#### **SUMMARY MINUTES**

### 2nd Meeting of the Consultation Forum

# pursuant to Article 23 of Regulation (EU) No 517/2014 on fluorinated greenhouse gases

1 December 2016, 10:00 – 16:00, Centre de Conferences Albert Borschette, Room 3C, Rue Froissart 36, B-1049, Brussels

Participants: See "Attendance List" in Annex.

#### Welcome

The Commission welcomed the participants to the  $2^{nd}$  Consultation Forum and reminded participants about the role of the Consultation Forum<sup>1</sup> and briefly introduced the agenda<sup>2</sup> as provided to the members ahead of the meeting.

### 1. Information from the Commission on the global agreement to phase down HFCs under the Montreal Protocol

The **Commission** informed participants about the recently adopted global agreement under the Montreal Protocol to phase down HFCs, the so called Kigali Amendment of October 2016<sup>3</sup>. The Commission emphasised that this was a significant success for the climate, where the EU had a leading role, not least by presenting its own amendment proposal in 2015. The Fgas Regulation showed the way, proving to other countries that it was possible to take ambitious measures to reduce HFCs and bring down their emissions significantly. EU stakeholders should be happy about the Kigali amendment, as this will make the transition easier and prices of alternative technologies should go down quicker. The EU plans to ratify as quickly as possible. The existing Fgas Regulation enables us to meet all our global commitment until 2030.

**European Aerosol Federation** asked if there was any intention to align the GWP values mentioned in the Kigali Amendment with those provided by the UNFCCC. The **Commission** replied that there is no intention to change GWPs at this point because they are aligned with the GWP values taken from the Fourth Assessment Report (AR4) of the IPCC, which are also used for the emission reporting taking place under UNFCCC and the reporting under the EU F-gas Regulation.

<sup>&</sup>lt;sup>1</sup> See meeting slides: https://ec.europa.eu/clima/events/articles/0106 en

https://ec.europa.eu/clima/sites/clima/files/20161201 agenda en.pdf

<sup>&</sup>lt;sup>3</sup> See meeting slides: https://ec.europa.eu/clima/events/articles/0106 en

Greenpeace pointed out that reduction steps under the F-gas Regulation are more ambitious than what is included in the Kigali Amendment. Greenpeace considers a robust implementation of the F-gas Regulation very important because of the EU's role as a driver on the global stage, including for technology transfer. Illegal trade into EU should be handled effectively in order to set an example for the rest of the World. Customs should be enabled to access the quota system. Furthermore, Greenpeace emphasised that under the Kigali agreement an HFC licensing system is required by 2019 which needs to be introduced. The Commission replied that a licensing system will be implemented under the existing legal framework of the F-gas Regulation. Robust implementation is a key priority for the Commission and if there are indications of illegal trade, this would be taken very seriously, and the Commission is following up all non-compliance cases. There are essentially three types of companies: (i) those that report, (ii) those that do not report but are registered in the HFC Registry and (iii) those that do not report and are not known to the authorities. In case there are doubts that registered companies (reporting and non-reporting) may have exceeded their quota, the Commission has been requesting independently verified reports. The third type of companies – those that is neither reporting on their transactions nor known to the Commission – should be identified at customs. Customs officials already now have access to the HFC registry and thus have the ability to flag shipments and associated companies regarding non-compliance. CN codes have been adjusted to facilitate the work of customs, including for pre-charged equipment. In cases of non-compliance, the Commission allocates a reduced quota for the allocation period after the excess has been detected and is asking the Member States to take all appropriate measures to ensure their national penalties for infringing the F-gas Regulation are implemented. The Commission emphasised that the expost company data suggests that the phase-down is currently complied with. 4 It is nonetheless always crucial to receive alerts by other stakeholders on concrete cases which can be followed up.

