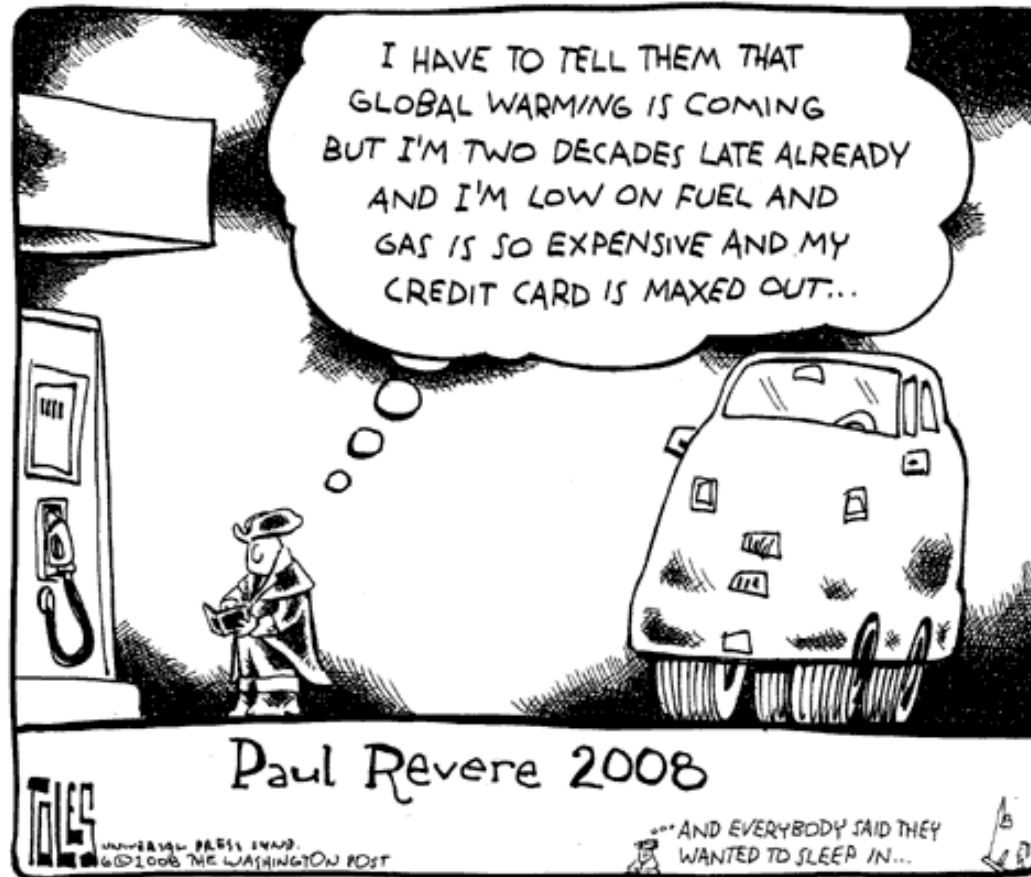




Greenhouse Gas Programs - Overview and Potential Impacts to the Industry

2008 International Telecommunications Safety Conference

Introduction



6-25-08

Caveats



- ▶ I used to work in the Power industry
- ▶ Presentation is skewed to the Western US
- ▶ I believe there is a global warming issue
- ▶ I support a free market solution (no tax!)

Before Al Gore's "An Inconvenient Truth"



- ▶ All about combustion - cars, power plants
- ▶ October 1999 - International Center for Technology Assessment petitioned EPA to regulate emissions from automobiles
- ▶ September 2003 - EPA denied the petition saying they did not have jurisdiction

Before Al Gore's "An Inconvenient Truth"



- ▶ EPA believed it was a matter of regulating fuel economy
- ▶ Several States sues EPA
- ▶ 2005 - DC Circuit Court upheld EPA decision

An Inconvenient Truth - Summer 2006



The Supreme Court Decision



- ▶ Massachusetts v. EPA (April 2007)
- ▶ CO₂ is an air pollutant under the Clean Air Act
- ▶ EPA - "we will move expeditiously, but responsibly"

Federal Government Approach



- ▶ Senate bill - Lieberman Warner Climate Security Act (2007)
- ▶ Reduce GHG emissions by 63% by 2050 from 2005 levels
- ▶ EPA mandated to develop a reporting system

States approach



- ▶ Fill in the EPA vacuum

- ▶ Activity along 3 tracks
 - Reporting
 - Performance Standards
 - Cap and Trade

What will be regulated?



