

Climate Change Policy

International, Federal and U.S. State Policy

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Welcome to
THE GREENEST STATES

The logo for 'grist' is displayed in a white, stylized serif font on a black rectangular background. The word 'grist' is written in lowercase, with a registered trademark symbol (®) at the top right of the 't'. A small orange dot is positioned below the 'i'.

A BEACON IN THE SMOG

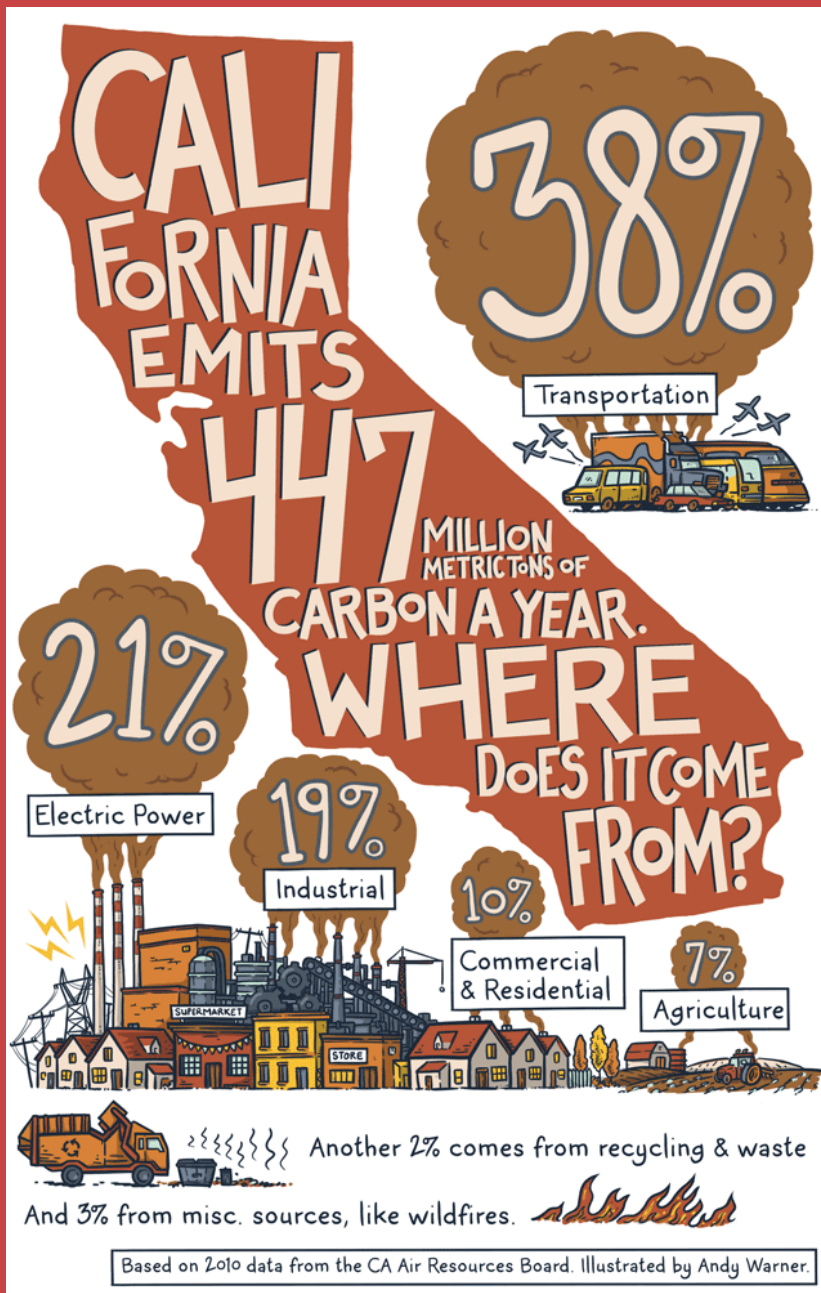
TOP 10 GREENEST STATES

1. vermont
2. New York
3. WASHINGTON
4. oregon
5. Minnesota
6. California
7. Nevada
8. New Hampshire
9. Massachusetts
10. Maine