# 2. Initiatives related to national codes and standards with respect to replacement technologies using alternatives to fluorinated gases

The **Commission** informed about its report on national codes and standards pursuant to Art 11(6) of the F-gas Regulation, published the previous day.<sup>5</sup> Standards were identified in this report as important barriers to the use of flammable refrigerants which should be addressed with urgency (as stated in the EU strategy on heating and cooling<sup>6</sup>). The Commission intends to make a request to the European standardization organisations in support of updating relevant standards, ensuring a technology neutral and consistent approach, and will ask for a technical report to be delivered on the issue of ensuring a wider, but safe use of flammable refrigerants. Some background on the standard setting process in relation to the envisaged

<sup>&</sup>lt;sup>4</sup> European Commission. Progress of the HFC phase-down. 10/2016: https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/phase-down progress en.pdf

<sup>&</sup>lt;sup>5</sup> Report from the Commission on barriers posed by codes, standards and legislation to using climate-friendly technologies in the refrigeration, air conditioning, heat pumps and foam sectors:

https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/report on standards en.pdf

<sup>&</sup>lt;sup>6</sup> Communication from the Commission: An EU strategy on heating and cooling. COM (2016) 51 final: https://ec.europa.eu/energy/sites/ener/files/documents/1 EN ACT part1 v14.pdf

Commission's Mandate to Standardisation Organisations on the harmonization of product standards was provided to the audience by **CEN/CENELEC**<sup>7</sup>.

The **Commission** also provided information on the "2016 Call for proposals" under the LIFE programme for Climate Action, which included a particular priority on risk assessment of flammable refrigerants in support of the standard setting process. In addition the Decision of the Parties to the Montreal Protocol on establishing regular consultations on safety standards adopted in October 2016, was introduced to the audience<sup>8</sup>.

Some stakeholders (EIA, WWF, shecco) asked for a continued active involvement of the Commission. The EIA pointed out that the report by the Commission concludes that the standards are restrictive, but that the draft mandate did not request the development of new standard requirements which was needed. WWF regards the standards issue as a central point to the successful implementation of the EU HFC phase down. Alternative technologies will need to achieve a significant market penetration, otherwise potential failure looms for the phase-down. Shecco wanted the Commission to push standardization bodies to reach out to a wider range of representatives and to make the process more inclusive, and inquired how a balanced representation and a balanced outcome on the technical report would be assured. **The Commission** replied that it will give, as a way to kick off the process, the standardization organizations CEN/CENELEC a mandate to develop a technical report with recommendations on how to update relevant standards. It would then be up to them to ensure that the process is taken further. By initiating the process the Commission will give a clear signal to encourage the full range of industry to participate to ensure a balanced outcome. It will be up to industry to send experts to those groups. As standard setting is an industry-driven process and requires the detailed technical knowledge of industry experts to develop the appropriate specifications, industry will have to move this issue forward. The cross-cutting working group that will be formed to produce the technical report is considered a good opportunity to make your voice heard. The Commission invites everyone to make use of this chance. CEN/CENELEC also emphasised that the standardization process was driven by industry. However, the representative stated that their working group would be open to allow NGOs, trade unions, associations and others into meetings and outside expertise would be welcome. The technical report elaborated by the working group would influence future outcomes and processes in the field of standardization as well.

**Carbon Market Watch** pointed out that the Commission report itself highlights Italy and France as two countries in which the standards issue is a more problematic one and wanted to know if any feedback from these countries on additional barriers to hydrocarbons was received. The **Commission** explained that the it encourages MS to look into this matter and to identify barriers. However, it can be difficult even at the national level to change the rules, as some are set at regional or even local level.

**Shecco** asked how the participants to the working group would be selected and **Carbon Market Watch** wanted to know if NGOs would be allowed to vote during the process. **CEN/CENELEC** explained that experts are being appointed by national bodies. Associations could also contribute because they could generally ask to become members of the working

8 https://ec.europa.eu/clima/sites/clima/files/20161201 mp decision en.pdf

<sup>&</sup>lt;sup>7</sup> See presentation: https://ec.europa.eu/clima/events/articles/0106 en

group. EU associations could further ask national branches to send members to national level working groups as well. NGOs can participate as observers.

