

Briefing paper: Preliminary assessment of the quota allocation method

1. Context

Article 21(5), Regulation (EU) No 517/2014 ("F-gas Regulation") calls for an assessment of the quota allocation method used to implement the HFC phase-down to be published by the European Commission by 1 July 2017. This briefing paper was drafted by Öko-Institut and Öko-Recherche on the basis of work currently being carried out for DG CLIMA including an analysis of data in DG CLIMA's HFC Registry and the EEA's BDR reporting tool as well as a stakeholder survey among companies conducted in June 2016. It is intended to provide some background to participants at the Consultation Forum on fluorinated greenhouse gases, to be held in Brussels on 1 December 2016.

2. Quota Allocation Method

Under the HFC phase-down quotas are needed to place bulk HFCs on the market from 1 January 2015. The quota allocation method legislated by the F-gas Regulation prescribes a free allocation of quotas based on (i) companies' past activities ("incumbents"), and/or (ii) ex-ante declarations on additional need of quota for the next year ("new entrants"). Incumbent quotas are transferrable to others, while new entrant quotas are not (to prevent companies not in the F-gas business requesting quota with the sole purpose of selling these rights). HFCs contained in RAC equipment¹ that is placed on the market must also be accounted for within the quota system from 1 January 2017. In order to ensure the environmental integrity of the phase-down and a level playing field for EU manufacturers of equipment that buy HFCs on the EU market, importers of such equipment need to obtain authorisations from the quota-holding companies to use their quota for this purpose.² Due to a lack of data on these companies' past activities, it would not have been feasible to allocate incumbent quota directly to equipment importers. Both incumbent and new entrant quota holders can authorise the use of their quota for equipment importers but new entrants must also prove the physical supply of the corresponding gas quantities.

3. Preliminary Findings

About 1 100 companies are currently affected by the quota allocation method, roughly two-thirds are HFC bulk producers and importers and the remainder equipment importers, as ascertained from the yearly declarations for quota and annual ex-post company reporting.³ This is a substantial increase from the 86 companies that reported HFC imports and production in 2012 and is, to a large degree, the result of a high number of new entrant companies applying for quotas.

The number of new entrants has increased by 73% between 2015 and 2017 which has caused a significant reduction in the quota available to each new entrant, as such quota is given out on a pro rata basis. At the same time, a number (30%) of new entrants from the first application round for 2015 quota had dropped out by 2017, meaning that new players are continuously entering the market. It is also evident that some HFC producers and major HFC distributors are trying to optimise

¹ Refrigeration, Air Conditioning and Heat-pump Equipment

² Unless the HFCs thus imported were previously placed on the market in the EU, exported and charged into the equipment before its import

³ Article 19 of the F-gas Regulation



their quota access by registering subsidiaries or business partners which previously had not been involved in importing HFCs.

The number of companies submitting declarations for 2018 is likely to increase further as the group of present incumbents will for the first time become eligible to receive an equal share from the new entrants' reserve. On the other hand, the allocation method ensures that in future years the absolute amounts available from the new entrants' reserve will remain more or less stable, while the share available to incumbents will decrease more quickly than the overall market (i.e. the phase-down steps). This should to some degree counterbalance the observed reduction in new entrant quotas. Future new entrant quotas will however be determined mostly by the number of entities applying for the reserved amount.

In 2015, 11% of the allocated quota was reserved for new entrants. However, new entrants contributed disproportionately to those 9 % of total allocated quota that remained unused in 2015: half of these amounts originated from new entrant quotas and a considerable number of new entrants did not use their quota at all. A key reason mentioned by the survey respondents for companies' partial use of their quota is that the allocated amounts were too small as regards the volumes of high GWP HFCs usually imported in container quantities. Other explanations for unused quotas are the stockpiling of HFCs in 2014 when large imports took place ahead of the phase-down⁴ and some equipment importers erroneously applying for quota (rather than authorisations) in the first year of the application of the Regulation.

Quota transfers in 2015 and 2016 were to a very large degree limited to a few transactions between major incumbents as well as companies leaving the market. There seemed to be little willingness to trade quotas with other market players beyond these particular transactions.

The obligation covering pre-charged equipment starts on 1 January 2017 and applies to all importers of RAC equipment (no *de minimis* threshold). Some companies prepared themselves ahead of time: some 9% of total quota was authorised to equipment importers in 2015⁵. On the other hand, the survey conducted in June 2016 found that 56 % of responding equipment importers had no experience yet in acquiring authorisations. Reasons identified were (i) a lack of understanding of the system, (ii) the difficulty of planning own demand for authorisation or quota (by both OEMs/equipment importers and quota holders), (iii) the difficulty of identifying a quota holder willing to provide authorisation, and (iv) high authorisation prices (from OEM/equipment importer perspective).

