

# ***Delaware's CO<sub>2</sub> Budget Trading Program – amendments to Regulation 1147***

---

Public Hearing  
*January 23, 2013*

---



*Valerie Gray*

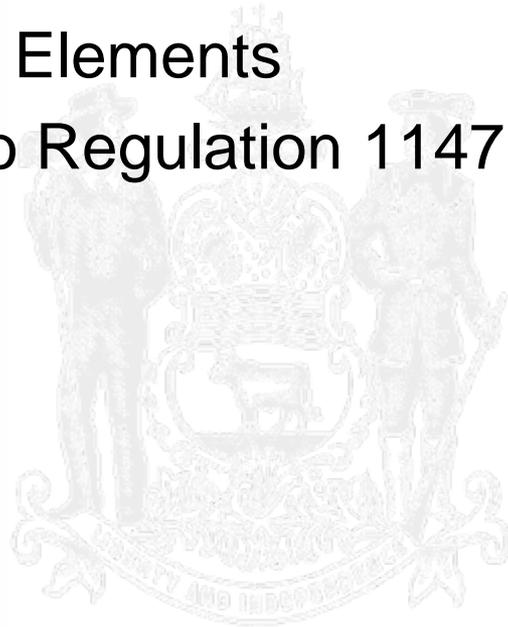
*Delaware Department of Natural Resources  
and Environmental Control – Division of  
Air Quality*

***Blue Skies Delaware; Clean Air for Life***

# Overview

---

- Background Information
- RGGI Program Elements
- Amendments to Regulation 1147



***Blue Skies Delaware; Clean Air for Life***

# ***Background Information***

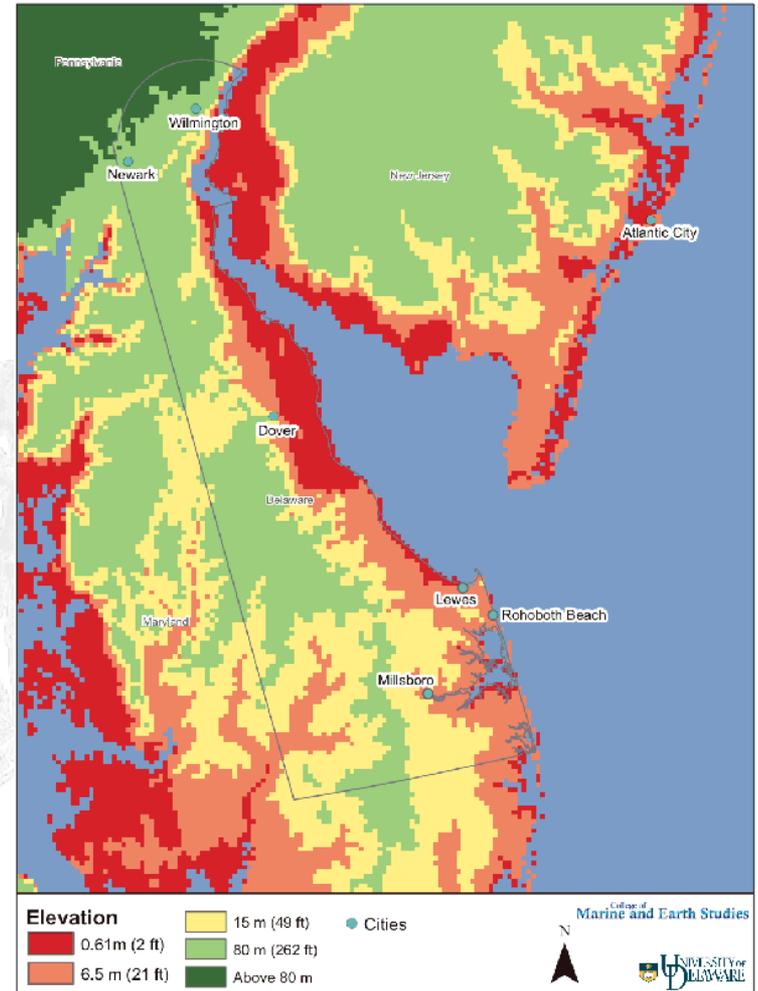
## ■ **RGGI Region**

- 3rd Largest World Economy
- 14% of US Greenhouse Gas (GHG) Emissions
- 3.2% of World GHG Emissions ( $\cong$  Germany)



# Local & Regional Impacts from Climate Change

- Since 1900 the average temperature at Dover, DE has risen by 1.9° F and precipitation has increased by almost 10%.
- At Lewes, DE, sea level has risen 12 inches in the last century, and is likely to rise another 23 inches by 2100.
- Delaware's tidal coastline measures 381 miles: 357 miles on the Delaware Bay and 24 miles on the Atlantic Ocean.



