KYOTO PROTOCOL

By:
John Sedlak
Matt Grund
Nate Whitehead

The Kyoto Protocol to the United Nations Framework Convention on Climate Change

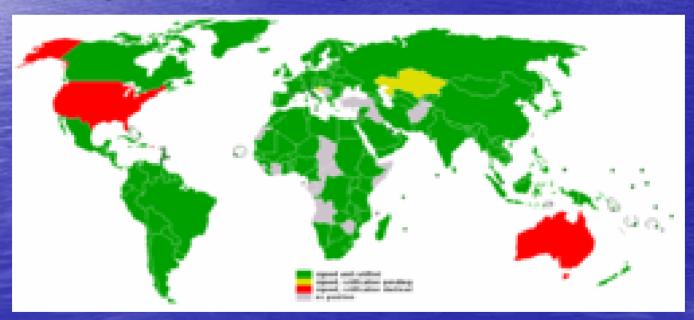
- Commit to reduce emissions of carbon dioxide and 5 other greenhouse gasses
- Engage in emissions trading if they maintain or increase emissions of these gasses

Emissions Trading

- An approach used to control pollution by providing economic incentives for reducing emissions of pollutants
- A limit on the amount of pollutant that can be emitted
- Countries are given credits which represent the right to emit a specific amount.
- Companies that pollute beyond their allowances must buy credits from those who pollute less than their allowances
- The buyer is being fined for polluting, while the seller is being rewarded for having reduced emissions
- The more firms that need to buy credits, the higher the price of credits becomes -- which makes reducing emissions cost-effective in comparison

Kyoto Protocol

The Kyoto Protocol now covers more than 160 countries globally and over 55% of global greenhouse gas (GHG) emissions.



Kyoto Protocol

- Governments are separated into two general categories:
- Developed countries, referred to as <u>Annex I</u> <u>countries who have accepted GHG emission</u> <u>reduction obligations</u> and must submit an annual greenhouse gas inventory
- Developing countries, referred to as <u>Non-Annex</u> <u>I countries who have no GHG emission reduction</u> <u>obligations</u> but may participate in the clean development mechanism

Clean Development Mechanism

- The Clean Development Mechanism (CDM) is an arrangement under the Kyoto Protocol allowing industrialised countries with a GHG reduction commitment to invest in emission reducing projects in developing countries as an alternative to what is generally considered more costly emission reductions in their own countries.
- The CDM allows for a drastic reduction of costs for the industrialised countries, while achieving the same amount of emission reductions as without the CDM

Reasons the U.S.A has not Ratified the Kyoto Protocol

Carbon Credits

- Annex 1 countries that have signed and ratified the protocol have <u>required reduction goals</u> to meet by 2012.
- Countries that exceed the limit are penalized and must offset the limit by purchasing <u>Carbon</u> <u>Credits</u>.
- There are two types of Carbon Credits:
 - 4 1.) <u>Baseline and Credit-</u> Carbon credits can be obtained by governments/firms by investing in clean air technology projects in Developing Nations.
 - 2.) <u>Cap and Trade-</u> companies/governments can purchase Carbon Credits from developing nations that are under their allowable quota for emissions.

Top Two Reasons the U.S.A will not Ratify

- <u>Manufacturing/Transportation</u>- in order to meet reductions required by the protocol, the U.S. would need to change many of it's manufacturing and transportation practices. The United States Senate and George W. Bush feel that this may be a devastating blow to the economy.
- China and India- Despite these countries large populations and the fact that China is the #2 producer of Greenhouse Gases they are still classified as Non-Annex 1 countries and are not required to reduce their emissions.

"We are not working on the issue of unsigning; we are working on the issue of market-driven, technological and creative ways of addressing the issue of global climate change."

Richard Boucher, a US State Department spokesman

More Opposition

- Since the U.S.A is the #1 emitter of GHG's if the U.S. ratified we would be obligated to become the top consumer of Carbon Credits.
- Other people who oppose the protocol call it "Global Socialism" and feel that it is a scheme to transfer wealth from developed nations to 3rd World countries.

