



# Connecticut Department of Energy and Environmental Protection



**RGGI Briefing for December 12, 2013**

# RGGI Background

- Launched in 2008 resulting in \$1.6 billion in net present economic value added to the region, and \$80 million to Connecticut alone,
- Center piece of CT's GHG mitigation efforts
- Electricity consumers overall- households, businesses, government users and others realized regional auction revenue = \$1.1 billion, as their overall electric bills dropped over time
- Over 80% of cumulative allowance auction proceeds fund CT energy efficiency and renewable energy projects
  - \$59 M for energy efficiency
  - \$15 M for renewable energy



# RGGI “Program Review” Analysis

- Size and Structure of New Cap
  - Existing cap too loose due to:
    - Initial design, including underestimating EE investments
    - Shift to natural gas for electricity generation
    - Mild weather
    - Recession
- Need Alternative Market Tightening Strategies to drive CO2 reductions
  - Retire banked and unsold allowances
  - Escalate Reserve Price
  - Address emissions from “imported power”



# Current RGGI Emissions

## RGGI Units CO<sub>2</sub> Emissions by State (RGGI COATS DATA - Short Tons)

	2009	2010	2011	2012
Vermont	1,965	3,756	6,537	2,319
Maine	3,643,493	3,943,457	3,337,460	2,940,072
Rhode Island	3,416,783	3,504,392	3,946,582	3,735,785
New Hampshire	5,769,881	5,899,447	5,525,369	4,642,898
Delaware	3,708,331	4,299,269	4,150,396	4,839,522
<b>Connecticut</b>	<b>7,322,364</b>	<b>8,527,102</b>	<b>7,018,498</b>	<b>6,819,155</b>
Massachusetts	18,661,076	19,804,384	15,634,872	13,217,640
Maryland	25,572,943	27,958,958	24,699,638	20,596,979
New York	37,861,408	42,113,171	37,137,382	35,417,901
<b>9-State Total</b>	<b>105,958,243</b>	<b>116,053,938</b>	<b>101,456,734</b>	<b>92,212,271</b>



Connecticut Department of Energy and Environmental Protection

# RGGI Program Review Conclusions

1. Tighten RGGI Cap from 165 million tons/yr to 91 million tons/yr
  - CT's new cap will be 5,891,895 tons in 2014
  - By 2020, CT's cap will be reduced to 5,061,540 tons
  - 2009-2012 CT average annual RGGI emissions-7,421,789
  - Any cap must address private bank of allowances
  - States committed to retire unsold allowances
2. Retire unsold allowances held by states (~102 million allowances)
  - Connecticut is holding ~6.6 million unsold allowances
3. Establishment of a cost containment reserve (CCR) to stabilize prices for allowances in the event of unforeseen circumstances, such as a shortage of natural gas
  - CCR will inject additional allowances into the market if allowance prices reach certain price triggers (\$4 per ton in 2014, \$6 in 2015, \$8 in 2016, and \$10 in 2017, rising by 2.5% thereafter)



# CT Proposed CO2 Auction Rule Program Revisions

1. Subsection (a) – Definitions- clarify new structure of Program and new Cap;
2. Subsection (b) – General Provisions – Sets out requirements for CO2 emitting sources, states what constitutes a violation, outlines requirements during control and interim periods;
3. Subsection (f) – Establishes new size of Program and quantifies allowances available for auction through 2020, revises set-asides, establishes the CCR trigger price rules, clarifies distribution of auction proceeds and rules for retirement of “unsold” and “undistributed” allowances;
4. Subsection (g) – Allowance Tracking and Compliance- includes rules for vintage allowances;
5. Subsection (i) – Reporting – allows for filing data by electronic means;
6. Subsection(j) – Ratepayer Relief- Provides conforming language to capture DEP and DPUC merger and details cap for rate exposure to ratepayers. (See slide 12).



# RGGI Regulation Revision Process

## RGGI Timeline

- **Adopt rule by January 1, 2014**
- **July 15<sup>th</sup>-August 14<sup>th</sup>** Public Comment Period
- **August 14<sup>th</sup>** Public Hearing
- **September 3<sup>rd</sup>**-DEEP to complete Hearing Report and final reg package and submit for Attorney General's review for legal sufficiency
- **September 11<sup>th</sup>– September 30<sup>th</sup>** 20-day notice period prior to LRRC filing
- **October 1 – LRRC filing with request for normal consideration (results in November 26, 2013 LRRC meeting)**
- **October 1- October 21 – LRRC filing with request for early consideration (results in November 26, 2013 LRRC committee meeting).**



