

Procedure file

Basic information	
<p>COD - Ordinary legislative procedure (ex-codecision procedure) 2001/0245(COD) Directive</p>	Procedure completed
<p>Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive</p> <p>Amending Directive 96/61/EC 1993/0526(SYN)</p> <p>Amended by 2003/0173(COD) Amended by 2006/0304(COD) Amended by 2008/0013(COD) Amended by 2012/0202(COD) Amended by 2012/0328(COD) Amended by 2013/0344(COD) Amended by 2014/0011(COD) Amended by 2015/0148(COD) Amended by 2017/0017(COD) Amended by 2021/0204(COD) Amended by 2021/0207(COD) Amended by 2021/0211A(COD) Amended by 2022/0164(COD) Amended by 2023/0199(COD)</p> <p>Subject 3.70.02 Atmospheric pollution, motor vehicle pollution 3.70.03 Climate policy, climate change, ozone layer 3.70.18 International and regional environment protection measures and agreements</p>	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	ENVI Environment, Public Health, Consumer Policy	PPE-DE MOREIRA DA SILVA Jorge	05/11/2001
	Former committee responsible	PPE-DE MOREIRA DA SILVA Jorge	05/11/2001
	Former committee for opinion	ELDR NEWTON DUNN Bill	23/01/2002
	BUDG Budgets	The committee decided not to give an opinion.	
	ECON Economic and Monetary Affairs	EDD BLOKLAND Johannes	22/01/2002
	JURI Legal Affairs and Internal Market	V/ALE HAUTALA Heidi	27/11/2001

Council of the European Union	Council configuration	Meeting	Date
	Agriculture and Fisheries	2524	22/07/2003
	Agriculture and Fisheries	2494	17/03/2003
	Environment	2473	09/12/2002
	Environment	2457	17/10/2002
	Environment	2439	25/06/2002
	Environment	2413	04/03/2002
	Environment	2399	12/12/2001
European Commission	Commission DG	Commissioner	
	Environment		

Key events

23/10/2001	Legislative proposal published	COM(2001)0581	Summary
28/11/2001	Committee referral announced in Parliament, 1st reading		
12/12/2001	Debate in Council	2399	Summary
04/03/2002	Debate in Council	2413	
25/06/2002	Debate in Council	2439	Summary
10/09/2002	Vote in committee, 1st reading		Summary
10/09/2002	Committee report tabled for plenary, 1st reading	A5-0303/2002	
10/10/2002	Debate in Parliament		
10/10/2002	Decision by Parliament, 1st reading	T5-0461/2002	Summary
17/10/2002	Debate in Council	2457	
27/11/2002	Modified legislative proposal published	COM(2002)0680	Summary
18/03/2003	Council position published	15792/1/2002	Summary
27/03/2003	Committee referral announced in Parliament, 2nd reading		
11/06/2003	Vote in committee, 2nd reading		Summary
11/06/2003	Committee recommendation tabled for plenary, 2nd reading	A5-0207/2003	
01/07/2003	Debate in Parliament		
02/07/2003	Decision by Parliament, 2nd reading	T5-0319/2003	Summary
22/07/2003	Act approved by Council, 2nd reading		
22/07/2003	Final act signed		
13/10/2003	End of procedure in Parliament		
25/10/2003	Final act published in Official Journal		

Technical information	
Procedure reference	2001/0245(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Directive
	<p>Amending Directive 96/61/EC 1993/0526(SYN)</p> <p>Amended by 2003/0173(COD)</p> <p>Amended by 2006/0304(COD)</p> <p>Amended by 2008/0013(COD)</p> <p>Amended by 2012/0202(COD)</p> <p>Amended by 2012/0328(COD)</p> <p>Amended by 2013/0344(COD)</p> <p>Amended by 2014/0011(COD)</p> <p>Amended by 2015/0148(COD)</p> <p>Amended by 2017/0017(COD)</p> <p>Amended by 2021/0204(COD)</p> <p>Amended by 2021/0207(COD)</p> <p>Amended by 2021/0211A(COD)</p> <p>Amended by 2022/0164(COD)</p> <p>Amended by 2023/0199(COD)</p>
Legal basis	EC Treaty (after Amsterdam) EC 175-p2; Rules of Procedure EP 57_o
Stage reached in procedure	Procedure completed
Committee dossier	ENVI/5/16798

Documentation gateway					
Legislative proposal		COM(2001)0581 OJ C 075 26.03.2002, p. 0033 E	23/10/2001	EC	Summary
Committee of the Regions: opinion		CDR0458/2001 OJ C 192 12.08.2002, p. 0059	13/03/2002	CofR	
Economic and Social Committee: opinion, report		CES0680/2002 OJ C 221 17.09.2002, p. 0027	29/05/2002	ESC	
Committee report tabled for plenary, 1st reading/single reading		A5-0303/2002	10/09/2002	EP	
Text adopted by Parliament, 1st reading/single reading		T5-0461/2002 OJ C 279 20.11.2003, p. 0020-0096 E	10/10/2002	EP	Summary
Modified legislative proposal		COM(2002)0680	27/11/2002	EC	Summary
Council statement on its position		07290/1/2003	14/03/2003	CSL	
Council position		15792/1/2002 OJ C 125 27.05.2003, p. 0072-0095 E	18/03/2003	CSL	Summary
Commission communication on Council's position		SEC(2003)0364	25/03/2003	EC	Summary
Committee recommendation tabled for plenary, 2nd reading		A5-0207/2003	11/06/2003	EP	

Text adopted by Parliament, 2nd reading		T5-0319/2003 OJ C 074 24.03.2004, p. 0101-0642 E	02/07/2003	EP	Summary
Commission opinion on Parliament's position at 2nd reading		COM(2003)0463	18/07/2003	EC	Summary
Follow-up document		COM(2003)0830	07/01/2004	EC	Summary
Implementing legislative act		32004D0156 OJ L 059 26.02.2004, p. 0001-0074	29/01/2004	EU	Summary
Implementing legislative act		32004R2216 OJ L 386 29.12.2004, p. 0001-0077	21/12/2004	EU	
Follow-up document		COM(2006)0676	13/11/2006	EC	Summary
Follow-up document		COM(2006)0725	29/11/2006	EC	Summary
Follow-up document		COM(2012)0652	14/11/2012	EC	Summary
Follow-up document		COM(2015)0576	18/11/2015	EC	Summary
Follow-up document		SWD(2015)0246	18/11/2015	EC	
Follow-up document		COM(2017)0048	01/02/2017	EC	Summary
Follow-up document		COM(2017)0693	23/11/2017	EC	Summary
Follow-up document		COM(2018)0842	17/12/2018	EC	Summary
Follow-up document		COM(2019)0557	31/10/2019	EC	Summary
Follow-up document		COM(2020)0740	18/11/2020	EC	
Follow-up document		COM(2020)0747	23/11/2020	EC	
Follow-up document		SWD(2020)0277	23/11/2020	EC	
Follow-up document		COM(2021)0962	26/10/2021	EC	
Follow-up document		SWD(2021)0308	26/10/2021	EC	
Follow-up document		COM(2022)0416	26/08/2022	EC	
Follow-up document		COM(2022)0516	14/12/2022	EC	
Follow-up document		SWD(2022)0407	14/12/2022	EC	
Follow-up document		COM(2023)0654	31/10/2023	EC	
Follow-up document		SWD(2023)0346	31/10/2023	EC	
Follow-up document		COM(2023)0732	24/11/2023	EC	
Follow-up document		COM(2024)0196	15/05/2024	EC	

Additional information

European Commission

[EUR-Lex](#)

