

September 2008



OZONACTION

Special issue dedicated to

HCFC Phase out: Convenient Opportunity to Safeguard the Ozone Layer and Climate





Fast-Track Climate Mitigation: the Montreal Protocol Shows the Way



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To keep the climate system from passing tipping points for abrupt and irreversible climate changes, it is critical to pursue fast-track mitigation strategies in the near-term, starting immediately. Such urgent actions complement efforts to develop a post-2012 climate treaty to address mid- and long-term climate goals.

Several fast-track climate mitigation strategies are available, which also provide significant co-benefits. These include:

- strengthening the Montreal Protocol to capture additional climate mitigation, which also benefits the ozone layer;
- reducing emissions of black carbon, or soot, which also benefits public health;
- reducing precursors for tropospheric ozone, which also benefits public health;
- sequestering carbon in biochar, which also improves soil productivity, while producing carbon-negative bio-energy,
- sequestering carbon in forests, which also benefits local communities, wildlife, and biodiversity;
- increasing energy efficiency, which also reduces costs, increases competitiveness and energy independence, and creates jobs, and;
- expanding the use of renewable energy sources, which also increases energy independence, creates jobs, and protects public health.

The Montreal Protocol is a model for achieving near-term climate benefits. By successfully phasing out 97 chemicals that harm both the ozone layer and the climate system, the Montreal Protocol has produced a net 135 billion tons of CO₂-eq. in climate mitigation, and delayed climate forcing by up to 12 years.

Last year's adjustment to accelerate the phase-out of HCFCs has the potential to produce an additional 16 or more billion tons of CO₂-eq. in climate mitigation, and accelerate recovery of the ozone layer by three years. This year's proposals to collect, destroy, or safely store banks of ODSs from discarded products and equipment can produce still more—an estimated 6 billion tons of CO₂-eq. by 2015, depending on how much is actually recovered, and more thereafter.

Further climate mitigation could be produced if HFCs were regulated under the Montreal Protocol, where they could be phased-out, rather than under the Kyoto Protocol. The Montreal Protocol has the expertise and experience to phase out HFCs, and they should be added to the list of controlled substances next year and phased-out as quickly as feasible. Otherwise HFCs will be used as substitutes for HCFCs, and contribute to climate change.

Requiring the use of Life Cycle Climate Performance (LCCP) is critical for capturing more of the Montreal Protocol's climate mitigation potential, including the climate benefits of the HCFC phase-out. LCCP measures both the direct climate impacts of the substance, as well as the indirect climate impacts from energy use, which can be up to 80% or more of total climate emissions.

Finally, in addition to its direct climate mitigation, the Montreal Protocol has important lessons to share with the climate negotiators, including its "start and strengthen" approach, its ability to "disaggregate" the ozone problem into manageable pieces, its quick-response Technology & Economic Assessment Panel and Technical Options Committees, its successful financial and technology transfer mechanism, its dedication supporting strong national ozone units in 146 developing country Parties, its fast adjustment process, and its comprehensive compliance assistance approach.

Success with the Montreal Protocol and other near-term mitigation strategies are essential to buy the international community time to negotiate, ratify, and implement a post-2012 climate treaty, and time to replace existing high-carbon technologies with new low-carbon technologies and otherwise undertake the changes necessary to achieve our mid- and long-term climate goals.

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