There was a concern expressed by several participants that it was generally difficult to join the relevant standard setting committees. ASERCOM reported that one of their members was not able to join the national committee in Germany and had to go to the Czech Republic instead to join the process. Specific people from established companies often control national committees, in their experience. Associations should be able to join the process and the CEN/CENELEC suggestion is welcome. Component manufacturers are eager to learn which parts of the processes they need to be involved in. Transfrigoroute pointed to the fact that many things are under the control of international bodies, so European influence is limited. **Eurammon** shared the concerns expressed on participation in the standard setting process. The organization felt it was fighting against giants with different interests than theirs. Eurammon is not participating in these processes due to a lack of funds. The process is considered unfair and does not encourage companies to keep production in the EU. Shecco emphasised that in reality it would be hard to get involved in the standardization process because the rules had been decided by other interests. The natural refrigerants industry would be getting to a point where it would want to create its own standards which may not be desirable. Thus Shecco asked to make sure that the interests of the natural refrigerants industry will be represented in the current standardization bodies. They considered that representatives of chemical producers deciding on standards for hydrocarbons seemed inappropriate but is often the situation on the ground. A fairer system should hence be established to avoid such discussions for years to come.

In summary, the **Commission** noted the general concern that it is difficult for smaller, newer companies to have the same representation in the standardization process as the older, more established or bigger companies. Generally HFC technology tends to be more established and natural refrigerants to a lesser degree. The Commission acknowledges these views while underlining that the process is industry driven. Thus the requests for a formation of a working group on flammable refrigerants, under the open participation regime explained by CEN/CENELEC, is an opportunity to bring change to the process.

## 3. Training of personnel for the safe handling of alternative refrigerants to replace and reduce the use of fluorinated gases

The **Commission** informed about its report on the training of personnel regarding alternatives to F-gases, pursuant to Art 21(6) of the F-gas Regulation, published the previous day. The report concludes that the legislative framework complemented by existing standards at the European level appears appropriate as regards training issues to ensure safe handling of equipment. Further legislative action at EU level on this issue seems therefore inappropriate at this time. The report identified some shortcomings in the existing training offer (e.g. training facilities, practical training, number of skilled personnel), which gives a role to technicians, associations, companies, authorities and other stakeholders to take action. The Commission

<sup>&</sup>lt;sup>9</sup> Report from the Commission on availability of training for personnel regarding the safe handling of climate-friendly technologies replacing or reducing the use of fluorinated greenhouse gases: https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/report on training en.pdf

also provided information on the "2016 Call for proposals" under the LIFE programme for Climate Action, which had a priority area to encourage the uptake of training on climate-friendly F-gas alternatives including awareness campaigns and train-the-trainer programmes<sup>10</sup>.

**AREA** emphasised that training is a key issue for them and that they had tried their best to improve training of personnel on alternative refrigerants. AREA shared the view that trained and skilled staff would be of key importance. Training schemes for natural refrigerants had been developed and an agreement with UNEP for work in Article 5 countries was close to being established. Limitations are linked to providing training in many different languages, the low number of training facilities as well as the question how to make people take trainings. Only mandatory certification would represent a respected measure among the service companies. EuroCommerce underlined that retailers represent the end users of refrigeration systems. Training is of high relevance: thus some members had been training technicians themselves when pilot stores were established. The timetable of the Fgas Regulation is considered very tight and EuroCommerce members could not wait for training measures to be available. EuroCommerce pointed out that end users would only want to rely on well proven, established technologies which do not require constant monitoring by retailers. But reluctance towards alternatives could be overcome if trained personnel to maintain several thousand stores were available. Things need to happen rather quickly. **ASERCOM** emphasised that new provisions are not implemented easily in many technical areas and enduser awareness, including of relevant legislation, often is a problem. Carbon Market Watch reported about a meeting in Italy some weeks ago. The supermarket chain Coop stated their plans for building new supermarkets running on CO<sub>2</sub> in Italy but a lack of trained technicians had not been mentioned. The current situation with regard to trainings did not seem to prevent the uptake of natural refrigeration in Italy. **EEB** confirmed that problems concerning the training for alternatives to F-gases had been noted in Spain, but manufacturers also offer technician training on natural refrigerants. Some alternative installations already exist in Spain. Shecco observed that a move towards natural refrigerants had a certain resistance because of the need to learn new skills. Some technicians have already been installing these new systems and may not have done it properly. Shecco called for not making people afraid of natural refrigerants because this would prevent these alternatives from serious market penetration.