File permanent regulation with Secretary of State

Connecticut Department of Energy and Environmental Protection

# Auction 22 Results

<b>Auction Date</b>	<b>December 4, 2013</b>
Allowances Offered for Sale	38,329,378
Allowances Sold	38,329,378
Ratio of Bids to Supply	2.7
Clearing Price	\$3.00
Reserve Price	\$1.98
Proceeds from Auction 22	\$114,988,134.00 (Total CT Proceeds: \$11,097,007.00)
Total Cumulative Proceeds (All Auctions)	\$1,567,758,634.96 (Total CT Proceeds: \$98,507,925.51)
Number of Bidders in Auction 22	49
Percent of Allowances Purchased by Compliance Entities & their Corporate Affiliates in Auction 22	43%



# Additional Information



Connecticut Department of Energy and Environmental Protection

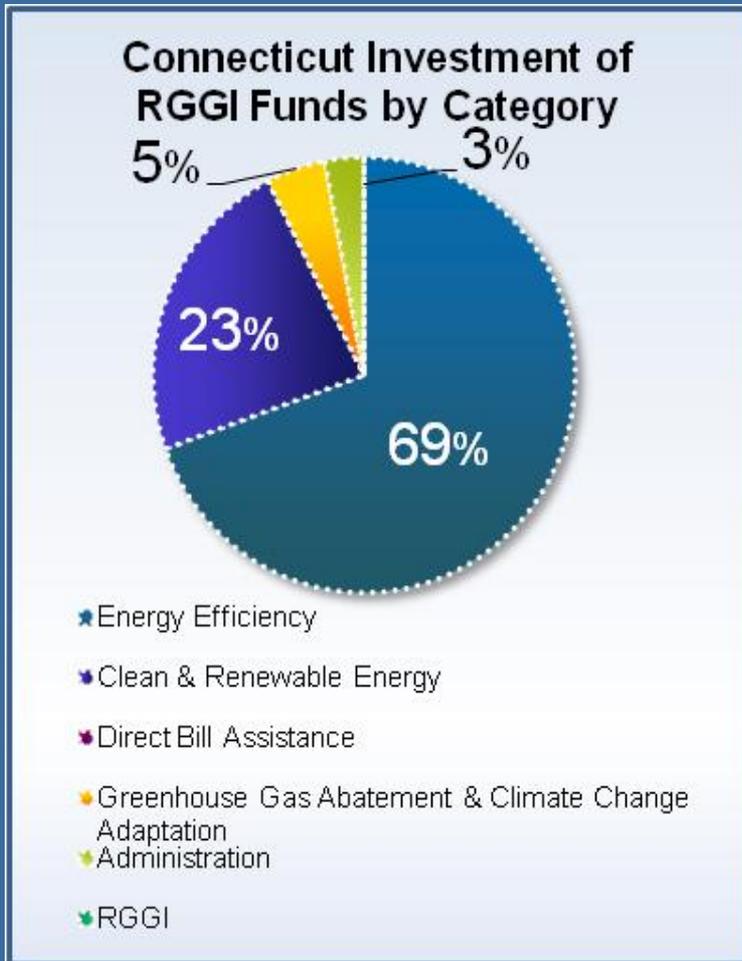
# RGGI Projections

## IPM Modeling of Highest and Lowest Projected RGGI Proceeds CY14-CY15

RGGI Proceeds Spread 2014- 2015	CY 2014	CY 2015
Max Projected Allowance Price (\$)	\$ 7.27	\$ 7.69
Min Projected Allowance Price (\$)	\$ 1.86	\$ 1.86
Max Projected Max (\$Millions)	\$ 41.89	\$ 39.81
Min Projected Proceeds (\$Millions)	\$ 10.12	\$ 8.43



# Distribution of RGGI Proceeds



- One Option to Consider Under the Revised RGGI Rule:
- Retain 6.25 % distribution to CMEEC (reduced by departure of Wallingford Electric)
- Thereafter \$5 million prorated at \$1.25 million per auction for CY 14 and CY 15 to the EDCs as proposed in the 2013-15 CL&M plan
- Distribute \$12.7 million of the proceeds to CEFIA for efficiency in CY 14 and in CY 15 to fill the budget gap of \$24.4
- After addressing CEFIA's budget gap resume distribution in accordance with framework for the SBC charge.



