



Basic information	
<p><b>2007/0019(COD)</b></p> <p>COD - Ordinary legislative procedure (ex-codecision procedure) Directive</p>	Procedure completed
<p>Specification of petrol, diesel and gas-oil: mechanism to monitor and reduce greenhouse gas emissions from fuels. "Fuel Quality Directive"</p> <p>Amending Directive 98/70/EC <a href="#">1996/0163(COD)</a> Amending Directive 1999/32/EC <a href="#">1997/0105(SYN)</a> See also <a href="#">2014/2995(RSP)</a></p> <p><b>Subject</b></p> <p>3.20.04 Inland waterway transport 3.20.05 Road transport: passengers and freight 3.60.02 Oil industry, motor fuels 3.60.05 Alternative and renewable energies 3.70.02 Atmospheric pollution, motor vehicle pollution 3.70.20 Sustainable development</p>	

Key players					
European Parliament	<b>Committee responsible</b>		<b>Rapporteur</b>	<b>Appointed</b>	
	<a href="#">ENVI</a> Environment, Climate and Food Safety		CORBAY Dorette (PSE)	08/03/2007	
	<b>Committee for opinion</b>		<b>Rapporteur for opinion</b>	<b>Appointed</b>	
	<a href="#">ECON</a> Economic and Monetary Affairs		The committee decided not to give an opinion.		
	<a href="#">ITRE</a> Industry, Research and Energy				
	<a href="#">IMCO</a> Internal Market and Consumer Protection		The committee decided not to give an opinion.		
	<a href="#">TRAN</a> Transport and Tourism		The committee decided not to give an opinion.		
	<a href="#">AGRI</a> Agriculture and Rural Development		DAUL Joseph (PPE-DE)	08/05/2007	
	Council of the European Union	<b>Council configuration</b>		<b>Meetings</b>	<b>Date</b>
		Justice and Home Affairs (JHA)		2936	2009-04-06
Environment		2812	2007-06-28		
Environment		2842	2007-12-20		
Environment		2826	2007-10-30		

European Commission	<b>Commission DG</b>	<b>Commissioner</b>
	Environment	DIMAS Stavros

Key events			
Date	Event	Reference	Summary
31/01/2007	Legislative proposal published	COM(2007)0018 	Summary
13/03/2007	Committee referral announced in Parliament, 1st reading		
28/06/2007	Debate in Council		
30/10/2007	Debate in Council		Summary
27/11/2007	Vote in committee, 1st reading		Summary
06/12/2007	Committee report tabled for plenary, 1st reading	A6-0496/2007	
20/12/2007	Debate in Council		
16/12/2008	Debate in Parliament	CRE link	
17/12/2008	Decision by Parliament, 1st reading	T6-0613/2008	Summary
17/12/2008	Results of vote in Parliament		
06/04/2009	Act adopted by Council after Parliament's 1st reading		
22/04/2009	End of procedure in Parliament		
23/04/2009	Final act signed		
05/06/2009	Final act published in Official Journal		

Technical information	
<b>Procedure reference</b>	2007/0019(COD)
<b>Procedure type</b>	COD - Ordinary legislative procedure (ex-codecision procedure)
<b>Procedure subtype</b>	Legislation
<b>Legislative instrument</b>	Directive
	Amending Directive 98/70/EC 1996/0163(COD) Amending Directive 1999/32/EC 1997/0105(SYN) See also 2014/2995(RSP)
<b>Legal basis</b>	EC Treaty (after Amsterdam) EC 175-p1 EC Treaty (after Amsterdam) EC 095
<b>Stage reached in procedure</b>	Procedure completed
<b>Committee dossier</b>	ENVI/6/46035





Documentation gateway				
European Parliament				
Document type	Committee	Reference	Date	Summary
Committee draft report		PE392.119	19/07/2007	
Amendments tabled in committee		PE392.234	23/07/2007	

Committee opinion	<a href="#">AGRI</a>	<a href="#">PE390.722</a>	13/09/2007	
Amendments tabled in committee		<a href="#">PE394.127</a>	28/09/2007	
Amendments tabled in committee		<a href="#">PE396.443</a>	11/10/2007	
Committee opinion	<a href="#">ITRE</a>	<a href="#">PE390.741</a>	13/11/2007	
Committee report tabled for plenary, 1st reading/single reading		<a href="#">A6-0496/2007</a>	06/12/2007	
Text adopted by Parliament, 1st reading/single reading		<a href="#">T6-0613/2008</a>	17/12/2008	<a href="#">Summary</a>