Final act

[Directive 2003/87](#)
[OJ L 275 25.10.2003, p. 0030-0031](#) Summary

Delegated acts	
2019/2642(DEA)	Examination of delegated act
2018/2914(DEA)	Examination of delegated act
2018/3001(DEA)	Examination of delegated act
2019/2768(DEA)	Examination of delegated act
2018/3005(DEA)	Examination of delegated act
2019/2608(DEA)	Examination of delegated act
2019/2797(DEA)	Examination of delegated act
2019/2595(DEA)	Examination of delegated act
2019/2585(DEA)	Examination of delegated act
2020/2660(DEA)	Examination of delegated act
2021/2687(DEA)	Examination of delegated act
2023/2754(DEA)	Examination of delegated act
2023/2921(DEA)	Examination of delegated act
2023/2855(DEA)	Examination of delegated act
2023/2942(DEA)	Examination of delegated act

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

PURPOSE : to establish a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC. **CONTENT** : this proposal arises from the need for the European Union to reduce its emissions of greenhouse gases cost-effectively and meet its obligations under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. Emissions trading is, first, an instrument for environmental protection, and, second, one of the policy instruments that will impair competitiveness the least. At the same time, emissions trading is environmentally effective by achieving a pre-determined emission reduction from the activities covered. To recall, the Commission launched a broad consultation on emissions trading by publishing a Green paper in March 2000, and further details of the system envisaged have been discussed with stakeholders under the European Climate Change Programme. The proposed Directive aims at establishing an EU framework for emissions trading and an EU-wide market for emissions. It thereby ensures the proper functioning of the internal market and prevents distortions of competition that might arise from separate national emissions trading schemes. The Commission proposes that emissions trading in the EU should start in 2005, and in a first phase cover CO₂ emissions from large industrial and energy activities. These are estimated to account for 46% of the EU's CO₂ emission in 2010, and about 4,000 to 5,000 installations across the EU will be affected. In 2004, the Commission will consider an extension of the Directive to other sectors and greenhouse gases. Each installation covered by the Directive will have to apply the competent authority in its Member State for a permit allowing it to emit greenhouse gases. The permitting procedure shall be fully co-ordinated with the procedure under Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC) in order to avoid unnecessary bureaucracy. On the basis of the permits, Member States shall allocate emission allowances to each installation every year. They will gradually reduce the number of these allowances over time to ensure that emissions are reduced. It is these allowances that can be traded, although no operator of an installation will be forced to trade. By 31 March each year, the operator will have to surrender a number of allowances equal to the emissions of its installation in the preceding calendar year. Moreover, the proposed Directive would set harmonised penalties to be paid by operators for not surrendering a number of allowances. In the period 2005-2007, the Member States shall allocate allowances free of charge according to a national allocation plan to be approved by the Commission and respecting certain criteria so as to avoid state aid and distortions of competition between sectors in different Member States. For the 2008-2012 period, the Commission shall specify a harmonised method of allocation at a later stage. Member States will set up national registries to ensure the accurate accounting of the holding and transfer of allowances and the Commission will designate a Central Administrator at Community level. Lastly, the proposed Directive sets basic principles for the monitoring and reporting of emissions from installations as well as a list of binding verification criteria. ?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

On the basis of questions prepared by the Presidency to guide future work on the Commission's proposal for a Directive of 23 October 2001 establishing a scheme for greenhouse gas emission allowance trading within the Community, the Council held a policy debate focusing on how to organise the initial phase of the scheme (2005 to 2007) prior to entry into force of the Kyoto Protocol. The Council began by stressing that the European Union saw such an allowance trading scheme as complementary to efforts to reduce emissions via domestic measures and policies. As to whether the method of allocating allowances should be free of charge or by auction, the vast majority of Member States held that making it free would be an incentive to participation. In general, Member States argued for the introduction of a harmonised method of allocation and harmonised criteria as the best means of preventing distortions of competition. As regards cover, the majority of Member States favoured a scheme initially for CO₂ only, but did not rule out the possibility of rapidly extending it to other greenhouse gases. There was broad support for the Commission's proposal regarding the sectors to be covered, although a few Member States wanted to include additional sectors, with other stressing that that must be done solely on the basis of harmonised criteria set at Community level. Finally, a large majority of Member States considered that the costs of such a scheme should be borne by electricity producers, in line with the polluter-pays principle. The President concluded the debate by noting that positions were not firmly fixed, since consultations were still under way in some Member States, which had therefore expressed preliminary views. She noted that because of the initial phase many States were keeping an open mind and that positions could therefore change, particularly on the subsequent commitment period.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The Council was briefed on the state of play on this proposal for a Directive, which is intended to create a Community market for emission allowance trading as part of the overall reduction in greenhouse gas emissions required by the Kyoto Protocol. Three important issues relating in particular to the first phase in 2005-2007 remain undecided at this stage, i.e. whether the emission allowance trading scheme should be compulsory or optional, what its scope of application should be and how rights to pollute should be allocated. While seeking an overall reduction in greenhouse gas emissions, the proposal aims to ensure the proper functioning of the internal market and prevent any distortions of competition which might result from the establishment of separate national trading schemes. The first phase of the scheme proposed by the Commission, between the beginning of 2005 and the end of 2007, precedes the Kyoto Protocol's first commitment period. It will be recalled that the Council discussed the proposal at its meeting on 12 December 2001 and that it was briefed on the stage reached in the initial proceedings at its meeting on 4 March 2002.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The committee adopted the report by Jorge MOREIRA DA SILVA (EPP-ED, P) tabling a large number of amendments to the Commission proposal under the codecision procedure (1st reading). It sought to ensure a coherent approach by widening the scope of the proposal considerably and introducing extra provisions to prevent distortions of the internal market. The amendments focused on the following points: - whereas the proposal only covered carbon dioxide, MEPs wanted to include all other greenhouse gases, provided that the quality of data was satisfactory and that accepted methods on measurement, monitoring and calculation could be developed; - the chemicals and aluminium industries should also be included in the scope of the directive; - Member States should be able to apply to the Commission to temporarily exclude some plants (an opt-out) during the first stage of the directive (2005-2007), subject to stringent conditions and criteria; - Member States should be able to add other industrial sectors on a voluntary opt-in basis; - the directive should be reviewed in 2006 rather than in 2004, with an obligation for the Commission to present a proposal on amending Annex I to include more sectors and activities; - there should be fixed-sum penalties only, rather than the Commission's more complicated formulation, in order to avoid excessive uncertainty for industry; - there should be a cap on emissions allowances per Member State to get round two problems: (1) the fact that the directive did not set annual quantitative targets for cutting greenhouse gas emissions under the trading system between Member States; and (2) the danger of over-allocation; - Member States should cancel the allowances of plants which are closed down, whose capacity is cut back or which continue to operate under the same or worse conditions in non-EU countries; - there should be transparency regarding the ownership of emission allowances and transactions performed between companies inside and outside the Member States; - the criteria for national allocation plans (Annex III) should be modified through the codecision procedure rather than through the regulatory procedure; - mutual agreements with emissions trading schemes from third countries should be conditional upon those countries having ratified the Kyoto Protocol; - during the first stage of the directive, there should be a complete ban on the use of emission allowance credits, given that efforts need to be concentrated on reducing emissions within the EU; however, the use of emission credits earned from clean development mechanism (CDM) or joint implementation (JI) projects under the Kyoto Protocol should be allowed with effect from the second stage (2008-2012), provided that those projects did not include carbon sinks or nuclear energy sources.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The European Parliament adopted a resolution based on the report by Jorge MOREIRA DA SILVA (EPP-ED, Portugal) on emission allowance trading. (Please refer to the document dated 10/09/02.) Parliament asked that Member States ensure that direct mechanisms to reduce carbon dioxide such as combined heat and power generation, receive consideration in national allocation plans. It went on to state that: - policies and measures should be implemented at Member State and Community level across all sectors of the EU economy, and not only within the industry and energy sectors, in order to generate substantial emission reductions. Member States should ensure that the choice and substance of policies do not, within a particular sector, result in competition distorting unequal treatment of undertakings which is not objectively justified, such as advantages and disadvantages in terms of policy on climate. -any agreement for mutual recognition of allowances between the Community greenhouse gas emission allowance trading schemes and other trading schemes will be limited to the trading of emission reduction allowances. The use of carbon sinks within this scheme will not be permitted. -credits from clean development mechanism and joint implementation projects under the Kyoto Protocol will not fall within the scope of this directive in the first period beginning in 2005. The trading of allowances may only be linked to credits from clean development mechanism or joint implantation projects that do not involve

carbon sinks or nuclear energy sources. Instead of allocating allowances free of charge as provided in the commission's proposal, Parliament provided that, until 2013, Member States will allocate 15% of the allowances against payment and the remaining part free of charge. When selling part of the allowances, Member States must try and avoid any increase in the overall financial burden for operators, notably where energy taxes are applied, in order to achieve neutrality.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