CALIFORNIA: **CLIMATE CHANGE POLICIES**

- cap and Trade
- AUCTION Revenue Investment
- Greenhouse Gas CREDITS FROM UNREGULATED SECTORS
- LOW CARBON FUEL STANDARD
- CALIFORNIA CLEAN CARS PROGRAM
- CLIMATE ACTION RESERVE'S FOREST PROJECT PROTOCOL
- PAY-AS-YOU-DRIVE

For More Information: <http://www.edf.org/climate/california-climate-action>



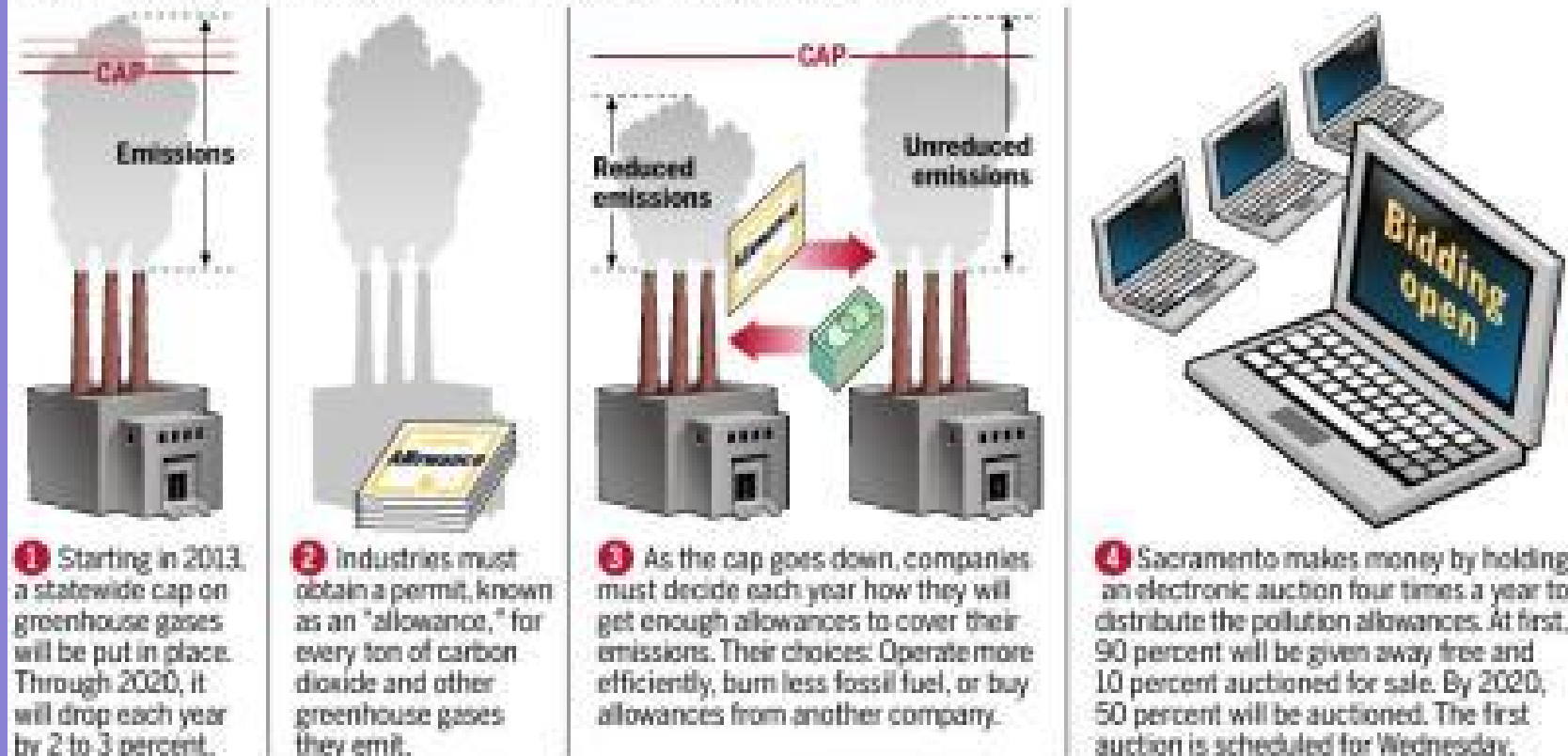
WHAT THE CAP AND TRADE WILL TARGET:

- sources that emit at least 25,000 metric tons of CO₂ equivalent/yr
- the 6 GHG covered in the Kyoto Protocol (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆) as well as NF₃ & other fluoridated GHG)
- Phase 1 (2013-2014) covers: electricity generation including: imports and industrial sources, covering 35% of CA's GHG emissions (~160 MMT)
- Phase 2 (2015 & on) covers: distributors of transportation fuel, natural gas, and other gas, which totals over 85% of CA's total GHG emissions (~395 MMT)

DETAILED EXPLANATION OF CALIFORNIA'S cap and trade

How California's cap-and-trade will work

Rather than having a strict government mandate, like a carbon tax, to reduce pollution, a cap-and-trade system uses market mechanisms to reward companies that figure out ways to reduce pollution below the level the government sets. California's cap-and-trade rules, which will affect oil refineries, power plants and large factories, take effect Jan. 1.



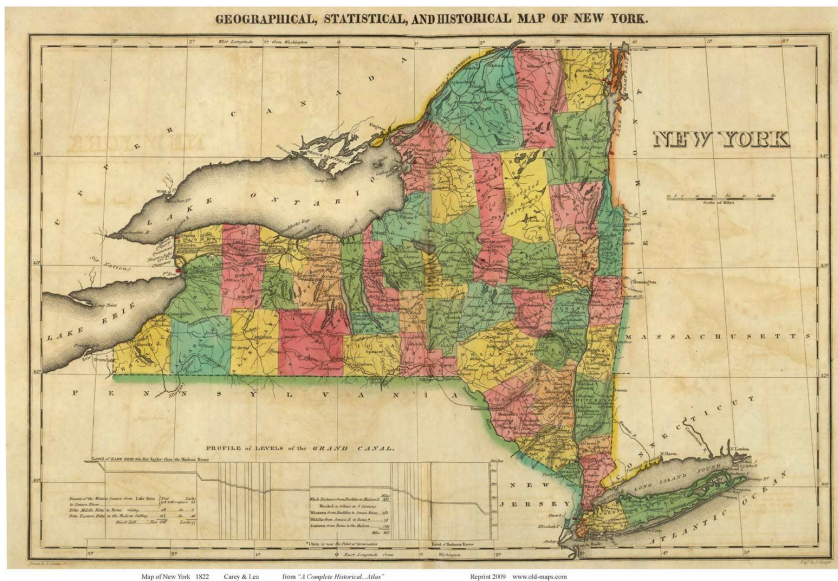
Source: Mercury News reporting

SAN AREA NEWS GROUP

NEW YORK

DEPARTMENT OF ENVIRONMENTAL CONSERVATION: OFFICE OF CLIMATE CHANGE

"The New York State Office of Climate Change was created to lead the development, in concert with other DEC programs and New York agencies, of programs and policies that mitigate greenhouse gas (GHG) emissions and help New York communities and individuals adapt when changes in our climate cannot be avoided."



For More Information: <http://www.dec.ny.gov/about/43166.html>

NEW YORK, NORTHEAST AND MIDATLANTIC STATES) POLICIES & PROGRAMS UNDERWAY

- Regulatory Performance Standards for new stationary sources that will have large, long-term CO2 emissions, including electric power plants, very large boilers, and gasification systems
- Regional Greenhouse Gas Initiative (RGGI)
 - 10-state program under which power sector CO2 emissions are reduced through cap and trade allowances purchased in an auction
 - Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont
 - will reduce CO2 emissions by 10% by 2018
 - Proceeds from the auctions are returned to states & invested in consumer benefit programs

