



**ENVIRONMENT:  
Ozone Deal to Cut Down CO2 Emissions**

**Stephen Leahy**

**MONTREAL, Sep 23 (IPS) - More than 190 nations agreed this week to combat global warming and accelerate the healing of the ozone layer, although critics say more could have been accomplished.**

The sun shone bright and warm here on Friday, the final day of the 19th Meeting of the Parties to the Montreal Protocol to protect the ozone layer. Outside, caravans of pre-school children in strollers or holding hands as they walked sported hats and long-sleeved shirts to protect their delicate skin.

It can be easy to forget that the sun was not always so dangerous, and that modern society is responsible for putting chemicals into the atmosphere that continue to destroy the ozone layer that protects all life from harmful levels of solar ultraviolet radiation.

And we forget that things could have been far worse without international action in the form of the Montreal Protocol, which opened for signature 20 years ago this week.

Sadly, that action came late and was not vigorous enough for millions of people who have or will get skin cancer.

Today, more than one million new cases of skin cancer are diagnosed each year and more than 10,000 people will die as a result in the United States alone. That's nearly 90 percent more skin cancer than in the 1960s. Medical costs for treatment for non-fatal form of skin cancer in the U.S. is more than a half billion dollars a year.

A 2002 British study by the Imperial College of London looked at both medical and other costs, such as loss of productivity, for both forms of skin cancer and determined the total annual cost was nearly 300 million dollars. Britain has "only" 70,000 cases, with 2,000 in the fatal melanoma form.

And then there are the incalculable costs to individuals and their families.

Skin cancer rates will continue to climb because the ozone layer will remain crippled for decades by past and current emissions of chlorofluorocarbons (CFCs) and halons, chemicals used as refrigerants, aerosol propellents, solvents, foam blowing agents and as fire extinguishers.

In fact, because skin cancer takes many years to manifest, excess skins cancers will triple from present rates by 2040, according to statistics from Environment Canada. In Australia, most of the U.S. southwest and northern Mexico, and over large parts of Argentina, Chile, Paraguay, Bolivia and Uruguay, skin cancers will soar even higher by 2060, reports the Dutch National Institute for Public Health.

Without further action by the 191 member nations of the Montreal Protocol on Substances that Deplete the Ozone Layer, skin cancer rates will not return to normal until well into the next century.

"Sri Lanka will phase out CFCs by 2008, two years ahead of our obligation under the Protocol," said the head of the Sri Lanka delegation at the 19th Meeting of the Parties (MOP19) in Montreal.

Developed countries phased out production of CFCs by 1996, and developing countries have until 2010, but many already have. That will be 36 years after the first definitive scientific evidence that CFCs were removing 10 to 20 percent of the ozone layer each year.

Industry denied their products were the cause of the measurable ozone depletion until 1980, and then argued that replacing these chemicals would be very costly. But by 1987, industry agreed and became participants in the Montreal Protocol process, which sanctioned the use of their CFC replacement chemicals called hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs).

The few scientists among the many government officials and chemical industry representatives attending the MOP19 noted that many of the delegates here do not have scientific backgrounds and often do not have access to scientific advice on ozone chemistry in their home countries. Some privately asked scientists to explain what ozone is, how it is formed and depleted.

Here's their explanation: Ozone is formed at the equator where the sun is the strongest. Warm air at the equator rises along with ozone and flows towards the colder polar regions. Without this flow there would be little ozone in these regions. Ozone-depleting chemicals have their biggest impacts furthest from the equatorial areas where new ozone is constantly being made.

The switch from CFCs to HCFCs was done at some cost in Sri Lanka and elsewhere, and many governments received more than 2 billion dollars from developed countries in the past 15 years.

HCFC's also destroy ozone, but at about five percent the rate of CFCs. Previously, they were also to be phased out globally but not until 2040. However they were also known to be a powerful greenhouse gas, 10,000 greater than carbon dioxide on a molecule by molecule basis. HFC doesn't damage ozone but it also is a strong greenhouse gas.

Although the ozone layer is still in poor shape, total emissions of ozone damaging chemicals has slowly declined since 1998, so the focus here in Montreal was on climate change. It turns out that a minor acceleration of just 10 years in the HCFC phase-out and an earlier production freeze could keep the equivalent of 38 billion tonnes of CO<sub>2</sub> out of the atmosphere over 25 years. The United States emits about 7.5 billion tonnes a year currently.

Billions more CO<sub>2</sub> could be avoided by an even earlier phase-out, said Alexander von Bismarck, campaigns director for the Environmental Investigation Agency (EIA), an environmental group based in London, England.

EIA, Greenpeace and the Worldwide Fund for Nature lobbied delegates to seize "this unique opportunity" to combat climate change and heal the ozone layer sooner.

"This could be one of the greatest unilateral steps to fighting climate change the world has yet seen," Bismarck told IPS.

In the end, delegates agreed to freeze production of HCFCs in 2013 and to advance the final phase-out to 2030. Environmental groups agreed with final phase-out of 2030 but wanted a 2008 freeze -- which would save an additional four billions tonnes of CO<sub>2</sub>, they calculated.

For its own reasons, industry agreed with environmentalists. An earlier freeze means there is less machinery and equipment to convert later, explained Mack McFarland, chief atmospheric scientist for DuPont, a multinational chemical company and major U.S. manufacturer of HCFCs and which now also manufactures alternatives.

Not surprisingly, money to assist developing countries like China make the transition from HCFCs to alternative chemicals was the contentious issue and affected the timing of the production freeze.

"The precise and final savings in terms of greenhouse gas emissions could amount to several billions of tonnes," said Achim Steiner, executive director of the United Nations Environment Programme, which has responsibility for the Montreal Protocol.

"Historic is an often overused word, but not in the case of this agreement made in Montreal," Steiner said in a statement at the close of the conference.

While a long way from the hoped-for 38 billion tonnes, given the weakened state of multilateralism and international agreements of the past decade, "historic" might be the right word since virtually every country in the world agreed to do something good for the health of the global community and are actually prepared to pay for it.

(END/2007)