

Refrigeration and freezer equipment: Changes to refrigerant gases that can be used

May 2019

The 2020 ban

Under UK and EU legislation, a ban is coming into force on 1 January 2020 that will ban refrigerants with a global warming potential (GWP) greater than 2500 being used to service or refill your refrigeration or freezer system.

This ban affects refrigeration systems containing hydrofluorocarbons (HFCs) equivalent to over 40 tonnes of carbon dioxide. This equates to around 10kg of R404A, a common refrigerant in medium sized systems. Smaller and hermetically sealed systems should be unaffected by this ban.

Commonly used refrigerants that will be subject to this ban include but are not limited to R404A and R507A.

Operators who do not comply with the service ban are breaking the law and are liable for enforcement action.

As of April 2018, the new Fluorinated Greenhouse Gases Enforcement Regulation in Great Britain (<http://www.legislation.gov.uk/ukxi/2018/98/made>) enables regulators in England and Scotland to issue civil penalties up to £200,000 to operators breaching the requirements of the Regulation. Enforcement notices and possible fines can also be applied by enforcing authorities in Northern Ireland and Wales for breaches of F-gas provisions.

Reduction in the use of HFCs

HFCs are powerful greenhouse gases that contribute to climate change.

The UK and EU have Regulations that will phase down the use of HFCs by 79% by 2030. These

Regulations will make some refrigerants harder to obtain and more expensive.

If you use one of the systems described below, you are very likely to use a refrigerant covered by the Regulation.

Who this guidance is for

This guidance is for any business that has refrigeration or freezer units using HFC refrigerants in the following categories:

- Small hermetically sealed systems: Examples include ice-cream freezers, bottle coolers, stand-alone retail displays that typically contain between 0.1 and 0.5kg of refrigerant.
- Condensing units: Examples include commercial display cabinets, blast chillers and freezers used in small shops, convenience stores and food service. These are medium sized systems with one or two refrigerated display units cooled by a condensing unit typically containing between 2 and 10kg of refrigerant.
- Central pack systems: used in supermarkets and other large stores. They typically contain more than 100kg of refrigerant.

You can check which category your system falls into and which refrigerant it uses with your refrigeration manufacturer or certified maintenance technician.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
03459 88 11 88

What you will need to do

1. Calculate the carbon dioxide equivalent of your refrigerant by using this online tool: <https://www.gov.uk/guidance/calculate-the-carbon-dioxide-equivalent-quantity-of-an-f-gas>. Alternatively, ask your refrigeration manufacturer or certified maintenance technician.
2. Ask your refrigeration service provider or maintenance technician for advice on what steps you can take to manage the impacts of the F-gas Regulation. The requirements will continue to apply after the UK leaves the EU.
Great Britain: (scroll down to Article 13(3))
<http://www.legislation.gov.uk/ukxi/2015/310/schedule/2/made>
Northern Ireland:
<http://www.legislation.gov.uk/nisr/2015/425/schedule/2/made>

Switching to an alternative refrigeration system

Steps you could take include:

- Using reclaimed HFC refrigerants, which are exempt from the servicing ban until 2030;
- Using recycled HFC refrigerants that have been recycled either from your own equipment, or by the company servicing your equipment, as these are exempt from the servicing ban until 2030;
- Switching to low GWP refrigerants that are not covered by the 2020 service ban. This will usually involve replacing or retrofitting your existing system.

The Enhanced Capital Allowance (ECA) Scheme may help with the cost of replacing your refrigeration system with more energy efficient and environmentally friendly alternatives.

The ECA scheme allows businesses to write off the whole cost of the equipment against taxable profits in the year of purchase, if the equipment purchased is specified on the Energy Technology List (ETL): <https://www.gov.uk/guidance/energy-technology-list>.

The Scottish Government SME Loan Scheme is available for the installation of energy efficient measures including refrigeration. For more information, and to determine if you are eligible, visit Resource Efficient Scotland: <https://www.resourceefficientscotland.com/SMELoan>.

Further advice

For more information about the other requirements of the F-gas Regulation, such as operators' responsibility to ensure that HFC refrigerants are properly managed recovered or destroyed by qualified technicians at the end of their service life, read the following guidance: <https://www.gov.uk/government/collections/eu-f-gas-regulation-guidance-for-users-producers-and-traders>

Consult your refrigeration manufacturer for information on climate friendly alternatives.

Consult your trade association for further advice and guidance.

For further background information, read this helpful guidance sheet about commercial refrigeration: <http://www.gluckmanconsulting.com/wp-content/uploads/2014/12/IS-2-Commercial-Refrigeration.pdf>

The main enforcing authorities are the Environment Agency, the Scottish Environment Protection Agency, Natural Resources Wales, Welsh Government and Welsh local authorities, Northern Ireland Environment Agency and the NI Districts Councils. A full list of the NI district councils is available at <https://www.nidirect.gov.uk/contacts/local-councils-in-northern-ireland>