#### Council of the EU

Document type	Reference	Date	Summary
Draft final act	<a href="#">03740/2008/LEX</a>	23/04/2009	

#### European Commission

Document type	Reference	Date	Summary
Document attached to the procedure	<a href="#">SEC(2007)0055</a> 	31/01/2007	
Document attached to the procedure	<a href="#">SEC(2007)0056</a> 	31/01/2007	
Legislative proposal	<a href="#">COM(2007)0018</a> 	31/01/2007	<a href="#">Summary</a>
Commission response to text adopted in plenary	<a href="#">SP(2009)402</a>	29/01/2009	
Follow-up document	<a href="#">COM(2010)0811</a> 	22/12/2010	<a href="#">Summary</a>

#### National parliaments

Document type	Parliament /Chamber	Reference	Date	Summary
Contribution	<a href="#">CZ_SENATE</a>	<a href="#">COM(2010)0811</a>	09/05/2011	

#### Other institutions and bodies

Institution/body	Document type	Reference	Date	Summary
ESC	Economic and Social Committee: opinion, report	<a href="#">CES1454/2007</a>	24/10/2007	

#### Additional information

Source	Document	Date
National parliaments	<a href="#">IPEX</a>	
European Commission	<a href="#">EUR-Lex</a>	

#### Final act

## Specification of petrol, diesel and gas-oil: mechanism to monitor and reduce greenhouse gas emissions from fuels. "Fuel Quality Directive"

2007/0019(COD) - 30/10/2007

Following a Commission presentation on the proposed Directive to reduce air pollutants and greenhouse gas emissions from fuel use in transport and increasing the use of biofuels, the Council held a major policy debate on the way forward.

The debate sought to enable Ministers to express their views on the key elements of the proposal. It focused, in particular, on:

- reducing greenhouse gas emissions from fuels and setting a target figure for the reduction of such emissions, and
- provisions relating to inserting such a target in the fuel-quality Directive.

Delegations largely supported the setting of a target for reducing the greenhouse gas emissions from fuels, subject to certain conditions. The conditions include, in particular, the need to establish sustainability criteria for biofuels, whilst at the same time recognising the need to set targets that are both realistic and viable.

## Specification of petrol, diesel and gas-oil: mechanism to monitor and reduce greenhouse gas emissions from fuels. "Fuel Quality Directive"

2007/0019(COD) - 23/04/2009 - Final act

PURPOSE: to introduce stricter transport fuel standards.

LEGISLATIVE ACT: Directive 2009/30/EC of the European Parliament and of the Council amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC.

CONTENT: following a first reading agreement with the European Parliament, the Council adopted this Directive which will improve air quality and reduce greenhouse gas emissions through environmental standards for fuel. It will also facilitate the more widespread blending of biofuels into petrol and diesel and, to avoid negative consequences, set ambitious sustainability criteria for biofuels.

It should be noted that this Directive forms part of the climate-energy legislative package containing measures aimed at fighting climate change and promoting renewable energy. (See also [COD/2008/0013](#), [COD/2008/0014](#), [COD/2008/0015](#) and [COD/2008/0016](#) and [COD/2007/0297](#)). The package is designed to achieve the EU's overall environmental target of a 20 % reduction in greenhouse gases and a 20 % share of renewable energy in the EU's total energy consumption by 2020.

**Scope:** the Directive sets, in respect of road vehicles, and non-road mobile machinery (including inland waterway vessels when not at sea), agricultural and forestry tractors, and recreational craft when not at sea:

- a) technical specifications on health and environmental grounds for fuels to be used with positive ignition and compression-ignition engines, taking account of the technical requirements of those engines; and
- b) a target for the reduction of life cycle greenhouse gas emissions.

The revised directive introduces for the first time a reduction target for greenhouse gas (GHG) emissions from fuels. Member States shall require suppliers to reduce as gradually as possible life cycle greenhouse gas emissions per unit of energy from fuel and energy supplied by **up to 10 % by 31 December 2020**. This reduction shall consist of:

- a) **6 % by 31 December 2020**. Member States may require suppliers, for this reduction, to comply with the following intermediate targets: 2 % by 31 December 2014 and 4 % by 31 December 2017;
- b) **an indicative additional target of 2 % by 31 December 2020**, to be achieved through certain methods, such as the use of any technology such as carbon capture and storage;
- c) **an indicative additional target of 2 % by 31 December 2020** to be achieved through the use of credits purchased through the Clean Development Mechanism of the Kyoto Protocol, under the conditions set out in Directive 2003/87/EC.

