





Basic information	
2003/0189A(COD) COD - Ordinary legislative procedure (ex-codecision procedure) Regulation	Procedure completed
Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride Repealed by 2012/0305(COD) Subject 3.70.02 Atmospheric pollution, motor vehicle pollution 3.70.03 Climate policy, climate change, ozone layer 3.70.10 Man-made disasters, industrial pollution and accidents	





Key players				
European Parliament	Committee responsible		Rapporteur	Appointed
	CODE	Parliament Delegation to Conciliations Committee	DOYLE Avril (PPE-DE)	10/01/2006
	Former committee responsible		Former rapporteur	Appointed
	ENVI	Environment, Climate and Food Safety	DOYLE Avril (PPE-DE)	12/07/2005
	ENVI	Environment, Climate and Food Safety	GOODWILL Robert (PPE-DE)	25/09/2003
	Former committee for opinion		Former rapporteur for opinion	Appointed
	JURI	Legal Affairs	WALLIS Diana (ELDR)	18/02/2004
	ITRE	Industry, Research and Energy	BOWE David Robert (PSE)	02/10/2003
	Former committee for opinion on the legal basis		Former rapporteur for opinion	Appointed
	JURI	Legal Affairs	LÓPEZ-ISTÚRIZ WHITE Antonio (PPE-DE)	13/07/2005
Council of the European Union	Council configuration		Meetings	Date
	General Affairs		2705	2006-01-30
	General Affairs		2724	2006-04-25
	Agriculture and Fisheries		2669	2005-06-20

	Environment	2610	2004-10-14
European Commission	Commission DG	Commissioner	
	Environment		

Key events			
Date	Event	Reference	Summary
11/08/2003	Legislative proposal published	COM(2003)0492 	
01/09/2003	Committee referral announced in Parliament, 1st reading		
16/03/2004	Vote in committee, 1st reading		Summary
16/03/2004	Committee report tabled for plenary, 1st reading	A5-0172/2004	
30/03/2004	Debate in Parliament	CRE link	
31/03/2004	Decision by Parliament, 1st reading	T5-0237/2004	
31/03/2004	Results of vote in Parliament		
21/06/2005	Council position published	16056/5/2004	Summary
07/07/2005	Committee referral announced in Parliament, 2nd reading		
11/10/2005	Vote in committee, 2nd reading		Summary
13/10/2005	Committee recommendation tabled for plenary, 2nd reading	A6-0301/2005	
24/10/2005	Debate in Parliament	CRE link	
26/10/2005	Decision by Parliament, 1st reading	T6-0400/2005	Summary
26/10/2005	Results of vote in Parliament		
30/01/2006	Parliament's amendments rejected by Council		Summary
14/03/2006	Joint text approved by Conciliation Committee co-chairs	03604/2006	
24/03/2006	Report tabled for plenary, 3rd reading	A6-0087/2006	
03/04/2006	Committee referral announced in Parliament, 1st reading		
04/04/2006	Debate in Parliament	CRE link	
06/04/2006	Decision by Parliament, 1st reading	T6-0133/2006	Summary
06/04/2006	Results of vote in Parliament		
25/04/2006	Decision by Council, 3rd reading		
17/05/2006	Final act signed		
17/05/2006	End of procedure in Parliament		
14/06/2006	Final act published in Official Journal		

Technical information	
Procedure reference	2003/0189A(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)

Procedure subtype	Legislation
Legislative instrument	Regulation
	Repealed by 2012/0305(COD)
Legal basis	EC Treaty (after Amsterdam) EC 095
Stage reached in procedure	Procedure completed
Committee dossier	CODE/6/32196

Documentation gateway				
European Parliament				
Document type	Committee	Reference	Date	Summary
Committee report tabled for plenary, 1st reading/single reading		A5-0172/2004	16/03/2004	
Text adopted by Parliament, 1st reading/single reading		T5-0237/2004 OJ C 103 29.04.2004, p. 0450-0600 E	31/03/2004	Summary
Amendments tabled in committee		PE362.664	20/09/2005	
Committee recommendation tabled for plenary, 2nd reading		A6-0301/2005	13/10/2005	
Text adopted by Parliament, 2nd reading		T6-0400/2005 OJ C 272 09.11.2006, p. 0272-0381 E	26/10/2005	Summary
Report tabled for plenary by Parliament delegation to Conciliation Committee, 3rd reading		A6-0087/2006	24/03/2006	
Text adopted by Parliament, 3rd reading		T6-0133/2006	06/04/2006	Summary
Council of the EU				
Document type		Reference	Date	Summary
Council statement on its position		09209/2005	31/05/2005	
Council position		16056/5/2004 OJ C 183 26.07.2005, p. 0001-0016 E	21/06/2005	Summary
Draft final act		03604/2/2006	17/05/2006	
European Commission				
Document type		Reference	Date	Summary
Legislative proposal		COM(2003)0492 	11/08/2003	Summary
Commission communication on Council's position		COM(2005)0296 	01/07/2005	Summary
Commission opinion on Parliament's position at 2nd reading		COM(2005)0713 	23/12/2005	Summary
Follow-up document		COM(2011)0581 	26/09/2011	Summary
Other institutions and bodies				
Institution/body	Document type	Reference	Date	Summary

