# New York CO<sub>2</sub> Budget Trading Program Proposal (RGGI)

Kevin P. McGarry, P.E.
Division of Air Resources
New York State Department of
Environmental Conservation

NYSAEMC Program Update June 11, 2007





#### **Overview**

- Climate Change
- What's at stake for New York and the Northeast
- Regional Greenhouse Gas Initiative (RGGI)
- New York Distinctions
- RGGI Next Steps







SUN

Some solar radiation is reflected by the Earth and the atmosphere.

Some of the infrared radiation passes through the atmosphere,

and some is absorbed and re-emitted in all directions by greenhouse gas molecules. The effect of this is to warm the Earth's surface and the lower atmosphere.

Solar radiation passes through the clear atmosphere

ATMOSPHERE

EARTH

Most radiation is absorbed by the Earth's surface and warms it.

Infrared radiation is emitted from the Earth's surface

#### **Greenhouse Gases**

Carbon Dioxide (CO<sub>2</sub>) - Fossil fuel combustion

Methane (CH<sub>4</sub>) - Landfills

**Nitrous Oxide (N<sub>2</sub>O)** - Agricultural Soil Management, Fossil Fuel Combustion

**Hydrofluorocarbons (HFCs)** - Man made chemicals introduced as alternatives to ozone depleting substances

**Perfluorocarbons (PFCs) - Primary aluminum production** by-product

**Sulfur Hexafluoride (SF<sub>6</sub>)** - Dielectric in electrical transmission/distribution systems





# Has the Climate Changed Already?

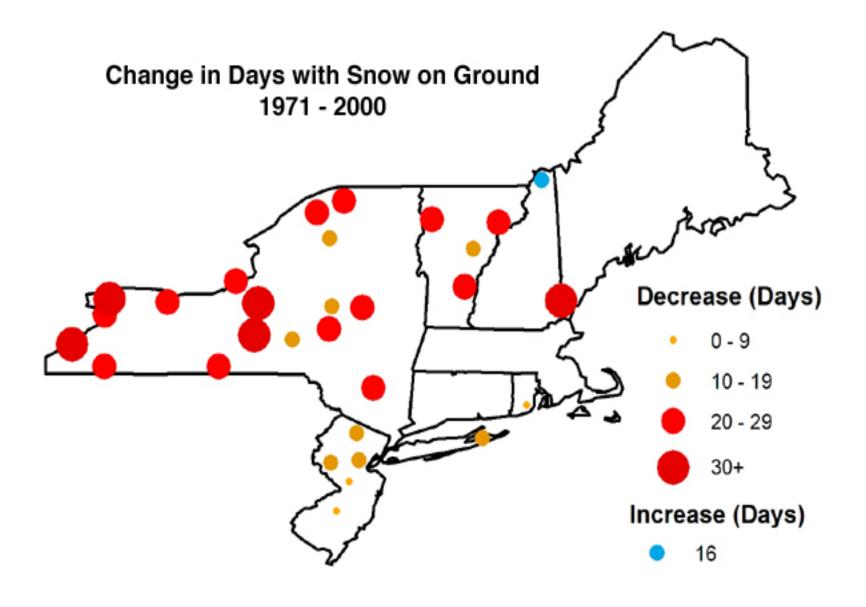
The scientific community is in agreement that the Earth is warming. Worldwide, 8 of the 10 hottest years on record have occurred in the last 10 years.

Rank	Year
1	2006
2	2005
2	1998
4	2002
5	2003
6	2004
7	2001
8	1997
9	1990
10	1995

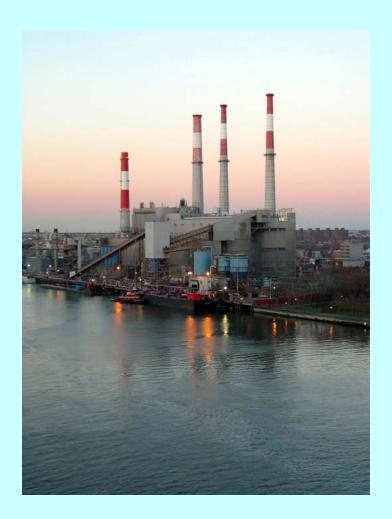




#### Fewer Days with Snow Cover



# Regional Greenhouse Gas Initiative (RGGI)



The Nation's First Mandatory Cap-and-Trade Program for Carbon Dioxide (CO<sub>2</sub>)

> Launch Date: Jan. 1, 2009





#### Regional Greenhouse Gas Initiative

An Initiative of the Northeast & Mid-Atlantic States of the U.S.

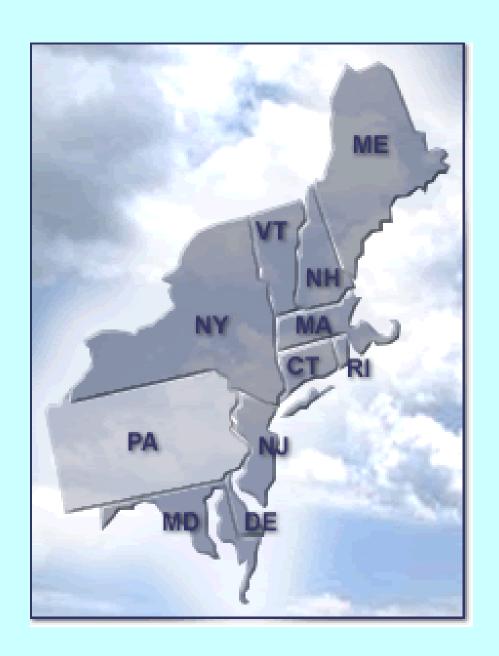
#### Background

- April 2003 Invitation
- 3 Year Design Process
- December 2005
   Memorandum of Understanding (7 States)
- Model Rule Complete
- MA,RI and MD join in '07
- D.C. to join









# RGGI Status

- 10 States CT, DE, MA, MD, ME, NH, NJ, NY, RI & VT
- Pennsylvania?
- West Coast to Link?
- Other Jurisdictions?