Certain amendments made by the European Parliament are acceptable to the Commission, in full, part or principle. These include: - penalties concerning the "naming and shaming" of companies and deletion of clauses regarding the calculation of penalties based on average market price; - policies and measures must be implemented across all sectors of the economy and not only the industrial and energy sectors; - transparency regarding the ownership of allowances; - Member States must report on the way in which penalties and the purchase of additional allowances are treated for tax purposes; - links with emission trading schemes can only be made with parties listed in Annex B of the Kyoto Protocol that have ratified the Protocol; - the Commission will make reports so long as it preserves the right of initiative to make appropriate proposals; - national allocation plans must list installations included in the scope of the Directive with the quantities of allowances allocated to each; - standardised methods for monitoring the emissions of other greenhouse gases than CO₂ shall be developed in collaboration with all stakeholders; The Commission does not accept the following amendments: - a recital providing that Member States must ensure that indirect mechanisms to reduce CO₂, such as CHP generation, receive consideration in national allocation plans; - the provision stating that emission trading should form a flexible and complementary part of a package of measures to address climate change. The Commission rejects a voluntary approach. - the provision for additional sectors to be included, and notified to the Commission. Voluntary and "opt-in" of additional activities may distort competition and undermine the environmental integrity of the emissions trading system; - the extension of the scope of emissions trading to cover all greenhouse gases covered by the Kyoto Protocol; - the clause stating that special provision should be made for CHP and the use of waste fuels on the basis of Commission guidance; - the introduction of 15% auctioning in both periods; - the clause that treatment of new entrants must give rise to no distortions of competition compared to incumbents. Member States must be able to choose the method by which allowances are allocated to new entrants; - deleting the ability of amending Annex III (national allocation plans) by comitology - the provision that mutual recognition agreements will exclude the use of carbon sinks; - the stipulation that credits from Joint Implementation and the Clean Development Mechanism cannot be used before 2008. The Commission also rejects the provision that after 2008, only credits that do not involve carbon sinks and nuclear energy sources may be used.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

Of the 73 amendments proposed by the European Parliament in first reading, the common position incorporates 23 (totally, in part or in principle, by means of identical or similar wording, or in spirit. The Council considers that the common position does not alter the approach and aims of the original proposal from the Commission and notes that the commission also supports the common position as it stands. In addition, the changes introduced by the Council to the Commission's amended proposal respond in certain Member States, with which the European Parliament agreed, that existing instruments should, in certain circumstances, be allowed to continue until the end of 2007 as an alternative to the relevant installations being brought within the emission trading scheme. For the five-year period beginning in 2008, the provision for "pooling" would enable there to be an easier transition between existing instruments, such as long-term negotiated national agreements and emissions trading. The common position incorporates many of the amendments proposed by the European Parliament at its first reading. In particular, reviews will take place by 31 December 2004 and 30 June 2006 to examine if emissions of other greenhouse gases can be sufficiently accurately monitored and the scope of the scheme can be extended. As from 2008 Member States will be able to unilaterally opt-in emissions of other gases, following which a review will consider harmonising the scheme through co-decision. The scope of the emissions trading scheme includes energy, heat and steam production of installations above 20MW, while Member States can extend the coverage of the scheme as from 2005 to lower thresholds. It should also be noted that the originally proposed use of comitology to revise Annex III has been limited to the period 2008-2012 in the common position, which is necessary purely for reasons of timing. The common position's requirement for Member States during the period 2008-2012 to allocate at least 90% of allowances free of charge gives businesses and Member States greater certainty of what to expect in the future, and the issue of further harmonisation of the method of allocation will be included in the review to take place by 30 June 2006. Regarding the modalities for linking the EC emissions trading scheme with the Kyoto Protocol's so-called project-based mechanisms, it can be noted that the common position does not prejudice this issue: On the basis of the Commission's forthcoming proposal on the project-based mechanisms, the Council and the European Parliament will decide on these modalities through co-decision. Furthermore, the common position accepts the European Parliament's position that the EC emissions trading scheme should only be linked to schemes in third countries that have ratified the Kyoto Protocol.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The Commission accepted many of the Parliament's amendments that increased transparency. The Commission welcomes the adoption of the common position as likely to accelerate adoption of the proposal whose principal aims are safeguarded in the common position, and thus supports the common position as it stands.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The committee adopted the report by Jorge MOREIRA DA SILVA (EPP-ED, P) amending the Council's common position under the 2nd

reading of the codecision procedure. With the Council having accepted only 23 of the 73 amendments adopted by Parliament at 1st reading, MEPs voted to re-table around 25 of the rejected demands. They were hopeful that by limiting the number of amendments there would be a good chance of reaching agreement with Council at 2nd reading and thus avoiding conciliation. The key amendments were as follows: - the chemical and aluminium industries should also be included in the scope of the directive; - Member States should be able to extend the scheme to additional sectors on a voluntary opt-in basis as early as 2005 if they notify the Commission by 31 March 2004; - the directive should be reviewed in 2006 rather than in 2004, with an obligation for the Commission to present a proposal on amending Annex I to include other sectors and activities; - the directive should apply not only to CO₂ but also to all six greenhouse gases from 2005, provided that the quality of data for a particular reference year is satisfactory and that harmonised methods have been agreed for measuring, monitoring and calculating emissions (the Council was proposing that the other gases be included only on a voluntary basis and after 2008); - on the question of temporary exemptions, the committee again insisted that these should apply only to individual plants and not to whole industrial activities, as the Council was proposing. MEPs were concerned not to open the way to various sectoral opt-outs which could jeopardise the efficiency of the scheme; - on the question of auctioning versus "grandfathering" of licences, the committee adopted a compromise amendment modifying the "hybrid scheme" proposed by Parliament at 1st reading. It said that, for the five-year period beginning 1 January 2008, 5% of the allowances should be sold and the remainder allocated free of charge. However, when selling these allowances, Member States must try to avoid any increase in the overall financial burden for operators, notably where energy taxes are applied, so as to ensure neutrality; - Member States should cancel the allowances of plants which are closed down, whose capacity is cut back or which continue to operate under the same or worse conditions in non-EU countries; - there should be a cap on the number of permits issued to each Member State, in order to prevent distortions of competition. The total ceiling per Member State must correspond to the share of total emissions produced by the industrial plants covered by this directive in 1990. ?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The European Parliament adopted a resolution based on the report by Jorge MOREIRA DA SILVA (EPP-ED, Portugal). It made the following principal compromise amendments to the common position: - for the three-year period beginning 01/01/05, Member States will allocate 95% (rather than 100%) of the allowances free of charge. Furthermore, there should be further harmonisation of the method of allocation to include auctioning for the time after 2012; - the Commission may not amend criteria (1), (5) or (7) of Annex III through comitology; - the Commission will develop guidance to describe the circumstances under which force majeure is demonstrated by 31/12/03; - the Commission shall make a proposal on how and whether the Annex I should be amended to include "other relevant sectors, inter alia the chemicals, aluminium and transport sectors" with a view to further improving the economic efficiency of the scheme; - Member States may apply to the Commission for installations to be temporarily excluded until 31 December 2007. This amends the Council common position, in which such provision would apply for "certain" installations as well as "activities"; - the Commission must look at the practicality of developing Community-wide benchmarks as a basis for allocation, taking into account the best available techniques and cost-benefit analysis. ?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The Commission can accept the European Parliament's 17 amendment in full. It considers that the principal aims of the EC emissions trading scheme are safeguarded by the compromise package that these amendments constitute. ?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

