



EFCTC NEWSLETTER

An update on fluorocarbons and sulfur hexafluoride

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AUSTRIAN ENERGY EFFICIENT BUILDING USING AN HFC-134A HEAT PUMP

The Power Tower, a new building in Linz, Austria, considered a 'milestone in energy efficiency', uses a geothermal [heat pump](#) operating with HFC-134a to provide heating and cooling.

The new headquarters of an Austrian utility company is claimed to be the world's first high-rise office block with the characteristics of a passive building, saving emissions of about 300 tonnes CO₂ per year compared to a conventional high-rise building of similar dimensions.

Geothermal heat is pumped from 150m deep pits and two groundwater wells are used for heating and cooling. The heat pump has a power of about 330 kW and a COP of 5.7.

The heat pump system is equipped with geothermal sensors measuring 6,900 meters in length, and it can operate in three different modes according to requirements:

- Heat drawn from underground when heating is required
- Heat dissipated underground when cooling is required
- Cooling by reversing the heat pump operation

In the [EU Directive](#) on the promotion of the use of energy from renewable sources, ground-source, air-source and water-source heat pumps are recognized as "renewable energy technology".



Source : Equipment Manufacturers



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STATISTICS ON FLUORINATED GREENHOUSE GASES IN THE EUROPEAN UNION

The EU Commission has recently [published the data](#) for the production, import, export and sales of Fluorinated Gases (HFCs, PFCs and SF₆) in the EU in 2007.

HFC Production amounted to 58,000 tonnes.

HFC Imports to 59,600 tonnes.

HFC Exports to 23,700 tonnes.

HFC-134a represented in each category between 54 and 60 % of the total.

HFC Sales in the EU amounted to 93,126 tonnes, corresponding to 220.5 M tonnes CO₂ - equivalent.

HFC-134a represented 55 % of the total in tonnes, and 30 % in CO₂ - equivalent.

Higher GWP gases such as SF₆ or HFC-125 represented respectively 30 and 25 % of the total. It must however be reminded that [Sales do not correspond to emissions](#), as long as F-Gases are used responsibly.

Refrigeration and Air-conditioning Sales were 69 % in tonnes and 62 % in CO₂ - equivalent of the Sales.

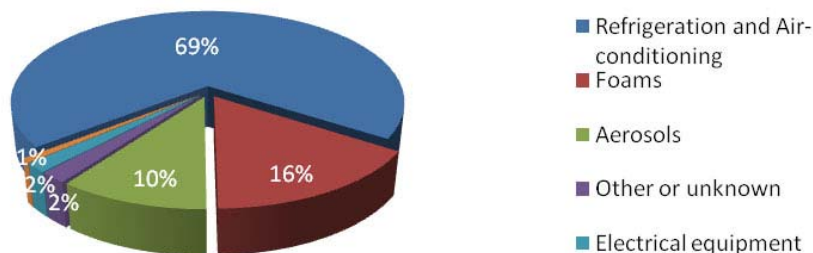


Figure : Main estimated intended uses of fluorinated gases reported by companies in 2007 (tonnes)

Commission data were aggregated from reports submitted by EU producers, importers and exporters, for quantities higher than 1 tonne per year, pursuant to the F-Gas Regulation EC 842/2006.

They did not include gases contained in imported or exported equipment, and only data from 3 or more companies were included in these statistics in order to protect the confidentiality of information submitted by fewer companies;



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EPEE QUESTIONING GERMAN SUBSIDIES DISCRIMINATING HFCs

EPEE (European Partnership for Energy and the Environment) has posted a [Position Paper](#) questioning the discrimination against HFCs in the "German guidelines for the stimulation of measures on commercial refrigeration installations" ([Richtlinien zur Förderung von Maßnahmen an gewerblichen Kälteanlagen](#)) recently introduced in Germany.

Whilst the main objective of the measures is the reduction of energy consumption and of greenhouse gas emissions, new installations can only be subsidized if they are not operated with [HFCs](#). In the case of existing installations, subsidies differentiate HFC running installations, for which the subsidy rate only amounts to 15% of the net investment cost compared to 25% for installations running on so-called "natural" refrigerants.

Industry representatives, such as EPEE, clearly disagree with the current guidelines and awards which should be targeted towards [energy-efficient systems](#) without any discrimination on refrigerants.

Sixty-seven subsidy requests have been submitted so far, and EPEE expects their evaluation by the BAFA (Federal Agency for Economics and Export Control) to play an important role in the further design and possible modifications of the guidelines.

REVISION OF THE EU OZONE DEPLETING SUBSTANCES REGULATION APPROVED BY THE PARLIAMENT

The EU Parliament has agreed on the compromise reached with the Council on the [Revision of the EU ODS Regulation](#).

The new legislation bans the use of virgin [HCFCs](#) from 2010 while allowing the use of recycled HCFCs under certain conditions until the end of 2014.

The production of HCFCs for export - mainly to developing countries where the phase out is lagging by about ten years - would be limited to 35 % of their 1997 level in 2010, to 14 % in 2014, to 7 % in 2017 and fully stopped from 1 January 2020. Only laboratory and scientific purposes will have exemptions.

Emissions of [ODS](#) contained in [refrigeration](#) equipment and in building [insulation foams](#) should be avoided by tightening leakage control and provisions on end-of-life [recovery and destruction](#).

The revision aims to improve implementation of the Regulation by clarifying some of its provisions, such as those on exemptions and derogations on the use of ODS, and the conditions under which they can be imported and exported.



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It also strengthens the measures on the illegal trade and introduces measures to prevent the dumping of ODS - or obsolete equipment relying on them - in developing countries.

By reducing ODS emissions, as these are also [greenhouse gases](#), as well as benefiting the [ozone layer](#), the Revised Regulation will avoid emissions equivalent to more than 100 million tonnes CO₂/year.

NEW ON FLUOROCARBONS.ORG

[EPEE PR](#) : Industry supports an international agreement on greenhouse gas emission reductions



NEW ON FIGAROO.ORG

[F-GAS-REGULATION IMPACT ON MANUFACTURERS AND USERS OF SF₆-ELECTRIC POWER EQUIPMENT](#)

In the [F-Gas Regulation](#), SF₆ is considered in some of the articles only. The [use of SF₆](#) in electric power equipment is permitted. A number of measures required for manufacturers and users have to be implemented.

FIGAROO in German:

[Zertifizierung gemäß Chemikalien-Klimaschutzverordnung:
3500 Kälteanlagenbauer zertifiziert](#)