



EFCTC position

on the "Paris via Montreal" Article in The Economist (20/09/2014)

Brussels, 24 September 2014

EFCTC welcomes the way the article "[Paris via Montreal](#)" in the edition of September 20th, 2014, brings the debate on the role of fluorocarbons in climate change to a wider audience. EFCTC strongly supports the inclusion of HFCs and other F-gases in the Montreal Protocol as a means of limiting their climate impact but we feel that there are some issues that need to be clarified.

When the Montreal Protocol was ratified, CFCs and other ozone depleting substances had been released into the atmosphere for several decades. This, and their comparatively long atmospheric lifetimes, resulted in the accumulation in the atmosphere that is responsible for their climate impact. According to the Intergovernmental Panel on Climate Change, as of 2011, ozone depleting substances contribute 10% to man-made climate change. As correctly pointed out in the article, by phasing out the use of CFCs and HCFCs, the Montreal Protocol has allowed the ozone layer to start to recover and also, with removal of these substances from the atmosphere by natural processes, their climate impact has begun to fall.

HFCs, on the other hand, have less history of release into the atmosphere and much shorter atmospheric lifetimes and so accumulate to a lesser extent. The same source of information puts their 2011 contribution at 1%, growing at a rate of 0.07% per year. Compared to the current contribution from the major greenhouse gases, such as carbon dioxide, HFCs are insignificant at present. This means that any claim for the effectiveness of the Montreal Protocol in limiting the effect of HFCs must be based on guesses about their future deployment - a game for any number of players.

The IPCC uses "Representative Concentration Pathways" (RCPs) to predict potential future impacts and, for HFCs in a business as usual case, these amount to a 9-fold increase in effect by 2100 (which incidentally would bring their contribution up to almost equal the current contribution from ozone depleting substances).

Some of the wilder predictions, such as those of Velders and colleagues, predict several hundred fold growth. This is based on extending the highest recent growth rates to all HFCs and then extrapolating at constant compound growth for 90 years! This singles out HFCs for special treatment without regard for social and technological change. The RCPs, on the other hand, treat the future evolution of all greenhouse gas emissions as a whole; for example, the same business as usual scenario foresees carbon dioxide concentrations 2 ½ times current levels by the end of the century.

Whatever the future, including HFCs in the Montreal Protocol provides the most appropriate approach to cap and reduce the use of HFCs while enabling an effective transition to lower GWP products and applications. It would also allow the use of HFCs in applications which require their safety benefits or where their energy efficiency can help to reduce emissions of carbon dioxide, the most important, and long lived, of the greenhouse gases.

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