intensity of Greenhouse gases (GHGs). The first reports are due in 2018. Member States have already reported net savings in greenhouse gas emissions resulting from the use of renewable energy in transport of around 35 Mt CO<sub>2</sub> equivalent in 2014.

The Commission proposed not extending the GHG emission target under the Fuel Quality Directive beyond 2020. Instead, the Renewable Energy Directive should become the key instrument for driving the uptake of renewable and low-emission transport fuels up to 2030. It is therefore not considered appropriate to propose a changing the 6% target for 2020.

Biofuel blend limits: the 6% reduction target for GHG emissions from fuels provides an incentive for using more low carbon fuels, such as biofuels, in the transport sector. The Commission commissioned a study on the feasibility and the economic and environmental impacts of a hypothetical increase in the current blending levels for biofuels.

The scenarios contemplated suggest that there will be no significant adverse effect on vehicle emissions or on refineries.

Moreover, the most recent monitoring report on EU fuel quality, for 2014 and 2015, showed overall compliance with the specifications for petrol and diesel in the Fuel Quality Directive, with very few deviations from the relevant provisions.

Consequently, the Commission does not consider it appropriate to change the specifications for general market fuels with regard to maximum EU bio-blend levels.

Linkages with CO<sub>2</sub> emission standards: the report suggested it may be possible to enhance engine design for use with gasoline with an increased research octane number (RON) to allow for higher compression ratios leading to a reduction in fuel consumption and CO<sub>2</sub> emissions.

As the current fuel specifications already permit the marketing of gasoline with enhanced RON, at present there does not seem to be a case for amending them in this regard.

Fuel quality and environmental issues: one of the aims of the Fuel Quality Directive is to reduce atmospheric pollution caused by vehicles. Over the period 1995-2013 transport emissions of SO<sub>x</sub> declined by -98%, emissions of lead declined by -95%, emissions of NO<sub>x</sub> declined by -51%, emissions of PM<sub>10</sub> declined by -42%, and emissions of PAH declined by -62%.

Environmental specifications for fuels for non-road mobile machinery: the Commission has analysed the possibility of extending the requirements for diesel fuels to non-road mobile machinery fuel. The analysis concluded that such an extension is unlikely to have significant impact for most Member States.

Fuel additives: European standards for fuel quality (EN228 for petrol and EN590 for automotive diesel) allow the use of fuel additives to improve performance quality. The Commission considers that the current practice of voluntary standard-setting has led to an appropriate level of detergent use and related benefits. No further action is required in this regard.

Metallic additives: the legal requirements for fuel quality monitoring and measurement by Member States for metallic fuel additives are limited to lead and MMT. The Commission is not aware of the use of other metal fuel additives that would be sold through the fuel distribution network.

Components regulated under environmental legislation: from the information available the quantity of fuel components addressed under the Water Framework Directive cannot be stated. Consequently, there is at present no case for amending the fuel specifications in this regard.

Vapour pressure: this is fixed at 60 kPa for summer grade petrol to reduce non-methane volatile organic compound (NMVOC) emissions from road vehicles. According to a report prepared for the Commission, a further reduction in the maximum permitted vapour pressure would have an impact on the fuel industry, which would result in increased capital and operating costs.

In conclusion, the Commission will continue to monitor compliance with the environmental specifications for fuels laid down in the Fuel Quality Directive along with its impact on the protection of the environment and human health and on the internal market for transport fuels, vehicles and non-road mobile machinery.

It will also monitor the transposition of the provisions related to the greenhouse gas reduction target in the Fuel Quality Directive, due in April 2017.

## Quality of petrol and diesel fuels

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In accordance with Directive 98/70/EC, Member States are required to report on the quality of petrol and diesel fuel used for road transport in the European Union (reporting year 2017).

The Fuel Quality Directive obliges Member States to require fuel suppliers to reduce the life cycle GHG intensity of transport fuels, i.e. the life cycle GHG emissions per unit of energy from fuel and energy supplied, by a minimum of 6 % by 31 December 2020 compared with the fuel baseline standard for 2010 of 94.1 gCO<sub>2</sub>eq/MJ.

A total of 22 Member States as well as Iceland and Norway, provided corresponding data in the appropriate format. Estonia, Lithuania, Poland, Portugal, Romania and Spain submitted reports on the quality of the fuels placed on the market by fuel suppliers but not on their greenhouse gas intensity.

### Greenhouse gas emissions and distance to 2020 target

According to the data provided, the average GHG intensity of the fuels and energy supplied in the 22 reporting Member States in 2017 was 3.4 % lower than the 2010 baseline. This corresponds to a saving of 29 Mt carbon dioxide equivalent (CO<sub>2</sub>eq) in the year 2017. To ensure the delivery of the minimum 6 % reduction target by 2020, the Fuel Quality Directive specifies that Member States may require fuel suppliers to comply with an intermediate reduction target of 4 % for the year 2017.

### Fuel supply

The report noted that 22 Member States reported on all fossil fuels, biofuels and fuels of non-biological origin within the scope of the Fuel Quality Directive for road transport and non-road mobile machinery. Total fuel supply reported was 8 976 petajoules (PJ), of which 95.5 % was from fossil fuels, and 4.5 % was from biofuels. No renewable fuels of non-biological origin were reported in 2017. The fossil fuel supply in 2017 was dominated by diesel (55.8 %; 5 007 PJ), followed by petrol (27.6 %; 2 474 PJ) and gas oil (14.8 %; 1 324 PJ). Liquefied petroleum gas and compressed natural gas had a total share of 1.8 % (167 PJ).

### Biofuel consumption

The biofuels consumption in the reporting Member States was dominated by biodiesel (fatty acid methyl ester, FAME) (62.3 %; 267 PJ), followed by bioethanol (17.5 %; 75 PJ) and hydrotreated vegetable oil (HVO; 16.6 %; 71 PJ). Bio-ethyl tert-butyl ether (bio-ETBE) and biogas account for almost 3 % (12 PJ).

### Petrol and diesel and biocomponent content



Diesel continues to dominate fuel sales in the EU: 72.3 % (270 668 million litres) of fuel sold in 2017 was diesel and 27.7 % was petrol (103 766 million litres). Petrol sales in 2017 increased by 2.9 % compared with 2016, whereas diesel sales increased by 5.2 %.

Overall, fuel sales of petrol and diesel increased by 4.6% compared with 2016. This is the result of increased transport demand that outweighed efficiency gains in the vehicle fleet.

Diesel fuel consumption is significant in most EU Member States, representing more than 60 % of total fuel sales in 23 Member States (all except Cyprus, Greece, Malta and the Netherlands; Romania did not submit a complete report for 2017).

#### Compliance of sold fuels with quality limits

Overall, fuel quality in the EU is high. Bulgaria, Malta and Sweden verified and reported full compliance for both petrol and diesel fuels, while nine Member States verified and reported full compliance for petrol (Austria, Bulgaria, Greece, Hungary, Lithuania, Malta, Netherlands, Slovenia and Sweden) and seven for diesel (Bulgaria, Croatia, Cyprus, Finland, Latvia, Malta and Sweden). One Member State (Belgium) reported more than 100 non-compliances for petrol in 2017. Member States reported a total of 496 cases of non-compliance for petrol and 141 for diesel for 2017.