To enable these GHG emissions cuts, petrol may have a higher biofuel content. From 2011, petrol may contain up to 10% ethanol. In order to avoid damage to old cars, however, fuel with 5% ethanol (E5) will continue to be available until 2013, with the possibility for Member States of extending that period.

The Directive also lays down stringent environmental and social sustainability criteria for **biofuels**, which correspond to those in the Directive on the promotion of energy from renewable sources (see [COD/2008/0016](#).)

The Directive also imposes limits on the content of **sulphur and metallic additives** in engine fuel. In order to minimise emissions of volatile air pollutants, the maximum vapour pressure of fuel is also prescribed.

**Reporting:** the Commission shall submit by 31 December 2012, and every three years thereafter, a report to the European Parliament and the Council accompanied, where appropriate, by a proposal for amendments to this Directive. At the latest in 2014, the Commission shall submit a report to the European Parliament and the Council relating to the achievement of the greenhouse gas emission target for 2020. The Commission shall, if appropriate, accompany its report by a proposal for modification of the target.

The revised environmental quality standards as well as the sustainability criteria for biofuels will apply from 2011.

ENTRY INTO FORCE: 25/06/2009.

TRANSPOSITION: 31/12/2010.

## **Specification of petrol, diesel and gas-oil: mechanism to monitor and reduce greenhouse gas emissions from fuels. "Fuel Quality Directive"**

2007/0019(COD) - 31/01/2007 - Legislative proposal

PURPOSE: to introduce stricter transport fuel standards.

PROPOSED ACT: Directive of the European Parliament and of the Council.

BACKGROUND: Directive 98/70/EC establishes minimum specifications for petrol and diesel fuels for use in road and non-road mobile applications and was modified in 2003 in order to adjust sulphur limits for petrol and diesel. (See [COD/1996/0163](#) and [COD/2001/0170](#)). Both Directives apply to road vehicles, inland waterway barges and non-road mobile machinery such as locomotives, earth moving machinery and tractors. The main aim of the existing Directive is to protect human health; to protect the environment; and to establish an effective framework for the smooth functioning of the single market.

CONTENT: the purpose of this proposal is to amend Directive 98/70/EC in order to :

- i) take account of recent technological developments in fuel and engine technology;
- ii) incorporate the growing importance of biofuels into the Directive;
- iii) help meet air quality goals set out in the 2005 Thematic Strategy on air pollution; and
- iv) reduce greenhouse gas emissions.

The main changes proposed to the Directive are:

- To confirm 2009 as the date by which sulphur diesel will be allowed a maximum level of 10 ppm. This will result in lower pollutant emissions, primarily particulate matter. It will also facilitate the introduction of other pollutant control equipment.
- To reduce the poly aromatic hydrocarbon content in diesel to 8% from 2009 onwards. This might result in a reduction in particulate matter and poly aromatic hydrocarbon emissions.
- To reduce the maximum sulphur content in non-road gas-oil from 1000 ppm to 10 ppm for land based uses and from 1000 ppm to 300 ppm for inland waterways. The change for land based equipment will facilitate the introduction of more advanced engines and emission control equipment as well as lowering particulate matter emissions from existing equipment. The change for inland waterways will ensure that these engines operate at approved levels of pollutant emissions.
- To allow for a higher volume of biofuels to be used in petrol. A separate petrol blend will be established with higher permitted oxygenate content (including up to 10% ethanol). The vapour pressure limit is increased for petrol blended with ethanol.
- To clearly label all blends available on the market.
- To introduce controls on higher emissions of volatile organic compounds by collecting emissions in petrol stations for all fuels. (The Commission will bring forward a proposal for the mandatory introduction of "filling station vapour recovery" in 2007).
- To introduce mandatory monitoring of lifecycle greenhouse gases from 2009.
- To reduce emissions by 1% a year as from 2011. This will ensure that the fuel sector contributes to the Community's longer term greenhouse gas reduction goals as well as parallel initiatives to improve vehicle efficiency.
- To clarify exemptions to the vapour pressure limit for arctic or severe weather in order to avoid misinterpretation and increase legal certainty and to introduce a new review clause.

Lastly, the proposed amendments seek to bring Directive 98/70/EC up to date by eliminating redundant elements.