# Potential Impacts From Climate Change - Delaware & the Mid-Atlantic Region

(<http://www.usgcrp.gov/usgcrp/Library/nationalassessment/newsletter/2000.06/midatl.html>)

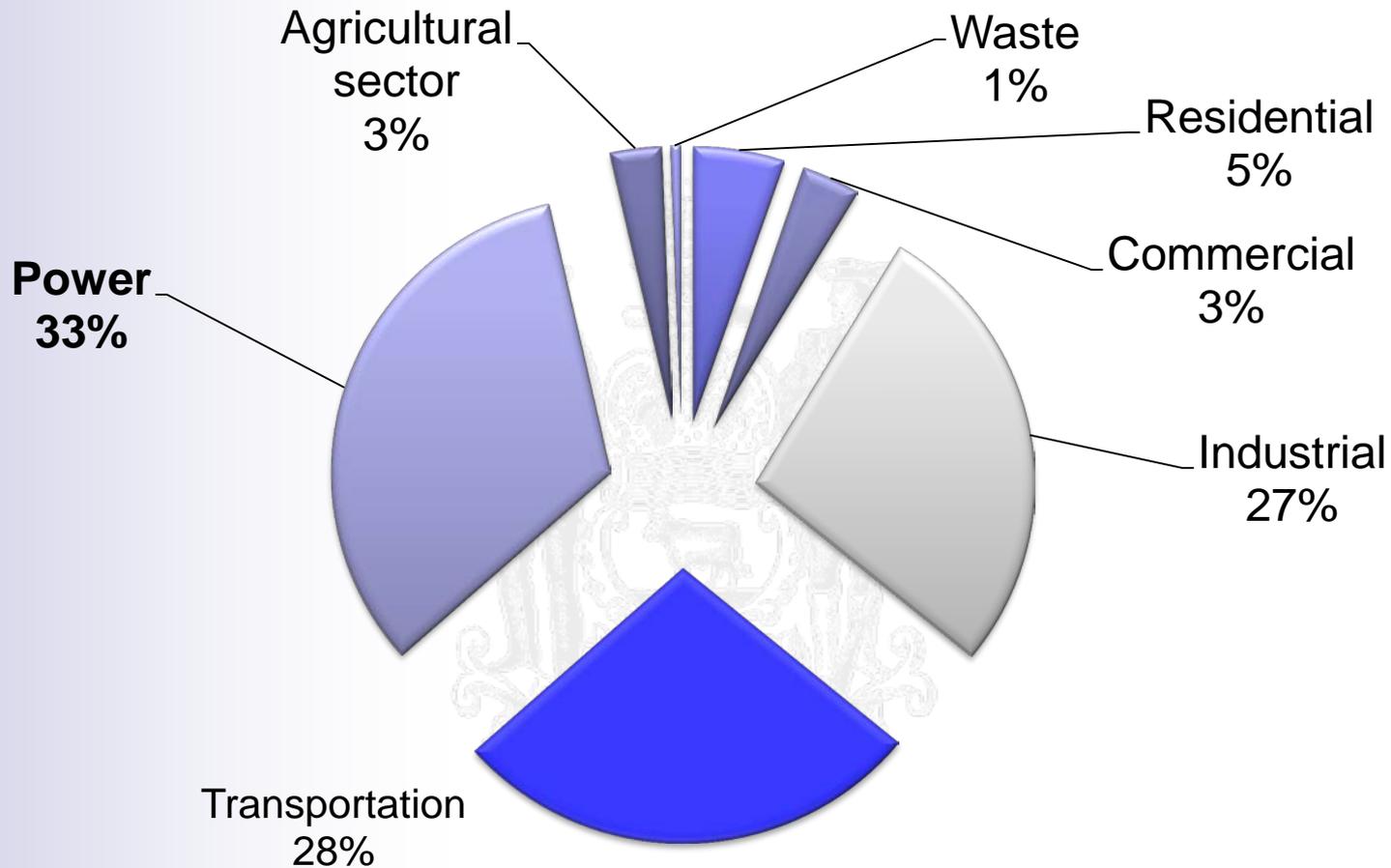
Summary of MAR Impacts	Negative Impact	Positive Impact
<b>Most Certain</b> <ul style="list-style-type: none"> <li>• Agricultural production</li> <li>• Coastal zones</li> <li>• Temperature related health status</li> </ul>		
<b>Moderately Certain</b> <ul style="list-style-type: none"> <li>• Forestry production</li> <li>• Temperature related health status</li> </ul>		
<b>Uncertain</b> <ul style="list-style-type: none"> <li>• Biodiversity</li> <li>• Fresh water quantity</li> <li>• Fresh water quality</li> <li>• Ecological functioning</li> <li>• Vector and water-borne disease health status</li> <li>• Environmental effects from agriculture</li> </ul>		