The **Commission** summarised that the exchange of views highlighted that a lot still needs to happen. There are many actors in this who will have to play their part. There is a legal framework, the demand should come due to the policy in place, so technicians should have an incentive to get themselves trained. It is a matter for all stakeholders to work together to address this issue.

4. The report to be prepared in accordance with Article 21(3) of the Regulation on the prohibition related to multipack centralised refrigeration systems for commercial use

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<sup>&</sup>lt;sup>10</sup> See meeting slides: <a href="https://ec.europa.eu/clima/events/articles/0106">https://ec.europa.eu/clima/events/articles/0106</a> en

Oeko-Recherche presented their analysis regarding the prohibition related to multipack centralized refrigeration systems for commercial use<sup>11</sup>. A briefing paper<sup>12</sup> containing key aspects and preliminary results of this study had been distributed to participants two weeks prior to the meeting.

EIA confirmed that the preliminary findings of the presentation and the preliminary conclusions by the consultants matched their own experience in the commercial sector: alternatives are available and that technical problems to install alternative systems in the South have largely already gone away. EIA expects that the F-gas Regulation will further accelerate this development. She pointed out that analyses by Shecco are available for all years before 2016 and that no negative impacts from the transition to alternatives are reported. EIA considers the 2022 multipack ban as feasible in all Member States. **EEB** agreed with the statement by EIA and the results of the study. At least 28 medium to large stores are being monitored in Spain and have proven to be energy efficient. Thus the multipack ban is feasible. The results of the monitoring will be shared with the Commission. Shecco made reference to their report published last month which includes a survey with hundreds of people and a comparison of data from 2013 and 2016 on companies working on alternatives in Europe, which has increased from 218 to 655. The F-gas Regulation is creating a lot of momentum and increasing innovation. The survey looked at only one alternative which is transcritical CO<sub>2</sub> and a huge increase of stores all over the EU is noted (there are now 9000 transcriticial stores in the EU). CO<sub>2</sub> technology has moved down from Northern EU and has now arrived in Spain, which had been lagging behind some years. The 2016 Atmosphere Conference in Barcelona indicated a large interest in the market of alternative technologies in Spain. The questions now raised in Spain were similar to what was heard in Germany and other countries some years ago. A GWP of 600 should not be considered when a solution with a GWP of 1 was available. Prices for alternative systems are observed to go down as competition increases and we are still 6 years away from the ban. Shecco therefore supports the results of the Öko-Recherche study. The Shecco publication can be provided on request. Carbon Market Watch referred to their meeting with Coop in Italy which fully backs the conclusion of the consultants. In Italy transcritical CO2 systems are being introduced in new supermarkets at this time: Coop committed recently to this solution because it was found cost-competitive after a trial period of 5 years. Strong market change is expected in Italy and prices are expected to be going down quickly.

