On Wednesday, May 23, 2007, the Committee held an oversight hearing on achievements and opportunities for climate protection under the Montreal Protocol. This international environmental treaty established legally binding controls on the production and consumption of substances that deplete the stratospheric ozone layer. Witnesses at the hearing included the lead author of a scientific paper quantifying the climate benefits of the Montreal Protocol, the Executive Director of an international nongovernmental organization with expertise on the Montreal Protocol, and the Global Environmental Manager of DuPont's fluorochemicals business. At the hearing, the Committee received testimony about cost-effective measures that can be taken under the Montreal Protocol and the Clean Air Act to reduce greenhouse gas emissions and combat global warming. A transcript of this hearing is now available.

Ozone Layer Depletion and Global Warming Linked

Ozone depleting chemicals, such as chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) not only damage the stratospheric ozone layer but also act as potent greenhouse gases. For example, the production of the ozone depleting chemical HCFC-22 produces HFC-23 as a byproduct. This byproduct is an extremely powerful greenhouse gas, one ton of which is the global warming equivalent of 11,700 tons of carbon dioxide. HCFC-22 is itself a greenhouse gas with a global warming potential 1,780 times that of carbon dioxide.

The Montreal Protocol has Delivered Huge Climate Benefits

According to a recent scientific paper, the Montreal Protocol will have reduced the total global warming impact from ozone depleting chemicals by about 50% in 2010. This reduction will

have the effect of delaying global warming impacts by seven to twelve years. In other words, without the Montreal Protocol, the world would be about a decade further along the path to catastrophic climate change.

Potential for Additional Dramatic Climate Benefits

Currently, the Montreal Protocol requires developed countries to phase out HCFCs by 2030 and developing countries to do so by 2040. Accelerating the phase-out of HCFCs and destroying banks of existing ozone depleting chemicals have the potential to produce large climate benefits. New research found that these actions could eliminate the equivalent of one billion tons of carbon dioxide emissions. This figure is equal to roughly half of the total emissions reductions required under the Kyoto Protocol.

Tremendous Progress at Low Cost

An accelerated phase out of HCFCs would be affordable because there are low-cost substitutes currently on the market, there would be ample time to transition to alternatives, and many of the alternatives offer significant energy efficiency advantages. This step is estimated to have a global cost of between $500 million and $1.5 billion. These emissions reductions under the Montreal Protocol could be as cheap as just 50 cents per ton — an order of magnitude less costly than reductions commonly expected to be available.

Documents and Links

- Testimony of Guus Velders
- Testimony of Allan Thronton
- Testimony of Mack McFarland
- Hearing Summary
- August 3, 2007: Rep. Waxman Introduces H.R. 3448, The Global Climate and Ozone Layer Protection Act of 2007
- Hearing Transcript