## International Environmental Case Studies, Day 2: Stratospheric Ozone Depletion and Global Climate Change

**Four stages:** issue definition, fact-finding, bargaining on regime creation, and regime strengthening **Three key questions to ask for each issue:** who are the lead states, and why? Who are the veto states, and why? And how do the lead states convince the veto states to join the convention (if they do)?

## **Ozone Depletion**

*Lead states*: "The United States, which at the time accounted for more than 40 percent of worldwide CFC production, took a lead role in the negotiations in part because it had already banned CFC use in aerosol spray cans"

2 veto coalitions: 1st) most of Europe and Japan, wanting to protect existing markets, 2nd) Brazil/China/India/Indonesia, wanting to protect potential *future* markets

**Definition process:** CFSs and other compounds found to be ozone-depleting

Regime creation: 1985 Vienna Convention for the Protection of the Ozone Layer

Fact-Finding: Antarctic ozone hole findings published a few weeks after Vienna

**Regime strengthening**: 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (mandates 50% reductions and eventual phaseout of the 5 major CFCs—provisions for technical assistance and special treatment for developing countries). Coincided with DuPont's work on CFC substitutes, which eased the transition away from ozone depleters.

## **Climate Change**

Complicating factors: the multiple sources of emissions that contribute to global warming; the scientific uncertainties regarding the chemistry of the atmosphere; the dependence on global climate modeling...others?

**Definition process**: various, but different states tend to look at issue through one of the following three lenses: "The perceived costs of climate change...are related primarily to the country's "**energy culture**," that is, its historical experience with fossil fuels in relation to its economic growth. Because governments cannot estimate the eventual costs of mitigation measures in overall economic growth without far more information, perceptions of costs are usually shaped by their overall biases regarding energy policy. Who would be most likely to be a lead state? A veto state?

- 1) "states that are relatively dependent of imported energy and thus have learned to maintain high living standards while reducing their use of fossil fuels" (Japan/EU)
- 2) "states with large supplies of cheap energy resources and a culture of highly inefficient energy use" (US/Russia/China/India/Brazil/Mexico)
- 3) "states highly dependent on fossil fuel exports for income" (Arab oil states/Australia/Norway)

*Regime creation*: UN Framework Convention on Climate Change (UNFCCC) signed at Rio in 1992. Entered into force in 1994 after ratification by the requisite 50 states.

## Regime strengthening

- **Kyoto Protocol** signed at third COP: "the US delegation took the position that it could not accept any emissions reductions unless developing countries also agreed formally to control their emissions—a condition that had been mandated by a unanimous vote in the U.S. Senate but was clearly unacceptable to developing countries" Kyoto's three key "flexibility mechanisms": **Clean Development Mechanism** (CDM), **Joint Implementation** (JI), and **Emissions Trading**. Before entering into force, however, Kyoto required "ratification by fifty-five parties to the convention, accounting for at least 55 percent of the carbon dioxide emissions in 1990. Rejected by Bush in 2001, requiring the signing on by most other big polluters. Came into force with the signing of Russia in 2004.
- **Post-Kyoto Commitments**: Bali (2007), Copenhagen (2009) what's happened so far? How does the future look, either domestically or internationally, for comprehensive and binding climate agreements?