For more information: http://www.rggi.org/rggi_benefits/success_stories

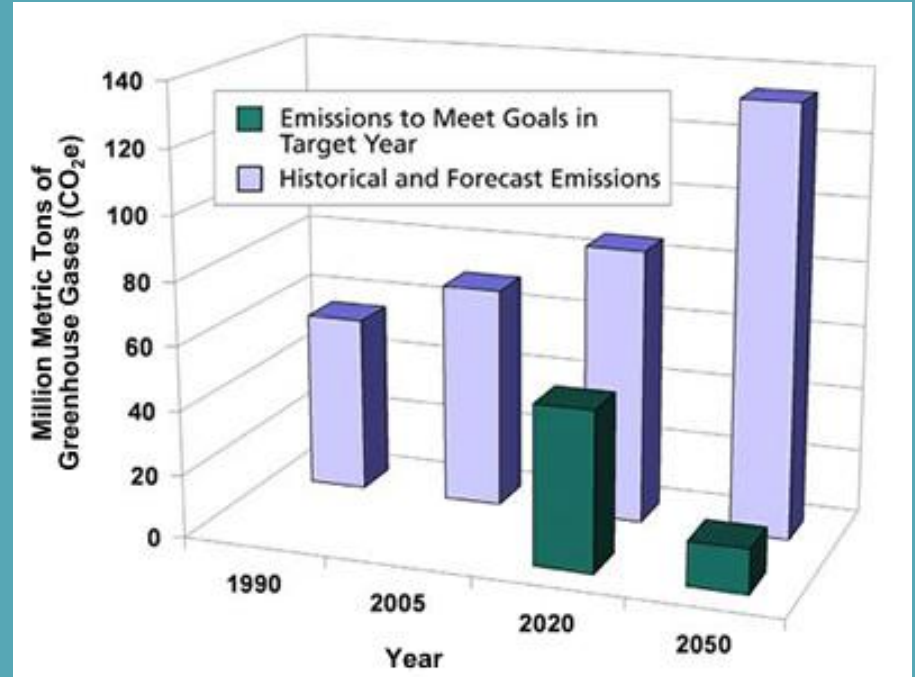
OREGON

Oregon Department of Energy

- Residential & business energy tax credit program
- Energy Loan Program
- Community Solar Program
- Investments in wind, thermal, solar, biomass, hydro



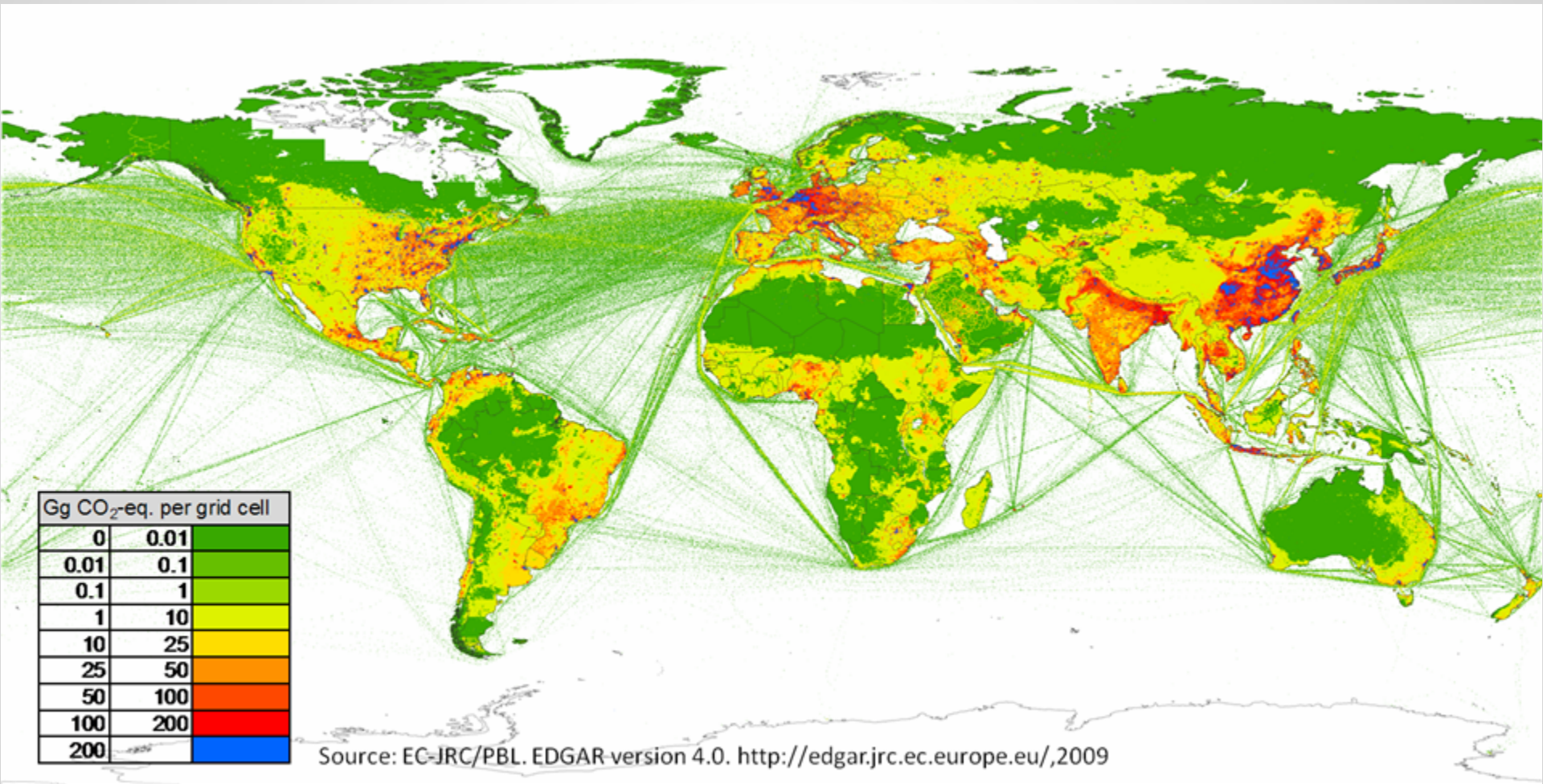
2020 & 2050 GHG Reduction Goals:



Oregon Renewable Portfolio Standard (RPS) requires utilities to deliver a percentage of their electricity from renewable sources by 2025.

-standard started at 5% in 2011, increases to 15% in 2015, 20% in 2020, and 25% in 2025

What's the rest of the world doing?



2012 Climate Change Performance Index

Table 1:

Rank Tendency		Country	Score**	Partial Score		
				Trend	Level	Policy
1*		–	–			
2*		–	–			
3*		–	–			
4	↗	Sweden	68.1			
5	↗	United Kingdom	67.4			
6	↗	Germany	67.2			
7	↘	Brazil	66.9			
8	↗	France	66.3			
9	↗	Switzerland	65.1			
10	↗	Mexico	64.6			

Table 2:

Index ranking of the 10 largest CO₂ Emitters

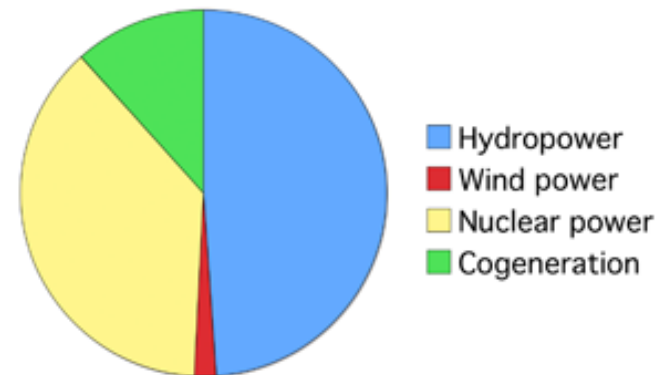
Country	Share of Global CO ₂ Emissions*	CCPI Rank	
		2011	2012
United Kingdom	1.61 %	8	5
Germany	2.59 %	7	6
India	5.47 %	10	23
Korea, Rep.	1.78 %	34	41
Japan	3.77 %	38	43
USA	17.91 %	54	52
Canada	1.80 %	57	54
Russia	5.28 %	48	55
China	23.71 %	56	57
Iran	1.84 %	52	60