## CT Monthly Bill Impact for years 2012-2020

<b>Customer Class</b>	<b>Reference Case</b>	<b>91 Cap Bank MR</b>	
	<b>Average Monthly Bill (\$2010)</b>	<b>Monthly Difference (\$2010)</b>	<b>Percent Difference</b>
<b>Residential</b>	\$ 98.76	\$ 0.71	0.7%
<b>Commercial</b>	\$ 848.31	\$ 8.01	0.9%
<b>Industrial</b>	\$ 6,748.09	\$ 74.45	1.1%



# \$ Benefits of RGGI - Current Program

- \$80 mil. dollars in proceeds to date, projected to yield:
  1. \$294 million in net value added to CT economy
  2. 2,036 jobs years over the next 10 years
- *-source Economic Benefits of RGGI, June 2013, Environment Northeast*



# \$ Benefits of RGGI – Success Story

- Price Chopper Supermarket (Middletown) – installed energy efficient lighting, HVAC, and Refrigeration equipment through RGGI funded programs and incentives
- Projected savings: \$100K off energy bills annually
  - *-source: Economic Benefits of RGGI in CT, Environment Northeast*



# RGGI Program Price Cap

- Allowance auctions impact rates, EE investments impact bills
- CT caps allowance price impact at \$5
  - Amount above \$5 is returned to ratepayers
  - Current budget of 10.7M /year = maximum potential ratepayer cost of \$53.5 million/year
- Recommendation for 2014 and later
  - Cap entire program cost at \$35 million/year
  - Reframe allowance price cap as total cost cap
  - Limit ratepayer exposure to \$35 million/year



# RGGI Bill Impacts Cont.

## Average Bill Impacts CT Residential Customers

Year	Average Monthly Bill (\$2010)		Difference between Reference Case and Scenario Cases (\$2010)		
	Reference Case		91 Cap Bank MR		
			Monthly Difference (\$2010)	Percent Difference	
2012	\$	90.04	\$	(0.01)	0.0%
2013	\$	93.45	\$	0.03	0.0%
2014	\$	95.82	\$	0.94	1.0%
2015	\$	98.12	\$	0.97	1.0%
2016	\$	100.38	\$	0.97	1.0%
2017	\$	101.26	\$	0.95	0.9%
2018	\$	102.02	\$	0.93	0.9%
2019	\$	103.29	\$	0.86	0.8%
2020	\$	104.44	\$	0.76	0.7%
<b>Average</b>	\$	98.76	\$	0.71	0.7%



# RGGI Bill Impacts Cont.

## Average Bill Impacts CT Commercial Customers

Year	Average Monthly Bill (\$2010)		Difference between Reference Case and Scenario Cases (\$2010)		
	Reference Case		91 Cap Bank MR		
			Monthly Difference (\$2010)	Percent Difference	
2012	\$	742.60	\$	(0.10)	0.0%
2013	\$	781.67	\$	0.39	0.0%
2014	\$	810.21	\$	9.81	1.2%
2015	\$	837.88	\$	10.43	1.2%
2016	\$	865.04	\$	10.65	1.2%
2017	\$	878.17	\$	10.65	1.2%
2018	\$	890.00	\$	10.62	1.2%
2019	\$	906.80	\$	10.20	1.1%
2020	\$	922.39	\$	9.45	1.0%
<b>Average</b>	\$	848.31	\$	8.01	0.9%



# RGGI Projections

	IPM Cost and Revenue Projections for Connecticut								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Projected Proceeds (\$million)</b>	\$10.97	\$19.29	\$31.81	\$29.07	\$29.79	\$34.93	\$31.58	\$31.58	\$34.78
<b>Projected Allowance Prices</b>	\$1.93	\$1.93	\$5.92	\$6.26	\$6.62	\$7.00	\$7.39	\$7.83	\$8.27
<b>CT Cap (M)</b>	10.69	10.69	5.89	5.74	5.60	5.46	5.32	5.19	5.06
<b>Allowance Reserve</b>	0	0	323K	647K	647K	647K	647K	647K	647K



# RGGI Bill Impacts Cont.

<b>Average Bill Impacts CT Industrial Customers</b>				
<b>Difference between Reference Case and Scenario Cases (\$2010)</b>				
<b>Average Monthly Bill (\$2010)</b>		<b>91 Cap Bank MR</b>		
<b>Year</b>	<b>Reference Case</b>	<b>Monthly Difference (\$2010)</b>	<b>Percent Difference</b>	
2012	\$ 5,689.84	\$ (0.84)	0.0%	
2013	\$ 6,069.95	\$ 3.86	0.1%	
2014	\$ 6,354.52	\$ 89.41	1.4%	
2015	\$ 6,630.51	\$ 95.77	1.4%	
2016	\$ 6,901.04	\$ 98.30	1.4%	
2017	\$ 7,044.79	\$ 98.83	1.4%	
2018	\$ 7,176.09	\$ 99.16	1.4%	
2019	\$ 7,351.22	\$ 95.84	1.3%	
2020	\$ 7,514.87	\$ 89.68	1.2%	
<b>Average</b>	<b>\$ 6,748.09</b>	<b>\$ 74.45</b>	<b>1.1%</b>	