ESC	Economic and Social Committee: opinion, report	CES0100/2004 OJ C 108 30.04.2004, p. 0062-0064	28/01/2004	
CSL/EP	Joint text approved by Conciliation Committee co-chairs	03604/2006	14/03/2006	

Additional information		
Source	Document	Date
European Commission	EUR-Lex	

Final act
Regulation 2006/0842 OJ L 161 14.06.2006, p. 0001-0011 Summary

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 23/12/2005

Of the 26 amendments adopted by the European Parliament, the Commission can accept 4 amendments in full, 7 amendments in part and a further 8 amendments in principle. 7 of the adopted amendments are not acceptable to the Commission.

The following amendments were among those accepted in full:

- introducing the element of "preventing" emissions as well as reducing emissions of fluorinated greenhouse gases which is already used in relation to leaks;
- further developing the definition of hermetically sealed systems;
- including energy efficiency as an element to take into account in assessing whether new products and equipment containing these gases should be prohibited.

The Commission considers that these amendments are in line with and improve the current text and will facilitate the implementation and contribute to the effectiveness of the Regulation.

The following amendments were accepted in part:

- a new recital specified that individual Member States, because they have different targets under the burden sharing agreement under the Kyoto Protocol should be able to take individual measures to meet their targets. However, it is not indicated that such measures must be compatible with the Treaty and the Regulation. The Commission suggests a form of wording to give effect to this;
- a number of clarifications are made regarding the article on the scope of the Regulation. Most of these changes can be accepted but it would be preferable to preserve the word "inspection" rather than "control on use" as suggested;
- one amendment changes the word inspection to "checked" and substitutes "circuits" for equipment in relation to hermetically sealed systems. The second part is acceptable but the Commission would wish to maintain "inspection" rather than "checked";
- the words "inspected for leakage" with are changed to "checked for leakage" and Parliament specified language with respect to indirect methods. The Commission cannot accept the first element. As regards the second part it would be possible to accept with some redrafting and the text could possibly meet the concerns with regard to the use of the word "inspection". The Commission suggests alternative wording;
- Parliament added in the reporting provision "solvents and fire protection systems" to the main category of applications that will guide producers and importers in their reporting. The Commission could accept the inclusion of fire protection systems but not solvent users since there are many small users and producers and importers would have considerable difficulty in collecting data;
- there are a number of changes with respect to the labelling provisions, notably indication of global warming potential. The Commission could accept the principle but believes this could be best done in comitology, and suggests a form of wording;
- one amendment specifies that Member States should promote alternatives, taking into account gases with a high GWP and that the Commission should be notified by the Member States of bans. The Commission could accept the first part of paragraph with some suggested rewording but does not believe the notification is necessary. Listing the applications which are covered in paragraph 2 is not necessary and should, therefore, be dropped.

The following amendments were accepted in principal:

- there is a new recital about the high global warming potential of fluorinated greenhouse gases. The Commission suggests an alternative text;
- a new recital specifies that application and enforcement of this Regulation should spur technological innovation. This amendment can be accepted with some slight redrafting of the text with the focus on technological innovation;
- a new recital that specifies that the Regulation should not prevent Member States from maintaining or introducing stricter protective measures is accepted in another recital;
- the term "circuits" is added to equipment. Circuit would cover all the elements in equipment where the fluorinated greenhouse gas is used and is the standard term in standards documents. In this context it might be useful to add "in particular" before circuits;
- Parliament requires that companies and their personnel involved in the maintenance and the installation of equipment covered by the Regulation should also be covered by the certification and training requirements. The Commission can agree in principle with the aim of covering "installation" but believes that this is disproportionate for the small plug in items. Maintenance is a wide concept and the relevant operations would be covered by the term "servicing". A text is suggested;
- each owner of stationary applications is required to obtain a registration number from the relevant competent authority for each system installed. It would be useful to indicate that this number should be used in all the record keeping provided for under the relevant clause;
- Parliament requires the Member States' competent authorities to review every 2 years a representative sample of the records. The Commission could accept if period is increased to three years;
- One amendment provides for some delay in the fitting of leakage detectors to fire protection systems. The Commission could accept this with a delay of two years and without the inclusion of safety and insurance provisions since these are implicitly covered. The Commission does not wish to see such factors delaying even further the implementation of the Regulation.