**EPEE** thanked for the consultant's report and does not challenge the overall findings and conclusions reached, but believes that the technical assessment could have been conducted in a more robust way. The Commission should take the opportunity of the report to clarify the definition of systems concerned to support compliance. EPEE finds however that the paper was not always sufficiently factual and that the selected sources used did not reflect the plurality of solutions. EPEE is currently carrying out a study on commercial refrigeration (as part of the "gapometer" study), which would be a chance to compare to the results of the Commission report. The study will be available by the end of the year/early next year. **EuroCommerce** stated that the alternatives presented in the study were not cost-effective in Southern Europe and other options in the market that might be feasible as well should have also been included. Concerns regarding energy efficiency, maintenance, training and costs were not reflected properly in the paper. EuroCommerce are therefore unhappy with the

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<sup>&</sup>lt;sup>11</sup> https://ec.europa.eu/clima/sites/clima/files/20161201 supermarket en.pdf

https://ec.europa.eu/clima/sites/clima/files/20161201 briefing supermarket en.pdf

findings of the study. TEWI and energy efficiency were not considered well enough. EuroCommerce agreed that non-HFC technology is moving South and that transcritical  $CO_2$  systems are getting into the Spanish supermarkets but not yet well enough to comply with the ban. EuroCommerce really wants to reduce emissions but rely on the phase-down to do it. **Spain** stated that the preliminary results are found as controversial in Southern European countries. The ban of existing cascade systems is seen as particularly problematic. For the next meeting of the F-gas Committee Spain will propose an intermediate position: the GWP threshold should be revised and other alternatives should be considered. These include R450A, R550 and others with a GWP > 300 should be allowed for use in a cascade system. Article 11 could be changed to allow for such intermediate solution. **Portugal** stated that their data suggest that transcritical  $CO_2$  systems are not energy efficient and cost-competitive. The **Commission** asked for these data to be shared and for differences to be checked. **Shecco** added that it should be taken into account that in Spain and Portugal they only started looking into natural refrigeration solutions now and that it was incorrect to look at transcritical  $CO_2$  technology as the only solution in these countries.

In summary, the **Commission** took note that an objective comparison of different systems was not an easy task, which underlines the importance of having all the technical data at one's disposal. Participants were requested to provide any additional data they find relevant by 15 December to aid the analysis.<sup>13</sup> Notwithstanding, two years after the adoption of the F-gas Regulation, there are promising developments going on, as already today there are various options available for supermarkets that may be used also after 2022; options that are not in the research phase but are being installed in supermarkets all over Europe, as the case studies collected by the consultants demonstrate.

## 5. The report to be prepared in accordance with Article 21(5) of the Regulation on the quota allocation method

Oeko-Institut presented their analysis regarding the quota allocation method<sup>14</sup>. A briefing paper<sup>15</sup> containing key aspects and preliminary results of this study had been distributed to participants two weeks prior to the meeting.

**JBCE** congratulated the Commission for implementing a pooling system in the HFC Registry, which gives flexibility and better control to equipment importers. JBCE also felt that

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<sup>&</sup>lt;sup>13</sup> The following statements and data were submitted to the Commission during the feedback period: 14 December 2016: Alfonso Olcina for the University of Castellòn and Tewis Smart Systems S.I.: Summary presentation "Alternative commercial refrigeration systems in warm climates – Specific case study Spain and Portugal" of December 2016.

<sup>15</sup> December 2016: Dirección General Oficina Espanola de Cambio Climatico (OECC): Spanish proposal regarding the prohibition on commercial refrigeration (Annex III of Rg 517/2014).

<sup>16</sup> December 2016: Guillermo Martínez López, Oficina Espanola de Cambio Climatico (OECC): Links to the summary presentation and full report of the study on alternatives in commercial refrigeration in warm climates.

<sup>16</sup> December 2016: EPEE Secretariat: EPEE comments following up the F-Gas consultation forum 1<sup>st</sup> December 2016.

<sup>16</sup> December 2016: Sébastian Gallet, EFCTC: EFCTC position on the recommendation for revision of Definition 38 of Article 2 of Regulation 517/2014.

https://ec.europa.eu/clima/sites/clima/files/20161201 paper quota en.pdf

https://ec.europa.eu/clima/sites/clima/files/20161201 briefing paper en.pdf

the link to REACH obligations should be better emphasised, not least for transparency and compliance. **CHEAA** stated that many Chinese air conditioner manufacturers were exporting to the EU. Some companies were recently finding it difficult to enter the EU market. CHEAA agreed that the pooling system was helpful but allocating quotas directly would be even more useful to creating a more open market. Chinese companies would be willing to pay fees for quotas. The **Commission** replied that the F-gas Regulation was the only legal base for any quota allocation and equipment importers would need to get authorisations from quota holders to achieve compliance.