# \$ Benefits of RGGI – Revised Rule

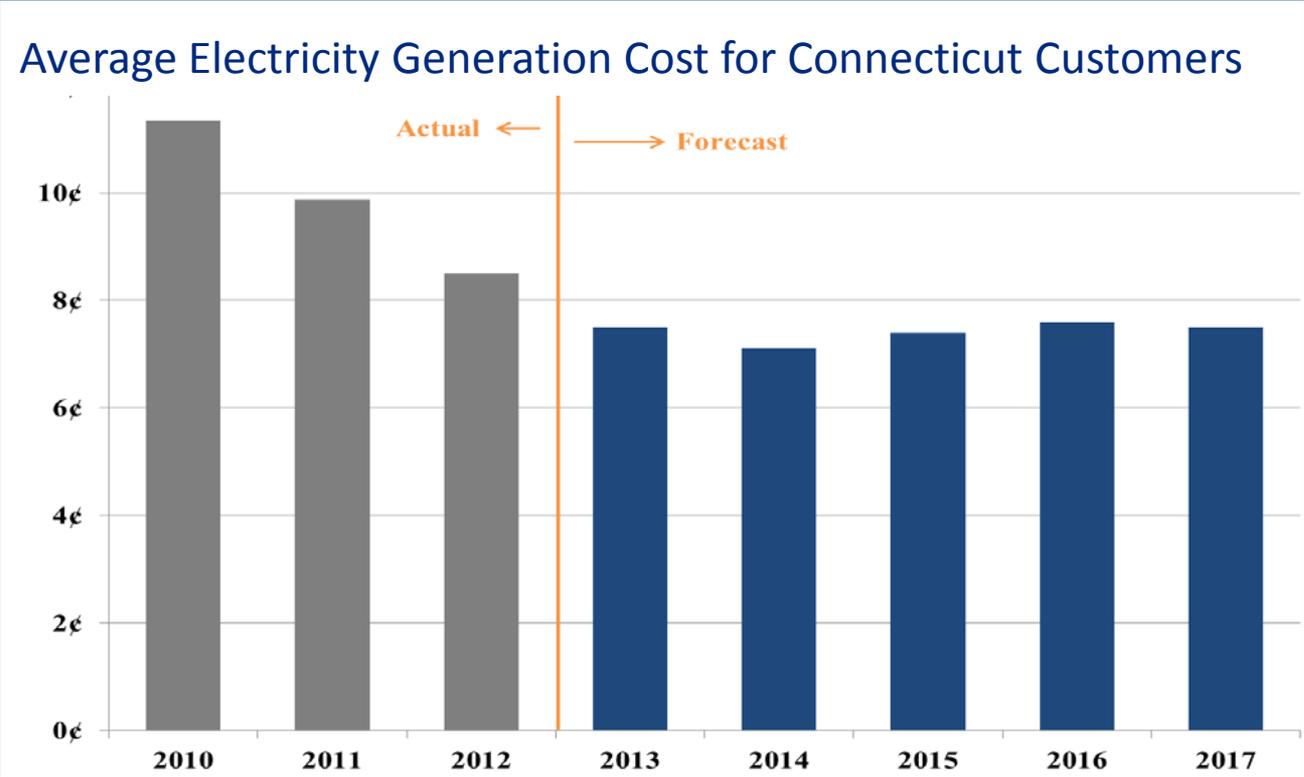
Projected Proceeds Triple between 2013-2020

Additional Net Value Added to CT

Additional job years added to CT economy.



# Projected lower rates due to lower generation costs



Source: CT DEEP; CLP; Brattle Group Projections  
Projections based on current commodity price projections; 2013-2017 projections for CLP service territory (80% of state)



QUESTIONS?



Connecticut Department of Energy and Environmental Protection

For additional Information, please contact Jaimeson Sinclair,  
Office Director, Office of Climate Change and Innovation

860-827-2642

[jaimeson.sinclair@ct.gov](mailto:jaimeson.sinclair@ct.gov)



Connecticut Department of Energy and Environmental Protection