PURPOSE : to establish a scheme for greenhouse gas emission allowance trading within the Community in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner. **LEGISLATIVE ACT** : Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC. **CONTENT** : the Council and the European Parliament, in the framework of the co-decision procedure, have been able to reach agreement in second reading on the Directive establishing a scheme for greenhouse gas emission allowance trading within the Community. The Directive aims to create an instrument of environmental protection to reduce emissions of greenhouse gases in a cost-effective manner, in order to allow the Union to meet its obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. While seeking an overall reduction in greenhouse emissions, it also aims to ensure the proper functioning of the Internal Market and prevent any distortions of competition which might result from the establishment of separate national trading schemes. The first phase of the proposed scheme covers the period between 2005 and 2007. It precedes the Kyoto Protocol's first commitment period from 2008 to 2012, which corresponds to the second phase of the Community scheme. The main points of the agreement are as follows: - Total quantity of allowances : in accordance with Annex III of the Directive (Criteria for National Allocation Plans), the total quantity of allowances for the two periods covered (2005-2007 and 2008-2012) shall be consistent with the Member States' obligations to limit their emissions and with the national climate change programme. It shall not be more than is likely to be needed for the strict application of the criteria of the Annex mentioned above. Furthermore, and prior to 2008, the quantity shall be consistent with a path towards achieving or overachieving each Member State's target under Decision 2002/358/EC and the Kyoto Protocol. - Method of allocation : For the period 2005-2007, Member States shall allocate at least 95% of the allowances free of charge. For the period 2008-2012, they shall allocate at least 90% of the allowances free of charge. Moreover, the Commission is requested to draw up a report on the application of the Directive where it should consider, inter alia, the further harmonisation of the method of allocation, including auctioning for the time after 2012. - Temporary exclusion of installations : Member States may apply to the Commission for installations to be temporarily excluded until 31 December 2007, at the latest, from the Community scheme. The application, containing the list of each installation, shall be published. Temporary exclusion may be granted on the basis of relevant criteria and as long as no risk of distortion of the Internal Market is presented. - Project-based mechanisms (Joint Implementation and Clean Development) : in recognition of the importance of those two project-based mechanisms for achieving the goals of both reducing emissions and increasing the cost-effective functioning of the Community scheme, and in accordance with the Kyoto

Protocol and the Marrakech Accords, Member States can use the mechanisms to supplement domestic action. - Future extension to other sectors : when drawing up its report on the application of the legal act, the Commission is requested to consider how and whether the categories of activities covered by the scope of the Directive (e.g. energy activities, production and processing of ferrous metals, mineral industry, pulp, paper and board industrial plants) should be modified to include other relevant sectors such as, inter alia, the chemicals, aluminium and transport sectors. - Harmonised early extension to other greenhouse gases : the initial focus of the Directive is on carbon dioxide (CO₂). However, from 2008, Member States may extend the coverage of the Community scheme to emissions of other greenhouse gases (e.g. methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride), inter alia, from aluminium and chemicals activities. The proposed Directive is closely linked to the draft Decision on a monitoring mechanism for greenhouse gas emissions in the Community and the Commission's proposal on Joint Implementation and Clean Development Mechanisms (soon to be presented). The United Kingdom delegation has made a public statement on the transposition of the provisions of the Directive into national law. That statement was supported by the Belgian, French and Austrian delegations. The Italian delegation has made a statement on the same subject. ENTRY INTO FORCE : 25/10/2003. IMPLEMENTATION : 31/12/2003.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

PURPOSE: Commission guidance to assist Member States on the implementation of the criteria establishing a scheme for greenhouse gas emission allowance trading within the Community and a clarification on the use of force majeure **CONTENT:** This Commission Communication seeks to offer clear and unambiguous guidelines to Member States when preparing allocations for greenhouse gas emissions trading. Directive 2003/87/EC provides for the establishment of a Community-wide greenhouse gas emission allowance trading scheme as of 2005. Under the Directive Member States are required to develop a national allocation plan, the first of which has to be published and notified to the Commission and other Member States by 31 March 2004. The Commission urges new Member States to follow suit even though they are only obliged to do so as from 1 May 2004. The Directive mandates the Commission to develop guidance on the implementation of the criteria listed in Annex III by 31 December 2003 as well as offering guidance on the circumstances under which force majeure can be demonstrated. The purpose of the Communication is: - To assist Member States in drawing up their national allocation plans, by indicating the scope of interpretation of the Annex III criteria that the Commission deems acceptable; - To support the Commission assessment of notified national allocation plans, pursuant to Article 9(3); - To describe the circumstances under which force majeure is demonstrated. Concerning the implementation of Annex III criteria the Communication notes that eleven criteria are listed, of which four are mandatory (assessments of emissions development; non-discrimination between companies; involvement of the public; list of installation), four are optional (new entrants; early action; clean technology; competition from outside the Union) and three are designed so that the Member States are free to decide which elements to apply (Kyoto commitments; potential to reduce emissions, consistency with other legislation). The Commission will not reject a plan if all mandatory criteria and mandatory elements of criteria are applied in a correct manner. The Commission will not reject a plan if optional criteria or optional elements of criteria are not applied. However, if these optional criteria or optional elements of criteria or additional transparent and objective criteria are applied, the Commission will assess their application. For the sake of clarity and in order to facilitate its use by Member States a recommended common format for establishing and notifying the national allocation of plans is attached. Regarding the question of force majeure, the Commission recognises that the provisions allowing for a force majeure go counter to the spirit of the Directive. Thus, the Communication makes it clear that it will only consider cases in exceptional and unforeseeable circumstances. The circumstances would have to cause a substantial increase in annual direct emissions of greenhouse gases at an installation and could not have been avoided even if all due care had been exercised. The circumstances would have had to be beyond the control of the operator of the installation concerned and of the Member State submitting an application. Force majeure would include natural disasters, war, threats of war, terrorist acts, revolution, riot, sabotage or acts of vandalism. The presence of force majeure would have to be demonstrated at installation level and on a case-by-case basis. Lastly, a Member State should submit an application to the Commission by 31 January the year following the year of the trading period during which the circumstance occurred for which force majeure is pleaded.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

LEGISLATIVE ACT : Commission Decision of 29 January 2004 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council **CONTENT :** This Decision has been established in order to offer Member States clear, consistent and harmonised methods for the monitoring and reporting of greenhouse gas emissions. The first Annex attached to the Decision offers general guidelines for the purpose of monitoring and reporting emissions. It includes definitions of the most important terms relating to the Decision such as the exact references for the meaning "activity"; "activity specific" "biomass" "emissions" etc. It also offers a comprehensive account of monitoring and reporting principles. Thus, for example, reports must be complete, consistent, transparent and accurate. Annex I also defines in considerable detail what greenhouse emissions are and how they can be measured according to a common format. Verification of the reports is also taken into account and incorporated into Annex I attached to the Decision as are issues relating to emission factors. The eight remaining Annexes relate to: - Guidelines for combustion emissions. - Activity-specific guidelines for mineral oil refineries. - Activity-specific guidelines for coke ovens. - Activity-specific guidelines for metal ore roasting and sintering installations. - Activity-specific guidelines for installation for the production of pig iron and steel including continuous casting. - Activity-specific guidelines for installations for the production cement clinker. - Activity-specific guidelines for the installations for the production of lime. - Activity-specific guidelines for installations for the manufacture of glass. - Activity-specific guidelines for installations for the manufacture of ceramic products. - Activity-specific guidelines for pulp and paper-producing installations. All of these are listed in Annex I to Directive 2003/87/EC. The revised annexes will enter into force on 01/01/08.?