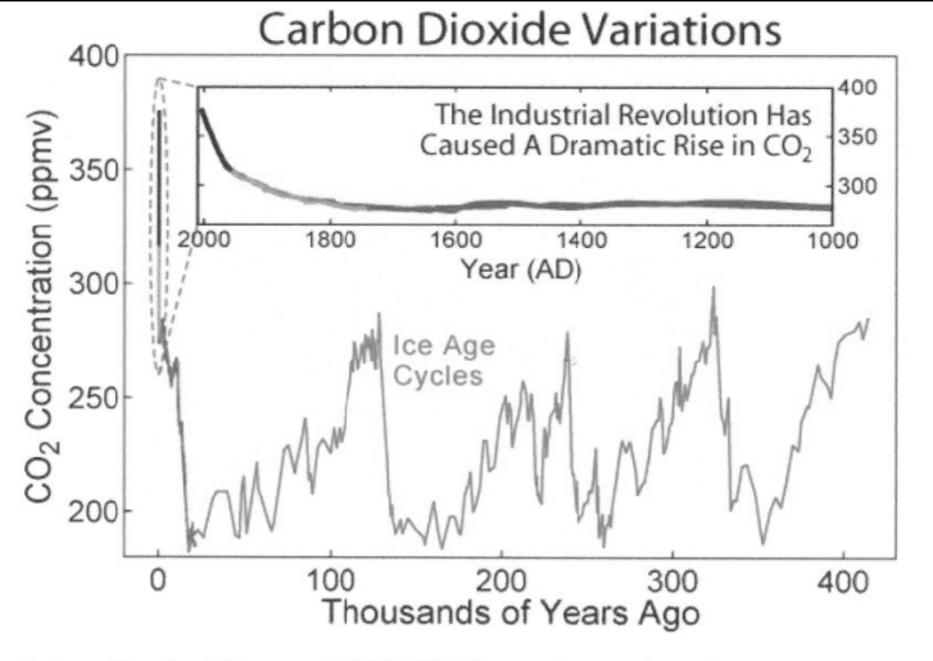
Carbon Credits are Big Business

Since China ratified the protocol they have provided <u>Half</u> of the world's carbon credits, as well as, developed 279 foreign-invested carbon reduction projects totaling **\$9 billion USD**.

