

NEW ANALYSIS QUANTIFIES EU BLACK MARKET IN ILLEGAL REFRIGERANTS AS A THIRD OF THE TOTAL MARKET IN 2018

A large, illicit market for illegally imported HFC (hydrofluorocarbon) gases in the EU has developed in recent years. Illegal HFCs are brought into Europe outside of defined quotas set in place to help combat climate change through the EU Fluorinated-gas (F-gas) Regulation. This regulation entered into force in 2015 and is targeting a 79% reduction of HFC use by 2030, with the intended effect of stimulating the transition to alternative solutions, with lower climate impact i.e. Global Warming Potentials (GWPs).

HFCs are mainly used in refrigeration and air conditioning systems, supermarkets, hotels, shopping centres and hospitals. They are also used in technical and consumer aerosols, insulating materials and as solvents and fire extinguishing agents.

EFCTC¹ worked with Oxera Consulting LLP to develop a database to provide more accurate and reliable figures on this unlawful market in HFCs. Three datasets were compared: Eurostat, United Nations Comtrade data and China export data. The results indicate a larger than anticipated volume of exports, possibly destined for Europe. EFCTC used Oxera conclusions to model the potential illegal imports, and to derive the CO₂ equivalence from the reported tonnages.

This new EFCTC examination based on data collected by Oxera is the first to consider the impact of potential imports from EU neighbouring countries, which explains why previous figures could have gravely underestimated the size of the issue.

The analysis shows that the volume of HFCs available to enter the EU market in 2018 illegally could have been as high as 34 million tonnes CO₂e:

- This is double the previous worst-case figures and is equivalent to the deforestation of a **forest twice the size of Portugal**
- It also represents **33% of the 2018 legal quota**. This means that the illegal imports could represent as much as 25% of the combined market of legal and illegal supply.

This study further reveals two major areas of potential illegal trade:

- Oxera data revealed an **unexplained gap** in 2018 between the reported exports from China to the EU and what the EU reports as imports from China. This gap equates to **19 million tonnes CO₂e**, according to EFCTC analysis.
- Oxera identified a **40% increase in HFC exports from China to countries neighbouring the EU**² between 2016 and 2018, accelerating steeply in 2018 coinciding with the 37% quota phasedown. Further study by EFCTC shows that expected market growth cannot account for this substantial increase in imports. We believe this discrepancy could be feeding the black market in HFCs. The difference between expected market growth and the increase in imports equates to **15 million tonnes CO₂e**.

This issue needs urgent attention and action from all EU stakeholders. EFCTC will continue to raise awareness and collaborate with authorities to help eradicate this HFC black market.

¹ The EFCTC is a sector group of the European Chemical Industry Council (Cefic) and its main objectives are to provide up to date information about applications, safety, health and environmental effects for HFCs, HFOs, and the relevant European and international legislation. It is represented by the companies Arkema, Chemours, Daikin Chemical, Honeywell and Koura

² Neighbouring countries of the EU are Albania, Armenia, Bosnia and Herzegovina, Georgia, Kazakhstan, Macedonia, Moldova, Montenegro, Russian Federation, Serbia, Switzerland, Turkey, Ukraine