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

In this Communication, the European Commission has set out its agenda for revising the EU emissions trading scheme (EU ETS) in the light

of experience gained since it first began operating in January 2005. The report has been prepared on the basis of Article 30 of Directive 2003/87/EC, which requires the Commission to draw up a report on the application of the Directive ? and if appropriate prepare further proposals. The Commission has decided that, at this stage, it would be premature to make legislative proposals. In addition, for reasons of regulatory stability and predictability, any changes to the Directive should take effect at the start of the third trading period commencing in 2013.

What the Commission is, however, suggesting is a thorough review of the EU ETS scheme prior to 2013. As such, the Commission wants to promote the environmental impact of emission trading by expanding it to new sectors and gases and further its global application as a key tool to combat climate change.

The review will seek to give greater predictability to investors and strengthen harmonisation by streamlining how the ETS is applied in the various Member States. The operation of the EU ETS, to date, has already generated position papers and studies by stakeholders which will feed into the review. The Communication sets out four broad categories of issues on which the review will focus:

Scope: The review will look at expanding the EU ETS to other sectors and other greenhouse gases besides carbon dioxide (CO₂). The review will, therefore, assess the feasibility of including N₂O from the production of nitric acid as well as the need to include CO₂ emissions from combustion installations; from the production of petrochemicals; from the production of ammonia; from the use of fertilisers other than nitric acid and adipic acid; PFCs from the production of aluminium and CH₄ from coal mines. In view of the many divergent interpretations by Member States, the review will consider ways to give greater clarity on which types of combustion installations should be covered. Separately from the review, the Commission, Council and European Parliament have all expressed support for bringing aviation into the EU ETS and the Commission intends to make a specific legislative proposal on the aviation sector within the next few months.

Further harmonisation and increased predictability: Further harmonisation is needed in relation to what types of installations are covered by emission trading, including how we deal with newly operating installations and of installations which close during the course of a trading period. Greater harmonisation on the allocation of emission allowances is also required. The Commission shares the widely expressed view that giving greater certainty to investors for longer than five years ahead, as the scheme currently does, is desirable. Increased predictability, as well as further harmonisation of the process under which Member States set an overall cap on their emissions and allocate emission allowances to installations, will thus be key to the review. The Commission plans to explore the option of setting a single EU-wide cap after 2012.

Robust compliance and enforcement: While initial experience regarding compliance with, and enforcement of, the ETS rules has been encouraging, there is a need to assess further harmonisation of requirements. The focus will, therefore, be on guidelines for monitoring and reporting emissions and rules for third-party verification of emissions reports.

Involving third countries: The Communication opens a discussion on how the EU ETS can be linked to existing or future schemes in third countries, such as the emissions trading schemes planned by the north-eastern States and California in the US and by Australian states. The Communication also contains a clear commitment by the Commission to maintain the scheme's recognition of credits from emission-saving projects carried out in developing countries and elsewhere, while further harmonising the EU ETS' provisions in this area. This will strengthen companies' willingness to engage in action to reduce emissions globally, leading to the transfer of clean technologies to third countries and to emission reductions taking place where this is most economically efficient.

A working group, within the framework of the European Climate Change Programme (ECCP), will begin work on this review in autumn 2006. Its review will feed into a legislative proposal, which will be presented to the Council and Parliament by the Commission in the course of 2007.

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

This Commission communication concerns the assessment of national allocation plans for the allocation of greenhouse gas emission allowances in the second period of the EU Emissions Trading Scheme accompanying Commission Decisions of 29 November 2006 on the national allocation plans of Germany, Greece, Ireland, Latvia, Lithuania, Luxembourg, Malta, Slovakia, Sweden and the United Kingdom in accordance with Directive 2003/87/EC.

This Communication sets out the Commission's approach to the assessment of second period plans and is accompanied by a first package of decisions addressed to 10 Member States.

For each trading period, each Member State is obliged to notify a national allocation plan to the Commission. The Directive requires the Commission to assess each plan according to the same criteria set out in Annex III to and Article 10 of the Directive. The Commission adopts a separate decision within three months of a complete plan being notified.

By 29 November 2006, 19 Member States had notified a national allocation plan to the Commission. Of these, 10 were sufficiently complete to allow the Commission to take a decision on their compatibility with the Directive. These plans represent about half of the overall quantity of allowances allocated in the first trading period.

On 12 October 2006, the Commission launched infringement proceedings on all outstanding plans. It will continue to exert legal pressure so as to ensure that outstanding plans are notified as soon as possible. The Commission has placed particular emphasis on assessing the second period plans in a consistent, fair and transparent manner. In so doing, the Commission has identified several issues that have been scrutinised in detail for compatibility with the Annex III criteria. These fall under the following main headings:

- setting a cap consistent with each Member State's Kyoto Protocol commitment, emissions development and reduction potential;
- ex-post adjustments;
- consistency with complementarity obligations (Joint Implementation/Clean Development Mechanism project credit limit);
- other issues specific to individual plans with a view to avoiding undue distortions of competition and of the internal market.

The Commission states that a successful EU ETS is of vital importance to sustaining the EU's credibility in relation to the post-2012 climate regime. At the same time greater use of the EU ETS is crucial to respecting the EU's Kyoto commitments during the period 2008 to 2012. A number of national allocation plans proposed to the Commission would not only endanger the achievement of Europe's Kyoto commitments, but would at the same time create undue distortions in the internal market.

With the objective and transparent assessment of the second period plans, as presented in this Communication, the Commission is safeguarding the achievement of the Kyoto commitments and a successful and growing carbon market into the future.

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The Commission presented a report on the state of the European carbon market in 2012. The purpose of this first report is to analyse the functioning of the carbon market and to consider whether regulatory action is needed, as foreseen in the EU Emission Trading System (ETS) Directive. It also responds to the call of the European Parliament and the Council made on the Commission in the context of the Energy Efficiency Directive.

The ETS as a central pillar in European climate change policy: the report underlines that the EU ETS has created a functioning market infrastructure and a liquid market producing an EU wide carbon price signal. This has contributed to delivering real greenhouse gas (GHG) emissions reductions in line with the EU targets for 2020.

The implementation of the EU ETS has been accompanied by a wealth of market and operational experience for governments and companies. This experience fed into the major revision of the systems operational design, agreed in 2008 for application as of 2013, where the following fundamental changes will apply:

- an EU-wide cap on allowances, as opposed to 27 individual Member State caps, decreasing by 1.74% annually, up to and beyond 2020, providing much greater regulatory predictability and stability;
- auctioning as the default system of allocation in phase 3;
- harmonised rules for free allocation, based on performance benchmarks established prior to phase 3;
- stricter rules on the type of international credits that are allowed for use in the EU ETS.

Mismatch between supply and demand: the effects of the crisis compounded by a number of regulatory provisions related to the transition to Phase 3 have caused serious imbalances to emerge between supply and demand in the short term with potentially negative long-term repercussions.