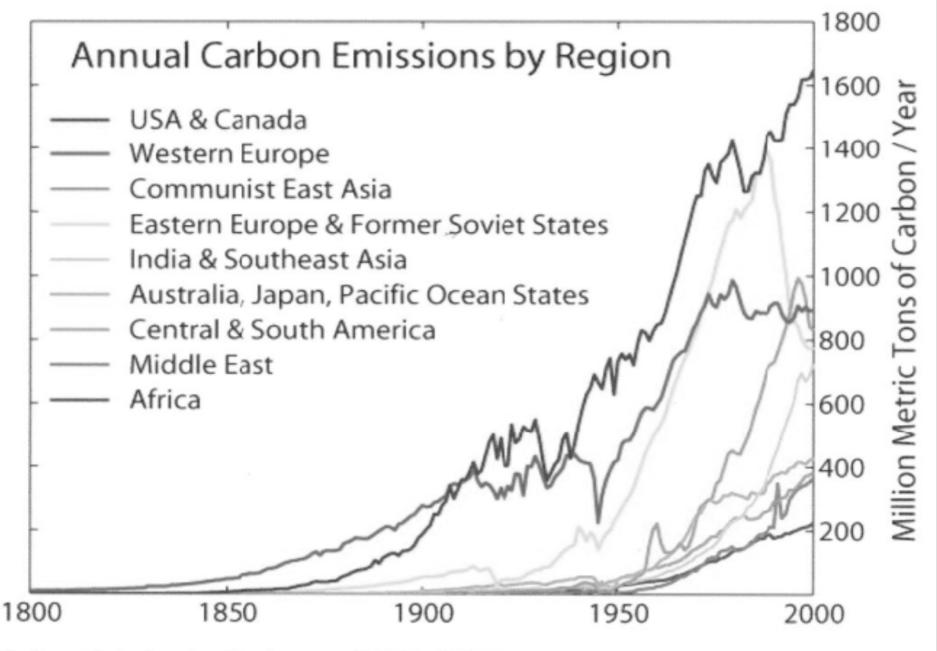
(According to

China's National Development and Reform Commission, Vice Chairman, Xie Zhenhua.)

Reasons Why The U.S. Should Ratify the Kyoto Protocol



Carbon_Dioxide_400kyr.png (23KB, MIME type: image/png)



Carbon_Emission_by_Region.png (29KB, MIME type:

image/png)

Kyoto Protocol.	TABLE 2.	Emission	Targets	for Annex I
Countries*				

	ANNEX I COUNTRY (OR REGIONAL ECONOMIC INTEGRATION ORGANIZATION)	
KYOTO TARGET		
(PERCENT)		
-8	European Community	
	Austria	
	Belgium	
	Denmark Finland	
	France	
	Germany	
	Greece	
	Ireland	
	Italy	
	Luxembourg Netherlands	
	Portugal	
	Spain	
	Sweden	
	United Kingdom	
-8	Bulgaria	
-8	Czech Republic	
-8	Estonia	
-8	Latvia	
-8	Liechtenstein	
-8	Lithuania	
-8	Monaco	
-8	Romania	
-8	Slovakia	
-8	Slovenia	
-8	Switzerland	
-7	United States	
-6	Canada	
-6	Hungary	
-6	Japan	
-6	Poland	
-5	Croatia	
0	New Zealand	
0	Russian Federation	
0	Ukraine	
+1	Norway	
+8	Australia	
+10	Iceland	

gases, weighted by GWP), with some provisions for flexibility discussed in the text. Parties may pool and reallocate their targets among their members; so far only the European Community has indicated that it will do so. Targets are listed in Annex B of the Protocol; that Annex includes the same list of countries as in Annex I of the FCCC, except that Turkey had objected to its listing in Annex I and thus was excluded from Annex B in Kyoto.

Kyoto Protocol. TABLE 3. Responsibility of Annex I Countries for Emissions of Carbon Dioxide in 1990*

ANNEX I PARTY	PERCENTAGE OF ANNEX I EMISSIONS
Iceland	0.0
Liechtenstein	0.0
Monaco	0.0
Luxembourg	0.1
Ireland	0.2
Latvia	0.2
New Zealand	0.2
Estonia	0.3
Norway	0.3
Portugal	0.3
Switzerland	0.3
Austria	0.4
Denmark	0.4
Finland	0.4
Slovakia	0.4
Sweden	0.4
Hungary	0.5
Bulgaria	0.6
Greece	0.6
Belgium	0.8
Czech Republic	1.2
Netherlands	1.2
Romania	1.2
Spain	1.9
Australia	2.1
France	2.7
Poland	3.0
Italy	3.1
Canada	3.3
United Kingdom	4.3
Germany	7.4
Japan	8.5
Russian Federation	17.4
United States	36.1

^{*}Total Annex I emissions of carbon dioxide from industrial sources (fossil fuel combustion and cement production) in 1990 were 13.7 billion metric tons. Entry into force requires that countries representing at least 55 percent of these emissions ratify the accord.

SOURCE: Data based on the information from the thirty-four Annex I Parties that submitted their first national communications on or before 11 December 1997, as compiled by the Climate Change Secretariat.