The amendments rejected are as follows:

- the amendment providing another definition of "placing on the market" by replacing producer by manufacturer. The existing definition does not lack clarity or ambiguity and so could be maintained;
- on the definition of "stationary" applications, the Commission believes that the wording of this amendment could lead to confusion and should be rejected.
- the word "inspections" is changed to "control measures". The rejection of this amendment is in line with the position taken on the same issue (see above).
- the Commission accepts in principal the amendment specifying that Member States shall facilitate the cross-border transport of recovered fluorinated greenhouse gases for destruction or reclamation. However, since the cross border shipment of F-Gases will be covered by the new proposed Regulation on "Waste Shipment", the Commission believes that it is not necessary to include it in this Regulation;
- one amendment requires the Commission to present legislative proposal by the 31 December 2008 with respect to mobile air-conditioning systems (MACs) in vehicles other than cars and refrigeration systems in transport. The Commission cannot accept this since it would have to produce proposals by a certain data irrespective of what emerges from its technical and economic evaluations and this could unduly restrict the Commission's right of initiative.
- the amendment to facilitate the Commission's role and increase transparency in relation to national measures on F-Gases and also ensure timely Member State notification is rejected since there is already a system of notification of national measures and this amendment would provide no added value.
- Finally, Parliament states that the Regulation shall not prevent Member States from taking stronger protective measures. This amendment refers to an article of the Regulation. Some Member States may use it as a justification for any stricter measure even if they are detrimental to the internal market. The provisions of the Treaty are directly applicable, hence this amendment is not acceptable.

The Commission underlines that, in order to contribute positively to the conciliation phase, it is ready to look at ways of facilitating solutions to outstanding issues.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 11/08/2003

PURPOSE : to put in place a legislative framework to reduce emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride, which are powerful greenhouse gases covered by the Kyoto Protocol. **CONTENT** : the European Commission has adopted this proposal for a Regulation to reduce emissions of fluorinated greenhouse gases. The proposal represents a further step towards fulfilling the EU's obligations under the Kyoto Protocol to reduce emissions of all gases contributing to global warming. Fluorinated gases are extremely powerful and long-lived greenhouse gases. Their emissions are forecast to increase rapidly in the coming years if no action is taken. The gases are used in refrigeration, air conditioning, fire-fighting equipment and various industry processes. The Commission's proposal is expected to reduce by almost a quarter the projected emissions of these gases by 2010. The main sources of emissions from are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride are refrigeration and air conditioning, including mobile air-conditioning in cars, and industry. They are also used as foam blowing agents, aerosol propellants, fire-fighting agents, process gases in semiconductor manufacture and electrical insulators. HFCs and PFCs are needed in some applications to replace the ozone depleting substances being phased-out under Regulation 2037/2000/EC and the Montreal Protocol. As a result, their emissions have been increasing over recent years. Currently, fluorinated gases account for 2% of total EU greenhouse gas emissions. However, their global warming potential is high and many of them have long atmospheric lifetimes. For example, sulphur hexafluoride has a global warming potential that is 23,900 times that of carbon dioxide (CO₂), which is the most common greenhouse gas arising from human activities. The Commission's proposal makes a significant contribution towards the European Union's Kyoto Protocol target to reduce greenhouse gas emission by 8% below 1990 levels in the period 2008-2012. Projected emissions of fluorinated gases are expected to be reduced by around 23 million tonnes of

