

# - A Green Q&A on F-gases in Europe -

### 1. What are F-gases?

Fluorinated greenhouse gases - also known as F-gases - are a group of chemicals containing fluorine. F-gases, like HFCs, are powerful greenhouse gases that trap heat in the atmosphere and contribute to global warming. They are now widely used in a range of refrigeration and airconditioning applications and also aerosols, foams and solvents.

### 2. What's the problem?

Although they are used in relatively small quantities, F-gases are very powerful greenhouse gases - with a global warming effect up to 23 000 times greater than carbon dioxide (CO2) - and their emissions are rising strongly.

At the moment F-gases only account for 2% of the EU's overall greenhouse gas emissions but F-gas emissions have raised by 60% since 1990. This strongly contrasts with all other greenhouse gases, which have been reduced. Given that the equipment that emit these gases have a long lifespan (up to 50 years); we must take urgent action to reduce these harmful emissions now.

### 3. What's the European Union's proposal on F-gases?

At the end of last year, the European Commission <u>proposed a new regulation</u> to gradually reduce the use of F-gases in Europe by 80% (compared to the current level) in 2030.

## 4. Are the proposals of the European Commission ambitious enough?

No. The Greens believe that all F-gases should be eliminated and replaced wherever other sustainable alternatives exist. This is for example the case with refrigeration products and air conditioning, where safe, cost-effective and energy-efficient natural refrigerants already exist today.

#### 5. How can reducing F-gases help the economy?

Currently the EU imports almost 90 percent of the small split air conditioning systems with F-gases from China. However, it is mainly European companies that have already invested in innovation and natural refrigerants. Ambitious legislation prohibiting the use of super greenhouse gases in refrigeration and air conditioning therefore encourages European activity in this sector.

10 years ago, Denmark decided to start phasing out F-gases and numerous small, green businesses greatly benefited from such a move. The new legislation as suggested by Green draftsman Bas Eickhout would give an extra boost to this kind of green investment, which can potentially create thousands of additional jobs.

#### 6. What about the hole in the ozone layer?

About 40 years ago, chemists discovered that Chlorofluorocarbons (CFCs) used in refrigerators and aerosols deplete the ozone layer.

In 1989, Countries implemented the 'Montreal Protocol', an international treaty designed to protect the ozone layer by phasing out the production of numerous substances believed to be responsible for ozone depletion. The aim was to ensure that the Ozone layer would recover by 2050. The treaty, which has helped to reduce ozone-depleting substances by 98 percent, is considered by many as being the most successful international environmental agreement so far.

The ozone depleting substances like CFCs were replaced by F-gases like HFCs. F-gases do not deplete the ozone layer, however, they do contribute to climate change as they are highly potent greenhouse gases. The transition out of CFCs has hence provided major ozone layer protection benefits, but with the unintended consequence of rapid growth of climate-damaging HFCs. Today we have the responsibility to phase-out these F-gases as soon as possible.

