BACKGROUND

The European Union (EU) adopted the fluorinated gas regulation in 2014 (The F-Gas Regulation) to reduce the environmental (CO$_2$) impact of refrigerant products and combat climate change. The F-Gas Regulation caps and then progressively reduces the quantity of a type of refrigerant called hydrofluorocarbons (HFCs) on the EU market by the creation of a quota system.

HFCs are synthetic substances that have a favourable safety profile (low toxicity, low flammability, stability) and excellent thermodynamic properties. They therefore provide safe, cost-effective and energy efficient solutions in Refrigeration, Air Conditioning and Heat Pump applications. Relative to Carbon Dioxide (CO$_2$) HFCs have a high Global Warming Potential (GWP). The goal of the F-Gas quota system is to drive demand toward lower-GWP refrigerant solutions such as Hydrofluoro-Olefins (HFOs), which have a negligible GWP and the same benefits of HFCs.

Economic Operators in the EU receive specific HFC quota allocations for any given year. The aim is to achieve a 79% reduction of HFCs by 2030 as compared to the 2009-2012 baseline figures.

ISSUE

An unintended side effect of imposing a quota system and limiting supply has been the creation of an EU black-market for HFCs. A report, "Doors Wide Open", from the environmental NGO the Environment Investigation Agency (EIA) provides an excellent analysis and summary of the issue. The EIA report describes the ways that illegal HFCs are traded on the EU market:

"Open smuggling" into the EU – where HFC imports are properly labelled and declared upon import but are illegal because:

a. They are imported by a company which is not an EU quota-holder or

b. Companies import HFCs more than their quota allowance which is enabled by poor EU-wide record-keeping and weak checks by authorities. This excessive import is facilitated by EU rules that allow importation of HFCs in excess of quota if they are re-exported. HFCs are therefore falsely reported as in transit through the EU but then illegally placed on the EU
Traditional smuggling – where goods are “undoubtedly” being smuggled under the radar of customs, either by being declared falsely in any customs declarations or through shipment in hidden compartments or in equipment which already contain HFCs.

Sale of illegal HFC containers – there has been a marked increase in the sale/availability of HFCs in disposable containers, which have been illegal in the EU since 2004.

**NUMBERS**

- **Imports of HFCs into the EU28 from China** show excess beyond quota levels equal to adding 12 million cars to EU roads (China export data).
  - In 2019 there was an estimated reduction of 23% in imports of tonnes of CO2 equivalent (CO2eqT) into the EU28 from China compared to 2018.
  - However, data suggests upwards of 29M+ CO2eqT excess imports from China into EU28 for 2019 if trends persist, an amount equal to adding 12 million cars to the roads.
- **Imports of HFCs from China into EU28 neighbors** (Russia, Turkey, Ukraine) show significant increase in 2019 beyond normal demand levels equal to adding 16 million cars to EU Roads.
  - Increase may reach more than 40M CO2eqT above normal demand levels. This is equal to adding 16 million cars to the EU fleet or cutting down 8 million trees.

**EVIDENCE**

Three strands of evidence detail the existence and extent of the illegal trade of HFCs: 1) Customs data from the EU, US and China, 2) Independent NGO investigation, 3) OLAF investigations.

The European Fluorocarbon Technical Committee (EFCTC), which is an industry group that represents the fluorocarbon manufacturers and works under the European Chemical Industry Council’s (CEFIC) umbrella, is working with investigators, including OLAF, to build a more detailed picture of the trade in illegal HFCs on the EU market and support effective
enforcement of the F-gas regulation.

Three strands of evidence help detail the problem:

1. **EU, US and China Customs data**: Customs data indicates that 
   **HFCs are being imported illegally into the EU** in excess of quota, 
   or without any quota at all and in illegal disposable containers. 
   Compared to the reduced HFC quota, key exporting countries, such 
   as China, have shown year-on-year increase of exports to the EU. 
   For example, Chinese exports decreased only 9% in 2018 versus a 
   37% F-Gas phase down, and therefore is in excess of quota. While 
   2019 shows a drop of Chinese imports directly into the EU versus 
   2018, imports to EU 28 neighbours such as Russia, Turkey and 
   Ukraine have seen a net increase.

2. **EIA Report**: The investigation by EIA revealed that “...[t]he EU's 
   doors are wide open to large-scale illegal HFC trade, driven by 
   quick profits and low risk of punitive measures and the absence of 
   a system allowing customs officials to determine if an HFC import 
   is actually legal or not...”