carbon dioxide equivalent by 2010, with even greater reductions in the period after. More specifically, this proposal has four main elements: - provisions to improve the containment of fluorinated gases; - reporting requirements to strengthen the monitoring of emissions; - marketing and use restrictions where containment is not feasible or the use of fluorinated gases is inappropriate; - phase-out of HFC-134a in air-conditioning systems of new vehicles. The containment of fluorinated gases will be improved by the requirement to take all measures that are technically and economically feasible to prevent and minimise emissions. In particular, all stationary refrigeration, air-conditioning, heat pump equipment and fire protection systems must be inspected for leakage by competent persons at least once a year. In addition, there is a requirement to install leakage detection systems for larger equipment and to maintain records on the quantities of fluorinated gases added or recovered from equipment. Provision is also made for the recovery of fluorinated gases for recycling or destruction during servicing and at the end of life of equipment. Member States are required to establish training and certification programmes for persons involved in inspection and recovery activities. The proposal also requires producers, importers and exporters of fluorinated gases to report annually to the Commission on the production, importation and exportation of fluorinated gases. Where improving the containment of fluorinated gases is not feasible, or the use of fluorinated gases is considered inappropriate, the proposal includes a number of marketing and use restrictions. The gases and applications affected are: sulphur hexafluoride in magnesium die-casting; sulphur hexafluoride in vehicle tyres; fluorinated gases in non-refillable containers; hydrofluorocarbons and perfluorocarbons in non-confined evaporative cooling systems (for example self-chilling drinks cans); perfluorocarbons in new fire protection systems and fire extinguishers; fluorinated gases in window manufacture; fluorinated gases in footwear; hydrofluorocarbons in one component foams hydrofluorocarbons in novelty aerosols. As regards air-conditioning systems in new vehicles, the proposal states that the phase-out of the use of the gas HFC-134a in air-conditioning systems in new vehicles is a key element of the proposal. Emissions from this sector are forecast to grow from 1.4 million tonnes of carbon dioxide equivalent in 1995 to 20 million tonnes of carbon dioxide equivalent in 2010 if action is not taken. The proposal introduces a flexible system based on transferable quotas to gradually phase-out the use of HFC-134a in new vehicle air-conditioning systems over the period 2009 to 2013. Companies have the possibility to transfer quotas between companies, if they wish to do so, enabling the overall goal to be reached in an economically efficient way. There is an incentive for reductions to be made even earlier. Quotas can be increased for companies that take early action by placing vehicles on the market either without HFC-134a air-conditioning systems or with less emissive HFC-134a air-conditioning systems (so-called enhanced systems) before the phase-out period begins on 1 January 2009. At the end of the phase-out period, it will be possible to carry over any quotas remaining up to 2018. This is to allow flexibility to those who act faster than they are required to, and so have excess quotas, and to allow niche markets to be served with HFC-134a systems. These provisions will work because they are accompanied by a system of sanctions that will ensure compliance with the phase-out.

FINANCIAL STATEMENT : - total allocation for action : EUR 2.736 million for commitment. - impact on human resources : 2 permanent posts; - financial impact of human resources : EUR 216 000; - other administrative expenditure deriving from the action : EUR 40 000.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 06/04/2006 - Text adopted by Parliament, 3rd reading

The European Parliament has adopted, by 476 votes for, 46 against and 25 abstentions, the legislative resolution on the joint text approved by the Conciliation Committee for a regulation of the European Parliament and of the Council on certain fluorinated greenhouse gases. (Please refer to the summary dated 31/01/2006).

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 26/10/2005 - Text adopted by Parliament, 2nd reading

The European Parliament adopted a resolution drafted by Avril **DOYLE** (EPP-ED, IE) and made a few amendments to the common position. Amendments include the following:

- a new recital states that the application and enforcement of the Regulation should spur technological innovation by encouraging continued development of alternative technologies and transition to already existing technologies that are more environmentally friendly;
- the Regulation does not prevent Member States from maintaining or introducing stricter protective measures;
- the definitions of "placing on the market" and "hermetically sealed system" are amended;
- a new term of "stationary application or equipment" is defined;
- the term "inspected" is changed to "subject to controls for leakage" throughout the text;
- in the case of fire protection systems installed before the date of entry into force of the Regulation, leak detection systems must be fitted within three years of entry into force of the Regulation, provided safety and insurance are not compromised;
- a new paragraph states that Member States must facilitate the cross-border transport of recovered fluorinated greenhouse gases for destruction or reclamation within the EU by allowing the competent authority of the Member State of destination to grant pre-consents to facilities that recover fluorinated greenhouse gases. Pre-consents may be limited in time and may be revoked by the competent authorities of Member States at any time.
- The Commission must establish minimum requirements and the conditions for mutual recognition in respect of training programmes and certification for both the companies and all relevant personnel involved in installing or maintaining the equipment concerned by this Regulation as well as for those involved in servicing or carrying out controls of the equipment for the activities provided for in the Regulation.
- A new clause states that each owner of stationary applications must obtain a registration number from the relevant competent authority for each system installed.
- The label for certain products must clearly indicate that the product or equipment contains fluorinated greenhouse gases and state their global warming potential, and this shall be clearly and indelibly stated on the product or equipment. The label shall be placed on the outside of the front or top of the product or equipment, in such a way as to be clearly visible, and not obscured.

