

Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006 (Text with EEA relevance)

REGULATION (EU) No 517/2014 OF THE  
EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 16 April 2014

on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee<sup>(1)</sup>,

After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure<sup>(2)</sup>,

Whereas:

- (1) The Fourth Assessment Report of the Intergovernmental Panel on Climate Change ('IPCC') of the United Nations Framework Convention on Climate Change ('UNFCCC'), to which the Union is party<sup>(3)</sup>, stated that, on the basis of existing scientific data, developed countries would need to reduce greenhouse gas emissions by 80 % to 95 % below 1990 levels by 2050 to limit global climate change to a temperature increase of 2 °C and thus prevent undesirable climate effects.
- (2) To reach this target, the Commission adopted a Roadmap for moving to a competitive low carbon economy in 2050, which was noted by the Council in its Conclusions of 17 May 2011, and endorsed by the European Parliament in its Resolution of 15 March 2012. In that Roadmap, the Commission laid out a cost-effective way of achieving the necessary overall emission reductions in the Union by 2050. That roadmap establishes the sectoral contributions needed in six areas. Non-CO<sub>2</sub> emissions, including fluorinated greenhouse gases but excluding non-CO<sub>2</sub> emissions from agriculture, should be reduced by 72 % to 73 % by 2030 and by 70 % to 78 % by 2050, compared to 1990 levels. If based on the reference year 2005, a reduction in non-CO<sub>2</sub> emissions, except those from agriculture, of 60 % to 61 % by 2030 is required. Fluorinated greenhouse gas emissions were estimated at 90 million tonnes (Mt) of CO<sub>2</sub> equivalent in 2005. A 60 % reduction means that emissions would have to be reduced to approximately 35 Mt of CO<sub>2</sub> equivalent by 2030. Given estimated emissions of 104 Mt of CO<sub>2</sub> equivalent in

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2030 based on the full application of current Union legislation, a further decrease of approximately 70 Mt of CO<sub>2</sub> equivalent is required.

- (3) The Commission report of 26 September 2011 on the application, effects and adequacy of Regulation (EC) No 842/2006 of the European Parliament and of the Council<sup>(4)</sup> concluded that the current containment measures, if fully applied, have the potential to reduce emissions of fluorinated greenhouse gases. Those measures should therefore be maintained and clarified on the basis of the experience gained in implementing them. Certain measures should also be extended to other appliances in which substantial quantities of fluorinated greenhouse gases are used, such as refrigerated trucks and trailers. The obligation to establish and maintain records of equipment that contains such gases should also cover electrical switchgear. Given the importance of containment measures at the end of life of products and equipment containing fluorinated greenhouse gases, Member States should take account of the value of producer responsibility schemes and encourage their establishment, based on existing best practices.
- (4) That report also concluded that more can be done to reduce emissions of fluorinated greenhouse gases in the Union, in particular by avoiding the use of such gases where there are safe and energy-efficient alternative technologies with no impact or a lower impact on the climate. A decrease of up to two thirds of the 2010 emissions by 2030 is cost-effective because proven and tested alternatives are available in many sectors.
- (5) The European Parliament Resolution of 14 September 2011 on a comprehensive approach to non-CO<sub>2</sub> climate-relevant anthropogenic emissions welcomed the Union's commitment to support action on hydrofluorocarbons under the Montreal Protocol on substances that deplete the ozone layer ('Montreal Protocol') as a prime example of a non-market based approach to reducing greenhouse gas emissions. That Resolution also called for the exploration of ways to promote an immediate phase down of hydrofluorocarbons at international level through the Montreal Protocol.
- (6) To encourage the use of technologies with no impact or lower impact on the climate, the training of natural persons who carry out activities involving fluorinated greenhouse gases should cover information on technologies that serve to replace and reduce the use of fluorinated greenhouse gases. Given that some alternatives to fluorinated greenhouse gases used in products and equipment to replace and reduce the use of fluorinated greenhouse gases can be toxic, flammable or highly pressurised, the Commission should examine existing Union legislation covering the training of natural persons for the safe-handling of alternative refrigerants and, if appropriate, should submit a legislative proposal to the European Parliament and to the Council to amend the relevant Union legislation.
- (7) Certification and training programmes should be established or adapted taking account of those established under Regulation (EC) No 842/2006 and may be integrated into the vocational training systems.
- (8) To ensure coherence with monitoring and reporting requirements under the UNFCCC and with Decision 4/CMP.7 of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to the UNFCCC, adopted by the seventh Conference of the Parties of the UNFCCC meeting in Durban on 11 December 2011, global warming