3. **OLAF Investigations**: OLAF, the EU's anti-fraud agency, has a 
   formal mandate to investigate the illegal trade of HFCs in the EU 
   since March 2019 and has opened investigations in several 
   Member States. Cooperation of national enforcement bodies with 
   OLAF will be essential to stopping illegal and criminal activity.

**IMPACT**

There are significant environment, safety and economic concerns arising from illegal trade of HFCs. Data shows upwards of 29M+ 
CO$_2$eqT excess imports from China into EU28 for 2019 if trends persists. This is 
equal to adding 12 million cars to the EU 
fleet in terms of CO2-emissions or cutting down almost 6 million fully grown trees.

The impact of illegal trade includes:

1. Undermining the environmental goals of the F-Gas regulation and the EU's 
global leadership on climate change.
2. Undermining of border security.
3. Loss of revenue for Member States through duties and taxes that would
otherwise be levied.

4. Potential health and safety consequences for workers and consumers transporting or handling illegal refrigerants as these are often improperly packaged and/or contain impurities.

5. Industry data from all 5 of the largest EU producers and quota holders demonstrate the impact on their business from sale of illegal HFCs. Distributors across the EU are reporting a dramatic drop in sales due to the availability of illegal material, with a 30% to 85% reduction of their year-on-year sales depending on the market. This leads to:

- Dampening future investment in the research and development of new products with lower environmental impacts
- Threatening jobs for the small and medium-sized distributors that rely on a successfully-operated regulatory system
- Erosion of traditional supply chains, which assure environmentally responsible handling of refrigerants including their recovery and reclamation at end of life, one of the key objectives of the F-Gas Regulation

**ROLE FOR GOVERNMENT**

Enforcing the HFC quota system is complex but absolutely achievable. Given the unprecedented scale of illegal HFCs on the EU market and the impact on the environment, citizens and businesses both large and small, a concerted effort is required to disrupt and end this illegal trade.

We appreciate there are challenges for Member States, but also that there are solutions either already available or that can be put in place to help enforce this legislation for the benefit of the environment, citizens, governments and businesses.

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<th>Challenges</th>
<th>Solutions</th>
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<td>Enhance customs checks and effectively use the F-Gas portal to combat illegal trade. MS Customs</td>
<td>MS should push the Commission to facilitate access to and effective use of the F-GAS portal through training and sharing of best practices,</td>
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<td><strong>Authorities and enforcement bodies</strong></td>
<td><strong>Member States should require HFCs importers to include registration ID in their customs declarations, change T-1 to include mandatory ID of products through customs codes, and require security for CO-eq value of shipment.</strong></td>
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<th><strong>Trainings of customs and enforcement agents, so that they can more easily identify illegal products.</strong></th>
<th><strong>Provide training to MS customs and other relevant authorities by cooperation with the EU and industry association EFCTC, which is available to support customs and enforcement agencies. Successful seizures in Poland in the wake of additional training by the local distributors trade association indicate that when border control is educated on how to stop illegal trade they are significantly more effective. EFCTC can also help authorities use raw customs data to identify where illegal disposable products have been imported. Member States can also go after online sales of prohibited packages that are clearly displayed on numerous online platforms (including eBay and Amazon).</strong></th>
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<th><strong>Effective prosecution and effective deterrents, including dissuasive penalties.</strong></th>
<th><strong>Increase the penalties for those convicted of illegal trade of HFC to levels which will act as a deterrent. Current levels are not dissuasive – with fines as low as around EUR 1000 for those who are caught and prosecuted. This can also serve as a source of revenue for MS.</strong></th>
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<th><strong>Weak areas of enforcement under current Member State regulations.</strong></th>
<th><strong>Member States should prohibit the use or possession of non-refillable cylinders containing HFCs and require cylinder collection/take-back provisions. These are actions that can be taken now under the current F-gas regulation to strengthen the ability to stop illegal trade and prosecute offenders.</strong></th>
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<th><strong>Lack of transparency in the F-gas registry, which allows importers to easily intentionally or inadvertently exceed quota without detection.</strong></th>
<th><strong>Member States can also push the Commission to make the F-GAS portal public to allow legitimate economic operators to verify if someone is offering HFCs without quota or exceeding quota.</strong></th>
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<th><strong>Handling of confiscated material, which comes at a financial cost to the Member State (MS).</strong></th>
<th><strong>The EU should create a fund specifically to support Member States in the handling of confiscated material. Member States should actively push the Commission to provide this financial assistance.</strong></th>
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In addition to prosecution under the F-Gas Regulation, other options are open to authorities to disrupt the illegal trade and supply chains including, for example, action under the ADR regulations (carriage of dangerous goods) or criminal charges arising from the proceeds of crime, such as money laundering.
THE PROBLEM