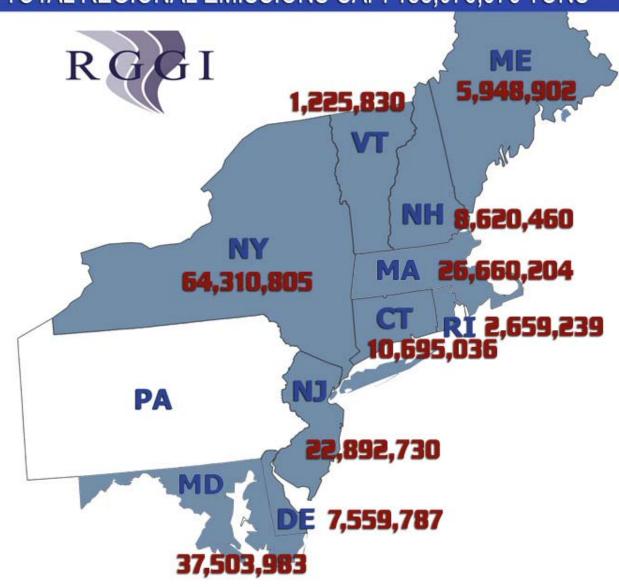
#### **How Does RGGI Work?**

- Each state has an emissions cap (tons of CO<sub>2</sub>)
- States issue "allowances", one per ton, up to the amount of the cap
- Each source must "cover" its emissions with allowances
- Allowances can be traded





#### TOTAL REGIONAL EMISSIONS CAP: 188,076,976 TONS



### **Reduction Requirements**

- Stabilize emissions at current levels through 2014;
- then reduce by 10% by 2019
- ~13% below 1990 levels
- ~35% below business as usual





### **RGGI Program**

- Start Date: January 1, 2009
- Covers 25+ Megawatt Electric Generating Units
- Compliance obligation: cover emissions with allowances and offsets at the end of each compliance period





## **RGGI Program**

#### Allocations:

- 25% minimum for Auction for Consumer Benefit and/or Strategic Energy Purpose
  - Proceeds to be invested in energy efficiency or clean energy technologies
  - Benefits of program go to consumers
- New York to auction nearly all allowances





# **Additional Market Flexibility**

"Offsets" or Project-Based Reductions

Methane
Capture from
Farms

Convert Land to Forest

**End-Use Energy Efficiency Projects** 

SF<sub>6</sub> Gas Leak Prevention in Electricity Distribution

Landfill Gas
Capture at Small
Landfills

# Source Compliance Requirements

- Start Date: January 1, 2009
- Permit Requirements: Each unit must have a permit that requires the source to comply with the requirements of the program.
- Allowance Accounts: Each source must designate only one account representative, and only one alternate representative.
- Allowance "True-Up": Each source must cover its emissions with CO<sub>2</sub> allowances at the allowance transfer deadline, which falls on March 1, after the control period ends. The control period is a threeyear period, unless extended.





# Source Compliance (cont'd.)

- Limits on use of offsets at true-up: A source may cover up to 3.3% of its emissions with CO<sub>2</sub> offset allowances. In case of a stage one trigger event (spot price for allowance is \$7 or more) a source may cover up to 5%; in case of a stage two trigger event (spot price is \$10 or more) a source may cover up to 10%.
- <u>Compliance certification</u>: Each account representative must file a compliance certification at the end of each compliance period (referred to as a "control period" in the proposed rule).





# Source Compliance (cont'd.)

Emissions Monitoring, Reporting and
 Recordkeeping: Each source must monitor its
 emissions consistent with existing practice under
 existing federal rules, and file quarterly emissions
 reports with the states. Records must be maintained
 for ten years by the source for inspection by the state.





#### **New York Distinctions**

"Behind the Meter" Limited Exemption

If a unit auxiliar less than 10% of its electric

If a unit supplies less than 10% of its electrical output to the grid, it can apply to be exempted from the program by Jan 1, 2008. If a unit is exempted, the Department shall reduce to the base budget to remove the number of tons equal to the unit's average annual emissions from the previous three calendar years.





## **New York Distinctions (cont'd.)**

 Energy Efficiency and Clean Energy Technology Account:

Through an allowance auction, the Department will allocate nearly the entire base budget to the account.

- this will promote and reward investments in energy efficiency, renewable or non-carbon emitting technologies, and/or innovative carbon abatement technologies with significant carbon reduction potential.
- By January 1, 2009, the Department or its agent will record the allowances for all allocation years in the account.





#### **RGGI Next Steps**

- Implement New York CO<sub>2</sub> Budget Trading Rule
- Develop Regional Organization
- Develop and implement Emission Allowance Tracking System
- Development New York and region wide RGGI auction
- D.C. on-ramp, add PA?
- Connection to California?
- Link with other West Coast states?—OR, WA, AZ, NM?





#### **Contact Information**

Kevin P. McGarry, P.E.

**Division of Air Resources** 

NYS Dept. of Environmental Conservation

(518) 402-8396

kpmcgarr@gw.dec.state.ny.us

http://www.rggi.org

http://www.dec.ny.gov/chemical/rggi.html