-The Commission must ensure that, within one year of entry into force of the Regulation, a register is created with information about the market restrictions and proposed market restrictions in each Member State for products and equipment containing, or whose function relies upon, fluorinated greenhouse gases.

-Member States shall promote the placing on the market of equipment using alternatives to gases with a high global warming potential. This applies to the following types of products and equipment: refrigeration products and equipment; air conditioning products and equipment (other than those contained in motor vehicles); foams.

Finally, Parliament asked the Commission to develop new legislative proposals by the end of 2008 to deal with non-vehicle air conditioning systems and refrigeration systems in modes of transport.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 17/05/2006 - Final act

PURPOSE: the control and use of fluorinated greenhouse gases in the EU.

LEGISLATIVE ACT: Regulation 842/2006/EC of the European Parliament and of the Council on certain fluorinated greenhouse gases.

CONTENT: the Council adopted a Regulation on fluorinated greenhouse gases following an agreement reached with the European Parliament in the conciliation committee. The Regulation was adopted alongside a Directive on emissions from air-conditioning systems in motor vehicles, amending Directive 70/156/EEC. The legal acts form part of a comprehensive package aimed at implementing the European Climate Change Programme, which was established in June 2000. It has also been introduced as part of the Sixth Community Environment Action Programme, which recognises that the Community is committed to achieving an 8% reduction in emission of greenhouse gases between 2008 and 2012 compared to 1990 levels.

Most fluorinated greenhouse gases identified by this Regulation have a high global warming potential. The objective, therefore, of this Regulation (complemented by the Directive on air conditioning systems in motor vehicles) is to create provisions which prevent and minimise emissions from fluorinated greenhouse gases (FFGs) covered by the Kyoto Protocol. In presenting harmonised provisions the EU is also helping to prevent distortions of competition within the internal market.

The Regulation, as redrafted in conciliation, addresses the containment, use, recovery and destruction of the FFGs listed in Annex A to the Kyoto Protocol (and adopted in Annex I and Annex II of this Regulation). Provisions include the principle of "Containment", whereby operators of FFGs must prevent any leakages and the principle of "Recovery", whereby operators are responsible for the proper recovery, by certified personnel, of FFGs. Certain fluorinated gases listed in Annex II will be banned from use within the EU, with effect, as from 4 July 2006.

The Regulation also provides rules on:

- the labelling and disposal of products and equipment containing these gases;
- the reporting of information on these gases
- the control of uses of sulphur hexafluoride;
- the placing on the market of products and equipment containing FFGs; and
- the training and certification of personnel and companies involved in activities relating to FFGs.

Review procedures are also foreseen, which request the Commission to prepare a report on the application of this Regulation by 31 December 2007. By 31 December 2008 the Commission must decide whether it will prepare additional legislation in order to extend the provisions of this Regulation to air conditioning systems as a whole and not just those fitted in motor vehicles. By 4 July 2004, the Commission must prepare a report based on the application of the Regulation.

Member States will be allowed to promote market products and equipment which use alternatives to FFGs of a high global warming potential. In addition, Member States may maintain or introduce more stringent protective measures than those listed in this Regulation and they will be responsible for establishing a system of penalties applicable to infringements of the Regulation.

ENTRY INTO FORCE: It will apply with effect from 4 July 2007, with the exception of provisions concerning the placing of FFGs, listed in Annex II, which will take effect as from 4 July 2006.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 21/06/2005 - Council position

Of the 81 amendments made by Parliament, the Council accepts 54, and these have been incorporated, either verbatim, in part or in principle, into the Council's common position- 44 in the Regulation and 10 in the Directive. 27 amendments have not been incorporated.

The Council agreed with the Parliament's amendments considering that the proposed quota system was not the most practical way to achieve the aim of reducing emissions from these systems and, ultimately, changing the refrigerant in all new systems to a less environmentally damaging substance (i. e. a gas with a substantially lower GWP). Therefore the quota system has been deleted.

The Council noted that the Parliament intended to use the EC Type Approval system pursuant to Directive 70/156/EEC for the purpose of controlling the way in which vehicles would be equipped with environmentally friendly air conditioning systems. The Council shares the Parliament's objective and has implemented it using the standard form of a vehicle type approval Directive, under the parent legislation contained in Directive 1970/156/EEC.

