

Climate change: melting glaciers, diminishing water resources, trapped suprays increase global warming





IMPLEMENTING THE EU PHASE DOWN

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The "F-gas Regulation" creates an efficient mechanism for reducing emissions from fluorinated greenhouse gases to help achieve the EU climate targets. It also stimulates innovation and facilitates convergence towards the global agreement to phase down hydrofluorocarbons (HFCs) under the Montreal Protocol. The F-gas Regulation also ensures that the EU can meet its global obligations under the Kigali Amendment. The main policy measure to achieve this is the "EU HFC phase-down", whereby the total quantities of HFCs that undertakings may import or produce in the EU (i.e. "place on the market for the first time"), are reduced gradually until 2030 (measured in CO₂ equivalent) to bottom out at 21% of the original baseline (2009-2012).

To stay within the annual HFC limit in a given year, a quota system has been set up where undertakings need quota to legally place bulk HFCs on the market. Quotas are allocated to "incumbent" undertakings on the basis of "grandfathering" as well as from a reserve on the basis of annual company declarations stating their need for quota ("new entrants"). Quotas are reduced in line with the overall phase-down steps. The EU HFC phase-down is managed centrally by the European Commission, which includes *inter alia*:

- managing the F-gas Portal and the HFC Registry for registration of undertakings, quotas, quota transfers and quota authorisations;
- managing *ex ante* quota declarations for quota, recalculating new quota reference values every three years and uploading new quotas on a yearly basis;
- overseeing the yearly *ex post* reporting by undertakings in a system, managed by the European Environmental Agency;
- checking on the basis of ex post reporting if undertakings have complied with their quota limits and applying quota penalties in form of deductions from future quota allocations;
- checking on the basis of *ex post* reporting if importers of HFC equipment have the required quota authorisations; and
- providing guidance to undertakings on use of the F-gas Portal and the HFC Registry and obligations related to the quota system.

In addition, Members States provide further guidance to stakeholders on the phasedown, ensure effective border controls including the training of customs officers as well as following up on non-compliance issues including illegal trade.

Ex post reporting data by companies for the year 2015 showed that the phase-down had been overachieved in its first year. The total quantities reported were 8% under the allowable limit. Not all companies used to their quotas to a maximum, but a few undertakings also exceeded their respective quota limits.

European Commission, DG CLIMA, October 2016: https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/phase-down_progress_en.pdf

The Commission has followed up on non-compliance cases, supported by the Member State authorities, in view of imposing sanctions in line with the F-gas Regulation (deducting twice the amount of excess from the company's future quota) and ensuring that penalties are also imposed at national level. Non-compliance is detected by comparing the quota allocated and the reported values that have been verified by an independent auditor. In addition, customs can check if importers of bulk gases and HFC equipment are registered in the HFC Registry and have a quota or authorisations.

HFCs are not only entering the EU through the import of bulk gases but are also contained inside imported equipment. Thus, the F-gas Regulation requires that HFCs contained in refrigeration, air conditioning and heat-pump equipment that is placed on the market must be accounted for within the quota system from 1 January 2017. For importers of HFC equipment this implies that they need authorisations from quotaholders to make use of the latter's quota for their imports. In order to facilitate business for smaller importers and manufacturers using several importers, the HFC Registry allows the delegation of authorisations, so that a company can coordinate the acquisition of authorisations for a group of importers. For instance, equipment manufacturers can obtain the relevant authorisations and delegate them further to those companies importing the equipment.

An authorisation counts against the quota holders' quota in the year it is given. Conversely, for the equipment importer there is no time limit for using the authorisation, e.g. an authorisation given in 2015 may be used in 2017 or later years. A significant number of quota authorisations were already issued in 2015 and 2016, as equipment importers were preparing for the obligation to have authorisations for importing refrigeration, air conditioning and heat-pump equipment from 1 January 2017. Of the total quota, 9% and 12% were authorised to equipment importers in 2015 and 2016, respectively. For comparison, the share of HFCs in imported refrigeration, air conditioning and heat-pump equipment of the total supply of HFCs to the EU in 2015 was 7%, according to company reporting.

The sector using HFCs is quite complex and involves a number of different types of undertakings: HFC producers (global actors), manufacturers of various equipment or products (global), importers of equipment or products (EU), bulk gas distributors (EU), equipment installation and service undertakings (EU) and end-users of the various equipment(EU). In order to follow the impact of the quota system, price developments for different types of HFCs and at different levels in the value chain are monitored on the basis of data obtained from refrigerant producers, gas distributors and equipment manufacturers. Although it is not possible to draw definite conclusions at this early stage of the phase-down, it is nonetheless possible to observe a general upward trend of prices since 2014. The observed price increases vary for different types of HFCs, and generally show a higher increase for HFCs with high global warming potential (GWP). It is also noteworthy that the costs of obtaining authorizations importing HFC equipment appear to be similar to bulk HFC price increases at distributor level, if converted into €/t CO₂eq. These price increases are an expected and desirable consequence of the phase-down measure, as the intention of this market measure was to restrict supply of high GWP gases in order to stimulate the innovation and use of lower GWP substances and non-HFC alternatives.

At this point in time only one full "annual" cycle of the phase-down has been completed² and the inclusion of refrigeration, air conditioning and heat pump equipment under the phase-down has only begun very recently, on 1 January 2017. It is therefore too early for an in-depth assessment of the functioning of the phase-down mechanism. Nonetheless, an analysis undertaken by an external consultant and a consultation of stakeholders carried out last year indicate that the phase-down is functioning as it should. It will require further monitoring to see how the situation develops in the coming years, including for new bulk gas importers entering the market and for equipment importers. A priority will be to enable a smooth implementation and helping all stakeholders better understand and comply with their obligations, in order to make the EU HFC phase-down a success.

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One "annual" cycle of the phase-down comprises quota allocation, quota use, *ex post* company reporting and subsequent compliance checking by the Commission. It takes roughly two years to complete the cycle.