

Naturally cooled cars revolutionise European markets

Regulators and industry held a worldwide stakeholder consultation on vehicle air conditioning in Saalfelden Austria on 17 February 2006. During the conference European car manufacturers and suppliers of vehicle air conditioners demonstrated that naturally cooled cars are ready to enter European car markets.

The most advanced suppliers and engineering companies, such as Behr, Obrist, Valeo and Visteon displayed cars which had a natural refrigerant, CO₂, in air conditioners. Today, the refrigerant that is used is a fluorinated greenhouse gas HFC-134a. CO₂ is a natural refrigerant that is revolutionising car cooling in the EU as it can be used instead of HFC-134a.

The European Parliament and EU Member States have just banned the use of HFC-134a because it is over one thousand times worse to the environment than CO₂. The ban will enter into force on 1 January 2011 for all new car models and is a major contribution in the reduction of greenhouse gases of the EU.

In 2006, several European companies are running fleet tests with naturally cooled cars. Industry experts estimated in a stakeholder conference “Mobile Air Conditioner Summit” 17 February 2006, that some 100.000 naturally cooled cars would be sold in the EU by 2008 and that the volumes would be about 2 million by 2011. However, car manufacturers considered the time table a challenge.

During the conference it became clear that no car manufacturer was looking for HFC-152a or other flammable refrigerants as alternatives. Thus, the main option considered was to use a natural refrigerant – CO₂ – as the alternative. However, two major chemical companies had announced just before the conference that they have developed low global warming potential refrigerants that could also be used as their chemical properties are likely to be close to HFC-134a. These completely new refrigerants are still in the test phase. The regulators and industry welcomed these announcements as this increases competition and thus a downward pressure on the costs of alternatives.

The conference was organised in Saalfelden, Austria by the European Commission with the California Air Resources Board which is also preparing concrete plans to reduce greenhouse gas emissions from cars and considers the phase-out of HFC-134a as a viable option. For further information, see www.mac-summit.com.