Given these difficulties, OEMs and equipment importers repeatedly raised the need to establish in the HFC Registry a 'pooling system' which allows OEMs to centrally procure authorisations for large amounts from quota holders and delegate them in smaller portions to several importing companies. Many stakeholders also pointed to the need to be able to identify the quota-holding companies in order to obtain authorisations more easily.

The access to quota-covered HFCs along the value chain is characterized by a complex market structure where HFC producers (worldwide), RAC OEMs (worldwide), RAC equipment importers (EU), bulk gas distributors (EU), installation and service companies (EU) and end-users (EU) compete for HFC supply. Refrigerant producers, gas distributors and OEMs have been providing indexed data to enable the monitoring of price developments for different types of HFCs and at different levels in the value chain. Although it is not possible to draw final conclusions, it is nonetheless possible to observe general trends. As an expected consequence of the phase-down, HFC prices have generally increased since 2014. This increase is most noticeable in the purchasing prices of gas distributors and also service companies, while not (yet) as apparent for gas bought by OEMs,

⁴ <http://www.eea.europa.eu/publications/fluorinated-greenhouse-gases-2014>

⁵ For comparison: the share of HFCs in imported RAC equipment in the total supply of HFCs to the EU in 2015 was 7 % according to company reporting.



possibly due to longer-term agreements with gas producers. The price increase varies for different types of HFCs, showing generally a higher increase for HFCs with a relatively high GWP. It is worthwhile noting that authorisation prices quoted by survey respondents are similar to bulk HFC price increases at distributor level, if converted into €/t CO₂e.

The European Commission operates the HFC Registry for registration, ex-ante declarations, quota allocation, transfers and authorisations. The HFC Registry is linked to the reporting system for annual ex-post reports, operated by the EEA. The Commission establishes quota compliance for HFC producers and bulk importers and eventually applies quota penalties to non-compliant companies in form of deductions from future quota allocations. Starting 2017, compliance also needs to be established for equipment importers.

The costs for Member States are therefore limited to providing further guidance to stakeholders and following up on non-compliance issues such as illegal trade and penalties for non-compliant companies including quota exceedance and lack of or incorrect ex post reporting, which are essential for the compliance process. Finally, there should be no additional costs arising from the recent Kigali Amendment of the Montreal Protocol⁶ as the F-gas Regulation is compatible with and in many cases goes beyond the obligations agreed at global level.

When companies were asked in the survey to name their key challenges regarding the quota allocation system and phase-down, they mentioned, in particular, (i) the complexity of the allocation system, (ii) the perceived market power for, in particular, incumbent quota holders, (iii) a lack of quota/authorisation market transparency, (iv) high administrative efforts, and (v) challenges for planning of quota/authorisation demand.

4. Preliminary Conclusions

Given that there is only one full year of experience with the HFC phase-down and that pre-charged equipment will only be affected from 1 January 2017, it is currently too early for an in depth assessment of the quota allocation system. The data currently available is further affected by an initial lack of a thorough understanding by stakeholders, e.g. leading equipment importers to apply for quota in 2015. Furthermore, authorisations in 2015 were mainly acquired by relatively few early movers and the authorisations market is still developing.

That said, the availability of free quota on request to new entrants appears to have significantly increased the number of players on the EU HFC market. These are small market players as they are limited to a pro rata share of the new entrants' reserve even though many of these appear not to be independent entities but parts of larger conglomerates aiming to maximise their quota share. As new entrant quotas are currently very small, it appears to make it difficult to sustain a business by starting the import of high GWP HFCs, as the allowable quantities in metric tons of high GWP gases are quite low.

At the same time, the allocation method based on past activities has to some extent maintained the market position of the present incumbent gas producers and importers, albeit in overall shrinking markets and noting that the quota allocation method implies that the relative importance of the quota allocated to present incumbent quota holders will diminish over time.

While transfers of the quotas between incumbent quota holders do not seem to result in large volumes of trade, the fact that authorisations are sold and HFC prices have increased show that quota holders and other actors might be profiting from the phase-down. A continued close monitoring of related markets can facilitate a more thorough assessment targeted to e.g. HFC and authorisation prices and HFC availability for mass market and niche sectors.

⁶ <http://ozone.unep.org/>



There appears to be a need to provide user-friendly information to stakeholders on the phase-down and the quota/authorisation. After the survey was launched, the Commission has provided some guidance documents, in particular directed to equipment importers to improve the understanding of the quota allocation system including aspects related to authorisations. Still, further guidance may be needed also from Member States and industry associations.

In terms of practical arrangements for implementation, the pooling arrangement for authorisations, as implemented in the HFC Registry in summer 2016, following the request by many stakeholders, is likely to improve the situation of OEMs and importing companies by making it easier, especially for smaller entities, to obtain authorisations.

5. Stakeholder Input

These preliminary conclusions on the quota allocation system will be discussed at the Consultation Forum on 1 December 2016. Feedback from stakeholders will be a crucial input for the development of the final project report. Please take the opportunity to provide feedback.