Having decided to remove the mobile air-conditioning part of the proposal to a separate Directive, the Council gave very careful consideration to the appropriate legal base for the rest of the Regulation and, as reflected in the common position, decided that a dual legal base is the most appropriate solution. This means that the Regulation is based on Article 175(1). However, the Articles relating to the use-bans, the prohibition of placing on the market and labelling (see below) are all based on Article 95 of the Treaty.

The Common Position is in the form of a Regulation on certain fluorinated greenhouse gases and a Directive on emissions from MACs. The change in form reflects the Parliament's wish to address MACs through type-approval legislation. The Council has taken a similar approach to the Parliament in terms of the legislative instrument to use for reducing emissions from MACs, and the Common Position gives this effect through a 'type approval'-style Directive that amends Directive 1970/156/EC, with dates of phase out of HFC-134a in 2011 and 2017 for new types of vehicles, and new vehicles respectively. The Parliament had proposed 2011 for new types of vehicle and 2014 for all new vehicles.

In addition, the following amendments were amongst those accepted:

- the word "greenhouse" before fluorinated gases is used throughout the text;
- repair work is to be done properly done after leakage;
- there is a reduction of inspection frequency if no leakage;
- leakage detection systems should be in areas where leakage is more likely;
- Member States must adapt their training schemes;
- Council incorporates the amendment which aims to provide information about the GWP of products and equipment containing fluorinated gases in the new labelling provision;
- a review is introduced to establish whether the Regulation needs revising.
- From 31 December 2006 new vehicles types comply with the leakage rates established in a standardised test procedure.
- Parliament's amendment requires recovery during servicing and during final disposal. However, in the Common Position the text is now "and before final disposal".

The following amendments were not incorporated in the common position:

- in the common position an exception to the use ban is still included. The use bans will be specifically reviewed in 2009 and 2010 and the possible extension of the placing on the market prohibitions will be considered in the general review;
- the requirement that refrigeration, air-conditioning and heat pumps to undergo standardised tests before placing on the market. These standards should be based on existing legislation not on tests defined by the Committee. The Council believes that this is normal procedure and so does not need to be repeated in the Common Position;
- the requirement that Member States must promote equipment (MACs) with a GWP below 50 and use fiscal incentives. The introduction of tax incentives for conversion of Mobile Air conditioning systems (MACs) with a GWP<50 was rejected;
- the GWP value used in the common position is 150, not 50. However, the Common Position provides for a review of whether Community provisions concerning the GWP of fluorinated greenhouse gases should be amended, in Article 8(1) of the 'type-approval' Directive. The report to be provided under Article 8(1), five, not two, years after entry into force, shall examine whether amendments are required taking account of technological and scientific developments and the need to respect industrial product planning timescales.
- the Council opted to retain the Commission's proposal to use "novelty aerosol" as it did not feel sufficient research and consultation had been undertaken with respect to other aerosols. Parliament's amendment would have replaced the Commission's proposed definition with a new definition of "technical aerosols";
- the Council did not incorporate the extension of the scope of the reporting provisions and it was not clear what the additional benefits would be in estimating emissions of fluorinated gases in the EU.

In addition:

- the Common Position contains a new Article on Labelling which will ensure that certain products and equipment containing fluorinated greenhouse gases are not put on the market unless they are appropriately labelled. The Council feels that seems to fit, to some extent, with the Parliament amendment on information to consumers.
- there will be a review four years after entry into force of the Regulation;
- in the Common Position the Regulation comes into force twelve months after its publication in the Official Journal instead of the twenty days proposed by the Commission. The entry into force of the Directive is maintained at 20 days. This change in date in the Regulation is because most of the prohibitions in Annex II will already take effect on the date of entry into force of the Regulation.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 31/03/2004

In adopting the report by Robert GOODWILL (EPP-ED , UK), the European Parliament made a large number of amendments to the draft Regulation on fluorinated gases. On the vexed question of imposing quotas on manufacturers for the use of fluorinated gases in new air-conditioned cars, Parliament supported its rapporteur and rejected the new quota system proposed by the Commission. Instead MEPs demanded the introduction of limits for car air-conditioning systems from January 2011 and the phasing-in by manufacturers of alternatives for HFCs, PFCs and sulphur

