

# A Sectoral Agreement for HFCs?

How – and Where – to Control  
HFCs and Other F-Gases

David Doniger, NRDC Climate Center  
Accra, Ghana, August 26, 2008

# Sectoral Opportunity

- HFCs are deliberately manufactured for product applications (as opposed to other GHGs that are byproducts of energy or other processes).
- Produced in a small number of countries.
- Industrial users (e.g., product manufacturers) also mostly located in small number of countries.

# Control Options

- More efficient, lower-leakage use.  
Recovery, recycling, and destruction.
- Substitution to lower-GWP HFCs.
  - New HFCs and blends with much lower GWP (e.g., 1300 → 4).
- Substitution to no-GWP alternatives
  - E.g., hydrocarbons

# A Sectoral Approach for HFCs?

- Set a phase-down schedule for HFCs
  - Technical and economic potential exists to reduce much faster than CO<sub>2</sub>.
- Technical and economic issues:
  - Converting/replacing HFC production facilities.
  - Converting/redesigning products and processes (e.g., refrigerators, A/Cs).
    - HFC and non-HFC alternatives.
    - How fast? What cost?

# UNFCCC/Kyoto or Montreal?

- UNFCCC covers GHGs not controlled by the Montreal Protocol.
- CFCs and HCFCs are ozone-depleting GHGs controlled by Montreal.
- HFCs (and other F-gases):
  - are not currently controlled under Montreal,
  - are covered under UNFCCC,
  - are part of 6-gas Kyoto basket.

# UNFCCC/Kyoto Path

- HFC agreement as commitment/action under Bali Action Plan
  - Developed country mitigation commitment:
    - Phase-down schedule substantially quicker than for CO<sub>2</sub>.
  - Developing country mitigation action:
    - Same or different schedule.
    - Need for technology transfer/financial assistance.
      - Could come from developed country national budgets or AAU set-asides.

# But Can It Be Pulled Off Here?

- Can UNFCCC/Kyoto negotiators focus on HFCs between now and Copenhagen?
- CO<sub>2</sub> “sucks all the oxygen from the room.”
- Do UNFCCC/Kyoto negotiators have HFC-relevant expertise?
- Is there an alternative?

# The Montreal Alternative

- Well-functioning, 20-year-old agreement, 190+ parties.
- Regulates related chemicals (e.g., CFCs, HCFCs).
- Phase-out commitments for both developed and developing countries.
  - Delayed schedule and technology/financial assistance for developing countries

# Potential Advantages

- Focus, expertise.
  - Strong national capacity in this specific area.
  - Technological and Economic Assessment Panel.
  - Multilateral Fund with balanced governance and strong track record.
- Simplicity, integration.
  - Regulates production/import, not emissions.
  - Ability to integrate HFC regime with CFC and HCFC phase-out (energy and ozone issues).

# Potential Advantages

- Net climate benefits.
  - CFC phase-out has delivered very large climate benefits.
  - CFC, HCFC benefits are not traded against the Kyoto basket, i.e., do not result in more emissions of other GHGs.
  - Potential to reduce HFCs much faster than CO<sub>2</sub>.

# Potential Advantages

- Precedent and experience with developing country commitments.
  - Many rounds of agreed binding commitments, with grace period and funding.
  - History of adding chemicals, accelerating schedules.
  - Funding often enables early compliance.
- Simplification of Copenhagen agreement.
  - Complex agenda.
  - Potential for confidence building.

# Issues for Consideration

- Climate advantage depends on HFC schedule.
  - Phase-down must be faster, provide net climate benefits.
- Narrows the Kyoto basket.
  - Climate benefits would be lost unless HFCs are removed from the basket.
  - Since HFCs are small fraction of GHG inventory, small impact on national flexibility.

# Issues for Consideration

- May require new domestic options for funding the Montreal Multilateral Fund by developed countries.
  - Countries could provide funds through government appropriations.
  - Alternatively, countries could create a (separate?) allowance-based domestic regime for HFCs and auction allowances to fund HFC-related portion of Multilateral Fund.

# Issues for Consideration

- As example of domestic options:
  - USA: Climate Security Act (Boxer, Lieberman, Warner), considered in Senate this year, proposed a separate cap for HFCs, apart from the main “five-gas cap.”
  - No trading between the two caps.
  - Substantial fraction of HFC allowances to be auctioned.

# Issues for Consideration

- Does the Montreal Protocol have the necessary scope to regulate HFCs?
  - Montreal already recognizes climate effects of phasing out ozone depleters.
  - Montreal can cover substitutes for CFCs.
  - In any event, including new chemicals requires an amendment, which could include any needed changes to Montreal's scope.

# Issues for Consideration

- Is the Montreal Protocol prepared to take on HFCs?
  - Informal discussions started between stakeholders under Montreal.
  - Would need at least one Party to propose a Montreal Protocol amendment next year.
  - Parties to both treaties are nearly identical – it's for them to decide.

# Issues for Consideration

- Whether to move some or all of the other F-gases to Montreal with HFCs.

# Potential Sequencing

- One or more parties could propose an HFC amendment to Montreal next spring.
- Montreal Parties could adopt it in November MOP, before Copenhagen.
  - If adopted, the Copenhagen agreement could remove HFCs from post-2012 basket, contingent on the Montreal amendment's entry into force.

# Thank you!

- Contact me at:

- [ddoniger@nrdc.org](mailto:ddoniger@nrdc.org)

- In Accra: +233 (0)24 237 1077

- In Washington: +1 202 289 2403

- [www.nrdc.org/globalwarming](http://www.nrdc.org/globalwarming)