

# Fluorinated greenhouse gases

2012/0305(COD) - 07/11/2012 - Legislative proposal

**PURPOSE:** to ensure a high level of environmental protection by reducing substantially fluorinated greenhouse gas emissions responsible for climate change.

**PROPOSED ACT:** Regulation of the European Parliament and of the Council.

**BACKGROUND:** according to 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, on the basis of existing scientific data, developed countries would need to reduce greenhouse gas emissions by 80 % to 95 % below 1990 emissions by 2050 to limit global climate change to a temperature increase of 2°C and thus prevent undesirable climate effects.

The [Roadmap for moving to a competitive low carbon economy in 2050](#) proposes a cost-effective way of achieving the necessary overall emission reductions in the Union by 2050. This roadmap establishes the sectoral contributions needed in six areas. Non-CO2 emissions (including fluorinated greenhouse gases but excluding non-CO2 emissions from agriculture) should be reduced by 72 % to 73 % by 2030 and by 70 % to 78 % by 2050, compared to 1990 levels.

In September 2011 the Commission published a [report on the application of Regulation \(EC\) No 842/2006](#) on certain fluorinated greenhouse gases. It concluded that the Regulation could deliver significant emission reductions if it was further improved and fully applied. It also stated that more needed to be done to further reduce F-gas emissions in the EU.

By ensuring that F-gases are replaced by safe alternatives with no or a lower impact on the climate, yearly emissions expressed in CO2 equivalent could be cut by two-thirds by 2030 at relatively low cost.

**IMPACT ASSESSMENT:** the Commission, finally, only retained those options that were shown to deliver substantial emission savings at low abatement costs and to be consistent with other EU policies. Full application of the F-Gas Regulation was set as the baseline option. Four other policy options were assessed in detail:

- 1) Voluntary agreements;
- 2) Extended scope for containment and recovery measures;
- 3) Quantitative limits on the supply of HFCs (phase-down);
- 4) A ban on placing certain products and equipment that contain F-gases on the EU market.

The methodological basis for the impact assessment was a detailed analysis of the feasibility of introducing safe, energy-efficient alternatives in the 28 main sectors that use F-gases.

The impact assessment showed that:

- a phase-down of HFCs that introduces gradually lower limits until 2030 for the amounts of these F-gases to be put on the market in the EU would deliver the most emission savings, reducing today's emissions by two-thirds by 2030 (roughly 70 million tonnes of CO2 equivalent);
- an emission reduction of two thirds would prepare EU industry for a phase-down. It would lead to cost reductions due to higher market penetration and to economies of scale for alternative technologies, thus helping to reach an agreement on the proposals under the Montreal Protocol.

Administrative costs can be kept relatively low (total administrative costs of around EUR 2 million a year for a phase-down).

**LEGAL BASIS:** Article 192(1) of the Treaty on the Functioning of the European Union (TFEU).

**CONTENT:** the proposal seeks to:

- replace Regulation (EC) No 842/2006 on certain fluorinated greenhouse gases in order to ensure a more cost-efficient contribution to achieving the EU's climate objectives by discouraging the use of F-gases with a high impact on the climate in favour of energy-efficient and safe alternatives, and further improving the containment and end-of-life treatment of products and equipment that contain F-gases;
- enhance sustainable growth, stimulate innovation and develop green technologies by improving market opportunities for alternative technologies and gases with a low impact on the climate;
- bring the EU into line with the latest scientific findings at international level, as described in the Fourth Assessment Report of the UN's IPCC, e.g. with regard to the substances covered by this regulation and the calculation of their global warming potential (GWP);
- help to bring about a consensus on an international agreement to phase down hydrofluorocarbons (HFCs), the most relevant group of F-gases, under the Montreal Protocol;
- simplify and clarify Regulation (EC) No 842/2006 to reduce administrative burden in line with the Commission's commitment to better regulation.

The key aspects of the proposal are as follows:

**Adaptation of existing provisions:** the proposal maintains the current provisions of the F-Gas Regulation, with adjustments to ensure better implementation and enforcement of the legislation by national authorities. Some containment measures have also been extended to refrigerated trucks and trailers.

**Mechanism for the gradual reductions of HFCs:** the most important new measure is the introduction of quantitative limits on the supply of bulk

HFC substances in the EU, decreasing over time. The phase-down mechanism involves a gradually declining cap on the total placement of bulk HFCs (in tonnes of CO<sub>2</sub> equivalent) on the market in the EU with a freeze in 2015, followed by a first reduction in 2016 and reaching 21 % of the levels sold in 2008<sup>11</sup> by 2030.

By means of this mechanism:

- companies that place bulk HFCs on the EU market must have rights to place bulk substances on the EU market for the first time;
- the Commission allocates free quotas to companies based on past reporting data, with a reserve for new entrants;
- companies must make sure that they have enough rights to cover their actual placing of products and equipment on the market. They may transfer quotas among themselves;
- the Commission checks compliance the following year, with independent verification of reports;
- a threshold ensures that companies that only place small quantities on the market are exempted.

HFCs imported in pre-charged equipment: these should also be counted under the phase-down. Therefore, non-hermetically sealed HFC appliances would still be able to be produced in, or imported into, the EU but they would have to be filled at the place of installation. Similarly, the placing on the market of movable air conditioning containing HFCs will be banned from 2020.

Additional bans: a few additional bans are introduced to underpin the phase-down mechanism and restrict the use of other F-gases not covered by the mechanism.

Recharging of existing refrigeration equipment with a charge size over 5 tonnes of CO<sub>2</sub> equivalent with HFC of very high GWP (>2500) will not be permitted from 2020 onwards as more adequate and energy efficient drop-in refrigerants of lower GWP are already widely available on the market.

Restrictions on the use of SF<sub>6</sub> in magnesium die casting is extended also to facilities using less than 850 kg per year as technological progress has rendered such use obsolete.

Lastly, additional reporting obligations should enable monitoring of the use of F-gases that are not covered by current legislation.

**BUDGETARY IMPLICATION:** the proposal has no incremental impact on the budget of the European Union.

**DELEGATED ACTS:** the proposal contains provisions empowering the Commission to adopt delegated acts in accordance with Article 290 of the Treaty on the Functioning of the European Union.