hexafluorides (SF₆). Whereas the Commission proposed banning gases with a global warming potential higher than 150 from 2009, MEPs wanted the limit to be tightened to 50 from 2011. For small-scale manufacturers, this provision would apply from 1 January 2013. From 1 January 2014, Member States should prohibit the sale or placing on the market of new vehicles fitted with an air-conditioning system using gases with a global warming potential higher than 50. Member States should also seek to promote the installation of air-conditioning systems using an efficient gas such as CO₂ which had a global warming potential of less than 100. They should also be able to introduce fiscal or financial incentives for the conversion of existing vehicles in operation, provided that air-conditioning systems using gases with a global warming potential of less than 50 were installed. Another important amendment concerned the prevention of the leakage of fluorinated gases. According to this amendment, all measures which were technically and economically feasible should be taken to prevent and minimise emissions of fluorinated gases. This obligation should be applicable to more sectors and not just cover refrigeration, heating and air-conditioning but all sectors where these gases were used. Parliament also wanted to enlarge the scope of the Regulation by introducing measures concerning recovery and placing on the market of these gases, use of products and equipment containing these gases and reporting of data on these gases. In addition, it introduced a number of amendments on inspections for the leakage of these gases. Parliament also demanded that consumers and citizens be informed of the global warming potential of products containing fluorinated gases.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 26/09/2011 - Follow-up document

In accordance with the requirements of Regulation (EC) No 842/2006 on certain fluorinated greenhouse gases, the Commission presents a report evaluating the application and effects of the current rules and assesses the need for further action to reduce emissions of fluorinated gases in the EU. The overall objective of the Regulation is, together with Directive 2006/EC/40 on emissions from air-conditioning systems in motor vehicles ('the MAC Directive') to help fulfil the

commitments of the EU and its Member States under the Kyoto Protocol to the United Nations Framework Convention on Climate Change, for the period 2008 to 2012.

Findings: the provisions in the Regulation became operational at different stages between 2006 and 2011. The analysis has identified some shortcomings in the current application of some of its key provisions, in particular training and certification, containment, and recovery provisions.

Delays regarding training and certification: the deadline for the Member States to notify their training and certification systems on the basis of the Commission's minimum requirements was 4 January 2009. On 4 July 2011, 8 Member States had yet to notify all or part of their training and certification arrangements to the Commission. This difference in the speed of implementation reflects differences in the Member States' vocational training and certification systems before the Regulation applied. Moreover, Member States attribute delays to the size of certain sectors and to underestimation of the administrative effort required to create new systems and adapt existing ones.

Varying levels of compliance with containment measures: a low degree of overall compliance was observed, particularly in Member States where no similar containment requirements applied prior to the Regulation. Analysis has shown that, in the key applications of stationary refrigeration, air conditioning and heat pumps, compliance with the schedules for leakage checks was particularly low among operators of domestic and small commercial equipment. Maintaining of records for these key applications is reportedly below 50%. Compliance with the obligation to install leakage detection systems seemed satisfactory only in specific fields where the installation of such systems was already standard practice prior to the Regulation. In the fire protection sector, where voluntary technical standards with similar requirements were already widespread, containment provisions are applied to a higher extent.

Recovery: in the refrigeration and air conditioning sectors, recovery levels were generally low prior to the Regulation. Some data indicate a slight growth in the quantities recovered, but no systematic data are available to allow more precise assessment. Recovery in the fire protection and high-voltage switchgear sectors is currently a commonly applied practice during servicing and maintenance. In these sectors the potential for recovery from systems containing F-gases will grow in the coming years, as such systems will be reaching their end of life.

In 2010, reclamation and destruction infrastructure was available for hydrofluorocarbons in only about half the Member States and for sulphur hexafluoride in only a couple of Member States. Cross-border shipment of recovered F-gases for reclamation and destruction within the EU is therefore of key importance and should be facilitated by Member States.

Measuring the effectiveness of the Regulation with regard to containment and recovery measures, the analysis concludes that there is still a lack of reliable and sufficiently long time-data series, and it is therefore too early to quantify their present effectiveness. However, given the nature of those measures, the short period of their application and the current shortcomings of compliance with some of the relevant provisions in key areas, a significant effect on the leakage rates of affected equipment prior to 2010 seems unlikely.

Nonetheless, if fully applied in the short term, the containment and recovery provisions can be expected to achieve a substantial reduction of leakage rates during the operation and end-of-life of affected equipment by 2015. They have the potential to reduce projected emissions by more than 29 million tonnes of CO₂ eq. by 2020 and eventually by more than 38 million tonnes of CO₂ eq. by 2050.