## **Specification of petrol, diesel and gas-oil: mechanism to monitor and reduce greenhouse gas emissions from fuels. "Fuel Quality Directive"**

2007/0019(COD) - 22/12/2010

The Commission presents a report on indirect land-use change related to biofuels and bioliquids. It recalls that Directive 2009/28/EC (the "Renewable Energy Directive") and Directive 2009/30/EC ("the Fuel Quality Directive") require the Commission to review the impact of indirect land-use change on greenhouse gas emissions and address ways to minimise that impact. Although land-use change can have a wide range of positive and negative

impacts (i.e. greenhouse gas emissions, biodiversity, social issues, etc), this report focuses on the consequences for the greenhouse gas emissions of biofuels, as required by the Directives.

The basic driver for indirect land-use change is the increased demand for agricultural crops in a situation where both suitable agricultural land availability and potential yield increases are limited. Some other key factors, such as achieving maximum profit from the production and complying with related legislation in place, are also likely to play a role in determining how the increased demand is to be realised.

The limited availability of low-carbon stock land in other parts of the world and the lack of more stringent protection of forests and carbon rich areas are factors that can contribute to damaging indirect land-use change. If conversion of carbon rich areas were to be limited or if more agriculture commodities were subject to sustainability criteria comparable to those laid down for biofuels, indirect land-use change could be limited. The reason for this is that the indirect land-use change effect of biofuels is the direct land-use change of another commodity.

**Estimating the greenhouse gas impact due to indirect land-use change:** this requires projecting impacts into the future, which is inherently uncertain, since future developments will not necessarily follow trends of the past. Moreover, the estimated land-use change can never be validated, as indirect land-use change is a phenomenon that is impossible to observe directly or measure. Therefore modelling is necessary to estimate indirect land-use change. The Commission describes in the report the analytical exercises and review of existing literature on the subject of indirect land-use change which it carried out during 2009 and 2010. It sets out the results of various consultation exercises with the wider community, and considers, in particular two reports involved separate modelling exercises. The first was carried out by IPTS, used the **AGLINK-COSIMO model**. This modelling assumed that the 10% renewable energy in transport target would be met using 7% conventional biofuels and 1.5% advanced biofuels that would be double counted. Although this model considered the impacts from the additional demand of conventional biofuels needed to meet the target, it did not consider any impacts resulting from additional demand for either advanced biofuels or bioliquids. The bioethanol-biodiesel shares considered were identical to the shares of petrol and diesel, i.e. approximately 35% and 65%, so that the share of biofuel in petrol and diesel were each respectively approximately 8.5%. The final conclusion of the modelling was that the additional demand resulting from the policy compared to a counterfactual 2020 scenario, equalled to 21 Mtoe, which would result in an increase of the total land area required for crops of 5.2 million hectares globally, one quarter of which is in the EU. This modelling did not provide a calculation of the greenhouse gas impacts of this land conversion.

The second modelling exercise was carried out using the **MIRAGE model** by the IFPRI. This modelling was based on the assumption that the 10% renewable energy in transport target would be met using 5.6% conventional biofuels with the remainder met in other ways, including a contribution of 1.5% from advanced biofuels, under current trade policy and assuming full trade liberalisation. Additional demand for advanced biofuels and bioliquids was not modelled. The conclusion of the modelling was that the additional demand resulting from the policy compared to a counterfactual 2020 scenario, equalled to 8 Mtoe, which would result in an increase of total land area required for crops of 0.8 and 1 million hectares globally, under the business as usual and free trade scenarios, respectively. Converted into greenhouse gas emissions this compares to 18 grams of CO<sub>2</sub>-eq. per MJ of energy (subsequently written as g/MJ). The bioethanol-biodiesel shares were set as 45% and 55% respectively. The overall land requirements increased to 2.8 million hectares globally in the scenario using 8.6% conventional biofuels, resulting into average emissions of 30g/MJ.

**The split between bioethanol and biodiesel turned out to be of great importance for the (indirect) land-use change impact** estimated using the IFPRI MIRAGE model. In a further IFPRI MIRAGE model run using the 5.6% scenario, and a 25% bioethanol/75% biodiesel split gave average (indirect) land-use change emissions of around 45 g/MJ.