EIA, WWF and EEB pointed out that in their view Article 21(15) required a broader scope than the focus entailed in the consultant's briefing paper. They stated a full analysis of impacts on stakeholders including all endusers in Member States, an in depth analysis of other allocation options as well as an analysis of all future expenses for contributors of the Multilateral Fund of the Montreal Protocol was warranted. They also felt that quota holders were profiting from the current system, and argued for recovering these profits. The Commission answered that the impact assessment accompanying the Commission proposal had examined the advantages and disadvantages of allocation options. Also, various options had been thoroughly debated by the negotiators during co-decision, which eventually led to the policy choice reflected in the F-gas Regulation. The Commission explained that when making EU legislation, it first evaluates the need for further action, then, if needed, it makes an impact assessment of policy options and on that basis a legislative proposal. Thus, the report is assessing the system chosen by the co-legislators. Since, the consultant's briefing paper found by and large that the system seemed to be working as intended, on the basis of the experiences made so far, it was not the intention to pursue a new impact assessment at this stage. Regarding the assessment of costs, considered in the context of the creation of potential revenue, it was the understanding that it should focus on the cost borne by the authorities in Member States. The overall costs of implementing the Regulation had already been analysed in the impact assessment accompanying the Commission's proposal.

**Denmark** stated that it would be worthwhile to examine if the allocation method could be made to function even better. This opportunity for getting more information should be utilized. **Carbon Market Watch** did not agree that the system was working as expected. According to the consultants paper new entrants were having a difficult time, meaning that free allocation did not work all that well. An assessment in the light of Kigali was considered absolutely crucial.

The Commission emphasised that at this point in time only the complete cycle related to the quota allocations in 2015 could be taken into account. Thus, the analysis is only giving an early shapshot of the method. The indications are that by and large implementation is satisfactory, and the desirable price signal is there. The Commission has taken note of the expectations that some expressed regarding the scope of the analysis. The Commission will continue monitoring the system and noted that a general review of the Regulation is due by 2022. It is the Commission's intention to make the phase-down a success. The participants of the meeting were asked to work together on the implementation of the F-gas Regulation and to improve processes together. If participants wish to provide additional information, this would be possible until 15 December.

### **Annex: Participants**

#### Chair:

European Commission, Directorate-General for Climate Action

#### **Consultants to the European Commission:**

Oeko-Recherche, Oeko-Institut, Prof. Michael Kauffeld

#### **Forum Members present:**

Austria, Bulgaria, Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Ireland, Italy, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Spain, Sweden, UK

Air Conditioning and Refrigeration European Association (AREA)

American Chamber of Commerce to the EU (AmCham EU)

Association des Constructeurs Européens d'Automobiles (ACEA)

Association of European Refrigeration Component Manufacturers (ASERCOM)

**Business Europe** 

China Household Electrical Appliances Association (CHEAA)

Eurammon

EuroCommerce

European Aerosol Federation (FEA)

European Cold Storage and Logistics Association (ECSLA)

European Committee of Domestic Equipment Manufacturers (CECED)

European Electronic Component Manufacturers Association (EECA)

European Environmental Bureau (EEB)

European Fluorocarbons Technical Committee (EFCTC)

European Heating Industry Association (EHI)

European Heat Pump Association (EHPA)

European Partnership for Energy and the Environment (EPEE)

**Eurovent Association** 

Federation of European Rigid Polyurethane Foam Associations (PU Europe)

Institut International de la Refrigeration (IIR)

Japan Business Council in Europe (JBCE)

Shecco

T&D Europe

Transfrigoroute international

WWF EPO

### Ad hoc experts and Speakers:

CEN/CENELEC