The MAC Directive introduced restrictions on the use of F-gases with a Global Warming Potential (GWP) above 150 in air conditioning systems of motor vehicles, and is expected to achieve substantial reductions of projected emissions of around 13 million tonnes of CO₂ eq. by 2020 and almost 50 million tonnes of CO₂ eq. by 2050. Taking into account the effects of the Regulation and the MAC Directive, the total emissions are expected to stabilise around today's level of 110 million tonnes of CO₂ eq. in EU-27 despite the growing use of many of their key applications.

The relative emission reduction is estimated to be less than 3% in 2010. However, projections show that yearly emissions will be reduced by 28% in 2020, by 44% in 2030 and by 46% in 2050. The costs related to the Regulation are estimated to be around 41 EUR per tonne per CO₂ eq. reduced.

Overall, four years after its entry into application, **the Regulation has already contributed to the commitments under the Kyoto Protocol** for the period 2008 to 2012, and has the potential together with the MAC Directive, to avoid almost half of projected emissions, stabilising emissions at today's levels. However, to reach this potential, the Commission calls on Member States to intensify their efforts towards rapid and proper implementation and enforcement.

The report goes on to state that, **in the context of the overall EU objective to cut emissions by 80–95% by 2050**, the stabilisation of F-gas emissions at today's levels is **not adequate** and the analysis shows that already available or emerging low-GWP technologies are technically feasible

and can be cost-effective in many application areas. With ongoing research constantly improving their safety and performance characteristics, such options have the potential to gradually replace technology based on F-gases with high-GWP, thereby aiding the transition to a climate-friendly, low carbon economy.

Consequently, the **EU must take further action** to achieve further cost-effective reductions of greenhouse gas emissions. Policy options to achieve further reductions in the EU must be considered in view of potential impacts, including on energy consumption, administrative burden and safety. The EU already supports global action to reduce F-gas emissions under the Montreal Protocol and this report identifies options for additional cost-effective reductions of F-gases in the EU, including:

the introduction of maximum, gradually declining, limits for the quantity of Fgases placed on the EU market (phase down) expressed in terms of CO₂ equivalent;

use and marketing prohibitions for new equipment and products (bans);

voluntary environmental agreements at Community level.

The Commission will consult stakeholders on these options and will, if appropriate, present a legislative proposal for revising this Regulation.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 30/01/2006

The Council decided not to approve the European Parliament's second reading amendments to proposals for a directive on emissions from air conditioning systems in motor vehicles and for a regulation on certain fluorinated greenhouse gases.

The Council accordingly decided to convene the Parliament-Council conciliation committee with a view to negotiating a joint text.

Climate change: fluorinated greenhouse gases, hydrofluorocarbons HFCs, perfluorocarbons PFCs, sulphur hexafluoride

2003/0189A(COD) - 01/07/2005

In its assessment of the common position, the Commission takes into account the change in the form of its proposal into a Directive dealing specifically with the issue of HFCs in MACs, using vehicle type approval legislation, and a Regulation to cover the remainder of its original proposal. The Commission agreed to this change in form on the basis that the content continues to be considered as an overall package that guarantees the environmental ambition of its original proposal. The Council also considered it important for the content of this legislation to be considered as an overall package. This is reflected the recitals, which emphasise that this legislation should be adopted and published in the Official Journal simultaneously.

As regards the Directive on MACs the common position has adopted the Parliament's proposal to phase out fluorinated greenhouse gases from MACs using the type approval procedure instead of a transferable quota system. While the Commission could not initially accept such an amendment it has now decided to support the type-approval procedure since neither the Parliament nor the Council were ready to accept the Commission's proposal and given that the overall environmental ambition of the Commission's proposal is maintained.

Both the Commission and the Council did not accept the Parliament's proposal to reduce the GWP of fluorinated gases in MACs from 150 to 50 since it would exclude the use of HFC-152a, a possible alternative technology, with only minimal environmental benefits. However, the Commission is committed within the framework of Article 8(1) of the type-approval Directive to review and to report on possible changes concerning the GWP of fluorinated gases in the light of technological and scientific developments.

The common position incorporates a large proportion of the amendments proposed in the Parliament's first reading. Many help to clarify the terms of the proposal as well as to increase transparency and accountability. As part of the overall agreement, the Commission can also agree to a number of amendments proposed by the

Parliament that it initially rejected, for instance under the reporting provisions, that are partially accepted or reformulated in the common position. The common position also goes further than the Commission proposal in a number of instances, such as the new Article on labelling, which is acceptable to the Commission.

The majority of the proposed Parliament amendments were taken on board, in particular the Review Article in the Regulation was considerably strengthened and made more specific and it will provide the Commission with useful guidance to assess all the policy areas set out in the Regulation and to propose further measures where appropriate.