1. What is the problem?

There is a significant amount of illegal HFCs on the EU market, which is undermining climate goals, border security, taxation, small and large businesses, regulatory compliance and creating potential safety risks. Illegal refrigerants (HFCs) come on the market through traditional smuggling routes. Some HFCs may be 'openly smuggled' into the EU – they may be declared at the border and pay duty but they are illegally in excess of quota. Many products are being imported and/or sold in disposable cylinders that have been illegal since 2006, because they will not be recovered at end of life.

2. What is the effect of illegal HFCs?

Illegal HFCs undermine the goals of the EU’s F-Gas Regulation, among other consequences. Specifically, they pose the following risks:

1. Undermine the environmental objectives of reducing HFCs in the EU
2. Undermine the EU’s commitment to enforce its laws and regulations, as well as border security.
3. Pose a risk to health and safety. These are hazardous products that need proper handling and oversight.
4. Loss of revenue for Governments through lost duties and VAT. On an EU wide-basis the loss in VAT is estimated at 230 million EURO.
5. Reduces incentive for companies to invest in the development of greener alternatives.
6. Hurts distributors, small and medium sized businesses that have invested in order to be compliant with the F-gas regulation and who are losing business to criminal activity.

IS THERE REALLY A PROBLEM?

3. What makes you think there is a problem?

This is not the view of just one company; the whole industry, represented by CEFIC and EFCTC, is feeling the impacts of illegal trade. EFCTC members include Arkema, Chemours, Daikin, Honeywell, and Mexichem.
Dozens of small and medium sized European distributors, which are often family owned and have invested significantly to comply with the F-gas regulation, are also feeling the negative impacts.

Environmental groups agree as evidenced by the Environmental Investigation Agency report setting out the problem of HFC smuggling and sales of HFCs in illegal disposable containers.

Other trade associations, such as the European Partnership for Energy and the Environment (EPEE) and the Association of European Refrigeration Component Manufacturers (ASERCOM), have also spoken out about the issue.

4. Isn’t a reduction in demand just the effect of the Regulation?

No. Local distributors are reporting to members of the EFCTC that their sales down anywhere from 30% to as much as 85% (Greece) on the previous years – indicating a widespread illegal trade and a significant effect on the economy and exchequer of Member States.

5. Do the export / import figures back this up?

The import data show that there are clearly illegal product entering the EU. At a time of reducing quotas, customs data continues to suggest upwards of 29M+ CO\textsubscript{2}eqT excess imports from China into EU28 for 2019 if trends persist. This is equal to adding 12 million cars to the EU fleet in terms of CO\textsubscript{2}-emissions or cutting down almost 6 million fully grown trees.

EVIDENCE

6. What evidence do you have?

- **Raw import/export data** shows large volumes of illegal HFC products are entering the EU. At a time of reducing quotas, customs data continues to suggest upwards of 29M+ CO\textsubscript{2}eqT excess imports from China into EU28 for 2019 if trends persist. This is equal to adding 12 million cars to the EU fleet in terms of CO\textsubscript{2}-emissions or cutting down almost 6 million fully grown trees.

- **Industry data** from all 5 of the largest EU producers and quota holders demonstrate the impact on their business from sale of illegal HFCs. Distributors across the EU are reporting a dramatic drop in sales due to the availability of illegal material, with a 30% to 85% reduction of their year-on-year sales depending on the market.

- **Independent Environmental NGOs** have estimated that illegal out of quota HFCs account for around 20% of all HFCs on the EU market (2018).
• **OLAF** has a formal mandate to investigate and has opened several investigations across the EU cooperating with the national enforcement agencies.

7. **Have you identified specific culprits?**

EFCTC has hired investigators to identify specific offenders and build a picture of the illegal HFC trade. This investigation agency is cooperating with OLAF and Member State authorities to share information as appropriate.

EFCTC set up an Action Line in March 2019 so that illegal sales can be identified. Almost 200 incidents of suspected illegal trade have been reported. We are working through those reports now.

We encourage you to work with OLAF regarding specific culprits, and EFCTC can also connect you to the investigative agency it hired.

8. **What has the Action Line revealed?**

There are reports of illegal HFCs being sold across the EU. The nature of the Action Line means that many of the reports focus on sale of HFCs in illegal disposable containers. But this points to the strong illegal trade more widely and we are pursuing leads on illegal imports of larger scale imports.