- ▶ Carbon dioxide and other “harmful” gases
- ▶ Carbon Dioxide equivalents (CO₂ -e)
- ▶ Product of metric tons and global warming potential (GWP)

Gases based on increasing GWP



- ▶ CO₂ [CO₂ -e = 1]
- ▶ Methane
- ▶ Nitrous Oxide
- ▶ Hydrofluorocarbons
- ▶ Perfluorocarbons
- ▶ Sulfur Hexafluoride [CO₂ -e = 23,900]
- ▶ Others

Who will be regulated?



In Washington (these numbers appear standard)

- ▶ Companies with a source or combination of sources that emits at least 10,000 metric tons of greenhouse gases a year in the state
- ▶ Companies with a fleet of on-road motor vehicles that emits at least 2,500 metric tons of greenhouse gases a year in the state

Will My Fleet be Regulated?



Fuel Type	Metric Tons CO ₂	Total Pounds of CO ₂	Pounds of CO ₂ emitted per gallon	Consumption to meet threshold
Gasoline	2,500	5.5 million	19.564	281,716
Diesel	2,500	5.5 million	22.38	246,269
Propane	2,500	5.5 million	12.669	435,038
Based on gallons of fuel used per year				
Source: Washington Dept of Ecology				

When will reporting be required?



- ▶ California - 2009 with independent verification in 2010
- ▶ Washington - 2010
- ▶ Oregon - rulemaking in progress

Reporting Requirements



- ▶ Most states/provinces/tribal nations following The Climate Registry processes
- ▶ <http://www.theclimater registry.org/>
- ▶ Independent verification is a concern

Elements of a Cap and Trade System



- ▶ Mandatory emissions cap
- ▶ Number of allowances equal to the cap
- ▶ Accurate measurement and reporting
- ▶ Appropriate enforcement

Progress on a Cap and Trade Program



July 23, 2008 3:39 p.m. EDT

Western States Propose Greenhouse Gas Cap-And-Trade Program

DOW JONES NEWSWIRES
July 23, 2008 3:39 p.m.

Power plants, factories and other industrial facilities would be the first to participate in the plan, starting in 2012, under the proposal. Emissions from gasoline, diesel fuel and natural gas would be included starting in 2015.

Each state and province would decide individually whether to give away pollution allowances for free, or to auction some or all of them.

What should I do now?



- ▶ Be wary of early action
- ▶ Understand your emission sources
- ▶ Follow what is happening at the Federal, state, and possibly local level

Presidential Candidates Positions



John McCain	Barack Obama
Supports cap and trade	Supports cap and trade
Reduce emissions 60% from 1990 levels by 2050	Reduce emissions 80% from 1990 levels by 2050
Domestic and international offsets to be considered in evaluating compliance	
	Auction 100% of emission allowances
Revenue from allowances to support clean technologies and finance commercialization programs Source - Trinity Consultants May 2008	Revenue from allowances to support clean technologies, energy efficiency programs, address transition programs, and assist US workers effected by economic transition

Conclusion



Contact Information



Ed Clement, PE, CSP

EHS Specialist/Northwest Regional Field Manager

Embarq Corporation

5454 West 110th Street, Mail Stop KSOPKJ0802

Overland Park, KS 66211

edward.b.clement@embarq.com

Work 913-345-7741

Cell 913-707-8373

Fax 913-397-3525