The report notes that model results vary considerably across feedstocks and trade assumptions. It describes a **number of key factors not considered in the models**. Notwithstanding these conceptual limitations, it can be argued that the best available methodology to estimate (indirect) land-use change is still through economic models where decisions are made based on relative prices. However, within this framework of economic modelling, there will always be a range of unsolved issues, which influence the results considerably.

The report goes on to discuss [developments in international regulatory actions to address \(indirect\) land-use change](#). It also presents a summary of the consultation responses.

**Preliminary conclusions and next steps:** renewable energy, including biofuels, is an essential element of the EU's energy and climate strategy. In this context the stable and predictable investment climate created by the Renewable Energy Directive, which already contains strict sustainability criteria for biofuels and bioliquids, including on their greenhouse gas performance, needs to be preserved, as well as respect for the Fuel Quality Directive's ambitious reduction target in the greenhouse gas intensity of fuels used in transport.

As far as indirect land-use change is concerned, based on the work carried out to date, the Commission believes it is possible to draw a number of conclusions. It recognises that a number of deficiencies and uncertainties associated with the modelling, which is required to estimate the impacts, remain to be addressed, which could significantly impact on the results of the analytical work carried out to date. Therefore, the Commission will continue to conduct work in this area in order to ensure that policy decisions are based on the best available science and to meet its future reporting obligations on this matter.

However, the Commission acknowledges that indirect land-use change can have an impact on greenhouse gas emissions savings associated with biofuels, which could reduce their contribution to the policy goals, under certain circumstances in the absence of intervention. As such, the Commission considers that, **if action is required, indirect land-use change should be addressed under a precautionary approach.**

The Commission is finalising its impact assessment, which would focus on the assessment of the following policy options:

- take no action for the time being, while continuing to monitor;
- increase the minimum greenhouse gas saving threshold for biofuels;
- introduce additional sustainability requirements on certain categories of biofuels;
- attribute a quantity of greenhouse gas emissions to biofuels reflecting the estimated indirect land-use impact.

The Commission will present the Impact Assessment, if appropriate together with a legislative proposal for amending the Renewable Energy Directive and the Fuel Quality Directive as necessary no later than by July 2011.

# Specification of petrol, diesel and gas-oil: mechanism to monitor and reduce greenhouse gas emissions from fuels. "Fuel Quality Directive"

2007/0019(COD) - 17/12/2008 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 670 votes to 20, with 25 abstentions, a legislative resolution on the proposal for a Directive of the European Parliament and of the Council amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions from the use of road transport fuels and amending Council Directive 1999/32/EC, as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC.

The report had been tabled for consideration in plenary by Dorette **CORBEBY** (PES, NL), on behalf of the Committee on Environment, Public Health and Food Safety.

The amendments – adopted in the first reading of the codecision procedure – are the result of a compromise between Parliament and Council. The main elements of the compromise are as follows:

**Scope:** the Directive sets, in respect of road vehicles, and non road mobile machinery (including inland waterway vessels when not at sea), agricultural and forestry tractors, and recreational craft when not at sea:

- technical specifications on health and environmental grounds for fuels to be used with positive ignition and compression-ignition engines, taking account of the technical requirements of those engines;
- a target for the reduction of life cycle greenhouse gas emissions.

**Petrol:** suppliers must ensure the placing on the market of petrol with a **maximum oxygen content of 2.7%** and a **maximum ethanol content of 5%**. Consumers shall be provided with appropriate information concerning the biofuel content of petrol and, in particular, on the appropriate use of different blends of petrol.

Member States with low ambient summer temperatures may permit the placing on the market, during the summer period, of petrol with a maximum vapour pressure of 70 kPa. Member States where this derogation is not applied may permit the placing on the market, during the summer period, of petrol containing ethanol with a maximum vapour pressure of 60 kPa.

Where Member States wish to apply either of the derogations, they shall notify the Commission. The Commission shall assess the desirability and duration of the derogation, taking account of: (a) the avoidance of socioeconomic problems resulting from higher vapour pressure, including time-limited technical adaptation needs; (b) the environmental or health consequences of the higher vapour pressure and, in particular, the impact on compliance with Community legislation on air quality. If the Commission's assessment shows that the derogation will result in a lack of compliance with Community legislation on air quality or air pollution, including the relevant limit values and emissions ceilings, the application shall be rejected.

**Diesel fuel:** Member States may permit the placing on the market of diesel with a fatty acid methyl ester (FAME) content greater than 7%. They shall ensure the provision of appropriate information to consumers concerning the biofuel content of diesel fuel, in particular FAME.

