The Future of the Regional Greenhouse Gas Initiative

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Retrospective analysis

RGGI Region: Estimated Factors Causing CO₂ Emissions to Decrease from 2005 to 2009

- Changes in Relative Fuel Prices / Fuel Switching (31.2%)
- Petroleum: 23.0%
- Weather: 24.2%
- Coal: 8.1%
- Economy: 4.4%
- Energy Efficiency & Customer-Sited Generation: 11.9%
- Increased Wind: 3.7%
- Increased Hydro: 2.6%
- Reduced Available Coal Capacity: 6.2%

Available Capacity Mix (20.7%)

Factors Causing Lower Load (48.1%)

RGGI CO₂ Emissions:
- 2005: 184.4 million tons
- 2009: 123.7 million tons
- Decrease: 60.7 million tons
Emissions and Economy

Ten-State RGGI Region CO₂ Emissions and Economic Output (GSP)

- CO₂ Emissions (EIA Power Sector Data) (MMTCO₂)
- CO₂ Emissions (RGGI Units) (MMTCO₂)*
- Combined GSP (Billions of Current Dollars)
RGGI in Context

Change in Power Sector CO₂ Emissions by Region
1990 - 2010

Source: U.S. Energy Information Administration
Reference Case Projections

$CO_2$ Emissions

Historical vs. Projected
Sensitivity Case Projections

Historical
Projected

Million Tons CO₂


RGGI Affected  Reference  High Case  Low Case  RGGI Cap
Reference Case Projections

![Graph showing carbon dioxide emissions projections for different regions from 2009 to 2020, with historical and projected data compared. The graph highlights the reduction in emissions over time, particularly showing a decrease in 2011 which is noted as the 2011 Reference Case. The regions include RGGI Affected, ISO-NE, NYISO, PJM (RGGI), and RGGI Cap.](image-url)
RGGI Potential Scenario Analysis

Emission Caps
RGGI Allowance Price Projections

Reference Demand Growth Cases

- 106 Cap_CCR_Ref
- 115 Cap_CCR_Ref
- 120 Cap_Ref
Sources of Emission Reductions

115 Cap CCR Reference Case

Emission Reductions from Affected Sources
Emissions Covered by Banked Allowances
Emissions Covered by Offsets
RGGI Allowance Price Projections

115 Cap CCR Cases (Reference, High Demand, Low Demand)

Sources withdraw 10 MM Tons from the CCR in 2014 in the 115 Cap case with high demand.
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