By the end of 2011, 8 171 million allowances had been put into circulation and 549 million international credits had been used for compliance, in total adding up to 8 720 million units that were available for compliance over the period 2008-2011. In contrast, verified emissions in the period 2008-2011 were only 7 765 million tonnes CO₂-eq. Consequently, by early 2012, a surplus of 955 million allowances had accumulated.

If not addressed, these imbalances will profoundly affect the ability of the EU ETS to meet the ETS target in future phases in a cost-effective manner, when significantly more demanding domestic emission objectives than today would have to be reached.

The Commission therefore proposes action on two fronts:

1) Revision of the auctioning timetable as a short-term measure: in order to address the rapid increase of supply in the transition to phase 3, the Commission proposes to change the auctioning timetable and invites the Climate Change Committee to give an opinion on the draft amendment to the Auctioning Regulation before the end of the year in order to provide certainty for market participants.

To eliminate any legal uncertainty, Parliament and Council are invited to urgently adopt the [proposed "mini-amendment" of the EU ETS Directive](#) that would clarify expressly the relevant provision and would then allow the Commission to swiftly adopt an amendment to the Auctioning Regulation.

2) Options regarding structural measures: the Commission considers that structural measures should be discussed and explored with stakeholders without delay. These discussions can benefit from insights of the 2050 Low Carbon Economy and Energy Roadmaps. Changing the auctioning profile is only a short-term and temporary measure that would allow for a more stable phase 3 and more gradual build-up of the surplus. It would not be a solution that addresses the structural surplus. To do so would require deploying a structural measure affecting more profoundly and permanently the balance between supply of and demand for allowances.

To remedy the growing structural imbalance between supply and demand and to gather stakeholders views, six non-exhaustive options for structural measures have been put forward by the Commission:

- Option 1: increasing the EU GHG target to 30% in 2020;
- Option 2: withdrawing a number of allowances during phase 3;
- Option 3: early revision of the linear reduction factor (the total amount of allowances decreases by the linear factor of 1.74% annually, compared to the average annual total quantity for the period 2008-2012);
- Option 4: extension of the scope of the EU ETS to other sectors;
- Option 5: limit access to international credits;
- Option 6: discretionary price management mechanisms.

Should the Commission decide to pursue any of these options, all would require a legislative proposal by the Commission to the co-legislators, accompanied by a full impact assessment in line with smart regulation principles.

While each option affects supply or demand, some options will require more time to analyse, decide upon and subsequently implement. Options also have different impacts on market certainty in the short term and the interaction with other policies such as renewables and energy efficiency will need to be further analysed.

The Commission welcomes stakeholders' views on structural options and will as the next step shortly launch a formal stakeholder consultation process.

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

The Commission adopted the climate action progress report, including the report on the functioning of the European carbon market and the report on the review of Directive 2009/31/EC on the geological storage of carbon dioxide. The report also responds to the requirements of Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emissions allowance trading within the Community (EU ETS).

The report notes that the EU is currently on track towards meeting its Europe 2020 greenhouse gas reduction target as well as its Kyoto Protocol targets. However, additional measures are needed for the EU to meet the target of a domestic reduction in greenhouse gas emissions of at least 40 % by 2030 compared to 1990.

To address this, the Commission has proposed a [revision of the EU Emissions Trading System \(EU ETS\)](#) in July 2015. In the first half of 2016, the Commission will also make proposals on the implementation of the non-ETS emissions reduction target of 30% compared to 2005.

EU ETS: since 2013, the EU ETS has operated under the improved and more harmonised rules of phase 3. The report on the functioning of the European carbon market covering the first two years of phase 3, 2013 and 2014, confirms that the system is robust and that it has created a functioning market infrastructure and a liquid market.

On 15 July 2015, the Commission presented a legislative proposal on the revision of the EU ETS for phase 4. The proposal aims to achieve a 43% reduction in EU ETS emissions compared to 2005 levels. To this end, the overall number of allowances will decrease at an annual rate of 2.2 % from 2021 onwards. Compared to the current 1.74%, this leads to a significant additional emissions reduction, estimated at around 550 million tonnes between 2021 and 2030.

Financing the fight against climate change: the report provides an overview of the use of climate finance generated by the auctioning of EU ETS allowances and the EU budget. It also summarises data on EU and Member States climate spending in support of developing countries.

- In 2014, the total revenue from the auctioning of EU ETS allowances amounted to EUR 3.2 billion. On average in 2014, Member States used or are planning to use around 87 % of these revenues for climate and energy related purposes, largely to support domestic investment in climate and energy. Nevertheless, a few Member States are still in the process of setting up the appropriate legal and financial instruments to make use of some of their revenues.
- Under the NER 300 programme, 38 renewable energy projects and one CCS project were selected for funding in 20 Member States. Total NER 300 funding will be EUR 2.1 billion, which is expected to leverage an additional EUR 2.7 billion of private investment.
- The new Innovation Fund proposed as part of the revised EU ETS Directive would have 400 million allowances plus 50 million of unallocated allowances. It would build on the NER 300 programme while extending its scope to low carbon innovation in industrial sectors.
- The Commission has also proposed a new Modernisation Fund, designed for 10 Member States with a GDP per capita of less than 60 % of the EU average in order to modernise their energy systems and improve energy efficiency and ultimately provide citizens with cleaner, secure and affordable energy. Between 2021 and 2030, 2% of the allowances, which means some 310 million allowances in total, will be used to establish the fund.

The report also notes that the current multiannual financial framework sets a target of allocating at least 20 % of the EU budget to climate-related objectives. This represents around EUR 180 billion and is a threefold increase from the 6-8% share in the 2007-2013 EU budget. There has been significant progress. The overall contribution in 2015 represents around 16.8%. In 2016, 20.6% of the EU budget is expected to contribute to achieving the EU's climate goals.

Furthermore, the EU and its Member States are the biggest providers of official development assistance to developing countries, accounting for over US\$ 70 billion per annum (around EUR 58 billion in 2014). They allocated EUR 7.34 billion to fast start finance over the 2010-2012 period. In 2014 the EU and its Member States collectively committed EUR 14.5 billion to help developing countries in tackling climate change.

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

In accordance with Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community

(EU ETS Directive), the Commission presents a report on the functioning of the European carbon market. The report covers year 2015 but it also presents certain initiatives proposed or agreed in 2016.

Since 2005, the EU Emissions Trading System (EU ETS) has been the cornerstone of EU strategy for reducing greenhouse gas emissions from industry and the power sector. In order to achieve the target of cutting emissions by at least 40% by 2030, the Commission the Commission presented a [legislative proposal](#) to revise the EU ETS for the next decade. A reformed EU ETS will amount to the decrease of 43% of emissions compared to 2005 in the sectors covered by the EU ETS.

Progress to date: according to the information recorded in the Union Registry in 2015, emissions of greenhouse gases from installations participating in the EU ETS are estimated to have decreased by just under 0.4%. This confirms the decreasing trend over the last five years of the functioning of the system.

Furthermore, 2015 marks the first year in which the surplus of allowances that has built up in the system since 2009 - largely due to the deep and sustained economic recession that reduced emissions more than anticipated - showed a material decline.

At the start of phase 3 (2013-2020), the EU ETS was characterised by a large imbalance between supply and demand of allowances, resulting in a surplus of around 2.1 billion in 2013. In 2014, it has been slightly reduced to some 2.07 billion and in 2015 it fell significantly to 1.78 billion allowances.

The decline in the surplus reflects the reduction in auction volumes due to the implementation of the back-loading measure provided for in [Decision No 1359/2013/EU](#), which postponed the auctioning of 400 million allowances in 2014, 300 million in 2015 and 200 million in 2016. Ultimately these allowances will be transferred to the Market Stability Reserve, which will be implemented as of 2019.