No later than from 1 January 2008, gas oils intended for use by non-road mobile machinery (including inland waterway vessels), agricultural and forestry tractors and recreational craft may be marketed within a Member State's territory only if the sulphur content of those gas oils **does not exceed 1000 mg/kg**. From 1 January 2011, the maximum permissible sulphur content of those gas oils shall be **10 mg/kg**. Liquid fuels other than those gas oils may be used in inland waterway vessels and recreational craft only if the sulphur content of those liquid fuels does not exceed the maximum permissible content of those gas oils.

In order to accommodate minor contamination in the supply chain, Member States may, from 1 January 2011, permit gas oil intended for use by non-road mobile machinery (including inland waterway vessels), agricultural and forestry tractors and recreational craft to contain up to 20 mg/kg of sulphur at the point of final distribution to end users. Member States may also permit the continued placing on the market until 31 December 2011 of gas oil containing up to 1000 mg/kg sulphur for rail vehicles and agricultural and forestry tractors, provided that they can ensure that the proper functioning of emissions control systems will not be compromised.

Member States may, for the outermost regions, make specific provision for the introduction of diesel fuel and gas oils with a maximum sulphur content of 10 mg/kg. Lastly, for Member States with severe winter weather, the maximum distillation point of 65% at 250 °C for diesel fuels and gas oils may be replaced by a maximum distillation point of 10% (vol/vol) at 180 °C.

**Greenhouse gas emission reductions:** Member States shall require suppliers to reduce as gradually as possible life cycle greenhouse gas emissions per unit of energy from fuel and energy supplied by up to **10% by 31 December 2020**, compared with the fuel baseline standard referred to in the Directive. This reduction shall consist of:

- **6% by 31 December 2020.** Member States may require suppliers, for this reduction, to comply with the following intermediate targets: 2% by 31 December 2014 and 4% by 31 December 2017;
- **an indicative additional target of 2% by 31 December 2020**, to be achieved through one or both of the following methods: (i) the supply of energy for transport, supplied for use in any type of road vehicle, non-road mobile machinery (including inland waterway vessels), agricultural or forestry tractor or recreational craft; (ii) the use of any technology (including carbon capture and storage) capable of reducing life cycle greenhouse gas emissions per unit of energy from fuel or energy supplied;
- **an indicative additional target of 2% by 31 December 2020**, to be achieved through the use of credits purchased through the Clean Development Mechanism of the Kyoto Protocol, under the conditions set out in Directive 2003/87/EC.

With effect from 1 January 2011, suppliers shall report annually on the greenhouse gas intensity of fuels and energy supplied within each Member State to the authority designated by the Member State by providing, as a minimum, the following information: (a) the total volume of each type of fuel or energy supplied, indicating where purchased and its origin; (b) life cycle greenhouse gas emissions per unit of energy.

Measures necessary for the implementation of these provisions shall be adopted in accordance with the regulatory procedure with scrutiny (comitology).

**Sustainability criteria for biofuels:** the compromise ensures that only biofuels that fulfil the sustainability criteria will be used. With effect from 2017, the greenhouse gas emission saving from the use of biofuels shall be 50%. After 2017 it shall be 60% for biofuels produced in installations whose production has started from 2017 onwards.

Biofuels taken into account shall not be made from:

- raw material obtained from land with high biodiversity value: (i) primary forest and other wooded land, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed; (ii) areas designated for nature protection purposes or areas for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements; (iii) highly biodiverse natural or non-natural grassland;
- raw material obtained from land with high carbon stock: (i) wetlands; (ii) continuously forested areas; (iii) land spanning more than 1 hectare with trees higher than 5 metres and a canopy cover of between 10% and 30%;
- raw material obtained from land that was peatland in January 2008, unless it is proven that the cultivation and harvesting of this raw material does not involve drainage of previously undrained soil.

The Commission shall report every two years to the European Parliament and the Council on the impact on social sustainability in the Community and in third countries of increased demand for biofuel, and on the impact of EU biofuel policy on the availability of foodstuffs at affordable prices, in particular for people living in developing countries, and wider development issues.

**Verification of compliance with the sustainability criteria for biofuels:** where biofuels are to be taken into account for the purposes of greenhouse gas emission reductions, Member States shall require economic operators to show that the sustainability criteria have been fulfilled. For this purpose they shall require economic operators to use a mass balance system. The Commission shall report to the European Parliament and the Council in 2010 and 2012 on the operation of the mass balance verification method and on the potential to allow for other verification methods in relation to some or all types of raw material or biofuels.

