

Action on HFC Gases 'Low Hanging Fruit' Opportunity to Combat Climate Change Says UN Environment Chief

Embargoed: Not for Publication or Broadcast until after 5pm Eastern Standard Time

Nairobi, 22 June 2009 - A scientific paper, highlighting the need to accelerate action over a group of gases known as Hydrofluorocarbons (HFCs) as part of the climate change agenda, was today welcomed by the head of the UN Environment Programme (UNEP).

The findings, by an international team of researchers are published in the *Proceedings of the National Academy of Sciences*.

The scientists argue that HFC use could climb sharply in the coming years in products such as insulation foams air conditioning units and refrigeration as replacements for ones being phased-out to protect the ozone layer.

Under a scenario where carbon dioxide emissions are pegged to 450 parts per million HFCs could equal nine Gigatonnes - equivalent to around 45 per cent of total CO₂ emissions - by 2050 if their growth is unchecked.

Conversely, rapid action to freeze and to cut emissions annually alongside fostering readily available alternatives could see HFC emissions fall to under one Gigatonne by 2050.

Achim Steiner, UN Under-Secretary General and UNEP Executive Director, said: "Dramatically cutting carbon dioxide emissions from society's inefficient energy use is the key to catalyzing a transition to a low, carbon resource efficient Green Economy. It is also central to delivering a stabilization of the atmosphere as outlined by the assessments of the Intergovernmental Panel on Climate Change".

"But there are other low hanging fruit in the climate change challenge and this new scientific paper spotlights one of them - HFCs. By some estimates, action to freeze and then reduce this group of gases could buy the world the equivalent of a decades-worth of CO₂ emissions," he added.

The projected growth in production and consumption of HFCs is in part linked with the success of the UNEP-administered Montreal Protocol on substances that deplete the ozone layer.

Since the late 1980s, this treaty has successfully phased-out 97 per cent of 100 chemicals that damage the protective shield that filters out harmful ultra violet rays to the Earth.

Over recent years, research has outlined that global efforts to protect the ozone layer has also delivered climate benefits as many of the chemicals that damage the ozone layer - such as chlorofluorocarbons or CFCs - also cause global warming.

In 2007 a scientific paper calculated the climate mitigation benefits of the ozone treaty as totalling an equivalent of 135 billion tonnes of CO₂ since 1990 or a delay in global warming of seven to 12 years.

In that same year countries meeting in Canada, under the Montreal Protocol, agreed to an accelerated freeze and phase-out of Hydrochlorofluorocarbons (HCFCs)—chemicals designed to replace the old, more ozone-damaging CFCs - in the main for the climate benefits.

The new paper indicates that unless there is action on HFCs, then countries and companies are likely to pick this group of gases to replace HCFCs in products such as air conditioning units, refrigeration and insulating foams.

Guus Velders of the Netherlands Environmental Assessment Agency, the lead author, said in a statement: "Our team of scientists calculates that HFCs present a significant threat to the world's efforts to stabilize climate emissions".

"Because of the projected growth of these climate-warming chemicals, they could represent up to 45 per cent of the total global CO₂ emissions by 2050 under a scenario that stabilizes CO₂ emissions at 450 parts per million. Preventing strong growth in HFC use is an important climate mitigation option the world has now".

Under a business as usual scenario, where CO₂ emissions are higher, HFCs could equate to between nine and 19 per cent of CO₂ emissions in 2050 causing a greenhouse effect equal to 6-13 years of global CO₂ pollution.

In 2008, governments requested the executive secretaries of the Montreal Protocol and the UN Framework Convention on Climate Change - Marco Gonzalez and Yvo de Boer - to cooperate more closely including on the issue of HFCs and that cooperation is on-going.

For More Information Please Contact:

Nick Nuttall, UNEP Spokesperson/Head of Media, on Tel: +254 733 632755 or E-mail: nick.nuttall@unep.org



© United Nations Environment Programme | [privacy policy](#) | [terms and conditions](#) | [contacts](#)
support UNEP