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potentials should be calculated in terms of the 100-year global warming potential of one kilogram of a gas relative to one kilogram of CO<sub>2</sub>. The calculation should, where possible, be based on the Fourth Assessment Report adopted by the IPCC.

- (9) Effective monitoring of fluorinated greenhouse gas emissions is critical for tracking progress towards the achievement of emission reduction targets and for assessing the impact of this Regulation. The use of consistent, high-quality data to report on fluorinated greenhouse gas emissions is essential to ensuring the quality of emissions reporting. The establishment of reporting systems by Member States of emissions of fluorinated greenhouse gases would provide coherence with Regulation (EU) No 525/2013 of the European Parliament and of the Council<sup>(5)</sup>. Data on leakage of fluorinated greenhouse gases from equipment collected by companies under this Regulation could significantly improve those emission reporting systems. In that way, it should be possible to check the consistency of the data used to derive emissions and to improve approximations based on calculations, leading to a better estimation of emissions of fluorinated greenhouse gases in the national greenhouse gases inventories.
- (10) Given that there are suitable alternatives available, the current ban on using sulphur hexafluoride in magnesium die-casting and the recycling of magnesium die-casting alloys should be extended to facilities that use less than 850 kg of sulphur hexafluoride per year. Similarly, with an appropriate transitional period, the use of refrigerants with a very high global warming potential of 2 500 or more to service or maintain refrigeration equipment with a charge size of 40 tonnes of CO<sub>2</sub> equivalent or more should be banned.
- (11) Where suitable alternatives to the use of specific fluorinated greenhouse gases are available, bans on the placing on the market of new equipment for refrigeration, air-conditioning and fire protection that contains, or whose functioning relies upon, those substances should be introduced. Where alternatives are not available or cannot be used for technical or safety reasons, or where the use of such alternatives would entail disproportionate costs, it should be possible for the Commission to authorise an exemption to allow the placing on the market of such products and equipment for a limited period. In the light of future technical developments, the Commission should further assess bans on the placing on the market of new equipment for medium-voltage secondary switchgear and new small single split air-conditioning systems.
- (12) Equipment containing fluorinated greenhouse gases should be allowed to be placed on the market if the overall greenhouse gas emissions of that equipment, taking into account realistic leakage and recovery rates, are lower, during its lifecycle, than those that would result from equivalent equipment without fluorinated greenhouse gases, which has the maximum allowed energy consumption set out in relevant implementing measures adopted under Directive 2009/125/EC of the European Parliament and of the Council<sup>(6)</sup>. The regular and timely review of those implementing measures, in accordance with that Directive would help to ensure that those implementing measures continue to be effective and appropriate.
- (13) Gradually reducing the quantities of hydrofluorocarbons that can be placed on the market has been identified as the most effective and cost-efficient way of reducing emissions of those substances in the long term.