We are also pursuing leads on apparent large-scale breaches of the EU F-Gas regulation and will work with authorities to help prosecute those offenders.

9. **What are the sources of the illegal HFCs?**

China is the main source of HFCs on the EU market. We are working with Chinese producers to minimise their role in supporting the trade of illegal HFCs on the EU market. We welcome the EU Commission’s announcement in July that it will work with China to reduce the flow of illegal HFCs and suggest a pilot project wherein China customs authorities would check that an importer has quota before allowing export from its ports.

Those importing illegal HFCs into the EU are using various means, including:

- Smuggling products across EU borders with little or no enforcement by some Member State customs authorities
- Overtly importing HFCs in illegal disposable containers through EU ports and across EU borders
- Taking advantage of the lack of understanding of quota regulations to import more HFCs than their allotted quota
- Abusing the EU transit arrangements that allow importing HFCs out of quota with little or no penalty as a result
- Selling illegal products through online market places in clear contravention of existing laws

ACTION

10. What do you want Member States to do?

First, it is important to have the right legislation in place that is effective and dissuasive. Some penalties are very low – with fines as low as around EUR 1000 for those who are caught and prosecuted. Member States should revise penalties to levels that would dissuade illegal activity.

Second, the law needs to be enforced. Coordinated action within Member States is often required to ensure compliance with the F-Gas Regulation and stop illegal HFC trade. This requires political leadership and technical enforcement.

There are numerous other ways Member States can disrupt the illegal trade – through enforcement of ADR transport regulations; targeting those selling illegal disposable products online; or pursuing criminal as well as civil action against those selling illegal HFCs.

11. What actions can Member States take now?

Member States can act right now to capture some of the “low-hanging fruit” in the fight against illegal trade:

- Ensure customs authorities check the F-Gas registry that those importing HFC products 1) have a quota issued by the EU and can lawfully import the product, and 2) are not importing more than their permitted quota

- Investigate and prosecute those selling illegal products online (e.g. HFCs in illegal disposable containers)

- Cooperate with OLAF, EU Commission, other Member States and industry to train customs officers and coordinate effective responses across the Member States. The F-gas Implementing Committee made up of representatives from Member States is one forum for such cooperation.

12. Are there any enforcement actions underway?

Some Member States have acted and seized illegal material, including Poland, Romania and Netherlands.

OLAF is also actively investigating in several Member States.

The European Commission sent letters of formal notice to Italy and Romania in July for failing to notify national measures on penalties
for infringements of EU rules on F-gases, noting that: “Effective, proportionate and dissuasive penalties should have been in place by 1 January 2017 and that availability of penalties is particularly important in view of preventing illegal trade in refrigerants.”

Arias Cañete, Commissioner for Climate responded on July 15 to an inquiry from a Member of the EU Parliament that stated the Commission: 1) is concerned about the enforcement of the HFC phase-down regime 2) is doing its utmost to tackle illegal trade 3) will discuss the problem with China (and others) 4) will request Member States enforce and will act against them if they don’t 5) is facilitating customs best practices 6) is creating an IT application to identify illegal F-Gases in single window in 2020.

13. Can the industry help with training/educating?

Yes. Industry would like to see effective enforcement of the F-gas regulation so that the EU can achieve its goal of an additional annual emissions reduction of 70 million Tonnes of CO$_2$ equivalent by 2030.

EFCTC is ready to provide training to Member States about the nature of the industry; the products and the methods of illegal trade we have seen. The industry can offer core training materials to help authorities identify illegal HFC products.

14. What do you want the Commission to do?

The Commission can:
- Facilitate Member States adoption of “Best Practices of F-gas Implementation”
  - Enhance Customs Checks:
    - require HFCs importers to include registration ID in their customs declarations;
    - change T-1 to include mandatory ID of products through customs codes, require security for CO-eq value of shipment
  - Raise penalties to a deterrent level
  - Create legal requirement for disclosing source of any material purchased
  - Targeted checks of HFC records through the supply chain
  - Prohibit the use or possession of non-refillable cylinders containing HFCs
  - Mandatory cylinder collection/take-back provisions
  - Enhanced VAT checks on HFC purchases
  - Guidance for dealing with confiscated material
- Create with urgency digital system to identify illegal material in real time
- Secure cooperation from third countries to share export data, check shipment and importer of record (quota holder)
- Support industry sponsored seminars and best practice sessions for key Member State customs authorities supported by Industry
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