The Community shall endeavour to conclude bilateral or multilateral agreements with third countries containing provisions on sustainability criteria that correspond to those of this directive.

At the latest in 2012, the Commission shall report on: (a) the effectiveness of the system in place for the provision of information on sustainability criteria; and (b) whether it is feasible and appropriate to introduce mandatory requirements in relation to air, soil or water protection, taking into account the latest scientific evidence and the Community's international obligations.

**Calculation of greenhouse gas emissions from biofuels:** Annex IV lays down the rules for the calculation of life cycle greenhouse gas emissions from biofuels: it focuses on: (a) typical and default values for biofuels if produced with no net carbon emissions from land use change; (b) estimated typical and default values for future biofuels that are not or in negligible quantities on the market in January 2008, if produced with no net carbon emissions from land use change; (c) the methodology for the calculation of emissions; (d) disaggregated default values for biofuels; (e) estimated disaggregated values for future biofuels that are not or in negligible quantities on the market in January 2008.

Regarding the default values and methodology laid down in Annex IV, particular consideration shall be paid to: (i) the method of accounting for wastes and residues; (ii) the method of accounting for co products; (iii) the method of accounting for co generation; (iv) the status given to agricultural crop residues as co-products.

The Commission shall, by 31 December 2010, submit a report to the European Parliament and to the Council reviewing the impact of indirect land use change on greenhouse gas emissions and addressing ways to minimise this impact. This report shall where appropriate be accompanied, in particular by a proposal, based on the best available scientific evidence, containing a concrete methodology for emissions from carbon stock changes caused by indirect land use changes. The proposal shall include the necessary safeguards to provide certainty for investment, undertaken before this methodology is applied. The European Parliament and the Council shall endeavour to decide in 2012 at the latest on any such proposals submitted by the Commission.

**Metallic additives in fuel:** the Commission shall conduct an assessment of the risks for health and the environment from the use of metallic additives in fuel and, for this purpose, develop a test methodology. It shall report its conclusions to the European Parliament and to the Council by 31 December 2012.

Pending the development of the test methodology, the presence of the metallic additive methylcyclopentadienyl manganese tricarbonyl (MMT) in fuel shall be limited to 6 mg Mn per litre from 1 January 2011. The limit shall be 2 mg from 1 January 2014. The limit for the MMT content of fuel shall be revised on the basis of the results of the assessment carried out using the test. It may be reduced to zero if the risk assessment justifies this.

A label containing the text "Contains metallic additives" shall be displayed, in a clearly visible position, at any point where a fuel with metallic additives is made available to consumers.

**Reporting:** the Commission shall submit by 31 December 2012, and every three years thereafter, a report to the European Parliament and the Council accompanied, where appropriate, by a proposal for amendments to this Directive. That report shall in particular take account of the following:

- the use and evolution of automotive technology and, in particular, the feasibility of increasing the maximum permitted biofuel content of petrol and diesel;
- Community policy on CO<sub>2</sub> emissions from road transport vehicles;
- the possibility of applying the requirements of Annex II (environmental specifications for market fuels to be used for vehicles equipped with compression ignition engines), and in particular the limit value for polycyclic aromatic hydrocarbons, to non-road mobile machinery (including inland waterways vessels), agricultural and forestry tractors and recreational craft;
- the increase of the use of detergents in fuels;
- the use of metallic additives other than MMT in fuels;
- the total volume of components used in petrol and diesel;
- the consequences of the greenhouse gas reduction target for the emissions trading scheme;
- the potential need for adjustments to the Directive in order to assess possible contributions for reaching a greenhouse gas reduction target of up to 10% by 2020;
- the possibility of introducing additional measures for suppliers to reduce by 2% life cycle greenhouse gas emissions per unit of energy, through the use of credits purchased through the Clean Development Mechanism of the Kyoto Protocol under the conditions set out in Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in order to assess further possible contributions for reaching a greenhouse gas reduction target of up to 10 % by 2020;



- an updated cost-benefit and impact analysis of a reduction in the maximum permitted vapour pressure for petrol for the summer period below 60 kPa.

At the latest in 2014, the Commission shall submit a report to the European Parliament and the Council relating to the achievement of the greenhouse gas emission target for 2020. The Commission shall, if appropriate, accompany its report by a proposal for modification of the target.