EU ETS architecture: the third year of phase 3 further indicated that the EU ETS architecture is robust. Since 2005 the system provides a price

signal for power plants and other installations, to promote research, development and investment in clean, low-carbon technologies.

The total value of reported investment support during the years 2009 to 2015 is around EUR 9.49 billion. About 80% of this was dedicated to upgrading and retrofitting infrastructure, while the rest of the investments related to clean technologies or diversification of supply. Examples of investments include a new cogeneration-condensing steam turbine in Estonia, rehabilitation of district heating networks in Bulgaria, the substitution of coal by renewable energy sources through waste utilisation in the Czech Republic and the construction of an interconnector pipeline for natural gas in Hungary.

In 2015, the auctioning of ETS allowances generated EUR 4.9 billion of revenues for Member States. On average, in 2015, Member States spent or planned to spend 77% of these revenues for specified climate and energy related purposes.

Aviation sector: in response to the ICAO Assembly agreement to develop by 2016 a global market-based mechanism to be implemented from 2020 to tackle emissions from international aviation, the scope the EU ETS is temporarily reduced to emissions from flights within the EEA between 2013 and 2016.

Verified emissions from flights between airports located in the EEA amounted to 56.9 million tonnes of carbon dioxide in 2015, an increase of 3.6% compared to 54.9 million tonnes in 2014.

The amount of allowances to be auctioned for 2015 as determined on the basis of an expected annual amount of 5.7 million, following the adjustments made to auction volumes in accordance with [Regulation \(EU\) No 421/2014](#). These figures show around 19 million tonnes of net demand for allowances created by aviation in 2015.

Monitoring of emissions: the Commission continues to seek continuous improvements in the guidance and templates that it makes available to facilitate consistent implementation of the [Monitoring and Reporting Regulation](#) (MRR) and the [Accreditation and Verification Regulation](#) (AVR). Another new initiative concerns drafting of guidance on EU ETS inspection. The Commission continues to monitor the monitoring, reporting verification, and accreditation (MRVA) implementation across all Member States. It is recognised that the efficiency of the compliance system has improved since the MRR allowed Member States to make electronic reporting mandatory.

Under the revised rules, which are proposed to apply as of phase 4 (2021-2030), the EU ETS will continue to be a cost-effective driver for low-carbon investments for the years to come.

A stronger European carbon market has the potential to make a major contribution to the transition to a low-carbon economy in Europe. It will also contribute to the global low-carbon transition, following the adoption of the first universal climate change agreement in Paris.

The Commission will continue to monitor the carbon market and provide the next report in late 2017.

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

In accordance with Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community (ETS), the Commission has submitted a report on the functioning of the European carbon market.

The present report covers the year 2016, but also presents certain initiatives proposed or agreed in 2017.

The EU Emissions Trading System (EU ETS) has been the cornerstone of the EU's strategy for reducing greenhouse gas (GHG) emissions from industry and the power sector since 2005.

In order to reach the target of reducing emissions by at least 40% by 2030, the Commission presented in July 2015 a [legislative proposal](#) to reform the ETS for its fourth trading period (2021-2030). A political agreement was reached on the proposal in early November 2017. The reformed ETS is expected to reduce emissions by 43% compared with 2005 in the sectors covered by the ETS.

Progress achieved: based on information from the Union Registry, it is estimated that in 2016, GHG emissions from installations participating in the EU ETS decreased by 2.9% compared to 2015. This reflects a downward trend in emissions since the beginning of Phase 3 of the system in 2013.

At the start of Phase 3, the EU ETS was characterised by a large imbalance between the supply and demand of allowances, resulting in a surplus of around 2.1 billion in 2013. The surplus was reduced slightly in 2014 and then fell significantly to 1.78 billion allowances in 2015 and to 1.69 billion allowances in 2016. This reflects the impact of a further reduction of the supply of allowances in 2016, the final year of the back-loading measure, by 200 million.

To address the structural imbalance between the supply and demand of allowances, the creation of a Market Stability Reserve (MSR) was agreed in 2015 to render the auction supply of emission allowances more flexible. Ultimately, the back-loaded allowances will be transferred to the reserve, which will be operational as of January 2019.

EU ETS infrastructure: in the fourth year of phase 3 the EU ETS architecture has proven to remain robust. The compliance rate has remained consistently very high for both stationary installations and aviation operators and the administrative organisation in participating countries has proven to be effective.

According to the reports submitted by the participating countries in 2017, the total number of permitted installations amounted to 10 790 in 2016, compared to around 10 950 in 2015 and 11 200 the previous year.

As was the case in previous years, the fuels combusted within the EU ETS in 2016 remained overwhelmingly fossil. However, 29 countries also reported biomass use (compared to 27 in 2015) in connection with 2 079 installations (19% of all installations).

The total value of reported investment support during the years 2009 to 2016 is around EUR 11 billion. About 80% of this was dedicated to upgrading and retrofitting infrastructure, while the rest of the investments were in clean technologies or diversification of supply. Some examples of investments include the reduction of energy consumption for electricity production in Lithuania, the replacement of insulation on existing steam distribution lines in the Czech Republic, and the construction of a cogeneration unit fuelled mainly by natural gas in Bulgaria.

In 2016, the auctioning of ETS allowances generated EUR 3.79 billion of revenues for the Member States. According to the information

submitted to the Commission, Member States spent or planned to spend approximately 80% of these revenues for specified climate and energy related purposes in 2016, however there are variations among them.

Aviation sector: significant progress has been made in the aviation sector. EU Member States have signalled their intention to join the ICAO global scheme from the start provided that certain conditions are met. Pending the application of the global measure, the Commission has [proposed](#) to continue the same EU ETS approach for aviation beyond 2016, namely to keep the geographic scope as intra-EEA.

As regards developments in aviation emissions within the EU ETS, in 2016, verified emissions continued to grow and amounted to 61 million tonnes of CO₂, an increase of 7.9% compared to 2015. The free allocation amounted to slightly over 32 million allowances in 2016. The amount of allowances auctioned between January and December 2016 was approximately 6 million.

Outlook: after more than 2 years of negotiations on the proposal for reforming the EU ETS for its fourth trading period, a landmark agreement has been reached in November 2017 which demonstrates that the European Union is turning its Paris commitment into concrete action.

The revised and substantially strengthened EU ETS will be a major part of the EU contribution to the implementation of the Paris agreement towards a global low-carbon transition.

The Commission will continue to monitor the European carbon market and provide the next report in late 2018.

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

In accordance with Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community (ETS), the Commission presents a report on the functioning of the European carbon market for 2017. It also presents initiatives proposed or agreed in the first half of 2018.

The EU Emissions Trading System (EU ETS) contributes significantly to the achievement of the EU's target of cutting greenhouse gas (GHG) emissions by 20% from 1990 levels by 2020. While the EU is on track to surpass this target, cutting GHG emissions by at least 40% by 2030 as part of the EU's 2030 climate and energy policy framework requires continued progress. A well-functioning EU ETS constitutes the main mechanism to achieve the EU's 2030 target, by facilitating a decrease of 43% of GHG emissions compared to 2005 levels in the sectors covered by the system.

Legislative changes

After extensive negotiations, the [revised EU ETS Directive](#) reforming the system for the next decade, entered into force on 8 April 2018. The revised Directive for phase 4 aims to facilitate the achievement of the threefold objective of a 43% GHG emissions reduction for EU ETS sectors by 2030, safeguarding industrial competitiveness, and fostering low-carbon modernisation and innovation by a series of interlinked measures.

To increase the pace of emissions cuts, the overall number of emission allowances will decline at an annual rate of 2.2% from 2021 onwards, compared to 1.74% currently. This increase implies a steady reduction of some 48 million allowances annually, compared to 38 million currently, and is consistent with a 43% reduction in GHG emissions from ETS covered sectors by 2030, compared to 2005 levels.