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- (14) To implement the gradual reduction of the quantities of hydrofluorocarbons that can be placed on the Union market, the Commission should allocate quotas to individual producers and importers for the placing of hydrofluorocarbons on the market in order that the overall quantitative limit for the placing hydrofluorocarbons on the market is not exceeded. To protect the integrity of the gradual reduction of the quantities of hydrofluorocarbons placed on the market, hydrofluorocarbons contained in equipment should be accounted for under the Union quota system. Where hydrofluorocarbons contained in equipment have not been placed on the market prior to the charging of the equipment, a declaration of conformity should be required to prove that those hydrofluorocarbons are accounted for under the Union quota system.
- (15) Initially, the calculation of reference values and the allocation of quotas to individual producers and importers should be based on the quantities of hydrofluorocarbons that they reported as having been placed on the market during the reference period from 2009 to 2012. However, in order not to exclude small undertakings, eleven per cent of the overall quantitative limit should be reserved for importers and producers who have not placed on the market 1 tonne or more of fluorinated greenhouse gases in the reference period.
- (16) By regularly recalculating the reference values and quotas, the Commission should ensure that undertakings are allowed to continue their activities on the basis of the average volumes they placed on the market in recent years.
- (17) The manufacturing process for some fluorinated gases can result in significant emissions of other fluorinated greenhouse gases produced as by-products. Such by-product emissions should be destroyed or recovered for subsequent use as a condition for the placing of fluorinated greenhouse gases on the market.
- (18) The Commission should ensure that a central electronic registry is in place to manage quotas, for the placing of hydrofluorocarbons on the market, and the reporting, including the reporting on equipment placed on the market, in particular where the equipment is pre-charged with hydrofluorocarbons that have not been placed on the market prior to the charging, thus requiring verification, through a declaration of conformity and subsequent third party verification, that the quantities of hydrofluorocarbons are accounted for under the Union quota system.
- (19) To maintain the flexibility of the market in bulk hydrofluorocarbons, it should be possible to transfer quotas allocated on the basis of reference values to another producer or importer in the Union or to another producer or importer which is represented in the Union by an only representative.
- (20) To enable the monitoring of the effectiveness of this Regulation, the scope of the current reporting obligations should be extended to cover other fluorinated substances that have significant global warming potential or that are likely to replace the fluorinated greenhouse gases listed in Annex I. For the same reason the destruction of fluorinated greenhouse gases and the importation into the Union of those gases when contained in products and equipment should also be reported. De minimis thresholds should be set

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to avoid disproportionate administrative burden, in particular for small and medium-sized enterprises and micro-enterprises.

- (21) The Commission should continuously monitor the effects of reducing the quantities of hydrofluorocarbons placed on the market, including its effects on the supply for equipment where the use of hydrofluorocarbons would result in lower life-cycle emissions than if an alternative technology was used. The Commission should produce a report on the availability of hydrofluorocarbons on the Union market by the end of 2020. A comprehensive review should be carried out by the Commission by the end of 2022 in time to adapt the provisions of this Regulation, in the light of its implementation and of new developments and international commitments, and to propose, if appropriate, further reduction measures.
- (22) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council<sup>(7)</sup>.
- (23) In order to amend certain non-essential elements of this Regulation, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union ('TFEU') should be delegated to the Commission. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level. The Commission, when preparing and drawing up delegated acts, should ensure a simultaneous, timely and appropriate transmission of relevant documents to the European Parliament and to the Council.
- (24) Since it is adopted pursuant to Article 192(1) TFEU, this Regulation does not prevent Member States from maintaining or introducing more stringent protective measures that are compatible with the TFEU. Pursuant to Article 193 TFEU, Member States are to notify the Commission of any such measures.
- (25) This Regulation amends and complements the subject matter of Regulation (EC) No 842/2006, which should therefore be repealed. However, in order to ensure a smooth transition from the old regime to the new regime, it is appropriate to provide that Commission Regulations (EC) No 1493/2007<sup>(8)</sup>, (EC) No 1494/2007<sup>(9)</sup>, (EC) No 1497/2007<sup>(10)</sup>, (EC) No 1516/2007<sup>(11)</sup>, (EC) No 303/2008<sup>(12)</sup>, (EC) No 304/2008<sup>(13)</sup>, (EC) No 305/2008<sup>(14)</sup>, (EC) No 306/2008<sup>(15)</sup>, (EC) No 307/2008<sup>(16)</sup> and (EC) No 308/2008<sup>(17)</sup> should remain in force and continue to apply unless and until repealed by delegated or implementing acts adopted by the Commission pursuant to this Regulation.
- (26) Since the objectives of this Regulation cannot be sufficiently achieved by the Member States but can rather, by reason of the transboundary nature of the environmental problem addressed and the effects of this Regulation on the intra-Union and external trade, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives,

