

the war

Decision Time

In summer 2007, German automotive manufacturers, opted for CO₂ as a refrigerant for their vehicles as from 2011. By end-2008, other automotive manufacturers will have to take a key decision regarding the choice of refrigerant worldwide for car air conditioning to replace the current global warming chemical HFC-134a. Why? Because:

- There is a deadline. The new EU MAC* Directive will phase out HFC-134a from January 2011 onwards.
- Car manufacturers need time to prepare. Typically, 3-4 years are necessary to develop and introduce a new car platform (incl. air conditioning).
- The car industry is a global business. With constant pressure on costs one global solution is ultimately the cheapest solution to implement.

Any further delay in replacing HFC-134a is a decision to continue emitting millions of tonnes of greenhouse gases and to not comply with the EU Directive.

The Choice

The car industry has a simple choice to make;

- **Either** to choose a natural refrigerant, carbon dioxide, with the potential to save more than 10% of total car emissions,
- **Or** adopt chemical substances which are flammable, less efficient, less sustainable, and which, in one case has yet to be fully tested, to analyse its long-term impact on the atmosphere.

The Choice Today - New Chemical Blends or CO₂

Why is this important?

Cars account for 10% of the planet's total greenhouse gas emissions. This is growing. Air conditioning is included in nearly all new cars built worldwide. These systems increase the total amount of greenhouse gas emissions from cars, through leakages, servicing, higher fuel consumption and end-of-life recycling and recovery.

Solution: By using a CO₂-based air conditioning system, total car emissions can be reduced by 10%. This is substantial.

This is just the beginning.

Other sectors are watching carefully the decisions taken by the automotive industry, namely manufacturers of vending machines, supermarket cabinets, heat pumps for water and floor heating, industrial refrigeration, etc. This is a potential market equal to 3%** of global greenhouse gas emissions of the entire planet. With CO₂ Technology being mass produced its cost will continue to fall quickly, thereby pushing this environmental technology across other industries with the obvious benefits to the consumers and the environment.

Car Air Conditioning & the Climate Change Challenge - Made Simple

The Call for Action

Therefore, we urge the automotive industry to opt for the sustainable option in the Cool War by;

- **Supporting** the adoption of CO₂ as a global solution for car air conditioning
- **Rejecting** the introduction of untested chemical substances and the further delay in the choice of refrigerant

* EU MAC Directive 2006/40/EC

** 3% global emissions reductions is an estimate based on CO₂ Technology replacing applications using fluorinated gases (2% taking into account both direct and indirect emissions), and fossil fuels used for heating purposes