Summary of impacts from climate variability and change that might occur in the MAR by the year 2100. The size of an arrow indicates an impact's expected magnitude in relative terms.



***Blue Skies Delaware; Clean Air for Life***

# 2008 GHG Emissions CO<sub>2</sub>e



*Blue Skies Delaware; Clean Air for Life*

## *Regional Greenhouse Gas Initiative Overview*



- **Nine Participating States:** CT, DE, MA, MD, ME, NH, NY, RI, VT
- **Coverage:** Fossil fuel-fired power plants 25 megawatts or greater in size
- **Initial CO<sub>2</sub> Emissions Cap:** 165 million short tons per year for the 9-state region
- **Timing of CO<sub>2</sub> Reductions:** 2009-2014, cap stabilizes emissions at 165 million tons annually; 2015-2018, cap declines by 2.5 percent per year for total reduction of 10 percent

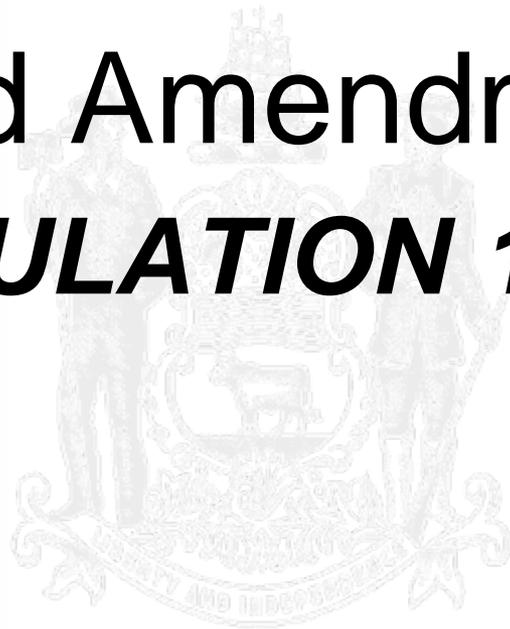


- **CO2 Allowance Auctions:** Regional, held quarterly, open to all who qualify (Auction 19 scheduled March 13, 2013)
- **Compliance Period:** Three years, first compliance period January 1, 2009 – December 31, 2011
- **CO2 Emission Offsets:** Qualifying GHG reduction projects outside the electricity sector. Currently, power plants may use offsets to meet 3.3 percent of their compliance obligation
- **Auction Proceeds:** Overall, approximately 70 percent invested in energy efficiency and renewable energy



***Blue Skies Delaware; Clean Air for Life***

# Proposed Amendments to ***REGULATION 1147***



***Blue Skies Delaware; Clean Air for Life***

# ***Current Compliance Options for Industrial Facilities Generating Electricity***

- Industrial Exemption
  - Limits generation to the electricity grid to no more than 10%
  - No CO<sub>2</sub> allowances required
  - Requires a permit condition limiting generation
- Full participation
  - CO<sub>2</sub> allowances required



# ***Proposed Compliance Option for Petroleum Refineries***

- The proposed amendments would require that petroleum refinery units to purchase CO<sub>2</sub> allowances to cover its reported emissions each year that are directly associated with the electricity generated and exported to the electrical grid.
- Petroleum refinery units participating in the CO<sub>2</sub> Budget Trading Program would be required to report emissions, as required by other Electric Generating Units, and accept enforceable permit conditions.



