



European Partnership for Energy
and the Environment

**The Voice of the Heating, Cooling
and Refrigeration Industry**

The EU F-Gas Regulation:

Why it matters and what it is about

F-gases are essential to daily life

Fluorinated gases, F-gases, are manufactured refrigerants. The most common ones are hydrofluorocarbons, also known as HFCs. They were developed in the 1990s to replace the ozone-depleting substances (CFCs and HCFCs), which were phased-out globally as they depleted the ozone layer. This process was carried out under the Montreal Protocol.

Today, F-gases can be found everywhere: in industrial refrigeration, air-conditioning systems and heat pumps, and even in hospitals and fire protection. They are **ozone-friendly**, very **energy efficient** and **safe** for users and the public thanks to their low toxicity level and non-flammability. However, they have a relatively high global warming potential and—once released—can stay in the atmosphere for a very long time. That is why the European Union decided in the early 2000s to control the use of some of these F-gases.

The reason behind the F-Gas Regulation

The F-Gas Regulation ([EC Regulation No 842/2006](#)) on certain fluorinated gases was adopted in 2006 and aims to reduce emissions of F-gases by preventing leaks from the systems where they are used. If F-gases are contained, they cannot impact the climate.

The key principles of the F-Gas Regulation

The objective of the F-Gas Regulation is to reduce emissions of the fluorinated greenhouse gases covered by the Kyoto Protocol, namely HFCs, PFCs and SF6. In order to meet this objective, the Regulation addresses:

Life cycle assessment:

- ◇ The **containment, use, recovery and destruction** of F-gases
- ◇ The **control of certain uses** of the gases:
- ◇ The **application of 'placing on the market' prohibitions** on certain products and equipment

Identification:

- ◇ The **labelling and disposal** of products and equipment containing those gases

Compliance :

- ◇ The **reporting of information** on those gases
- ◇ The **training and certification of personnel and companies** involved in activities covered under this Regulation



THE KEY PRINCIPLES OF THE F-GAS REGULATION EXPLAINED

Containment (Art. 3):

Operators (“the natural or legal person exercising actual power over the technical functioning of the equipment and systems”) are required **to use all available measures to prevent leakage of F-gases and repair any leaks** from refrigeration, air-conditioning and heat pump equipment as soon as possible. Operators of stationary applications containing more than 3kg of F-gas also have to maintain records on the quality and type of F-gases installed.

Recovery (Art 4)

Operators are responsible for putting in place **arrangements for the proper recovery** of F-gases by certified personnel to ensure their recycling, reclamation or destruction from the cooling circuits of refrigeration, air-conditioning and heat pump equipment; equipment containing fluorinated greenhouse gas based solvents; fire protection systems and fire extinguishers; and high-voltage switchgear.

Training and certification (Art 5):

The Regulation introduces **minimum requirements and mutual recognition** for both the **companies and the relevant personnel** involved in installation, maintenance or servicing of the equipment and systems containing F-gases as well as for the personnel involved in containment and recovery.

Reporting (Art. 9):

Each **producer, importer, and exporter** of more than one tonne of F-gases needs to communicate to the EU Commission the amount it has produced, placed on the market, recycled, reclaimed or destroyed.

Labelling (Art. 7):

Equipment placed on the market must have a **label that states the chemical name** of the F-gas and provides a clear indication that the product contains F-gases and their quantity.

Information on the F-gases, including their global warming potential, also has to be included in the instruction manuals provided for such products and equipment.

Placing on the market (Art. 9):

Some products and equipment can no longer be **placed on the market**. The full list can be found in Annex II of the F-Gas Regulation.

Review (Art 10):

By 4 July 2011, the Commission was set to publish a report based on the experience with the F-Gas Regulation. This report, entitled “*On the application, effects and adequacy of the Regulation on certain fluorinated greenhouse gases*” - published in September 2011- gives a brief overview of the main achievements of the F-Gas Regulation, which has only entered into force in 2006, and points to the improvements made in terms of containment of f-gases. It also forms the basis for the public consultation that ends in 2011 and the start of the Impact Assessment. Based on the results of this Impact Assessment, the European Commission is expected to present its proposal for a review of the Regulation in 2012. Although nothing is set in stone, the review takes into account several policy options:

Option A: no further action

Option B: Strengthening of specific provisions within the F-Gas regulation

Option C: phasing-down by introduction of maximum, gradually declining, limits for the quantity of F-gases placed on the EU market expressed in terms of CO2 equivalent .

Option D: Bans by prohibiting the use of f-gases in certain applications.

About EPEE—The European Partnership for Energy and the Environment (EPEE) is composed of more than 40 members who produce, design and install heating, cooling and refrigeration technologies. It is committed to a realistic, feasible yet ambitious review of the F-Gas Regulation. For more information on EPEE’s position on the F-gas Regulation and the review, visit our website: <http://www.epeeglobal.org/refrigerants/refrigerants/> .