* energy related

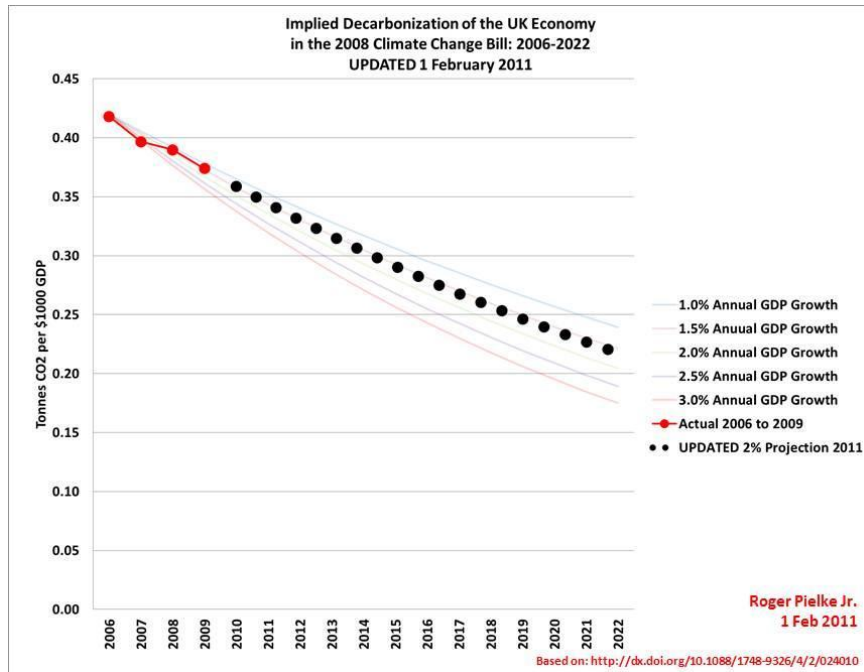
© Germanwatch 2011

Sweden

- Energy taxation system
 - Three different taxes levied on energy products: energy tax, sulphur tax and CO2 tax
 - High rate (€40/ton in 2009)
 - Revenue generated used to fill budget deficit and reduce income tax
- Renewable energy certificate system (RECS)
 - Voluntary international system for trading “green certificates”
 - Power consumers have to buy a certain number of green certificates via their electricity bills, while power producers receive a certificate for every MWh of renewable electricity they generate
- International collaboration and carbon trading systems
- Public participation



The UK



- Climate Change Act 2008
 - Mandatory 80% cut in UK's emissions by 2050
- Quantity-based instruments (e.g. the Renewables Obligation)
- Price-based instruments (e.g. the Climate-Change Levy)
- 2012 additions
 - Renewable Heat Incentive
 - The Energy Bill
 - Green Investment Bank

Brazil

- Amazon Fund

- Reduce deforestation in the Amazon by 70% by 2020
- Increase reforestation rate
- Creation of protected areas
- Follows REDD principles



- Increase the use of biofuels in transportation industry
- Energy expansion of hydro power and renewables
- Agriculture & forestry

Mexico

- Legally binding targets
 - Reduce GHGs 30% by 2020 and 50% by 2050
 - 35% of energy from renewables by 2024
 - Mandatory emissions reporting
 - Establish a trading scheme for GHG permits



Key Players

- China – 23.71%
 - Aggressively pursuing renewable energy sources
- India – 5.47%
 - Hundreds of CDM emission-reducing projects
- Japan – 3.77%
 - Trying to find a new way forward after Fukushima
- Russia – 5.28%
 - Energy efficiency goals a “black hole”

The EU



Emission Targets for 2020

- To reduce GHG emission by 30% in the absence of an international agreement.
- To increase the proportion of renewable energy to 20%.
- To increase the proportion of renewable fuels to 10%.
- To increase the efficiency of energy use by 20%.

How does the EU compare to the US?

- Public participation

68% of Europeans rate climate change as a “very serious” problem.

- Investment in renewable energies

The European Commission is proposing 20% of overall budget allocated to climate financing.

- Carbon trading market

First and biggest scheme for trading of GHG allowances.

Covers some 11,000 power stations and industrial plants in 30 countries.

- International cooperation

All EU countries ratified the Kyoto protocol.

EPA on Climate Change:

Climate change is happening



We are responsible.