In 2017, the EU ETS Directive was [further revised](#) to accommodate the development of a global measure for reducing aviation emissions by the International Civil Aviation Organisation (ICAO), by continuing to keep the systems' coverage confined to flights within the European Economic Area (EEA).

2017 also marked the signature of an agreement between the EU and Switzerland on linking the Swiss greenhouse gas emissions trading system to the EU ETS - the first such agreement for the EU.

Following the adoption of the revised legislation, the focus has now shifted towards implementing the new provisions ahead of the start of phase 4. Implementation work, in particular on carbon leakage and free allocation, as well as on the Innovation Fund is in full swing.

Progress on emissions

In 2017, emissions from installations covered by the European Emissions Trading System (EU ETS) increased slightly by 0.18% compared to 2016. While this breaks the decreasing emissions trend since the start of the systems third trading period (2013- 2020), it can be explained by growth in real GDP of 2.4%, which is higher than in any year since the beginning of the period. The increase was mainly driven by industry, while emissions from the power sector decreased slightly for the fourth consecutive year.

Surplus of allowances

Over the last three years, the surplus of allowances in the European carbon market has been steadily declining, by an overall amount of almost half a billion allowances, mainly due to back loading, i.e. postponed auctioning of allowances. The reformed ETS will further address the surplus by reinforcing the Market Stability Reserve - the EU's mechanism established in 2015 to reduce the oversupply of allowances and to improve the EU ETS's resilience to future shocks. From 2019 (when the reserve will start operating) to 2023, the percentage of the surplus to be placed in the Market Stability Reserve will be doubled from the initially agreed 12%, to 24%. Moreover, as of 2023, reserve holdings exceeding the previous year's auction volume will no longer be valid. Together with the second publication of the Market Stability Reserve surplus indicator in May 2018, these reforms will lead to placing almost 265 million allowances (16% of the surplus) into the Market Stability Reserve from January to August 2019 instead of auctioning them. This will reduce the auction volume over the first 8 months of 2019 by some 40% compared to the corresponding volume in 2018.

Due to the doubled amount of allowances to be placed in the reserve for the first five years of its operation, it is widely expected that the surplus will continue to decline substantially in the coming years. Progress on these fronts has translated into increased confidence by market participants as illustrated by the reinforced carbon price signal over the last year.

Revenues from allowances

The total revenues generated by Member States from the auctions between 2012 and 30 June 2018 exceeded EUR 26 billion (in 2017 alone,

the generated total revenues were EUR 5.6 billion). The EU ETS Directive provides that at least 50% of auction revenues, including all revenues generated from allowances distributed for the purposes of solidarity and growth, should be used by Member States for climate and energy related purposes. According to the information submitted to the Commission, Member States spent or planned to spend approximately 80% of these revenues for specified climate and energy related purposes in 2017.

Aviation

To provide continued momentum to the international process of establishing a global scheme to curb aviation emissions, and to facilitate its future implementation in the EU, the limited scope for aviation to only flights within the European Economic Area has been extended until 2023. As from 2021, a linear reduction factor will for the first time apply to the aviation sector, reducing the cap on aviation emissions by 2.2% annually.

EU ETS architecture

In the fifth year of phase 3, the EU ETS architecture has remained robust and the administrative organisation across Member States has proven to be effective. Moreover, the overall level of transparency, investor protection, and integrity in the carbon market has increased with the classification of emission allowances as financial instruments under the new financial market rules. An important step has also been taken towards the continued protection of the European carbon market against VAT fraud, with the adoption of an amendment to the VAT Directive to extend the application of the reverse charge mechanism derogation beyond the end of 2018.

Following the enhanced transparency and reporting requirements of the revised EU ETS Directive, the report provides for the first time an overview of the actual amounts of state aid spent by Member States on indirect carbon cost compensation in 2017.

Scheme for greenhouse gas emission allowance trading within the Community. EU Emissions Trading System (EU ETS) Directive

In accordance with Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community (ETS), the Commission presents a report on the functioning of the European carbon market for 2018. It also presents initiatives proposed or agreed in the first half of 2019.

State of play

Following the entering into force of the EU ETS revision for phase 4 in April 2018, the adoption of the implementing legislation for the fourth trading period is progressing at a fast pace. Over the past year, implementing legislation on the new carbon leakage list and free allocation rules has been adopted, and the legal framework for the Union Registry system has been revised to accommodate the required adjustments for phase 4.

Moreover, the rules for the operationalisation of the Innovation Fund – the ETSs main instrument for the funding of low-carbon innovative technologies and breakthrough innovation in phase 4 - have been established. At the same time, the Auctioning Regulation has been revised to enable the auctioning of the first 50 million allowances for the Innovation Fund in 2020.

A second revision to create the institutional framework for the auctioning of allowances for the Innovation and the Modernisation Funds in phase 4 was adopted by the Commission in August 2019.

2018 was also marked by the increased confidence of market participants, which was reflected in a reinforced carbon price signal. The higher price of emission allowances led to a substantial increase in the total revenues from auctioning generated by Member States - in 2018, the generated total revenues were EUR 14 billion, more than two times higher than the revenues generated in 2017. Based on data submitted by Member States, over the course of 2018, close to 70% of these revenues were spent (or were planned for spending) on specified climate and energy related purposes.

Legislative changes

The legislative changes agreed in recent years to address the surplus of allowances continue to show marked results. The Market Stability Reserve surplus indicator was published for the third time in 2019, and together with the 2017 indicator, led to a reduction in auction volumes by nearly 40%, or close to 397 million allowances in 2019. As a result, some 30% fewer allowances will be auctioned in 2019 than in 2018.

Revenues from allowances

The total revenues generated by Member States from the auctions between 2012 and 30 June 2019 exceeded EUR 42 billion. As stated, in 2018 alone, the generated total revenues were EUR 14 billion. The EU ETS Directive provides that at least 50% of auction revenues, including all revenues generated from allowances distributed for the purposes of solidarity and growth, should be used by Member States for climate and energy related purposes. According to the information submitted to the Commission by Member States, Member States spent or planned to spend close to 70% of these revenues for specified climate and energy related purposes in 2018. In the period 2013-2018, about 80% of auction revenues were spent for such purposes.

Progress on emissions

The year was also marked by a substantial fall in emissions from EU ETS-covered installations. The decrease of 4.1% compared to 2017 was mainly driven by electricity and heat production, with emissions from industry falling only slightly. However, verified aviation emissions continued to grow in 2018, increasing by 3.9% compared to 2017.

Surplus of allowances

The surplus has been decreasing over the course of the current trading period, remaining stable in 2014 and falling significantly to 1.78 billion allowances in 2015, 1.69 billion allowances in 2016, and 1.65 billion allowances in 2017. In 2018, the surplus remained at 1.65 billion allowances.

Aviation

In 2018, allowances were issued in line with the intra-EEA scope. Free allocation amounted to slightly over 32.3 million allowances. This

number comprises both free allocation (slightly over 31.2 million allowances) for incumbent operators and nearly 1.1 million allowances allocated from the special reserve for new entrants and fast growing operators. Allocations from this reserve are doubled in 2017-2020 as they relate to the full period 2013-2020. The volume auctioned in 2018 was approximately 5.6 million allowances.

Verified aviation emissions continued to grow and amounted to 67 million tonnes of carbon dioxide in 2018, an increase of 4% compared to 2017.

The EU ETS architecture

In 2018, EU ETS compliance has remained very high - the compliance rate exceeded 99% for both stationary installations and aircraft operators. The EU ETS architecture has remained robust and the administrative organisation across Member States has proven to be effective.

Follow-up

The Commission will continue to monitor the European carbon market and provide the next report in late 2020.