HAVE ADOPTED THIS REGULATION:

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- (1) [OJ C 271, 19.9.2013, p. 138.](#)
- (2) Position of the European Parliament of 12 March 2014 (not yet published in the Official Journal) and decision of the Council of 14 April 2014.
- (3) Council Decision 94/69/EC of 15 December 1993 concerning the conclusion of the United Nations Framework Convention on Climate Change ([OJ L 33, 7.2.1994, p. 11](#)).
- (4) Regulation (EC) No 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases ([OJ L 161, 14.6.2006, p. 1](#)).
- (5) Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC ([OJ L 165, 18.6.2013, p. 13](#)).
- (6) Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products ([OJ L 285, 31.10.2009, p. 10](#)).
- (7) Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by the Member States of the Commission's exercise of implementing powers ([OJ L 55, 28.2.2011, p. 13](#)).
- (8) Commission Regulation (EC) No 1493/2007 of 17 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, the format for the report to be submitted by producers, importers and exporters of certain fluorinated greenhouse gases ([OJ L 332, 18.12.2007, p. 7](#)).
- (9) Commission Regulation (EC) No 1494/2007 of 17 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, the form of labels and additional labelling requirements as regards products and equipment containing certain fluorinated greenhouse gases ([OJ L 332, 18.12.2007, p. 25](#)).
- (10) Commission Regulation (EC) No 1497/2007 of 18 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, standard leakage checking requirements for stationary fire protection systems containing certain fluorinated greenhouse gases ([OJ L 333, 19.12.2007, p. 4](#)).
- (11) Commission Regulation (EC) No 1516/2007 of 19 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, standard leakage checking requirements for stationary refrigeration, air conditioning and heat pump equipment containing certain fluorinated greenhouse gases ([OJ L 335, 20.12.2007, p. 10](#)).
- (12) Commission Regulation (EC) No 303/2008 of 2 April 2008 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, minimum requirements and the conditions for mutual recognition for the certification of companies and personnel as regards stationary refrigeration, air conditioning and heat pump equipment containing certain fluorinated greenhouse gases ([OJ L 92, 3.4.2008, p. 3](#)).
- (13) Commission Regulation (EC) No 304/2008 of 2 April 2008 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, minimum requirements and the conditions for mutual recognition for the certification of companies and personnel as regards stationary fire protection systems and fire extinguishers containing certain fluorinated greenhouse gases ([OJ L 92, 3.4.2008, p. 12](#)).
- (14) Commission Regulation (EC) No 305/2008 of 2 April 2008 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, minimum requirements and the conditions for mutual recognition for the certification of personnel recovering certain fluorinated greenhouse gases from high-voltage switchgear ([OJ L 92, 3.4.2008, p. 17](#)).
- (15) Commission Regulation (EC) No 306/2008 of 2 April 2008 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, minimum requirements and the conditions for mutual recognition for the certification of personnel recovering certain fluorinated greenhouse gas-based solvents from equipment ([OJ L 92, 3.4.2008, p. 21](#)).
- (16) Commission Regulation (EC) No 307/2008 of 2 April 2008 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, minimum requirements for training programmes and the conditions for mutual recognition of training attestations for personnel

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as regards air-conditioning systems in certain motor vehicles containing certain fluorinated greenhouse gases ([OJ L 92, 3.4.2008, p. 25](#)).

- (17) Commission Regulation (EC) No 308/2008 of 2 April 2008 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, the format for notification of the training and certification programmes of the Member States ([OJ L 92, 3.4.2008, p. 28](#)).



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