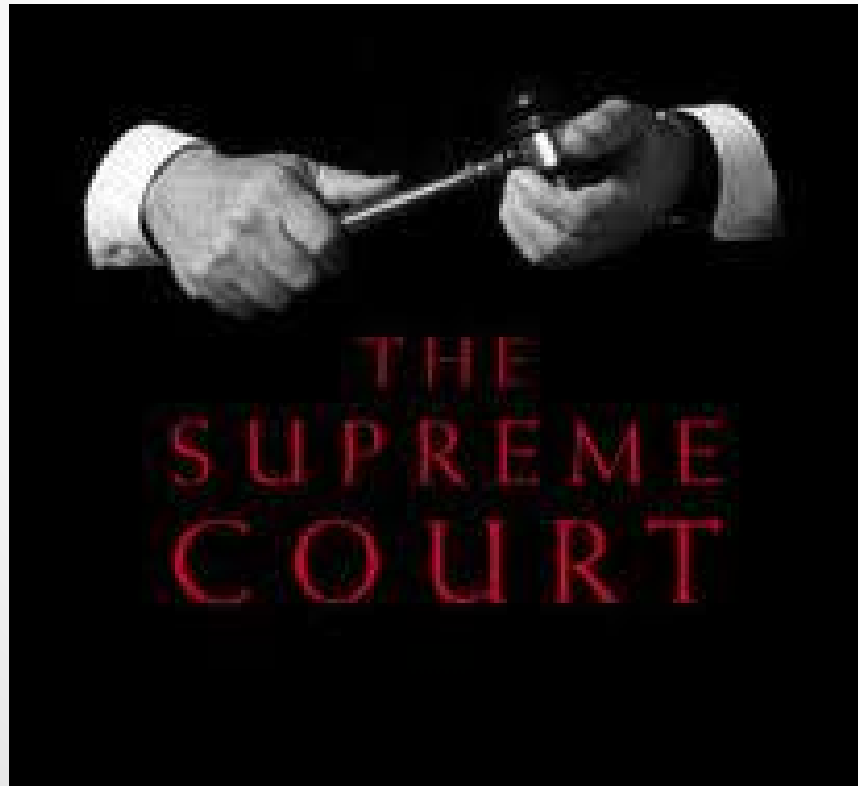


What you can do (in case you didn't know. . .)

<http://www.epa.gov/climatechange/wycd/>

History of Federal Climate Change Legislation

It all started when. . .



THE ENDANGERMENT FINDINGS...



"BEFORE I CONTINUE, YOU'RE NOT ONE OF THOSE GUYS WHO BLAMES THE MESSENGER FOR BAD NEWS, ARE YOU?"

But wait. . . who wouldn't be happy about the GHG findings?!



Confused?

The Top 10

1. Arthur Randol, Exxon Mobil
2. Chamber of Commerce of the USA
3. Coalition for Responsible Regulation (Members not actually known. . . the only confirmed member is Solvay CHEMical (major SF6 producer)
4. Commonwealth of Virginia
5. Competitive Enterprise Institute: "We believe that individuals are best helped not by government intervention, but by making their own choices in a free marketplace."
6. Ohio Coal Association
7. Pacific Legal Foundation, conservative law firm known for battling the EPA
8. Peabody Energy
9. Southeastern Legal Foundation, law firm with CEI, Heritage Foundation, CATO Institute, etc.
10. State of Texas

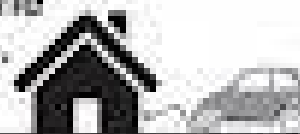
OBAMA ADMINISTRATION Fuel Economy Standards

In the year 2025

The fleet-wide average will be



Consumers will have saved
\$1.7 TRILLION
at the pump over the
life of the program.



A family that purchases a new
vehicle in 2025 will save

\$8,200

in fuel costs when compared with
a similar vehicle in 2010.

Over the life of the program, the standards will

Save



12

billion
barrels
of oil

Eliminate

6

billion
metric
tons

of carbon dioxide pollution.



This program, together with standards already put into place by this
administration for Model Years 2011-2016, will result in significant
cost savings for consumers at the pump, dramatically reduce oil
consumption, cut pollution and create jobs.



Learn More
at EPA.gov



www.epa.gov

Major plans for mitigating GHGs:

1. Carbon Pollution Standard for Future Power Plants
2. 10^3 of one, 1,000 of the other:

Carbon tax, or cap and trade?



CARBON TAX

- Price of fossil fuel does not reflect its true cost.
- will reduce emissions and generate revenue.
- spreadsheet to calculate actual carbon tax at www.carbontax.org.

Cap and Trade for CO2

- Waxman-Markey Bill (2009)
- Lots of doubts about cost in the future-- but we have Europe's model to learn from.
- Business likes this model! (For once!)