# ***Proposed Reg. 1147 Amendments***

- **Section 1 – General Provisions**
- Section 2 – Authorized Account Representative
- Section 3 – Permits
- Section 4 – Compliance Certification
- **Section 5 – Allowance Allocations**
- Section 6 – Allowance Tracking System
- Section 7 – Allowance Transfers
- Section 8 – Monitoring and Reporting
- Section 9 – RESERVED
- Section 10 – Emission Offset Projects
- Section 11 – Auction



# ***Amend 1.2 Applicability***

## ***1.2.3 Requirements for any CO<sub>2</sub> Budget Source that is a petroleum refinery.***

### ***1.2.3.1 Applicability.***

Notwithstanding 1.2.1 of this regulation, a CO<sub>2</sub> budget source under 1.2.1 of this regulation that is a petroleum refinery may elect to participate in the CO<sub>2</sub> budget trading program by **securing a permit issued pursuant to 7 DE Admin Code 1102 or 1130 that contains practically enforceable conditions that require compliance with all of the provisions** of this regulation, **except** “CO<sub>2</sub> budget emissions limitation” shall mean for a CO<sub>2</sub> budget source, the tonnage equivalent, in CO<sub>2</sub> emissions **associated with the annual gross electrical generation output** to the electric grid in a control period from all CO<sub>2</sub> Budget Units at the CO<sub>2</sub> Budget Source, of the **CO<sub>2</sub> allowances** available for compliance deduction for the source for a control period.



# ***Amend 1.2 Applicability***

## 1.2.3 Requirements for any CO2 Budget Source that is a petroleum refinery.

### 1.2.3.2 Effective date.

The requirements of 1.2.3.1 of this regulation shall become **effective as of January 1** of the year that the permit required under 1.2.3.1 of this regulation becomes final.

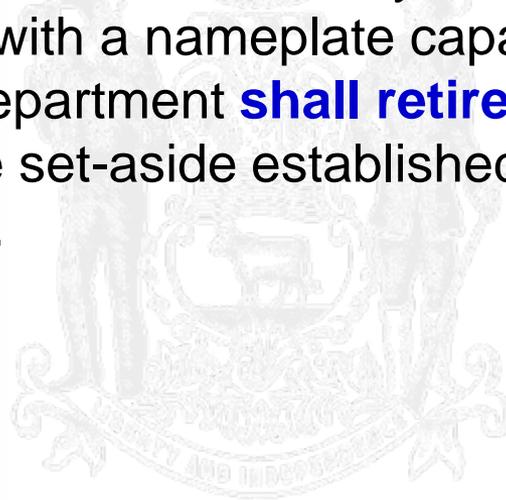
### ~~1.2.2.3~~ 1.2.3.3 Compliance.

For the purpose of applying permitting requirements under 3.0 of this regulation, and applying monitoring requirements under 8.0 of this regulation, the unit shall be treated as commencing operation on the date the permit required under 1.2.3.1 of this regulation becomes final.



## ***Amend 1.2 Applicability***

1.2.2.4 *Deduction of tons from State of Delaware CO<sub>2</sub> Budget Trading Program limited industrial exemption set-aside account.* In the event that the Department grants an exemption under 1.2.2 or approval to comply under 1.2.3 of this regulation to a CO<sub>2</sub> source, with one or more units that on January 1, 2005, serves an electricity generator with a nameplate capacity equal to or greater than 25 MWe, the Department **shall retire the number of CO<sub>2</sub> allowances** from the set-aside established for such purpose under 5.3 of this regulation.



***Blue Skies Delaware; Clean Air for Life***

## ***5.3.4 Limited industrial exemption set-aside allocation.***

5.3.4 *Limited industrial exemption set-aside allocation.* The limited industrial exemption *set-aside* allocation will consist of 1,207,544 tons from the State of Delaware CO<sub>2</sub> Budget Trading Program base budget set forth in 5.1, of this regulation. For each control period, the Department will determine CO<sub>2</sub> allowance allocations in accordance with the following procedures.

5.3.4.1 The Department will open and manage a general account for the limited exemption *set-aside* for each control period.

5.3.4.2 As of the January 1 that is after the date that an exemption under 1.2.2 or approval to comply under 1.2.3 has been granted, for each allocation year the Department will retire CO<sub>2</sub> allowances in the limited industrial exemption set-aside general account.



# *Next Steps*

- Hearing record will remain open for receipt of comments until **C.O.B.** February 7, 2013
- Comments may be submitted to:

Valerie Gray

DNREC – DAQ

655 South Bay Road, Suite 5N

Dover, DE 19901



*Blue Skies Delaware; Clean Air for Life*