

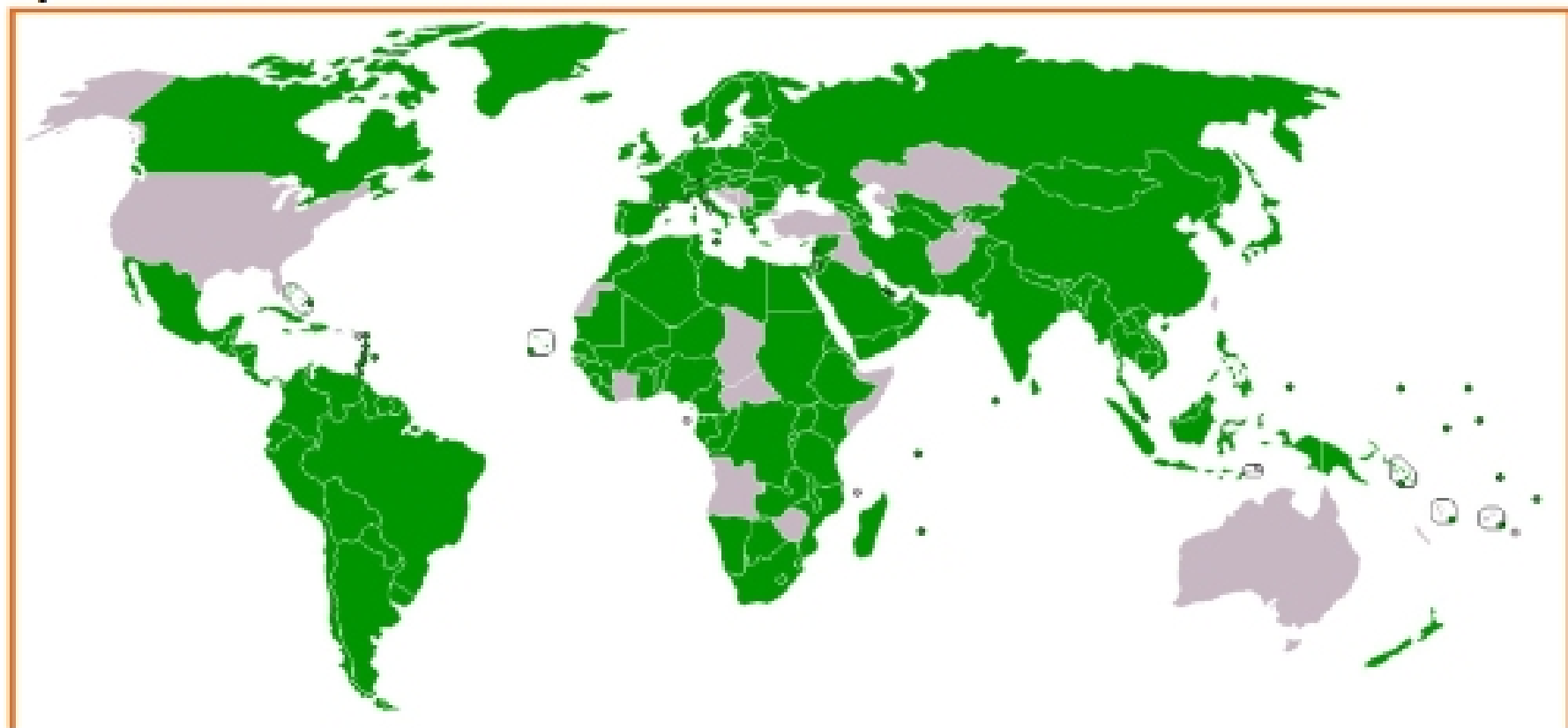
Overview

- International cooperation on atmospheric pollution (last time) set the stage for the negotiations on climate change
- Atmospheric carbon (which causes climate change) is a classic “tragedy of the commons” problem - each country wants other people to cut emissions but nobody wants to cut their own emissions

Kyoto Protocol, 1997

- Keynote by Al Gore
- Attendees
 - o 6000 UN delegate, 160 countries
 - o 3600 delegates from NGOs (incl. business)
 - o 3500 reporters

Kyoto Ratifies



Kyoto Protocol, 1997

- Basic idea: cut greenhouse gas emissions
- Treaty among nations
 - o So emissions were to be cut by each nation
 - Note that this is inherently both inefficient and ineffective: would you assign emissions reductions to each state in US? To each county?
 - o Nations could use whatever mechanism they like: command-and-control, cap-and-trade, etc.
 - If one of those is best, you're not requiring the best

Kyoto: Basic Structure

- By 2012, parties would cut emissions of six greenhouse gases below 1990 levels
 - EU, by 8%, US, by 7%, Japan, by 6%
 - Other industrialized countries by 5.2%
- No obligations for poor countries
 - Even if emissions rapidly increasing
 - Annual emissions from non-OECD now nearly 50% higher than in the OECD
 - and growing more than twice as fast

Kyoto and US Politics

- No ratification or implementation
 - G. H. W Bush signed the Rio “framework” in 1992
 - Clinton agreed to Kyoto Protocol in 1998
 - G. W. Bush withdrew the US from Kyoto in 2001
- EPA regulation of CO₂
 - G. W. Bush refused to classify as pollutant
 - Some states took regulatory action
 - Several states sued Bush in 2003, won in 2007
 - Under Obama EPA began to regulate CO₂ as a pollutant in 2009
- Europeans didn't meet their targets, either

Collective Goods and Distribution Questions

- Preventing global warming is a collective good
- Everybody benefits, whether they “pay” or not
 - So of course no one wants to pay
 - But costs of reducing emissions vary significantly
- Kyoto made the decision that rich countries should be only ones that pay
 - Fairness (rich can afford it) -
 - Historical justice (they caused problem)
- That solution sets world up for repetition of the problem: doesn't reduce future emissions

Kyoto: Role of Developing Countries

- Non-developed countries (formally “non-Annex I”) may participate in emissions reduction through “Clean Development Mechanism”

- What is it? Rich country can pay to lower emissions in a poor country project
 - o This may be attractive because it's cheaper to reduce emissions in poorer countries

Kyoto: Clean Development Mechanism

- Why do this?
 - o US wanted Kyoto to use flexible (especially market-based) methods to achieve goals
 - o Normative decision to benefit developing countries
- Cynics: a way for rich countries to avoid reducing emissions after all
 - o CDM "reduced emissions" are inherently counterfactual and may be fictional
 - o Also may be cheap: HFC-23 emissions reductions in China have cost only € 100 million but European firms received €4.6 billion in CDM credits

Kyoto: Economic Responses

- Carbon outsourcing
 - o Rich countries can reduce carbon emissions by shutting down high-carbon industries
 - o Developing countries move into those industries, export products back to rich world
 - o Evidence: Increase in developed world's carbon imports is six times greater than the developed world's reductions in carbon emissions
- Preservationist evidence: tropical deforestation coincides with rich country reforestation

2009 Copenhagen Conference

- Officially the "Fifth Session of the Ad Hoc Working Group on Longterm Co-operative Action under the United Nations Framework Convention on Climate Change"
 - o i.e., Kyoto renewal (expired in 2012)
 - o Obama administration proposed lowering US emissions to 1990 levels by 2020; developing countries would like rich countries to cut 1990 levels by 45%
 - o That is a large gap in positions.
- Negotiate possible successor to Kyoto