Objective	Stabilize atmospheric greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system, within a time-frame sufficient to (i) allow accounts with the climate system, within a time-frame
Dwin aimlas	(iii) allow sustainable economic development (art. 2)
Principles	Intra- and intergenerational equity; differentiated responsibilities and respective capabilities; right to promote sustainable development; precaution; cost-effectiveness; comprehensiveness; and free trade (art. 3)
Commitments	All countries—general commitments to: develop national greenhouse gas inventories formulate national mitigation and adaptation programs; promote and cooperate in scientific research, education, training, and public awareness (arts. 4(1), 5, 6) Developed countries (listed in Annex 1)—recognize that a return to earlier emission levels of CO ₂ and other greenhouse gases by the end of decade would contribute to modifying long-term emission trends, and will report with aim to return to 1990 emission levels (art. 4(2)) OECD countries (listed in Annex 2)—commitments to: fully fund developing country inventories and reports: fund the incremental costs of agreed mitigation.
	technology transfer (art. 4(3)-(5))
nstitutions	Conference of the Parties (art. 7), Secretariat (art. 8), Subsidiary Body for Scientific and Technological Advice (SBSTA) (art. 9), Subsidiary Body for Implementation (SBI) (art. 10), financial mechanism (art. 11)
Reporting ("communication of information")	All countries—communication of information on national greenhouse gas inventories and on steps taken to implement the Convention (art. 12(1)) Developed countries (listed in Annex 1)—detailed description of policies and measure to limit greenhouse gas emissions and enhance sinks, and a specific estimate of their effects on emissions
Adjustment mechanism	Reviews of the adequacy of commitments every three years, based on the best available scientific information (art. $4(2)(d)$)

O: 1	forth in Annex B. Commitments for each industrialized country set forth in Annex B. Commitments apply to basket of six greenhouse gases (carbon dioxide, methane, nitrous oxide, and three trace synthetic gases. First five-year commitment period runs from 2008–2012. Negotiations on second commitment period to begin no later than 2005.
Sinks	Emissions and removals due to afforestation, reforestation, and deforestation since 1990 count toward emission targets. Other sink activities can be added by decision of the Parties.
Emissions trading	Industrialized countries may trade their emission allowances.
Joint implementation	Industrialized countries may receive credit toward their emission reductions, resulting from projects undertaken in another industrialized country.
Clean Development Mechanism	Industrialized countries may receive credits toward their targets for emission reductions resulting from projects undertaken in developing countries. CDM governed by an executive board, with specific projects overseen by "operating entities" (for example, multinational accounting firms).
Institutions	Generally the same as FCCC institutions. Conference of the Parties serves as meeting of the Protocol Parties (COP/MOP).
Reporting and reviewing	Industrialized parties must have "national systems" to monitor and report on their greenhouse gas emissions. Emission inventories must follow IPCC inventory guidance. National inventories reviewed by expert review teams, which can recommend adjustments to inventory numbers that fail to follow IPCC guidelines.
Compliance	As of June 2000, compliance institutions and rules under negotiation pursuant to Buenos Aires Plan of Action.

Specific emission limitation commitments for each industrialized country set

Emission reduction commitments

Countries Who Have Signed the Kyoto Protocol

http://faculty.fortlewis.edu/SOMMERVIL%5FL/TS2N400/web%20links/kprat.pdf

Reasons to Ratify

- Reduce dependence on foreign, polluting energy
- Pressure from the rest of the world (UN,EU)
 - Widely criticized
- Economic effects questionable
 - US automakers already losing out
 - Future effects of not reducing emissions

US Mayors Climate Protection Agreement

Seattle Mayor Greg Nickels

US Mayors Climate Protection Agreement

Work Cited

- http://en.wikipedia.org/wiki/Kyoto_Protocol
- http://faculty.fortlewis.edu/SOMMERVIL%5FL/T
 S2N400/TS2N400.html
- <u>http://www.ci.seattle.wa.us/mayor/climate/quot</u> <u>es.htm#mayors</u>
- http://unfccc.int/2860.php
- http://news.bbc.co.uk/2/hi/science/nature/4267
 245.stm