

How Do Sovereign States Interact?

- War, trade, ...
- International agreements
 - Treaty: An official written agreement binding states to certain actions (general term)
 - Convention: Outlines broad objectives
 - Protocol: Specific steps to implement a convention
 - Governed by the Vienna Convention of 1969 on the Law on Treaties.
 - US courts often modify interpretation of treaties, contrary to the Vienna Convention

Sources of International Law besides Treaties

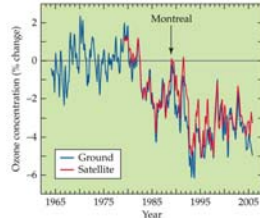
- Customary International Law:
 - Can include declarations, orders, ...
 - Lack precision
 - i.e., warning of hazardous environmental events
- General Principles of Law:
 - Keep promises (*estoppel*)
 - Should not benefit from wrongdoing
 - Fairness (*equity*)
 - Prohibit gratuitous endangerment
 - Prohibit "crimes against humanity"
- Judicial Decisions
 - Not as binding in international law as they are in US law, but ...
- Compliance and enforcement are difficult, since states are, "sovereign"

Examples:

- **Law of the Sea Convention Treaty:** Governs territorial waters, 250 mi exclusive economic zones, right of "innocent" passage, ...
 - Drafted 1973-1982, came into force in 1994 when 60th state ratified it
 - US, sadly, did not
- **Montreal Protocol on Substances That Deplete the Ozone Layer (1987)**
 - Restricts manufacture of Chlorofluorocarbons (CFCs, Freon) that deplete the ozone layer
 - Ratified in 1989 by 11 states that make the most CFCs
 - Big success, despite weak enforcement
 - Temporarily replaces CFCs with Hydrochlorofluorocarbons,
 - Which are being phased out, starting in 2015

Benefits of the Montreal Protocol

- Slowed decrease of stratospheric O₃
 - 20 to 40% more O₃ today than without MP
- Health benefits
 - Reduced skin cancer
 - Reduced cataracts
- Also reduced impacts on biosphere
- Cost \$235B, benefit \$1131B
 - Net \$896B
- Demonstrates that UN-brokered protocol can have positive environmental effect



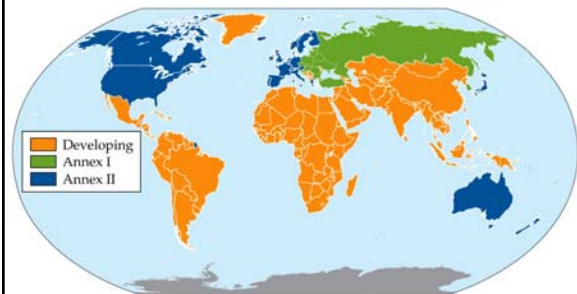
Global Climate Change

- 1988: UN established Intergovernmental Panel on Climate Change (IPCC) to assess causes and effects of climate change
 - Assessment Reports: 1st (1990), 2nd (1995), 3rd (2001), 4th (2007), 5th (2014)
- United Nations Convention on Climate Change (Rio de Janeiro, 1992)
 - Requires action to control GHG emissions
- Divides states into
 - Developing: No immediate restrictions on emissions
 - Annex I: Limit emission to 1990 levels
 - Annex II: 1990 emission levels and provide funds and technologies to Developing States
- Ratified by all states except Andorra, Vatican, Iraq, & Somalia

Kyoto Protocol

- Drafted in 1997.
- Came into force in 2005 after ratification by 55 states
 - US signed, but has not ratified
- Provisions:
 - Programs to mitigate and adapt to climate change
 - Annex 1 parties provide detailed GHG emission inventories (current and in baseline 1990)
 - Annex 1 parties limit emissions to specified fraction of 1990 values
 - Annex 1 parties may trade emission credits
 - Annex 1 parties may gain emission credits through green development
 - 1st Conference of Parties to set enforcement mechanisms
 - Subsequent Conferences review emission targets

UN Framework on Climate Change States



GLOBAL CLIMATE CHANGE, Figure 11.14

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Kyoto Reductions in GHG relative to 1990

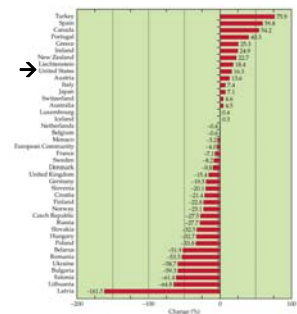


GLOBAL CLIMATE CHANGE, Figure 11.15

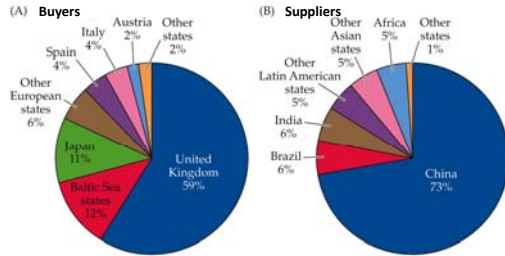
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- No limits on developing nations
- Cap & Trade
 - Subject to corruption
 - Creates marketable assets from nothing
- 1990 baseline gives advantages to former Soviet-Block states
- Weak enforcement
- Unlikely to replicate Montreal success because of much greater costs
- PARIS Agreement
 - Within UNFCCC (United Nations Framework Convention on Climate Change)
 - 30 Nov-11Dec 2015
 - Negotiate binding GHG limits
 - Warming < 2C
 - In force as of 4NOV16
- US (Trump Admin.) Withdraws
 - Announced, but can't leave before 4NOV20,
 - US Negotiators still active
 - US states, cities and enterprises still in
 - Only US out

Kyoto Protocol Issues and Accord de Paris

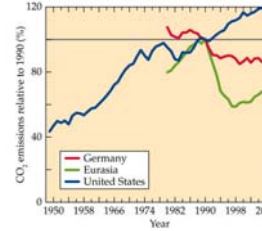


Kyoto Emissions Trading



GLOBAL CLIMATE CHANGE, Figure 11.18

CO₂ Emissions US, Germany, Russian Federation



- US "Gas Crisis of the mid-1970s"
- Slow growth in USSR and Warsaw Pact
- After collapse of USSR and E. Germany
- Economic Collapse
- Forms 1990 Kyoto baseline

Roles of Regional Governments and Nongovernmental Organizations

- US has not ratified the Kyoto Protocol, but...
- Withdrawal from the Paris agreement is likely but not certain.
 - US Nationally Determined Contribution (NDC) is 26-28% reduction from 2005 baseline by 2025
 - Killing previous administrations Clean Power Plan may make only half of the goal possible
- States and localities have implemented some of its provisions
 - California, New England, Western States, to an extent Miami Dade ...
- Corporations advertise their planet friendly activities ... **Greenwashing**
- **Political, social and market (i.e. boycott) can be important**

- Tragedy of Commons dominates GHG emissions
- Can be limited by international treaties
- Law of the Sea and Montreal Protocol on O₃ depletion are examples
- Kyoto Protocol
 - Entered force in 2005
 - Exempts Developing nations
 - Annex I states commit to reductions relative to 1990
 - Annex II also provide technology and funds to developing countries
 - Allows emission credit trading and creation among Annex I states
- Local governments and NGOs are bringing about some Kyoto compliance
- Corporations may voluntarily limit emissions, but there is a lot of **Greenwashing**, fake or token GHG mitigation
- Paris Agreement (<2C Warming through NDCs) Took effect 04NOV16
 - New administration places the issue in doubt

SUMMARY